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Kindle-DX Index; by AptID **Use "Menu", then "Goto Page"**

AZ Min Alt#4 - 6
AZ Min Rdr#4 - 9
AZ Min TO#4 - 11
CA Min Alt#2 - 305
CA Min Alt#3 - 308
CA Min Rdr#2 - 311
CA Min Rdr#3 - 312
CA Min TO#2 - 316
CA Min TO#3 - 329
CO Min Alt#1 - 1360
CO Min TO#1 - 1363
NM Min Alt#1 - 1761
NM Min Rdr#1 - 1764
NM Min TO#1 - 1766
NV Min Alt#4 - 1951
NV Min Rdr#4 - 1954
NV Min TO#4 - 1956
UT Min Alt#4 - 2115
UT Min TO#4 - 2118
1O2 - 593
1O3 - 623
1V6 - 1426
20V - 1689
2V5 - 1759
33V - 1757
36U - 2149
40G - 91
5T6 - 1931
69V - 2151
74V - 2203
8V7 - 1746
AAT - 342
ABQ - 1798
ACV - 348
AEG - 1815
AEJ - 1421
AHC - 574
AIB - 1720
AJO - 447
AKO - 1374
ALM - 1777
ALS - 1377
ANK - 1745
APA - 1446
APC - 811
APV - 345
ASE - 1382
ATS - 1827
AUN - 356
AVQ - 241
AVX - 357
AXX - 1825
AZC - 44
BAB - 749
BAM - 1968
BDG - 2131
BFL - 359
BIH - 375
BJC - 1475
BKF - 1391
BLH - 381
BMC - 2132
BUR - 390
BVU - 1971
BWC - 387
C83 - 403
CAG - 1442
CAO - 1839
CCB - 1324
CCR - 439
CDC - 2134
CEC - 451
CEZ - 1438
CGZ - 27
CHD - 31
CIC - 419
CLR - 407
CMA - 408
CNM - 1834
CNO - 426
CNY - 2171
COS - 1427
CPU - 1055
CRQ - 413
CVH - 576
CVN - 1843
CVS - 1848
CXP - 1976
D68 - 235
DAG - 457
DEN - 1504
DLO - 464
DMA - 246
DMN - 1859
DPG - 2142
DRO - 1594
DTA - 2137
DUG - 47
DVO - 820
DVT - 122
DWA - 462
E06 - 1898
E16 - 1220
E26 - 1888
E45 - 552
E80 - 1832
EDU - 461
EDW - 466
EED - 818
EEO - 1705
EGE - 1597
EIK - 1601
EKA - 492
EKO - 1978
ELY - 1984
EMT - 485
ENV - 2277
F34 - 513
F70 - 810
FAT - 517
FCH - 537
FCS - 1602
FFZ - 106
FHU - 56
FLG - 49
FLX - 1987
FMN - 1862
FNL - 1604
FOT - 514
FTG - 1562
FUL - 542
GCN - 94
GEU - 64
GJT - 1632
GNT - 1878
GOO - 549
GUC - 1677
GUP - 1874
GXY - 1645
GYR - 85
HAF - 554
HDN - 1681
HEQ - 1686
HGT - 577
HHR - 560
HIF - 2173
HII - 104
HJO - 558
HMN - 1781
HMT - 573
HND - 1998
HOB - 1880
HWD - 563

IFP - 23
IGM - 100
IKR - 1821
INW - 280
IPL - 580
ITR - 1423
IWA - 133
IYK - 581
IZA - 1279
JAQ - 584
KNB - 2153
L08 - 384
L18 - 512
L35 - 373
L45 - 369
L67 - 975
L71 - 404
LAA - 1693
LAM - 1897
LAS - 2006
LAX - 657
LGB - 638
LGF - 281
LGU - 2167
LHM - 615
LHX - 1691
LMO - 1702
LOL - 2067
LPC - 625
LRU - 1889
LSN - 737
LSV - 2045
LUF - 71
LVK - 618
LVS - 1892
LXV - 1699
MAE - 739
MCC - 1012
MCE - 763
MER - 768
MEV - 2070
MHR - 1018
MHV - 777
MIT - 1282
MLF - 2170
MMH - 742
MOD - 773
MPI - 747
MRY - 782
MTJ - 1711
MVI - 1708
MYF - 1073
MYV - 759
NFG - 857
NFL - 1988
NID - 979
NJK - 478
NKX - 1076
NLC - 599
NRS - 579
NSI - 1221
NTD - 899
NUC - 1069
NUQ - 800
NXP - 1312
NYL - 285
NZY - 1091
O02 - 371
O08 - 436
O22 - 434
O27 - 821
O28 - 1352
O37 - 896
O41 - 1358
O60 - 433
O69 - 952
O88 - 986
OAK - 824
OAR - 743
OGD - 2185
OKB - 869
OLS - 114
ONM - 1937
ONT - 874
OVE - 897
OXR - 909
P08 - 45
P13 - 83
P19 - 40
P20 - 120
P33 - 275
PAN - 121
PAO - 944
PGA - 117
PHX - 147
PMD - 938
POC - 586
PRB - 949
PRC - 207
PRZ - 1901
PSO - 1722
PSP - 917
PTV - 955
PUB - 1723
PUC - 2191
PVF - 954
PVU - 2195
RAL - 988
RBL - 962
RDD - 966
REI - 974
RHV - 1176
RIF - 2200
RIL - 1733
RIV - 998
RNM - 958
RNO - 2073
ROW - 1907
RQE - 277
RTN - 1903
RTS - 2107
RYN - 254
SAC - 1024
SAD - 213
SAF - 1919
SAN - 1104
SBA - 1244
SBD - 1056
SBP - 1212
SBS - 1747
SCK - 1290
SDL - 215
SDM - 1119
SEE - 1122
SEZ - 231
SFO - 1125
SGU - 2264
SIY - 781
SJC - 1181
SJN - 236
SKX - 1940
SLC - 2205
SLI - 651
SMF - 1028
SMO - 1261
SMX - 1254
SNA - 1225
SNS - 1046
SOW - 233
SQL - 1065
SRR - 1917
STK - 1749
STS - 1269

SUU - 495
SVC - 1932
SVE - 1296
TAD - 1754
TCC - 1944
TCS - 1942
TCY - 1303
TEX - 1751
TLR - 1311
TNP - 1319
TOA - 1299
TPH - 2109
TRK - 1308
TRM - 927
TUS - 257
TVL - 1283
TVY - 2270
TYL - 239
U42 - 2261
U52 - 2130
U69 - 2141
UDD - 933
UKI - 1321
VBG - 627
VCB - 1326
VCV - 1341
VEL - 2275
VGT - 2056
VIS - 1345
VNY - 1330
WHP - 734
WJF - 595
WLW - 1356
WMC - 2112
WVI - 1349
ZUN - 1949

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL ..... **RNAV (GPS) Rwy 16[12]**
RNAV (GPS) Rwy 34[34]
VOR/DME Rwy 34[15]

[1]NA when local weather not available.
[2]Categories A, B, 1200-2; Categories C, D, 1200-3.
[3]NA when control tower closed.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 2200-2; Categories C, D, 2200-3.

CARSON CITY, NV

CARSON ..... **RNAV (GPS)-A**
Categories A, B, 1700-2; Category C, 1700-3; Category D, 1800-3.
NA when local weather not available.

CEDAR CITY, UT

CEDAR CITY RGNL ..... **ILS Rwy 20**
VOR Rwy 20
Category D, 900-2¾.

DOUGLAS BISBEE, AZ

BISBEE DOUGLAS INTL ..... **VOR/DME or GPS Rwy 17**
VOR Rwy 17
NA when control zone not in effect.

ELKO, NV

ELKO RGNL..... **LDA/DME RWY 23[1]**
RNAV (GPS) Rwy 23[2]
VOR-A[3]
VOR/DME-B[4]

[1]Categories A,B, 900-2; Category C 1000-3; Category D, 1100-3.
[2]Categories A,B, 1400-2; Categories C,D, 1400-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.
[4]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME — ALTERNATE MINIMUMS

FLAGSTAFF, AZ

FLAGSTAFF PULLIAM ..... **ILS or LOC/DME Rwy 21[12]**
VOR or GPS-A[3]

[1]NA when control tower closed.
[2]ILS, Categories B,C,D, 700-2.
[3]Category D, 800-2¼.

FORT HUACHUCA-SIERRA VISTA, AZ

SIERRA VISTA MUNI-LIBBY AAF ..... **ILS or LOC Rwy 26**
NDB Rwy 26
RNAV (GPS) Rwy 8[1]
VOR Rwy 26

NA when control tower closed.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

GLENDALE, AZ

GLENDALE MUNI ..... **RNAV (GPS) Rwy 1**
NA when local weather not available.

GRAND CANYON, AZ

GRAND CANYON NATIONAL PARK ..... **ILS or LOC/DME Rwy 3**
NA when control tower closed.
Category D, 700-2.

VALLE ..... **VOR/DME Rwy 19**
NA except for operators with approved weather reporting service.

KANAB, UT

KANAB MUNI ..... **RNAV (GPS) Rwy 1**
Category B, 1100-2; Category C, 1400-3.

KINGMAN, AZ

KINGMAN ..... **RNAV (GPS) Rwy 3**
RNAV (GPS) Y Rwy 21
VOR/DME Rwy 21
Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LAKE HAVASU CITY, AZ

LAKE HAVASU CITY ..... **VOR/DME or GPS-A**
Categories A,B, 1000-2; Categories C, 1000-2¾; Category D, 1000-3.

LAS VEGAS, NV

HENDERSON EXECUTIVE ..... **RNAV (GPS)-B[1]**
VOR-C[2]
NA when local weather not available.
[1]Categories A,B, 1000-2; Category C, 1000-2¾.
[2]Categories A, B, 2400-2; Category C, 2400-3.

McCARRAN INTL ..... **ILS or LOC Rwy 25L[1]**
ILS or LOC Rwy 25R[1]
ILS or LOC/DME Rwy 1L[2]
RNAV (GPS) Rwy 1R[3]
RNAV (GPS) Rwy 19L[45]
RNAV (GPS) Rwy 19R[45]
VOR/DME-A[2]
VOR Rwy 25L/R[3]
[1]ILS,LOC,Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾, Category E, 1400-3.
[2]ILS,LOC,Categories A,B, 900-2; Category C, 900-2½.
[3]Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.
[4]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.
[5]NA when local weather not available.

NORTH LAS VEGAS ..... **ILS or LOC Rwy 12L**
NA when control tower closed.

LOVELOCK, NV

DERBY FIELD ..... **VOR or GPS-C[1]**
VOR/DME or GPS-A[2]
[1]Categories A,B, 1900-2; Categories C,D, 1900-3.
[2]Categories A,B, 900-2; Category C,900-2¾; Category D, 900-3.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD ..... **VOR or GPS-A**
Category D, 800-2½.

OGDEN, UT

OGDEN-HINCKLEY ..... **ILS Or LOC Rwy 3[12]**
RNAV (GPS) Y Rwy 3
RNAV (GPS) Z Rwy 3
NA when local weather not available.
[1]ILS, Category D, 700-2.
[2]NA when control tower closed.

NAME ALTERNATE MINIMUMS

PHOENIX, AZ

PHOENIX DEER VALLEY ..... **RNAV (GPS)-B[12]**
RNAV (GPS)-C[3]
RNAV(GPS) Rwy 7R[4]
RNAV (GPS) Rwy 25L[14]
[1]NA when local weather not available.
[2]Categories A,B, 1000-2; Category C, 1000-2¾.
[3]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1100-3.
[4]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

PHOENIX-
MESA GATEWAY ..... **ILS or LOC Rwy 30C[12]**
RNAV (GPS) Rwy 30C[1]
RNAV (GPS) Rwy 30L[3]
VOR or TACAN Rwy 30C[1]
[1]NA when local weather not available.
[2]NA when control tower closed.
[3]Category E, 800-2¼.

PHOENIX
SKY HARBOR INTL ..... **ILS or LOC Rwy 7R[1]**
ILS or LOC Rwy 7L[2]
ILS or LOC Rwy 8[3]
ILS or LOC Rwy 25L[2]
ILS or LOC Rwy 26[2]
RNAV (GPS) Y Rwy 7R[2]
RNAV (GPS) Y Rwy 7L[2]
RNAV (GPS) Y Rwy 8[4]
RNAV (GPS) Y Rwy 25L[2]
RNAV (GPS) Y Rwy 25R[2]
RNAV (GPS) Y Rwy 26[2]
[1]ILS, Categories A,B,C, 700-2; Category D, 800-2½. LOC, Category D, 800-2½.
[2]Category D, 800-2½.
[3]ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[4]Category C, 800-2¼; Category D, 800-2½.

PRESCOTT, AZ

ERNEST A. LOVE FIELD .. **ILS/DME Rwy 21L[12]**
RNAV (GPS) Rwy 21L[4]
VOR Rwy 12[3]
[1]NA when control tower closed.
[2]ILS, Category C, 700-2; Category D, 900-3. LOC, Category D, 900-3.
[3]Category D, 900-3.
[4]Category D, 1000-3.

NAME ALTERNATE MINIMUMS

PRICE, UT

CARBON COUNTY RGNL/
BUCK DAVIS FIELD ..... **VOR/DME Rwy 36**
VOR Rwy 36[1]
Category C, 900-2½; Category D, 1100-3.
[1]Categories A, B, 2000-2; Categories C, D, 2000-3.

PROVO, UT

PROVO MUNI .. **ILS or LOC/DME Rwy 13,** 700-2
Na when control tower closed.

RENO, NV

RENO/TAHOE INTL ..... **ILS Rwy 16R,** 2100-7[1]
ILS or LOC/DME Rwy 34L[2]
LOC Rwy 16R[3]
LOC/DME BC Rwy 34L[4]
RNAV (GPS) X Rwy 34L[5]
RNAV (GPS) X Rwy 34R[5]
RNAV (GPS) Y Rwy 16L[6]
RNAV (GPS) Y Rwy 16R[7]
RNAV (GPS) Y Rwy 34L[4]
RNAV (GPS) Y Rwy 34R[8]
RNAV (RNP) Z Rwy 16R, 800-2½
VOR-D, 1600-3
[1]LOC, NA.
[2]ILS,LOC, Categories A,B, 1000-2; Category C, 1000-2¾.
[3]Categories A,B, 1600-2; Categories C,D, 1600-3; Category E, 2400-3.
[4]Categories A,B, 1000-2; Categories C,D, 1000-3.
[5]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[6]Categories A,B, 1400-2; Categories C,D, 1400-3.
[7]Categories A,B, 1800-2; Categories C,D, 1800-3.
[8]Categories A,B, 1000-2; Category C, 1000-2¾.

ST. GEORGE, UT

ST. GEORGE MUNI ..... **RNAV (GPS) Rwy 34**[1]
VOR or GPS-B, 1300-2[2]
VOR-C, 1800-3[2]
VOR/DME Rwy 34[23]
[1]Categories A,B 1100-2¼; Categories C,D, 1100-3.
[2]NA except for operators with approved weather reporting service.
[3]Category C, 800-2¼; Category D, 1000-3.

ST. JOHNS, AZ

ST. JOHNS
INDUSTRIAL AIRPARK ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR/DME-A
NA when local weather not available.

NAME ALTERNATE MINIMUMS

SCOTTSDALE, AZ

SCOTTSDALE ..... **RNAV (GPS)-D**[1]
VOR or GPS-A[23]
VOR or GPS-C[24]
[1]NA when local weather not available.
[2]NA when Scottsdale altimeter not available.
[3]Categories A,B,C, 1100-3.
[4]Categories A,B, 900-2½;Category C, 900-2¾.

TONOPAH, NV

TONOPAH ..... **VOR or GPS-A**
Category D, 800-2¼.

TOOELE, UT

BOLINDER FIELD-
TOOELE VALLEY ..... **ILS or LOC/DME Rwy 17**[1]
RNAV (GPS) Y Rwy 17[2]
RNAV (GPS) Z Rwy 17
NA when local weather not available.
[1]ILS, Category D, 700-2.
[2]Categories A, B, C, D, 900-2½.

TUCSON, AZ

TUCSON INTL ..... **ILS or LOC Rwy 11L**[1]
LOC/DME BC Rwy 29R[2]
RNAV (GPS) Z Rwy 11L[2]
RNAV (GPS) Rwy 29R[2]
RNAV (GPS) Rwy 3[3]
RNAV (GPS) Rwy 29L[4]
RNAV (GPS) Z Rwy 29R[2]
VOR or TACAN Rwy 11L[2]
VOR/DME or TACAN Rwy 29R[2]
[1]ILS,LOC, Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3; Category E, 1100-3.
[2]Category E, 1100-3.
[3]Categories A,B,C,D, 800-2¼.
[4]Category D, 800-2¼.

WENDOVER, UT

WENDOVER ..... **VOR/DME-B**[1]
VOR/DME or TACAN Rwy 26[2]
[1]Categories A,B, 1700-2; Categories C,D,E, 1700-3.
[2]Category E, 800-2¾.

WINNEMUCCA, NV

WINNEMUCCA MUNI ..... **RNAV (GPS) Rwy 14**[12]
RNAV (GPS) Rwy 32[1]
VOR/DME Rwy 14[3]
[1]NA when local weather not available.
[2]Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 1300-3.

WINDOW ROCK, AZ

WINDOW ROCK ..... **VOR/DME-A**
Categories A,B, 1100-2; Categories C,D, 1100-3.

DAVIS-MONTHAN AFB (KDMA), AZ (Tucson) (07242 USAF) ELEV **2704**

RADAR[1] - **(E)** 118.5 125.1 318.1 297.2

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	30[2]	3.0°/59/1320	ABCDE	**2904**-½	200	(200-½)
	12[3]	3.0°/59/950	ABCDE	**2815**-¾	200	(200-¾)

[1]No NOTAM MP 1100-1300Z dly. PAR opr 1700-0300Z wkd or termination of A10 flying (contact scheduling for times at DSN 228-5777). [2]When ALS inop, increase vis ¼ mile. [3]NOT FOR CIVIL USE.

FALLON NAS (KNFL), (VAN VOORHIS FIELD), NV (03191 USN) ELEV **3934**

RADAR[1] - **(E)** 118.3x 121.875x 262.8x 275.6x 310.6x 345.2x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[2]	31L	3.5°/55/905	ABCDE	**4126**-¾	200	(200-¾)
	31R	3.5°/55/903	ABCDE	**4128**-¾	200	(200-¾)
	13L	3.0°/46/881	ABCDE	**4134**-¾	200	(200-¾)
	13R	3.0°/47/912	ABCDE	**4134**-¾	200	(200-¾)
	7	3.0°/36/679	ABCDE	**4129**-¾	200	(200-¾)
ASR[2]	31R		ABCDE	**4200**-1	272	(300-1)
	31L		ABCDE	**4200**-1	274	(300-1)
	13R		ABCD	**4260**-1	326	(400-1)
			E	**4260**-1¼	326	(400-1¼)
	13L		ABC	**4280**-1	346	(400-1)
			DE	**4280**-1¼	346	(400-1¼)
	7		AB	**4340**-1	411	(500-1)
			CD	**4340**-1¼	411	(500-1¼)
			E	**4340**-1½	411	(500-1½)
CIR	All Rwy		AB	**4400**-1	466	(500-1)
			C	**4400**-1½	466	(500-1½)
			D	**4520**-2	586	(600-2)
			E	**4980**-3	1046	(1100-3)

CAUTION: ATC Missed Approach Minimum Climb Rate

	Rwy	Knots	60	120	180	240	300	360
PAR/ASR	7[3]	FPM	300	600	900	1200	1500	1800
	13L/R[4]	FPM	250	500	750	1000	1250	1500
	31L/R[4]	FPM	270	540	810	1080	1350	1620

[1]No-NOTAM MP sked: PAR-2200-0000Z++ Thu, ASR-1500-1700Z++ Wed, when ceil-vis 3000-5 and above. [2]Descent to 5700' not authorized until inbound in initial segment within 10 NM of Rwy. [3]To 7500'. [4]To 7300'.

FORT HUACHUCA/SIERRA VISTA, AZ

Amdt. 4A, OCT 22, 2009 (FAA) ELEV **4719**

SIERRA VISTA MUNI-LIBBY AAF

RADAR[1] - (E) 127.05 254.35 ▽ ⚠NA

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[2]	8		ABCDE	**4919**-¾	200	(200-¾)				
	26		ABCDE	**4829**-¾	200	(200-¾)				
ASR	26		ABC	**5000**-1	371	(400-1)	DE	**5000**-1¼	371	(400-1¼)
	8		AB	**5440**-1	721	(800-1)	C	**5440**-2	721	(800-2)
			D	**5440**-2¼	721	(800-2¼)	E	**5440**-2½	721	(800-2½)
CIR[3]	26		A	**5100**-1	381	(400-1)	B	**5180**-1	461	(500-2)
			C	**5180**-1½	461	(500-1½)	D	**5280**-2	561	(600-2)
			E	**5400**-2½	681	(700-2½)				
	8		AB	**5440**-1	721	(800-1)	C	**5440**-2	721	(800-2)
			D	**5440**-2¼	721	(800-2¼)	E	**5440**-2½	721	(800-2½)

[1]Opr 1500-2300Z Monday-Friday, except for holidays. [2]No NOTAM maintenance period 1500-1900Z on the first Thursday of the month. [3]Circling not authorized south of ruways 8 and 30.

YUMA MCAS/YUMA INTL (KNYL), AZ (09295 USN)

ELEV **213**

RADAR - (E) 120.9x 124.15x 125.55x 125.95x 254.0x 270.8x 278.7x 286.0x 301.2x 305.2x ▽

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	3L	3.0°/54/1059	ABCDE	298-½	100	(100-½)
	21R[1]	3.0°/54/1114	ABCDE	295-½	100	(100-½)
ASR	3L		ABC	540-1	342	(400-1)
			DE	540-1¼	342	(400-1¼)
	3R[2]		ABC	540-1	350	(400-1)
			DE	540-1¼	350	(400-1¼)
	21L		ABC	600-1	390	(400-1)
			DE	600-1¼	390	(400-1¼)
	21R[3]		AB	620-½	425	(500-½)
			CD	620-¾	425	(500-¾)
			E	620-1	425	(500-1)
CIR	3L-21R, 3R-21L		AB	700-1	484	(500-1)
			C	700-1½	484	(500-1½)
			D	780-2	564	(600-2)
			E	800-2	584	(600-2)

[1]Caution - Missed app minimum obstacle climb rate 225' NM to 400' MSL.
[2]Caution - Lighted PAR antenna 27' AGL/217' MSL 650' from threshold, 306' left of runway centerline.
[3]When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1¼ miles and CAT E vis to 1½ miles.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

BATTLE MOUNTAIN, NV

BATTLE MOUNTAIN (BAM)
AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ a min climb of 282' per NM to 7300 or 4700-3 for climb in visual conditions. **Rwy 12,** std. w/ a min climb of 386' per NM to 7600 or 4700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 8200 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 12,** climb heading 122° and BAM R-076 to 10000 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 21,** climb direct BAM VORTAC and BAM R-205 to 10100 before proceeding on course. **Rwy 30,** climb heading 302° and BAM R-324 to 9100 before proceeding on course.

BEAVER, UT

BEAVER MUNI

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA-obstacles. **Rwys13, 31,** 2600-2¾ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13, 31,** climb in visual conditions to cross Beaver Muni Airport Northwestbound at or above 8300 then climb to 10100 via MLF VORTAC R-102 to MLF VORTAC. Do not exceed 210 KIAS until established on MLF VORTAC R-102.

NAME — TAKE-OFF MINIMUMS

BLANDING, UT

BLANDING MUNI

TAKE-OFF MINIMUMS: **Rwy 35**, 800-1 or std. with a min. climb of 350 feet per NM to 6700.

DEPARTURE PROCEDURE: **Rwy 17,** turn left. **Rwy 35**, turn right climb to 9000 via heading 090° and DVC R-223 to DVC VORTAC, then continue climb on course to MEA.

BRIGHAM CITY, UT

BRIGHAM CITY (BMC)
AMDT 5 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34,** std. w/ min. climb of 325' per NM to 5300 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn heading 205° and OGD R-331 to OGD VORTAC. **Rwy 34,** climbing left turn heading 205° and OGD R-331 to OGD VORTAC or for climb in visual conditions: cross Brigham City airport southbound at or above 9200 then via OGD R-351 to OGD VORTAC.

NOTE: **Rwy 16,** poles 266' from DER, 558' right of centerline, 30' AGL/4258' MSL.

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL (IFP)
AMDT 1 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 370' per NM to 1800, or 1700-3 for climb in visual conditions. **Rwy 34,** std. w/ a min. climb of 495' per NM to 5500, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 164° and EED VORTAC R-334 to EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **Rwy 34,** climb via heading 344° to 1600, then climbing right turn direct EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **All Aircraft** climb in EED VORTAC holding pattern (East, right turn, 257° inbound) to cross EED VORTAC at or above MEA for direction of flight before proceeding on course.

NOTE: **Rwy 16,** multiple bushes beginning 3600' from DER, left of centerline, up to 12' AGL/1029' MSL. **Rwy 34,** multiple poles beginning 2211' from DER, right of centerline, up to 105' AGL/821' MSL.

CARSON CITY, NV

CARSON (CXP)
ORIG 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 9,** use JIMPA DEPARTURE.

CASA GRANDE, AZ

CASA GRANDE MUNI

DEPARTURE PROCEDURE: **Rwy 5**, right turn. **Rwy 23**, climb direct TFD VORTAC. Continue climb in holding pattern (SW, right turn, 048° inbound) to MEA for direction of flight.

CEDAR CITY, UT

CEDAR CITY RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 3500-3 or std. with a min. climb of 450' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 20, 26**, turn right. **Rwys 2,8**, turn left, climb direct to CDC VOR/DME, continue climb to 9000 via R-348. Northbound continue on course. All others reverse course, climb to cross CDC VOR/DME at or above MCA for direction of flight.

CHANDLER, AZ

CHANDLER MUNI

DEPARTURE PROCEDURE: **Rwy 4R,** climbing left turn heading 220°. **Rwys 22L,22R,** climbing left turn heading 190°. **All Aircraft,** continue climb via TFD R-350 to TFD VORTAC.

NOTE: **Rwy 4L,** multiple towers and buildings beginning 69' from departure end of runway, 397' left of centerline, up to 80' AGL/1319' MSL.

CHANDLER, AZ (CON'T)

STELLAR AIRPARK

DEPARTURE PROCEDURE: **Rwy 17**, turn left, climb via heading 150°. **Rwy 35**, turn right. **All aircraft** climb via TFD R-350 direct TFD VORTAC.

NOTE: **Rwy 17,** tower and signs beginning 574' from departure end of runway, 183' right of centerline, up to 50' AGL/1124' MSL. Sign 611' from departure end of runway, 365' left of centerline, 42' AGL/1214' MSL.

COLORADO CITY, AZ

COLORADO CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** NA.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwys 20, 29,** turn left. **All aircraft** climb to 7400 via the 160° bearing from AZC NDB then continue climb on course.

COOLIDGE, AZ

COOLIDGE MUNI

DEPARTURE PROCEDURE: **Rwys 5,35,** climbing left turn heading 280° to intercept TFD R-063, then via R-063 to TFD VORTAC before proceeding on course. **Rwy 17,** climbing right turn heading 240° to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course. **Rwy 23,** climb runway heading to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course.

DAVIS-MONTHAN AFB (KDMA)

TUCSON, AZ. 07186

Diverse departures not authorized, use published departure procedure for obstacle avoidance.

TAKE-OFF OBSTACLES: **Rwy 12**: Terrain 0' AGL/2707' MSL, 81' from DER, 500' left of centerline. Terrain 0' AGL/2707' MSL, 46' from DER, 512' left of centerline. Terrain 0' AGL/2707' MSL, 16' from DER, 500' left of centerline. Terrain 0' AGL/2706' MSL, 0' from DER, 200' left of centerline. **Rwy 30**: Terrain 0' AGL/2592' MSL, 0' from DER, 106' left of centerline. Terrain 0' AGL/2592' MSL, 7' from DER, 97' left of centerline. Terrain 0' AGL/2592' MSL, 0' from DER, 484' right of centerline. Terrain 0' AGL/2592' MSL, 13' from DER, 493' right of centerline. Vehicle 11' AGL/2615' MSL, 1017' from DER, 477' left of centerline. Terrain 0' AGL/2612' MSL, 237' from DER, 590' left of centerline.

DELTA, UT

DELTA MUNI

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 412' per NM to 6600, or 1800-3 for climb in visual conditions. Climb in visual conditions NA at night. **Rwy 12,** NA-terrain. **Rwy 30,** NA-airspace.

DEPARTURE PROCEDURE: **Rwy 17,** climb via DTA VORTAC R-347 to DTA VORTAC, or climb in visual conditions to cross departure end of runway southbound at or above 6400, then via DTA VORTAC R-347 to DTA VORTAC, thence...**Rwy 35,** climb via heading 346° to 5800, then climbing left turn via heading 180° and DTA VORTAC R-310 to DTA VORTAC, thence...

...climb in holding pattern (hold south, left turn, 004° inbound) to cross DTA VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 17,** trees 1598' from departure end of runway, 62' right of centerline, 60' AGL/4799' MSL.

DOUGLAS BISBEE, AZ

BISBEE- DOUGLAS INTL

DEPARTURE PROCEDURE: Climb to 5700 in holding pattern, right turn to 140 inbound DUG VORTAC, then assigned route. CAT C,D turbojets climb not to exceed 250 kts. to 8000.

DUCHESNE, UT

DUCHESNE MUNI

DEPARTURE PROCEDURE: Climb direct to MTU VORTAC to depart at or above 7200 eastbound or 10000 westbound.

ELKO, NV

ELKO RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. with a min. climb of 330' per NM to 8000. **Rwy 23**, 2500-3 or std. with a min. climb of 340' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 5**, climb runway heading to 6000, then climbing right turn direct BQU VOR/DME, then...

Rwy 23, (V32 Southwest) climb to 6000, then climbing left turn heading 200°to intercept BQU R-241 (V32).

Rwy 23, all others climb runway heading to 6000, then climbing left turn direct BQU VOR/DME, then...

climb in BQU VOR/DME holding pattern (S, left turns, 340° inbound) to cross BQU VOR/DME at the MEA/MCA/MOCA for direction of flight.

ELY, NV

ELY AIRPORT-YELLAND FIELD

TAKE-OFF MINIMUMS: **Rwys 30,36**, 3000-2 or std. with a min. climb of 700' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 12,30,36**, right turn; **Rwy 18**, straight ahead; intercept . ELY VOR/DME R-150 to 10000. Aircraft departing on V293 southeast climb on course to MEA. Departures V269 or V293 northbound, reverse course to the left, continue climb to cross ELY VOR/DME at or above 12000.

FALLON, NV

FALLON MUNI

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. with a min. climb of 350' per NM to 4300.

DEPARTURE PROCEDURE: **Rwy 21**, turn right. **Rwys 3,13,31**, turn left. All departures climb via HZN R-075 to HZN VORTAC. Climb in holding pattern (W, right turns, 075° inbound) to depart HZN VORTAC at or above: R-240 CW R-149, 8000; R-150 CW R-239, 9000. Continue climb on course to MEA or assigned altitude.

FALLON NAS (KNFL)

FALLON, NV

Diverse departures not authorized.

FLAGSTAFF, AZ

FLAGSTAFF PULLIAM

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. Aircraft departing FLG R-160 CW R-175 climb on course. All others climb southbound on FLG R-172 to 9000, then climbing left turn direct FLG VOR/DME.

FORT HUACHUCA-SIERRA VISTA, AZ

SIERRA VISTA MUNI-LIBBY AAF

TAKE-OFF MINIMUMS: **Rwy 21**, NA.

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **Rwys 26,30**, turn right. **All aircraft** climb to 9500 to TOMBS Int via FHU VOR R-019 or 018° bearing from DAO NDB.

GLENDALE, AZ

GLENDALE MUNI

TAKE-OFF MINIMUMS: **Rwy 19,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 1,** Use DRAKE (RNAV) DEPARTURE.

GLOBE, AZ

SAN CARLOS APACHE (P13)

ADMT 2 08101 (FAA)

DEPARTURE PROCEDURE: Use IZTIR DEPARTURE.

GOODYEAR, AZ

PHOENIX GOODYEAR

TAKE-OFF MINIMUMS: **Rwy 3,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 21,** Use POTER DEPARTURE.

GRAND CANYON, AZ

GRAND CANYON NATIONAL PARK

TAKE-OFF MINIMUMS: **Rwy 3,** NA-environmental.

DEPARTURE PROCEDURE: **Rwy 21,** use GRAND DEPARTURE.

HEBER CITY, UT

HEBER CITY MUNI-RUSS MCDONALD FIELD

DEPARTURE PROCEDURE: **Rwy 3,** Use COOLI RNAV DEPARTURE.

HILL AFB (KHIF)

OGDEN, UT

Diverse departures not authorized, use radar vectors or published Departure Procedures (DP) for obstacle avoidance.

HUNTINGTON, UT

HUNTINGTON MUNI (69V)

AMDT 2A 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 26, 36**, NA. **Rwy 30**, 1700-3 or std. with a min. climb of 300' per NM to 8100.

DEPARTURE PROCEDURE: **Rwys 8, 12,** climbing left turn direct PUC VOR/DME...

Rwy 30, climbing right turn direct PUC VOR/DME....

...continue climb in PUC VOR/DME holding pattern (hold S, right turns, 009° inbound) to MEA for direction of flight.

NOTE: **Rwy 8,** tree 2663' from DER, 922' left of centerline, 40' AGL/5979' MSL. **Rwy 12,** tree 333' from DER, 132' right of centerline, 40' AGL/5919' MSL. **Rwy 30,** tree 2065' from DER, 875' left of centerline, 40' AGL/5999' MSL.

KANAB, UT

KANAB MUNI

TAKE-OFF MINIMUMS: **Rwy 1,** std. with a min. climb of 316' per NM to 7200.

NOTE: Use KACIR ONE RNAV DEPARTURE.

KINGMAN, AZ

KINGMAN

TAKE-OFF MINIMUMS: **Rwys 3,17,21,35**, 800-1 or std. with a min. climb of 210' per NM to 7000.

DEPARTURE PROCEDURE: Climb northbound on IGM R-010 until reaching 6000; reverse course to the left and continue climb to 9000 direct to IGM. If unable to cross IGM at 9000 continue climb in IGM holding pattern (SW, left turns, 027° inbound).

LAGUNA AAF (LGF)

YUMA PROVING GROUND, AZ (03247)

Rwy 6, 18, 36 turn right, climb to 3600 direct BZA VORTAC.

Rwy 24 climb to 3600 direct to BZA VORTAC.

TAKE-OFF OBSTACLES:

Rwy 18: 386' (6' AGL) windsock, 818' from departure end of rwy, 194' left of centerline.

LAKE HAVASU CITY, AZ

LAKE HAVASU CITY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1½ or std. w/ min. climb of 278' per NM to 1200. **Rwy 32,** 600-1½ or std. w/ min. climb of 492' per NM to 1100.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn heading 300° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight. **Rwy 32,** climbing left turn heading 290° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 14,** obstruction light on transmission tower, 1.2 NM from departure end of runway, 1885' left of centerline, 151' AGL/1027' MSL. Transmission tower 1.4 NM from departure end of runway, 1953' left of centerline, 145' AGL/1058' MSL. Bush 1080' from departure end of runway, 500' left of centerline, 31' AGL/825' MSL. Terrain 145' from departure end of runway, 347' left of centerline, 14' AGL/797' MSL. Bush 1256' from departure end of runway, 255' left of centerline, 35' AGL/818' MSL. **Rwy 32,** obstruction light on transmission tower 4052' from departure end of runway, 932' right of centerline, 180' AGL/974' MSL. Transmision tower 2504' from departure end of runway, 1009' right of centerline, 112' AGL/903' MSL.

LAS VEGAS, NV

HENDERSON EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 17L/R,** Cat A/B std. with a min. climb of 491' per NM to 6000, or 2100-3 for climb in visual conditions, Cat C/D NA. **Rwy 35L/R,** Cat A/B std. with a min. climb of 312' per NM to 4700, or 2100-3 for climb in visual conditions, Cat C/D NA.

DEPARTURE PROCEDURE: **Rwy 17L/R,** climbing right turn via LAS R-157 to LAS VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC. **Rwy 35L/R,** climbing right turn via BLD R-257 to BLD VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC.

NOTE: **Rwy 17L,** tree 5610' from departure end of runway, 82' left of centerline, 100' AGL/2739' MSL. Tree 1.9 miles from departure end of runway, 1495' left of centerline, 100' AGL/2859' MSL. **Rwy 17R,** tree 4041' from departure end of runway, 859' left of centerline, 100' AGL/2739' MSL.

MCCARRAN INTL (KLAS)

TAKE-OFF MINIMUMS: **Rwy 25R,** 200-1 or std. with a min. climb of 220' per NM to 2400.

DEPARTURE PROCEDURE: **Rwys 1L, 1R,** climbing right turn direct BLD VORTAC. **Rwys 7L, 7R,** climb via heading 075° to 3400 then climbing right turn direct BLD VORTAC. **Rwys 19L, 19R,** climbing left turn via heading 120° and BLD VORTAC R-257 to BLD VORTAC. **Rwys 25L, 25R,** climb via heading 255° to 2700 then climbing right turn direct BLD VORTAC.

NOTE: **Rwy 1L,** multiple poles, tree, and building 450' from departure end of runway, 283' left of centerline, up to 174' AGL/2132' MSL. Obstruction light on WSK 248' from departure end of runway, 224' right of centerline, 15' AGL/2104' MSL. **Rwy 1R,** multiple sign and building 1331' from departure end of runway, 448' right of centerline, up to 100' AGL/2120' MSL. **Rwy 7L,** multiple poles and trees 747' from departure end of runway, 442' right of centerline, up to 62' AGL/2062' MSL. Tree 1257' from departure end of runway, 789' left of centerline, 65' AGL/2077' MSL. **Rwy 7R,** lighted WSK 126' from departure end of runway, 290' right of centerline, 25' AGL/2051' MSL. **Rwy 19L,** multiple poles, sign and building 1394' from departure end of runway, 320' right of centerline, up to 51' AGL/2256' MSL. **Rwy 19R,** multiple poles, sign, and building 197' from departure end of runway, 125' right of centerline, up to 51' AGL/2256' MSL. Multiple pole and building 1396' from departure end of runway, 356' left of centerline, up to 47' AGL/2262' MSL. **Rwy 25L,** multiple poles, sign, and building 1003' from departure end of runway, 251' left of centerline, up to 63' AGL/2256' MSL. **Rwy 25R,** multiple poles and road 675' from departure end of runway, 17' right of centerline, up to 100' AGL/2301' MSL. Multiple poles and buildings 533' from departure end of runway, 1' left of centerline, up to 150' AGL/2469' MSL.

NORTH LAS VEGAS (VGT)

AMDT 3 08045 (FAA)

DEPARTURE PROCEDURE: Use BOULDER CITY DEPARTURE.

LOGAN, UT

LOGAN-CACHE

TAKE-OFF MINIMUMS: **Rwys 10,28,** NA-obstacles. **Rwy 17**, 2000-3 or std. with min. climb of 270' per NM to 10000. **Rwy 35,** 1500-3 or std. with a min. climb of 270' per NM to 10000.

DEPARTURE PROCEDURE: **Rwy 17,** climbing right turn via LHO VOR/DME R-097 to LHO VOR/DME...**Rwy 35,** climbing left turn via LHO VOR/DME R-055 to LHO VOR/DME...then via LHO VOR/DME R-263 to PIMIE INT, cross PIMIE INT at or above 10000.

NOTE: **Rwy 17,** lighted WSK 194' from departure end of runway, 137' right of centerline, 26' AGL/4465' MSL. Tree 1459' from departure end of runway, 229' left of centerline, 50' AGL/4495' MSL.

LOVELOCK, NV

DERBY FIELD (LOL)

ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1**, 2300-2 or std. with a min. climb of 300' per NM to 6200. **Rwy 7**, 1100-1 or std. with a min. climb of 250' per NM to 5000. **Rwys 19, 25**, 2300-2 or std. with a min. climb of 260' per NM to 6200.

DEPARTURE PROCEDURE: **Rwy 1,** turn right. **Rwys 7,19,25,** turn left, climb direct LLC VORTAC. Aircraft departing 330° CW 359° climb via LLC R-333 to ROBUD INT; 360° CW 089° climb in LLC VORTAC holding pattern (hold NW, left turns, 153° inbound) to depart LLC VORTAC at or above 8600; 090° CW 219° climb on course; 220° CW 329° climb in LLC VORTAC holding pattern to depart LLC VORTAC at or above 8600. Continue climb on course to MEA or assigned altitude.

LUKE AFB (KLUF)

GLENDALE, AZ . . . . . AMDT 3, 09183

Diverse departures not authorized.

Use published DP, if unable to comply with DP notify clearance delivery and request RADAR Vectors.

TAKE-OFF OBSTACLES:

RWY 3L: Taxiing aircraft, 19' AGL/1126' MSL, 1221' from DER, 782' left of centerline. Taxiing aircraft, 19' AGL/1126' MSL, 1407' from DER, 609' left of centerline. Weather equipment, 15' AGL/1117' MSL, 759' from DER, 505' right of centerline. Weather equipment, 15' AGL/1117' MSL, 1209' from DER, 505' right of centerline. Building, 20' AGL/1127' MSL, 1620' from DER, 925' left of centerline.

RWY 21L: Taxiing aircraft, 38' AGL/1120' MSL, 1428' from DER, 774' left of centerline.

MESA, AZ

FALCON FIELD

TAKE-OFF MINIMUMS: **Rwys 4L,4R,** std. with a min. climb of 459' per NM to 3600, or 1100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4L, 4R,** climbing left turn to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound. For climb in visual conditions cross FFZ NDB at or above 2300 then proceed via 220° bearing to PXR R-143 southeast bound. **Rwy 22L, 22R,** climb to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound.

NOTE: **Rwy 4L,** light standard 416' from departure end of runway, 415' left of centerline, 48' AGL/1428' MSL. Obstacle light on building 1313' from departure end of runway, 424' left of centerline, 54' AGL/1434' MSL. **Rwy 4R,** light standard 514' from departure end of runway, 565' right of centerline, 48' AGL/1441' MSL. Tree 1097' from departure end of runway, 650' right of centerline, 50' AGL/1448' MSL. Tree 1060' from departure end of runway, 359' right of centerline, 50' AGL/1451' MSL. **Rwy 22L,** light pole 254' from departure end of runway, 538' right of centerline, 13' AGL/1382' MSL. Windmill 691' from departure end of runway, 528' right of centerline, 30' AGL/1389' MSL. Windmill 715' from departure end of runway, 603' right of centerline, 30' AGL/1389' MSL. Light pole 68' from departure end of runway, 764' right of centerline, 13' AGL/1382' MSL. Tree 175' from departure end of runway, 826' right of centerline, 13' AGL/1383' MSL. **Rwy 22R,** light pole 296' from departure end of runway, 541' right of centerline 13' AGL/1400' MSL. Light pole 495' from departure end of runway, 187' right of centerline, 13' AGL/1382' MSL. LIght pole 594' from departure end of runway, 65' right of centerline, 13' AGL/1382' MSL.

MESQUITE, NV

MESQUITE

TAKE-OFF MINIMUMS: **Rwy 1,** 900-3, or std. with a min. climb of 620' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 1,** climbing left turn, **Rwy 19,** climbing right turn. **All aircraft** climb direct MMM VORTAC. Aircraft departing MMM R-149 CW R-220 climb on course. All others continue climb via MMM R-196 to 6100 and reverse course to cross MMM VORTAC at or above: R-221 CW R-270 and R-331 CW R-060, 6100; R-271 CW R-330, 7300; R-061 CW R-150, 8300.

MICHAEL AAF (KDPG),

DUGWAY PROVING GROUND,UT

.... .Amdt 1, 09099

Rwy 12, 4700-3*

*Or standard with minimum climb of 305 ft/NM to 6100.

DEPARTURE PROCEDURES: **Rwy 12** Climb via heading 122° to 6100, then right turn direct DPG NDB. Continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course, or for climb in visual conditions: Cross Michael AAF, Dugway Proving Ground at or above 8900 before proceeding on course. **Rwy 30** Climb via heading 302° to 6100 then left turn direct DPG NDB, continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD

TAKE-OFF MINIMUMS: **Rwy 34**, CAT A,B 1200-2 or std. with a min. climb of 360' per NM to 6500. CAT C,D NA.

DEPARTURE PROCEDURE: **Rwy 16**, climb direct MLF VORTAC. **Rwy 34,** climbing left turn direct MLF VORTAC. Aircraft departing MLF R-170 CW R-210 climb on course. All other aircraft continue climb southbound via MLF R-190 to 7600, then climbing right turn to cross MLF VORTAC at or above 9000, then climb on course.

MINDEN, NV

MINDEN-TAHOE

TAKE-OFF MINIMUMS: **Rwys 12,16,30,** NA. **Rwy 34,** 4000-3 or std. with a min. climb of 531' per NM to 8700.

DEPARTURE PROCEDURE: **Rwy 34,** use MINDEN RNAV DEPARTURE.

MOAB,UT

CANYONLANDS FIELD

TAKE-OFF MINIMUMS: **Rwy 3**, std. with a min. climb of 320' per NM to 5800. **Rwy 21,** std. with a min. climb of 330' per NM to 5400.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right climb to 6700 via OAB R-293, then climbing right turn direct OAB VOR/DME. Climb in OAB holding pattern (NW, left turns, 113° inbound) to 10000 then proceed on course.

NOTE: **Rwy 3,** tree 4383' from departure end of runway, 1507' right of centerline, 50' AGL/4729' MSL. Road 1749' from departure end of runway, 905' left of centerline, 15' AGL/4635' MSL. Tree 3914' from departure end of runway, 1166' right of centerline, 50' AGL/4690' MSL. Tree 1.25 NM from departure end of runway, 400' right of centerline, 50' AGL/4758' MSL. **Rwy 21,** pole 2026' from departure end of runway, 78' right of centerline, 80' AGL/4625' MSL. Pole 2061' from departure end of runway, 40' right of centerline, 80' AGL/4625' MSL. Pole 2095' from departure end of runway, 857' right of centerline, 80' AGL/4623' MSL. Pole 1980' from departure end of runway, 344' right of centerline, 80' AGL/4602' MSL.

NELLIS AFB (KLSV)

LAS VEGAS, NV 08241

Rwy 3L/R, 10,200-3* SR-SS

Rwy 21L/R, 10,200-3* SR-SS

Diverse departure not authorized.

MILITARY: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 300' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vector climb gradient, A/C must depart VFR.

*CIVIL: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 330' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vectors climb gradient, A/C may use published weather minimums or depart VFR.

TAKE-OFF OBSTACLES: **RWY 3L**: Terrain 0' AGL/1870' MSL, 0' inward of DER, 500' left of centerline. Road 15' AGL/1934' MSL, 1321' from DER, 802' left of centerline. **RWY 3R**: C-5 on taxiway 65' AGL/1936' MSL, 1345' from DER, 822' right of centerline. Road 15' AGL/2014' MSL, 3929' from DER, 1404' right of centerline. **RWY 21L**: Trees 90' AGL/1949' MSL, 4594' from DER, 1596' right of centerline. Trees 90' AGL/1949' MSL, 4940' from DER, 541' right of centerline. Trees 60' AGL/1899' MSL 929' from DER, 724' left of centerline. Trees 60' AGL/1899' MSL, 946' from DER, 626' left of centerline. Trees 60' AGL/1899' MSL, 2720' from DER, 341' left of centerline. Trees 60' AGL/1899' MSL, 2514' from DER, 403' left of centerline.

RWY 21R: Terrain 0' AGL/1835' MSL, 0' inward of DER, 500' right of centerline. Trees 90' AGL/1949' MSL, 4594' from DER, 597' right of centerline. Building 45' AGL/1904' MSL, 2274' from DER, 1037' right of centerline. Road 15' AGL/1874' MSL, 1404' from DER, 465' right of centerline.

NOGALES, AZ

NOGALES INTL

TAKE-OFF MINIMUMS: **Rwy 3**, 5000-3 or std. with a min. climb of 350' per NM to 8000. **Rwy 21**, 5000-3 or std. with a min. climb of 300' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right. **All aircraft** climb via OLS R-276 and TUS R-176 to cross ARVEY Int at or above 10000. Continue on course to MEA or assigned altitude.

OGDEN, UT

OGDEN-HINCKLEY (OGD)

AMDT 2 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,16,** NA- Obstacles.

DEPARTURE PROCEDURE: **Rwys 3, 21, 25, 34,** Use EMONT DEPARTURE.

PAGE, AZ

PAGE MUNI (PGA)
AMDT 2 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA – obstacles **Rwy 15,** 300-1 or std. w/ min. climb of 252' per NM to 6500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climb via 157° heading to 6000, then climbing right turn to PGA VOR/DME. cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA, or climb in visual conditions: cross Page airport at or above 6100, before proceeding on course. **Rwy 33,** climb via 337° heading to 6000, then climbing left turn to PGA VOR/DME. Cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA.

NOTE: **Rwy 15,** terrain 192' from departure end of runway, 274' right of centerline, 4323' MSL, tree 1.07 NM from departure end of runway, 167' left of centerline, 4519 MSL, transmission lines 1.96 NM from departure end of runway, 825' left of centerline, 100' AGL/4519' MSL, power line 4.00 NM from departure end of runway, 3606' right of centerline, 75' AGL/4819' MSL, power line 4.35 NM from departure end of runway, 3968' right of centerline, 75' AGL/4919' MSL, power line 5.36 NM from departure end of runway, 5039' right of centerline, 75' AGL/5119' MSL, power line 4.51 NM from departure end of runway, 4136' right of centerline, 75' AGL/5019' MSL, tree 4.52 NM from departure end of runway, 1508' right of centerline, 100' AGL/5173' MSL, AAO 4.58 NM from departure end of runway, 1617' right of centerline, 200' AGL/5187' MSL, AAO 5.15 NM from departure end of runway, 4456' left of centerline, 200' AGL/5190' MSL, tree 5.56 NM from departure end of runway, 4097' right of centerline, 30' AGL/5249' MSL, AAO 5.98 NM from departure end of runway, 653' left of centerline, 200' AGL/5440' MSL.

PARKER, AZ

AVI SUQUILLA

TAKE-OFF MINIMUMS: **Rwy 1**, 800-1½. **Rwy 19**, 300-1.

DEPARTURE PROCEDURE: **Rwy 19**, right turn. **Rwy 1**, left turn. Climb via R-067 to PKE VORTAC, to cross above 4500. Continue climb on course to MEA or assigned altitude.

PAYSON, AZ

PAYSON

TAKE-OFF MINIMUMS: **Rwy 6,** std. with a min. climb of 360' per NM to 9300, or 2500-3 for climb in visual conditions. **Rwy 24,** std. with a min. climb of 375' per NM to 9300, or 2500-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 6, 24,** for climb in visual conditions: Cross Payson Airport at or above 7500, then proceed on course.

NOTE: **Rwy 24,** bush 15' from departure end of runway, 133' right of centerline, 6' AGL/5148' MSL. Tree 320' from departure end of runway, 183' right of centerline, 12' AGL/5154' MSL. Fence 85' from departure end of runway, 84' left of centerline, 4' AGL/5141' MSL. Tree 164' from departure end of runway, 126' left of centerline, 9' AGL/5147' MSL.

PHOENIX, AZ

PHOENIX-DEER VALLEY

DEPARTURE PROCEDURE: Use DEER VALLEY DEPARTURE.

PHOENIX SKY HARBOR INTL (PHX)
AMDT 4A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 26,** 700-3 or std. with a min. climb of 358' per NM to 2000.

DEPARTURE PROCEDURE: **Rwys 7L, 7R, 8,** climb via 078° heading to 3000, then climbing right turn direct PHOENIX (PXR) VORTAC. **Rwys 25L, 25R**, climb via 258° heading to 1550 then climbing right turn to join the PXR R-260 (V16) westbound, climb to 5000. **Rwy 26,** climb via 258° heading to 1550 then climbing left turn to join the PXR R-260 (V16) westbound, climb to 5000. Westbound departures continue climb on PXR R-260. All others, climbing right turn direct PXR VORTAC.

NOTE: **Rwy 7L,** building 1332' from DER, 798' left of centerline, 67' AGL/1176' MSL. **Rwy 7R,** rod 716' from DER, 184' right of centerline, 87' AGL/1196' MSL. **Rwy 8,** light standard 3530' from DER, 1207' left of centerline, 123' AGL/1232' MSL. Light standard 3479' from DER, 1003' left of centerline, 118' AGL/1227' MSL. **Rwy 25L,** light standard 1129' from DER, 774' left of centerline, 91' AGL/1200' MSL. ASDE-X equipment 411' from DER, 531' left of centerline, 29' AGL/1135' MSL. **Rwy 26,** light 59' from DER, 63' right of centerline, 16' AGL/1125' MSL. Pole 58' from DER, 90' right of centerline, 25' AGL/1125' MSL. Light 78' from DER of runway, 64' right of centerline, 18' AGL/1127' MSL. Light 38' from DER, 440' left of centerline, 24' AGL/1135' MSL. Light standard 77' from DER, 453' left of centerline, 27' AGL/1136' MSL. Light standard 74' from DER, 456' right of centerline, 33' AGL/1142' MSL. Light standard 77' from DER, 434' right of centerline, 31' AGL/1140' MSL. Tree 113' from DER, 294' right of centerline, 24' AGL/1133' MSL. Building 2.32 NM from DER, 3309' right of centerline,406' AGL/1496' MSL. Building 2.28 NM from DER, 3612' right of centerline, 663' AGL/1750' MSL. Tree 234' from DER, 214' right of centerline, 24' AGL/1133' MSL. Light standard 64' from DER, 68' left of centerline, 39' AGL/1125' MSL. ASDE-X equipment 897' from DER, 413' right of centerline, 35' AGL/1141' MSL.

PHOENIX-MESA GATEWAY

TAKE-OFF MINIMUMS: **Rwys 30L,30C,30R,** CAT C,D,E 2000-2 or std. with a min. climb of 230' per NM to 3900.

DEPARTURE PROCEDURE: **Rwys 12L,12C,12R,** climb to 2500 via IWA R-122 then climbing right turn direct PXR VORTAC. **Rwys 30L,30C,30R,** climbing right turn to 4000 via IWA R-122 then climbing right turn direct PXR VORTAC.

PRESCOTT, AZ

ERNEST A. LOVE FIELD

TAKE-OFF MINIMUMS: **Rwy 12,** 2700-2 or std. with a min. climb of 460' per NM to 8100. **Rwy 21L,** 2700-2 or std. with a min. climb of 500' per NM to 8100. **Rwy 30,** 300-1 or std. with a min. climb of 300' per NM to 5200. **Rwy 3L, 21R,** NA.

DEPARTURE PROCEDURE: **Rwy 3R,** turn left heading 250° to intercept DRK R-305. **Rwy 12,** turn right direct DRK VORTAC. **Rwy 21L,** turn right heading 335° to intercept DRK R-305. **Rwy 30,** climb direct DRK VORTAC. **All aircraft** continue climb via DRK R-305 to 9000. Aircraft departing via DRK R-305 continue climb on course. All other aircraft turn right direct DRK VORTAC then climb on course.

PRICE, UT

CARBON COUNTY RGNL/BUCK DAVIS FLD (PUC)

AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - per flight check **Rwy 32,** std. w/ min. climb of 425' per NM to 7000, or 3400-3 for climb in visual conditions. **Rwy 36,** std. w/ min. climb of 400' per NM to 7200, or 3400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climb on a heading between 126° CW to 193°, thence...**Rwy 18**, climb on a heading between 192° CCW to 125°, thence...**Rwy 25,** climb on a heading between 176° CCW to 124°, thence... **Rwy 32,** climb to 7000 then climbing left turn on a heading between 175° CCW to 145°,thence...**Rwy 36,** climb to 6400 then climbing right turn on a heading between 141° CW to 184°, maintain 210K until completion of turn, thence...

...continue climb to assigned altitude for direction of flight. **Rwys 32, 36,** for climb in visual conditions cross Carbon County Rgnl / Buck Davis Field at or above 9200 before proceeding on course.

NOTE: **Rwy 14,** multiple trees beginning 121' from DER, 3' left of centerline, up to 40' AGL/5839 ' MSL. **Rwy 25,** trees 515' from DER, 535' right of centerline, up to 40' AGL/5879' MSL. **Rwy 32,** trees 9544' from DER, 1644' left of centerline, up to 40' AGL/6900' MSL. Trees 11332' from DER, 74' right of centerline, up to 40' AGL/6800' MSL. **Rwy 36,** poles 2599' from DER, 615' left of centerline, 40' AGL/6079 ' MSL. Poles 2715 ' from DER, 668' right of centerline, 59' AGL/6098' MSL.

PROVO, UT

PROVO MUNI

DEPARTURE PROCEDURE: Use PROVO DEPARTURE.

RENO, NV

RENO/STEAD (RTS)

AMDT 3A 09183 (FAA)

TAKE-OFF MINIMUMS: CAT A,B only, CAT C,D NA. **Rwys 8,14,** 1300-2 or std. with a min. climb of 400' per NM to 6500. **Rwy 26,** 1900-2 or std. with a min. climb of 410' per NM to 7200. **Rwy 32,** 2300-2 or std. with a min. climb of 420' per NM to 7200.

DEPARTURE PROCEDURE: **Rwys 8,32,** climbing right turn heading 100° and FMG VORTAC R-314 to FMG VORTAC. **Rwy 14,** left turn climb direct FMG VORTAC. **Rwy 26,** climbing right turn heading 050° and FMG VORTAC R-314 to FMG VORTAC. **All aircraft** climb in FMG VORTAC holding pattern (NE, right turns, 221° inbound) to depart FMG VORTAC; R-260 CW R-170 at or above 10000; R-171 CW R-195 at or above 10500; R-196 CW R-259 at or above 12000.

RENO, NV (CON'T)

RENO/TAHOE INTL (RNO)
AMDT 4 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, NA-terrain. **Rwy 16L,** std. w/ min. climb of 730' per NM to 8000, or 600-1¼ w/ min. climb of 480' per NM to 8000, or 2700-3 for climb in visual conditions. **Rwy 16R,** std. w/ the following minimum climb requirements: 210 knots or less, 385' per NM to 8000; more than 210 knots, 420' per NM to 8900, or 2700-3 for climb in visual conditions. Resume normal speed after passing FMG VORTAC. **Rwy 25,** std. w/ min. climb of 470' per NM to 7800, or 2700-3 for climb in visual conditions. **Rwy 34L,** std. w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions. **Rwy 34R,** std. w/ min. climb of 480' per NM to 7000, or 500-1½ w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 16L/R,** climb heading 164° to 6600 then climbing left turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . .**Rwy 25,** climb heading 254° to 5000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . . **Rwys 34L/R,** climb heading 344° to 7000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . .

. . .**All aircraft:** continue climb in FMG VORTAC holding pattern (northeast, left turn, 221° inbound) to cross FMG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 16L,** multiple poles, trees, bushes and terrain beginning 618' from departure end of runway, 133' left of centerline, up to 20' AGL/4961' MSL. **Rwy 16R,** multiple trees 2784' from departure end of runway, 171' right of centerline, up to 20' AGL/4510' MSL. Multiple trees and terrain beginning 746' from departure end of runway, 380' left of centerline, up to 20' AGL/4703' MSL. **Rwy 25,** multiple trees and poles beginning 829' from departure end of runway, 201' right of centerline, up to 103' AGL/4523' MSL. Building 6023' from departure end of runway, 456' right of centerline, 152' AGL/4608' MSL. Fence 222' from departure end of runway, 270' right of centerline, up to 5' AGL/4415' MSL. Multiple trees and poles beginning 500' from departure end of runway, 31' left of centerline, up to 20' AGL/4506' MSL. **Rwy 34L,** multiple trees and poles beginning 1229' from departure end of runway, 180' right of centerline, up to 20' AGL/4498' MSL. Multiple trees beginning 1193' from departure end of runway, 331' left of centerline, up to 20' AGL/4489' MSL. **Rwy 34R,** multiple trees and poles beginning 1067' from departure end of runway, 172' right of centerline, up to 20' AGL/4497' MSL. Multiple trees and poles beginning 1230' from departure end of runway, 350' left of centerline, upt o 20' AGL/4498' MSL. Building 1.2 NM from departure end of runway, 1730' right of centerline, 363' AGL/4780' MSL.

RICHFIELD, UT

RICHFIELD MUNI (RIF)
AMDT 1 08157 (FAA)

DEPARTURE PROCEDURE: **Rwy 1,** use RICHFIELD (RNAV) DEPARTURE. **Rwy 19,** use HAMET (RNAV) DEPARTURE.

ROOSEVELT, UT

ROOSEVELT MUNI

TAKE-OFF MINIMUMS: **Rwy 25,** 700-3 or std. with a min. climb of 300' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 7,** turn right. **Rwy 25,** turn left. **All aircraft,** climb direct MTU VORTAC. Aircraft departing MTU VORTAC R-040 CW R-150, climb on course. All others continue climb in MTU holding pattern (NE, right turns, 213° inbound) to cross MTU VORTAC; R-151 CW R-290 at or above 8000; R-291 CW R-039 at or above 10,000. Then climb on course.

SAFFORD, AZ

SAFFORD RGNL

TAKE-OFF MINIMUMS: IFR departure not authorized.

ST. GEORGE, UT

ST. GEORGE MUNI

TAKE-OFF MINIMUMS: **Rwy 34**, 1500-2 or std. with a min. climb of 325' per NM to 4000.

DEPARTURE PROCEDURE: **Rwy 16**, turn left. **Rwy 34**, turn right. Climb in OZN VOR/DME holding pattern (hold SE, right turns, 296 inbound) to depart OZN VOR/DME at or above MEA for direction of flight.

ST. JOHNS, AZ

ST. JOHNS INDUSTRIAL AIR PARK (SJN)
AMDT 1A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 21**, 400-2 or std. with a min. climb of 205' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 3, 32,** climbing right turn, **Rwys 14, 21,** climbing left turn. **All aircraft,** climb direct SJN VORTAC. Aircraft departing SJN VORTAC R-240 CW R-080 climb on course. All others continue climb in SJN VORTAC holding pattern (Hold NE,right turns,239° inbound) to cross SJN VORTAC at or above 9000.

NOTE: **Rwy 14,** 5790' tower 350' right abeam departure end of runway.

SALT LAKE CITY, UT

SALT LAKE CITY INTL (SLC)
AMDT 10 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 32,** NA, operational.
DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 10000 via heading 161° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwy 17,** climb to 10000 via heading 166° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwys 34L, 34R,** climb to 9000 via heading 341° and OGD R-153 to OGD VORTAC before proceeding on course. **Rwy 35,** climb to 9000 via heading 336° and OGD R-153 to OGD VORTAC before proceeding on course.
NOTE: **Rwy 16L,** vehicle 124' from DER, 14' right of centerline, 15' AGL/4239' MSL. Light pole 988' from DER, 726' right of centerline, 34' AGL/4254' MSL. Pole 1024' from DER, 689' right of centerline, 34' AGL/4254' MSL. **Rwy 17,** vehicles beginning 335' from DER, on centerline, up to 17' AGL/4241' MSL. **Rwy 34R,** post 13' from DER, 349' right of centerline, 3' AGL/4227' MSL. **Rwy 35,** post 56' from DER, 249' left of centerline, 2' AGL/4220' MSL.

SOUTH VALLEY RGNL AIRPORT (U42)
AMDT 4A 09155 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, 2400-3 or std. with a min. climb of 295' per NM to 7700. **Rwy 34,** std. with a min. climb of 353' per NM to 9500.
DEPARTURE PROCEDURE: **Rwy 16,** climbing left turn to 9600 via heading 136° and V21 (TCH R-161 FFU R-341) to FFU VORTAC. Aircraft departing FFU R-156 CW R-263 and R-308 CW R-359 climb on course. All others continue climb in FFU VORTAC holding pattern (S, right turns, 008° inbound) to cross FFU VORTAC at or above: R-360 CW R-093 12400; R-094 CW R-138 10600; R-139 CW R-155 11300; R-264 CW R-307 11500. **Rwy 34,** climbing right turn to 9500 via heading 026° and V21 (TCH R-161) to TCH VORTAC. Aircraft departing TCH R-144 CW R-176 and R-217 CW R-355 climb on course. All others continue climb in TCH VORTAC holding pattern (NW, right turns, 116° inbound) to cross TCH VORTAC at or above: R-356 CW R-116 10700; R-117 CW R-143 11600; R-177 CW R-216 10100.

SCOTTSDALE, AZ

SCOTTSDALE (SDL)
AMDT 7 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min climb of 440' per NM to 4000, or 3100-3 for climb in visual conditions. **Rwy 21,** std. w/ min. climb of 215' per NM to 4000, or 3100-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 3,** climbing left turn to 4000 via heading 220° and PXR VORTAC R-336 southeast bound to PXR VORTAC. Thence...
Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course. **Rwy 21,** climbing right turn to 4000 via heading 300° and PXR VORTAC R-336 northwest bound then left turn direct PXR VORTAC. Thence...
Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course.
...continue climb on course.
NOTE: **Rwy 3,** multiple light standards beginning 63' from departure end of runway, 445' left of centerline, up to 44' AGL/1554' MSL. Hoist on dike 878' from departure end of runway, 735' left of centerline, 51' AGL/1561' MSL. Dike beginning 1066' from departure end of runway, 316' left of centerline, 38' AGL/1548' MSL. Day marker on dike 1230' from departure end of runway, 5' left of centerline, 39' AGL/1549' MSL. Tree, 269' from departure end of runway, 490' left of centerline, 13' AGL/1523' MSL. Tree 51' from departure end of runway, 279' left of centerline, 6' AGL/1516' MSL. Tree 765' from departure end of runway, 115' left of centerline, 22' AGL/1532' MSL. Road beginning 647' from departure end of runway, 296' left of centerline, 19' AGL/1529' MSL. Tree 227' from departure end of runway, 97' left of centerline, 6' AGL/1516' MSL. Fence beginning 5' from departure end of runway, 338' right of centerline, 6' AGL/1511' MSL. Light standard, 1013' from departure end of runway, 430' right of centerline, 44' AGL/1552' MSL. **Rwy 21,** tree 1072' from departure end of runway, 426' right of centerline, 53' AGL/1497' MSL. Building 316' from departure end of runway, 537' right of centerline, 23' AGL/1467' MSL. Tree 2087' from departure end of runway, 418' left of centerline, 61' AGL/1505' MSL. Tree 1432' from departure end of runway, 438' right of centerline, 38' MSL/1482' MSL. Tree 2234' from departure end of runway, 559' left of centerline, 58' AGL/1502' MSL.

SEDONA, AZ

SEDONA (SEZ)
AMDT 1 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 21,** Use OATES RNAV DEPARTURE.

SHOW LOW, AZ

SHOW LOW RGNL

DEPARTURE PROCEDURE: **Rwys 3,6**, turn left. **Rwys 21,24**, turn right. All aircraft climb via 345 bearing from SOW NDB to DEHOG INT then climb on course.

SPRINGERVILLE, AZ

SPRINGERVILLE MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 1000-2 or std. with a min. climb of 360' per NM to 8400.

DEPARTURE PROCEDURE: **Rwys 3, 11,** climbing left turn to 8400 via heading 360° before proceeding on course. **Rwys 21, 29,** climbing right turn to 8400 via 360° before proceeding on course.

TAYLOR, AZ

TAYLOR MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 300-1 or std. with a min. climb of 248' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 3/21,** climb on runway heading to 8000 before turning on course.

TONOPAH, NV

TONOPAH

TAKE-OFF MINIMUMS: **Rwys 11,29**, NA. **Rwys 15,33**, 2600-2 or std. with a min. climb of 260' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 15**, turn left. **Rwy 33**, turn right. Climb direct TPH VORTAC. Continue climb in holding pattern (NE, right turns, 246° inbound) to depart TPH VORTAC at or above 8000. Climb on course to MEA or assigned altitude.

TOOELE, UT

BOLINDER FIELD-TOOELE VALLEY

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 490' per NM to 11000. **Rwy 35,** std. with a min. climb of 360' per NM to 9000.

DEPARTURE PROCEDURE: Use STACO DEPARTURE.

NOTE: **Rwy 17,** tree 794' from departure end of runway, 277' right of centerline, 35' AGL/4380' MSL. Tree 967' from departure end of runway, 432' right of centerline, 35' AGL/4394' MSL. Tree 1023' from departure end of runway, 313' right of centerline, 35' AGL/4395' MSL.

TUCSON, AZ

MARANA RGNL

TAKE-OFF MINIMUMS: **Rwys 3, 12,** N/A-Obstacles

DEPARTURE PROCEDURE: **Rwy 21,** climb to 6500 via heading 360° and TUS R-308 to TOTEC Int/TUS 57 DME, then as filed. **Rwy 30,** climb to 6500 via heading 303° intercept TUS R-308 above 3500, to TOTEC INT/TUS 57 DME, then as filed.

NOTE: **Rwy 21,** road 192' from departure end of runway, 527' left of centerline 15' AGL/2034' MSL.

RYAN FIELD

DEPARTURE PROCEDURE: **Rwy 6R,** turn right; **Rwy 24L**, turn left direct to Ryan NDB. Continue climb in holding pattern (W, right turn 090° inbound) to 5000 before proceeding on course.

TUCSON, AZ (CON'T)

TUCSON INTL (TUS)

AMDT 4A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 300-1¾ or std. w/ min. climb of 228' per NM to 3000.

DEPARTURE PROCEDURE: **Rwys 3, 29L,29R,** climbing right turn direct to TUS VORTAC. **Rwys 11L,11R** climb via runway heading to 4000 then climbing left turn direct TUS VORTAC. **Rwy 21,** climbing left turn direct to TUS VORTAC. **All aircraft** continue climbing in holding pattern (NW, right turns, 128° inbound) to depart TUS VORTAC at or above 9000.

NOTE: **Rwy 3,** tower 9215' from departure end of runway, 1689' left of centerline, 246' AGL/2831' MSL.

VERNAL, UT

VERNAL RGNL

TAKE-OFF MINIMUMS: **Rwy 16**, 1500-2 or std with a min. climb of 250' per NM to 7000'. **Rwy 25**, 1500-2 or std. with a min. climb of 390' per NM to 7000. **Rwy 34**, 1600-2 pr std. with a min. climb of 330' per NM to 7000'.

DEPARTURE PROCEDURE: **Rwys 7,34**, turn right. **Rwys 16,25**, turn left. **All aircraft** climb direct VEL. Aircraft departing V391 S-bound climb on course. All others climb in holding pattern (SE, right turns, 322° inbound). Aircraft SW-bound V208 depart VEL at or above 8400', all others depart VEL at or above 9500'. Continue climb on course to MEA or assigned altitude.

WENDOVER, UT

WENDOVER

TAKE-OFF MINIMUMS: **Rwy 26,** standard wit h a min. climb of 300' per NM to 7000. **Rwy 30**, NA.

DEPARTURE PROCEDURE: **Rwys 8,12, 26,** climbing left turn direct BVL VORTAC. Aircraft departing BVL VORTAC R-330 CW R-150 climb on course. All others continue climb in BVL VORTAC holding pattern (Hold NE right turns, 247° inbound) to cross at or above 7400, then climb on course.

WILLCOX, AZ

COCHISE COUNTY

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. **All aircraft** climb direct CIE VORTAC.

WINDOW ROCK, AZ

WINDOW ROCK

TAKE-OFF MINIMUMS: **Rwy 2**, 700-2 or std. with a min. climb of 500' per NM to 8000. **Rwy 20,** 600-2 or std. with a min. climb of 260' per NM to 8200.

DEPARTURE PROCEDURE: **Rwy 2**, turn right. **Rwy 20,** turn left direct to GUP VORTAC before proceeding on course.

NOTE: **Rwy 2,** terrain 3832' from departure end of runway, 1025' right of centerline, 6926' MSL. Poles 5220' from departure end of runway, 245' right of centerline, 180' AGL/6922' MSL. Tower 7067' from departure end of runway, 3072' left of centerline, 71' AGL/7316' MSL. Terrain 7449' from departure end of runway, 1612' left of centerline, 6991' MSL. Terrain 8776' from departure end of runway, 1851' left of centerline, 7109' MSL. Tree 9665' from departure end of runway, 1326' right of centerline, 7340' MSL. Tree 11326' from departure end of runway, 355' left of centerline, 7351' MSL. **Rwy 20,** trees 1018' from departure end of runway, 620' left of centerline, 30' AGL/6768' MSL.

WINNEMUCCA, NV

WINNEMUCCA MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, 2500-2 or std. with a min. climb of 450' per NM to 6800. **Rwys 14,20**, 3200-2 or std. with a min. climb of 520' per NM to 7500.

DEPARTURE PROCEDURE: **Rwys 14,20**, turn right. **Rwy 2**, turn left. **Rwy 32**, climb straight ahead. All aircraft climb via INA R-326 to 6700 or above within 12 NM, then climbing left turn return to INA VOR/DME via R-326. Continue climb in INA VOR/DME holding pattern (hold NW, right turns, 146° inbound) to depart INA VOR/DME at or above 11000. Southbound aircraft continue via INA R-146 direct Fesko Int. Northbound aircraft continue via INA R-326 and SDO R-144 direct SDO VORTAC.

YUMA MCAS/ YUMA INTL(KNYL)

YUMA, AZ. 08213

Climb direct to BZA VORTAC, thence on course.

AIRPORT DIAGRAM

BULLHEAD CITY/ LAUGHLIN/ BULLHEAD INTL (IFP)
AL-6967 (FAA)
BULLHEAD CITY, ARIZONA

AWOS-3
119.825
BULLHEAD TOWER
123.9
GND CON
118.25

D

FIELD ELEV 701

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

35°10.0'N

ELEV 625
9L
A1
163.8°
1.0% UP
FIRE STATION
TERMINAL
A2
A3
A3
RWY 16-34
S75, D200, DT400
897

35°09.5'N

A4
7500 X 150
VAR 12.7°E
A5
A5
CONTROL TOWER
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

35°09.0'N

A6
343.8°
A7
ELEV 699
A8
34

114°34.0'W
114°33.5'W
114°33.0'W

SW-4, 22 OCT 2009 to 19 NOV 2009

BULLHEAD CITY, ARIZONA AL-6967 (FAA)

APP CRS	Rwy Idg	7500
164°	TDZE	688
	Apt Elev	701

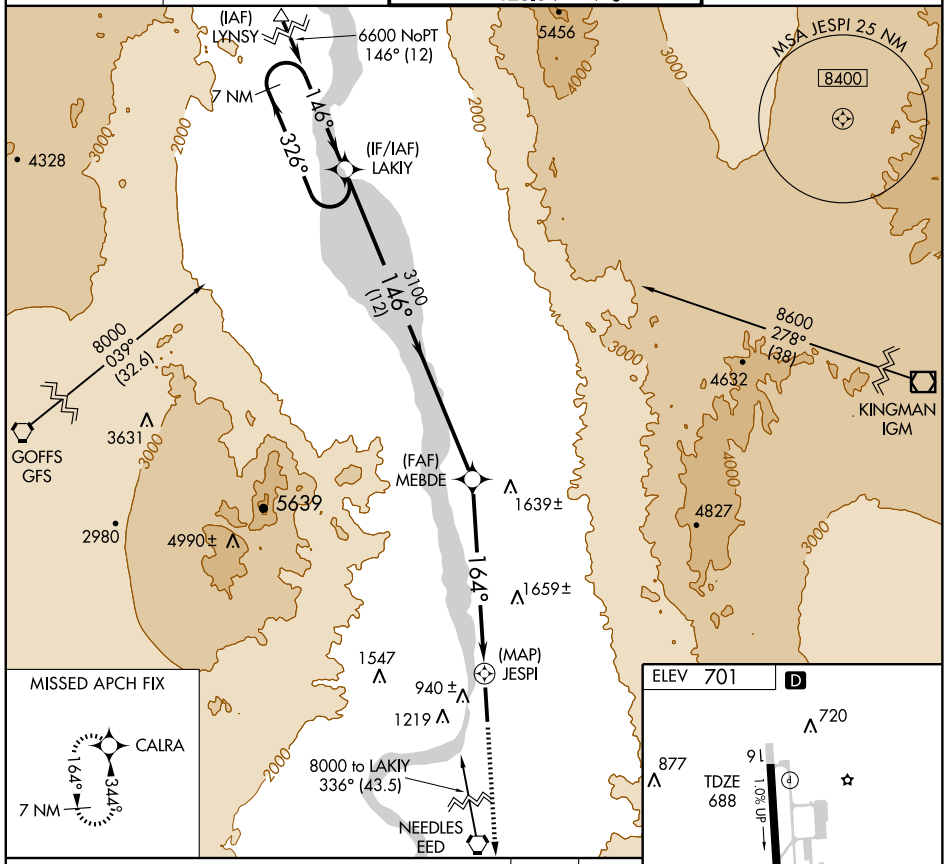
RNAV (GPS) RWY 16

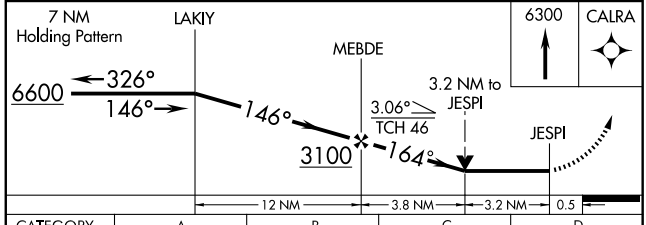
BULLHEAD CITY/LAUGHLIN/BULLHEAD INTL (IFP)

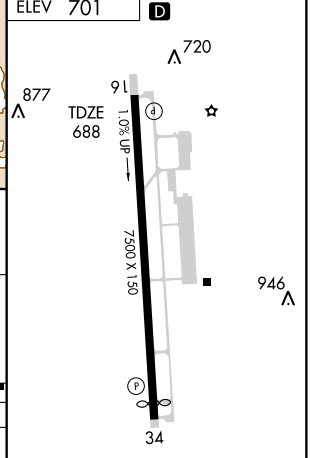
T A DME/DME RNP-0.3 NA. Procedure NA at night.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Needles altimeter setting and increase all MDA 100 feet.

MISSED APPROACH: Climb to 6300 direct CALRA and hold, continue climb-in-hold to 6300.

AWOS-3	LOS ANGELES CENTER	LAUGHLIN/BULLHEAD TOWER★	GND CON
119.825	134.65 360.65	123.9 (CTAF) L	118.25







CATEGORY	A	B	C	D
LNAV MDA	1840-1¼ 1152 (1200-1¼)	1840-1½ 1152 (1200-1½)	1840-3	1152 (1200-3)
CIRCLING	1840-1¼ 1139 (1200-1¼)	1840-1½ 1139 (1200-1½)	1840-3	1139 (1200-3)

REIL Rwys 16 and 34
MIRL Rwy 16-34 L

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 82602 W34A	APP CRS 344°	Rwy Idg 7000 TDZE 699 Apt Elev 701

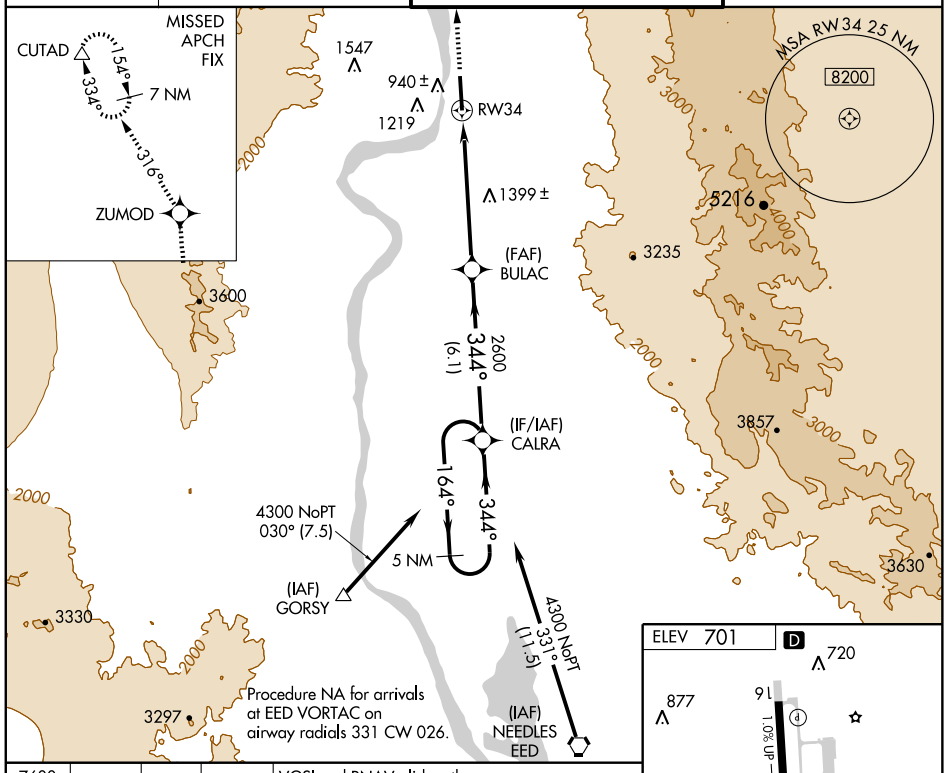
RNAV (GPS) RWY 34

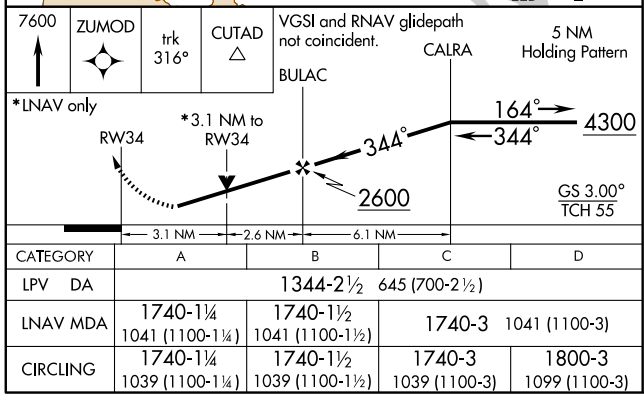
BULLHEAD CITY/LAUGHLIN/BULLHEAD INTL (IFP)

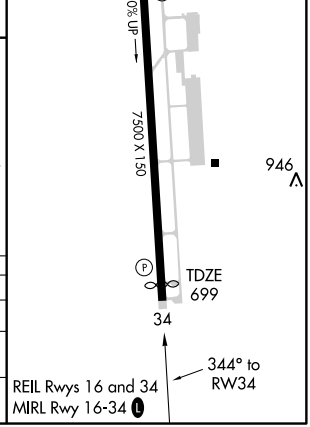
Circling to Rwy 16 NA at night.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Needles altimeter setting and increase LPV DA 94 feet and all MDA 100 feet.
VDP NA when using Needles altimeter setting.

MISSED APPROACH: Climb to 7600 direct ZUMOD and via track 316° to CUTAD and hold, continue climb-in-hold to 7600.

AWOS-3	LOS ANGELES CENTER	LAUGHLIN/BULLHEAD TOWER*	GND CON
119.825	134.65 360.65	123.9 (CTAF) L	118.25







CATEGORY	A	B	C	D
LPV DA	1344-2½ 645 (700-2½)			
LNAV MDA	1740-1¼ 1041 (1100-1¼)	1740-1½ 1041 (1100-1½)	1740-3 1041 (1100-3)	
CIRCLING	1740-1¼ 1039 (1100-1¼)	1740-1½ 1039 (1100-1½)	1740-3 1039 (1100-3)	1800-3 1099 (1100-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

BULLHEAD CITY, ARIZONA

AL-6967 (FAA)

VORTAC EED 115.2 Chan 99	APP CRS 335°	Rwy Idg 7000 TDZE 699 Apt Elev 701

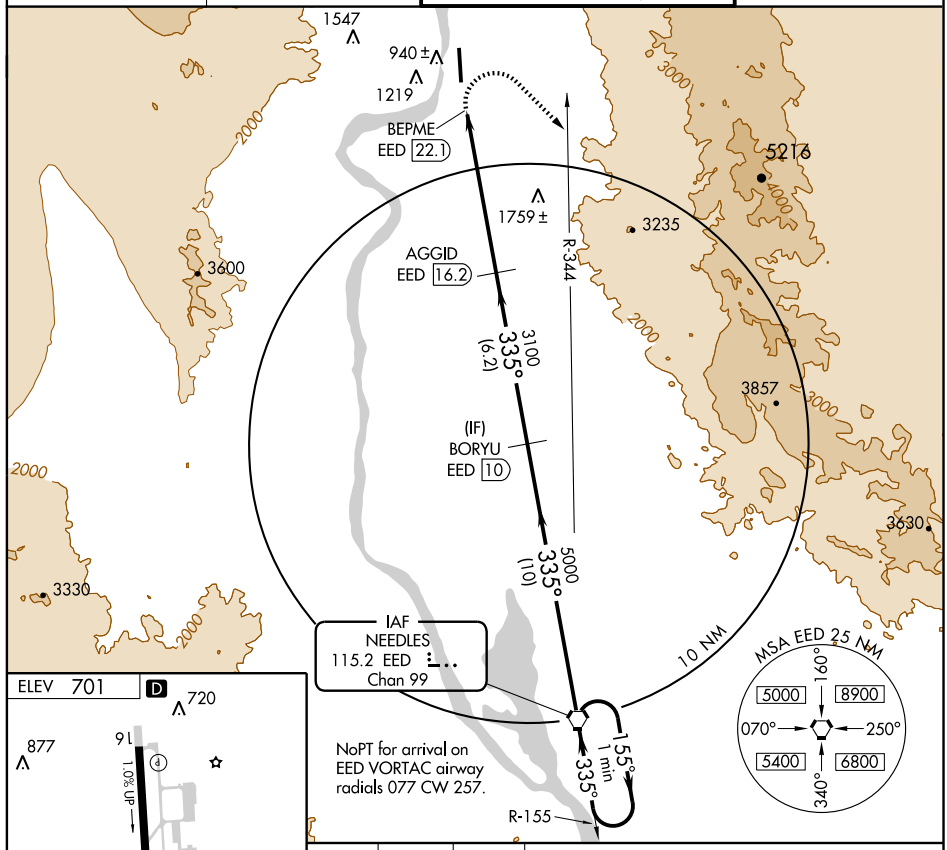
VOR/DME RWY 34

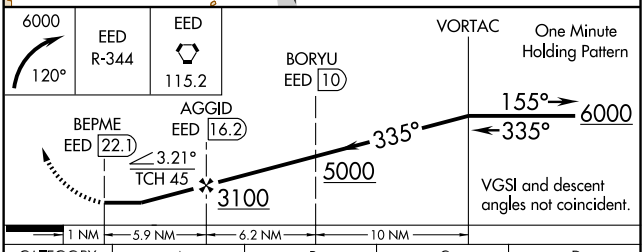
BULLHEAD CITY/LAUGHLIN/BULLHEAD INTL (IFP)

Circling to Rwy 16 NA at night. Visibility reduction by helicopters NA. When local altimeter setting not received, use Needles altimeter setting and increase all MDA 100 feet.

MISSED APPROACH: Climbing right turn to 6000 via heading 120° and EED VORTAC R-344 to EED VORTAC and hold.

AWOS-3 119.825	LOS ANGELES CENTER 134.65 360.65	LAUGHLIN/BULLHEAD TOWER ★ 123.9 (CTAF) L	GND CON 118.25





CATEGORY	A	B	C	D
S-34	2840-1¼ 2141 (2200-1¼)	2840-1½ 2141 (2200-1½)	2840-3	2141 (2200-3)
CIRCLING	2840-1¼ 2139 (2200-1¼)	2840-1½ 2139 (2200-1½)	2840-3	2139 (2200-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5200
048°	TDZE	1456
	Apt Elev	1462

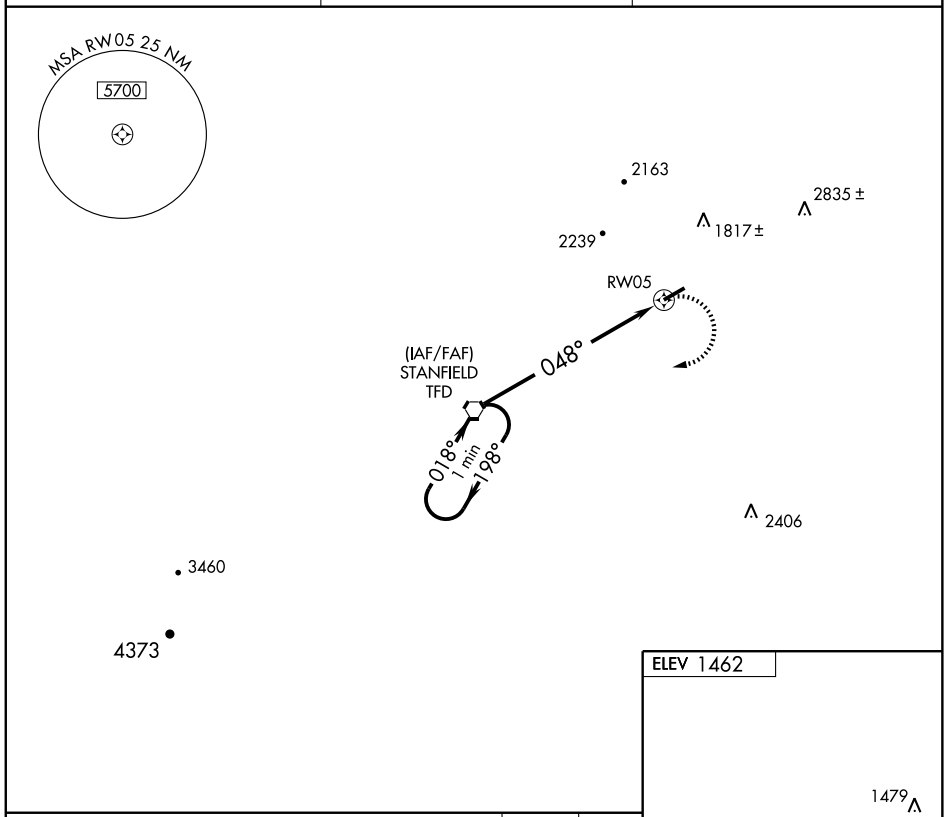
GPS RWY 5
CASA GRANDE MUNI (CGZ)

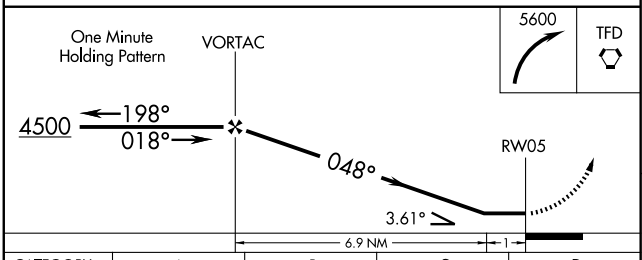
NA

MALSR

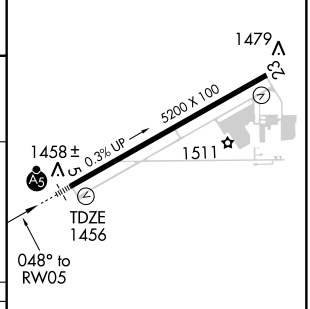
MISSED APPROACH: Climbing right turn to 5600 direct TFD VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
132.175	125.4 269.3	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-5	1880-½ 424 (500-½)		NA	
CIRCLING	1880-1 418 (500-1)	1980-1 518 (600-1)	NA	



MIRL Rwy 5-23

SW-4, 22 OCT 2009 to 19 NOV 2009

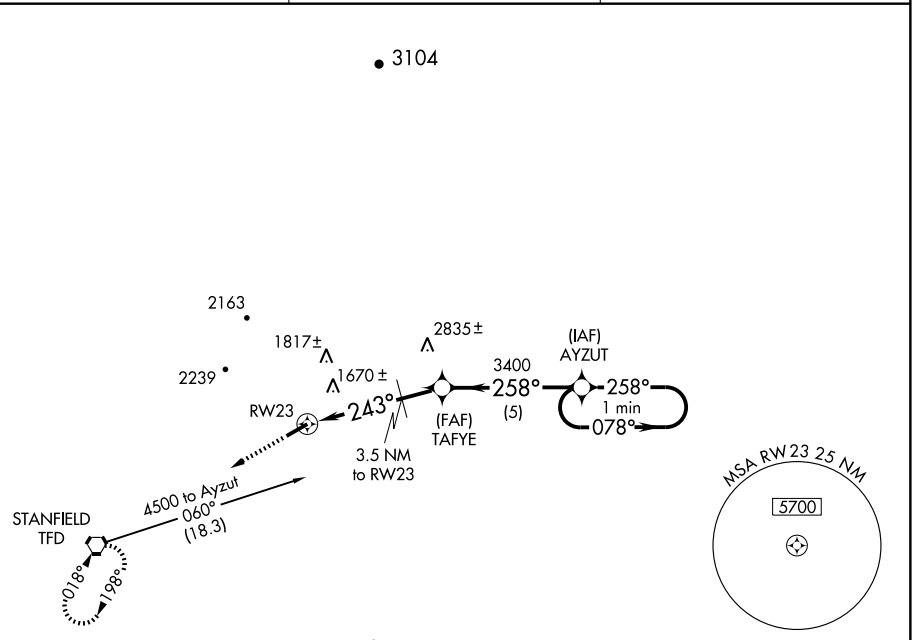
APP CRS	Rwy Idg	5200
243°	TDZE	1462
	Apt Elev	1462

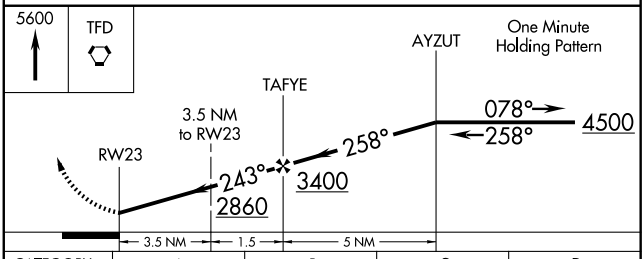
GPS RWY 23
CASA GRANDE MUNI (CGZ)

NA

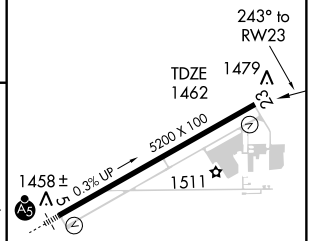
MISSED APPROACH: Climb to 5600 direct TFD VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
132.175	125.4 269.3	122.7 (CTAF)





CATEGORY	A	B	C	D
S-23	1840-1 378 (400-1)		NA	
CIRCLING	1840-1 378 (400-1)	1980-1 518 (600-1)	NA	



SW-4, 22 OCT 2009 to 19 NOV 2009

LOC I-CGZ	APP CRS	Rwy Idg	5200
111.15	048°	TDZE	1456
		Apt Elev	1462

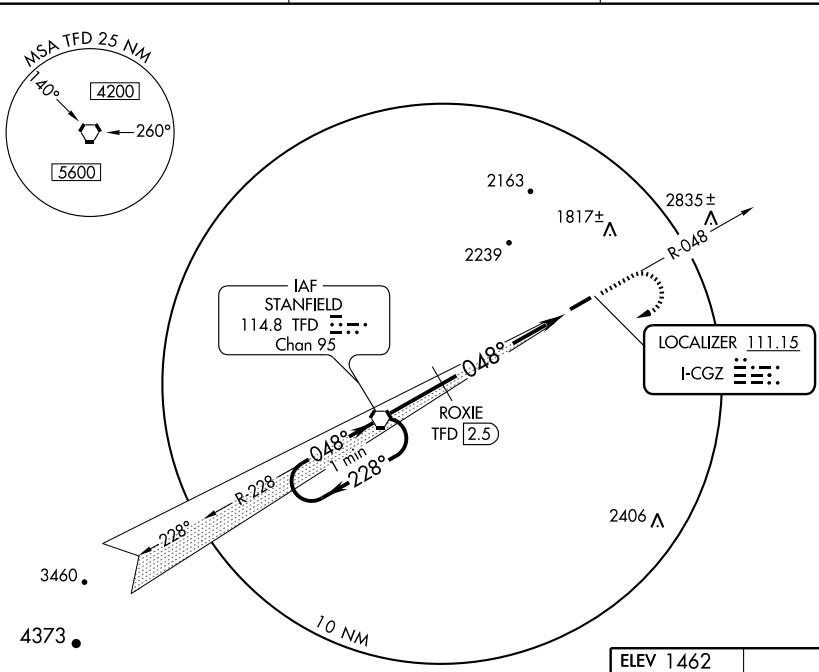
ILS/DME RWY 5
CASA GRANDE MUNI (CGZ)

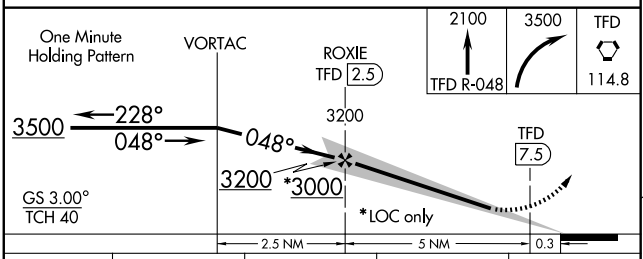
DME from TFD VORTAC; simultaneous reception of I-CGZ and TFD DME required. NA

MALSR

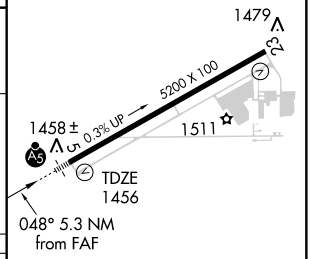
MISSED APPROACH: Climb to 2100 via TFD VORTAC R-048 then climbing right turn to 3500 direct to TFD VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
132.175	125.4 269.3	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-ILS 5	1741-½ 285 (300-½)		NA	
S-LOC 5	1840-½ 384 (400-½)		NA	
CIRCLING	1900-1 438 (500-1)	1920-1 458 (500-1)	NA	



MIRL Rwy 5-23

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

CASA GRANDE, ARIZONA AL-6656 (FAA)

VORTAC TFD	APP CRS	Rwy Idg	5200
114.8	048°	TDZE	1456
Chan 95		Apt Elev	1462

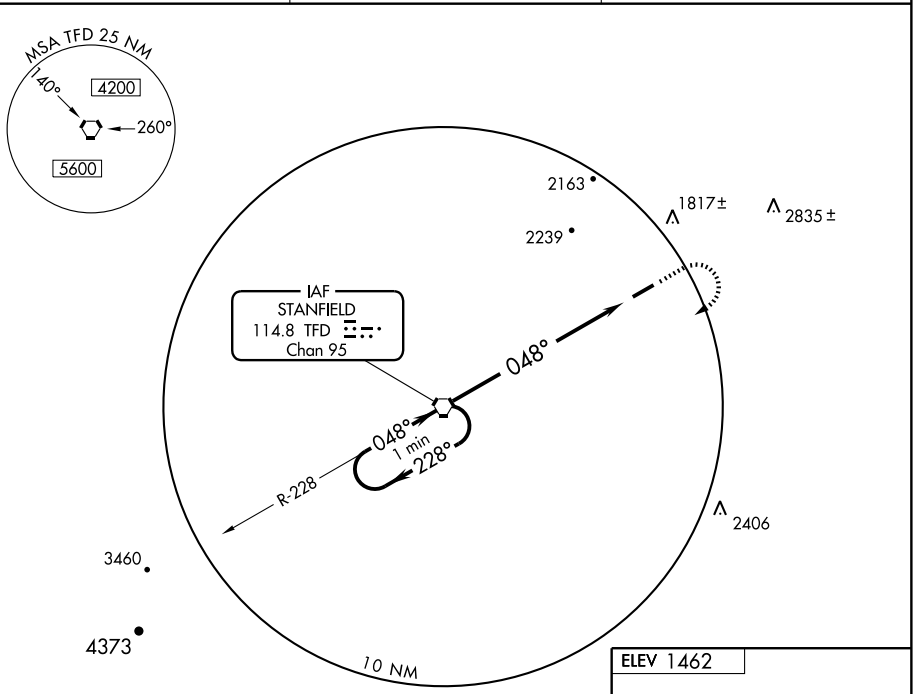
VOR RWY 5

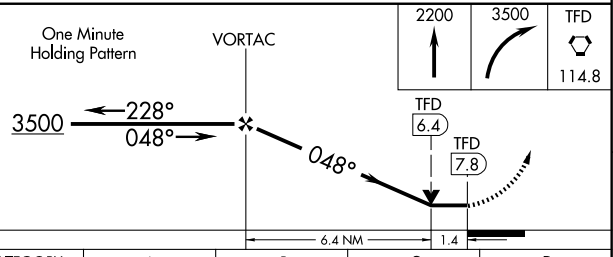
CASA GRANDE MUNI (CGZ)

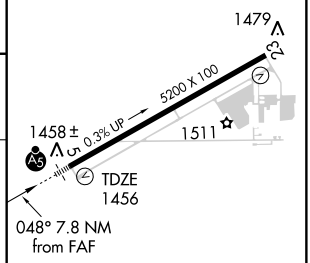
MALSR

MISSED APPROACH: Climb to 2200, then climbing right turn to 3500 direct TFD VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
132.175	125.4 269.3	122.7 (CTAF) L







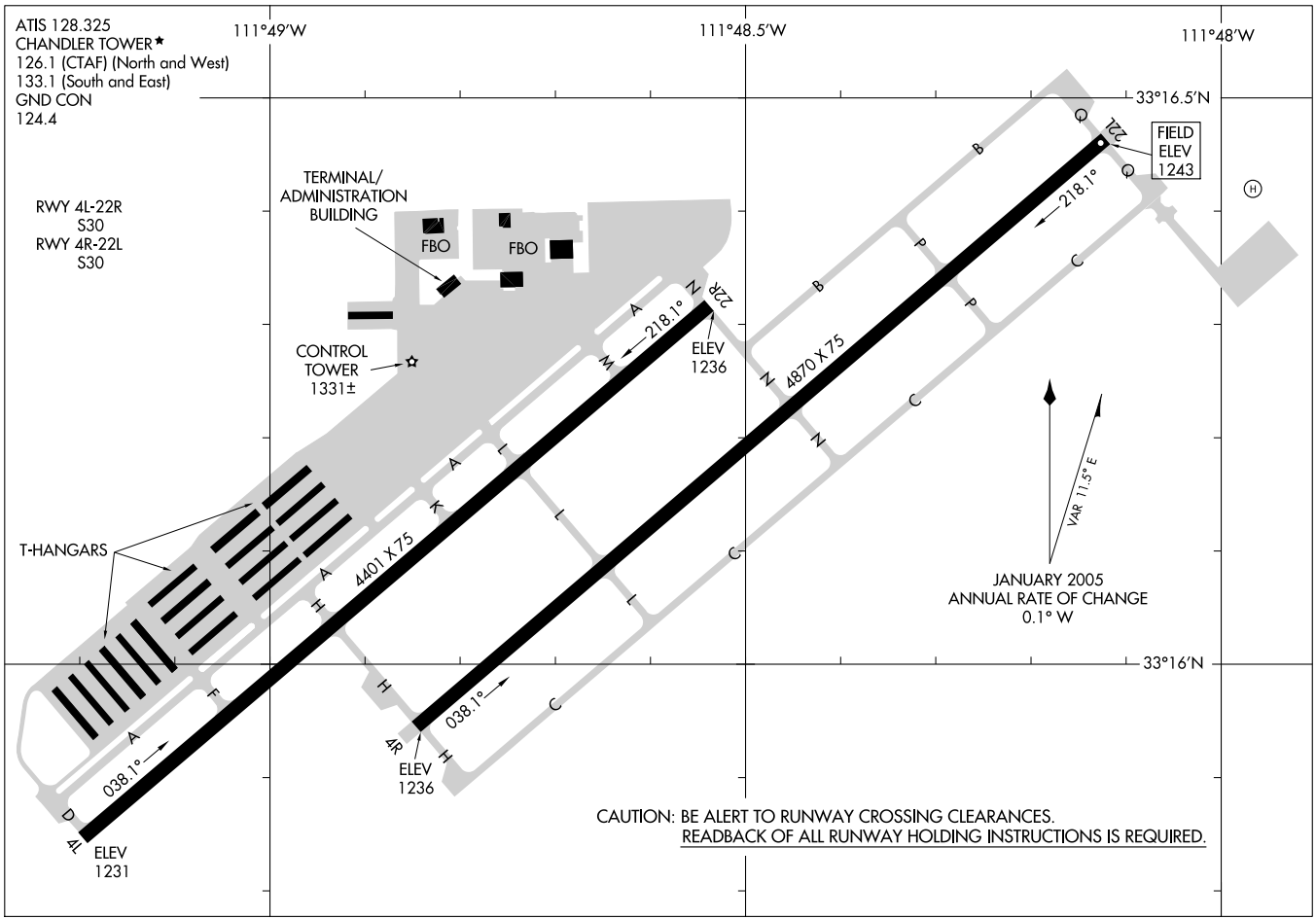
CATEGORY	A	B	C	D
S-5	1960-½	504 (500-½)	NA	
CIRCLING	1960-1	498 (500-1)	NA	

MIRL Rwy 5-23

FAF to MAP 7.8 NM

Knots	60	90	120	150	180
Min:Sec	7:48	5:12	3:54	3:07	2:36

SW-4, 22 OCT 2009 to 19 NOV 2009


ATIS 128.325
CHANDLER TOWER★
126.1 (CTAF) (North and West)
133.1 (South and East)
GND CON
124.4
111°49'W
111°48.5'W
111°48'W
33°16.5'N
33°16'N
RWY 4L-22R
S30
RWY 4R-22L
S30
TERMINAL/
ADMINISTRATION
BUILDING
FBO
FBO
CONTROL
TOWER
1331±
FIELD
ELEV
1243
22L
22R
4L
4R
218.1°
038.1°
ELEV
1236
ELEV
1231
4870 X 75
4401 X 75
T-HANGARS
VAR 11.5° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

BLYTHE TRANSITION (BLH.ARLIN3): From over BLH VORTAC via BLH R-089 and IWA R-256 to ARLIN INT. Thence....

MOHAK TRANSITION (MOHAK.ARLIN3): From over MOHAK INT via GBN R-247 and BXK R-215 to HYDRR INT, then via IWA R-256 to ARLIN INT. Thence....

....From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect vectors after ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT. Expect vectors prior to TUKEE INT to final approach course.

SATELLITE AIRPORTS: Expect vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
PHOENIX SKY HARBOR ATIS
127.575
PHOENIX DEER VALLEY ATIS
126.5
SCOTTSDALE ATIS
118.6
FALCON FIELD ATIS
118.25
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
PHOENIX
115.6 PXR
Chan 103
N33°25.98' W111°58.21'
FALCON FIELD
PHOENIX-SKY HARBOR INTL
BUCKEYE
110.6 BXK
Chan 43
BLYTHE
117.4 BLH
Chan 121
N33°35.76' W114°45.67'
L-4-5, H-4
SCOLE
N33°27.76'-W114°04.91'
VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or below FL 250
HYDRR
N33°16.46'
W113°04.18'
AMBRR
N33°17.46'
W112°20.83'
STELLAR AIRPARK
PHOENIX-MESA GATEWAY
CHANDLER MUNI
FL 180
*5000
089°
(35)
11,000
*6000
089°
(48)
10,000
*4500
076°
(4)
10,000
*4500
(11)
(8)
076°
(17)
(15)
R-215
R-171
R-131
R-194
R-143
R-256
GBN R-025
N
MOHAK
N32°46.55'-W113°58.33'
L-5, H-4
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at or below FL 250
Turboprops expect to cross at or below 15,000
CALIE
N33°16.34'
W113°08.76'
PAYNT
N33°16.80'
W112°50.65'
Cross at 250K IAS
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at 11,000.
Turboprops expect to cross at 10,000.
ARLIN
N33°17.02'
W112°41.11'
ALEYS
N33°17.80'
W112°02.94'
TUKEE
N33°17.96'
W111°53.85'
WILLIE
113.3 IWA
Chan 80
10,000
*6500
035°
(42)
R-344
R-247
116.8 BZA
Chan 115
R-075
10,000
*6500
067°
(15)
JUDTH
N32°48.99'
W113°41.30'
GILA BEND
116.6 GBN
Chan 113

NOTE: BLYTHE TRANSITION for turbojet aircraft FL 240 and above. Turboprop aircraft plan BLYTHE FOUR ARRIVAL at or below FL 230.

NOTE: MOHAK TRANSITION for turbojet and turboprop aircraft.

NOTE: Chart not to scale.

BLYTHE TRANSITION (BLH.BLH4): From over BLH VORTAC via BLH R-082 to SALOM INT, then via GBN R-285 and IWA R-256 to ARLIN INT. Thence . . . .

. . . .From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect radar vectors after passing ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT, expect radar vectors prior to TUKEE INT to final approach course.

ALL SATELLITE AIRPORTS: Expect radar vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
FALCON FIELD ATIS
118.25
PHOENIX DEER VALLEY ATIS
126.5
PHOENIX SKY HARBOR ATIS
127.575
SCOTTSDALE ATIS
118.6
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
FALCON FIELD
PHOENIX-SKY HARBOR INTL

BLYTHE
117.4 BLH
Chan 121
N33°35.76′ W114°45.67′
L-4-5, H-4

SALOM
N33°30.97′ - W113°53.33
VERTICAL NAVIGATION PLANNING INFORMATION
Turboprop aircraft expect to cross at or below 17,000′

BUCKEYE
110.6 BXK
Chan 43

PHOENIX
115.6 PXR
Chan 103
N33°25.98′ W111°58.21′

10,000
*5800
082°
(44)

10,000
*5200
105°
(31)

HYDRR
N33°16.46′
W113°04.18′

10,000
*4800
076°
(14)

SADLL
N33°16.01′
W113°20.71

10,000
*4500
(11)

ARLIN
N33°17.02′
W112°41.11′

AMBRR
N33°17.46′
W112°20.83′

076°
(17)

(8)

STELLAR AIRPARK

ALEYS
N33°17.80′
W112°02.94′

PAYNT
N33°16.80′-W112°50.65′

TUKEE
N33°17.96′
W111°53.85′

(15)

(8)

CHANDLER MUNI

PHOENIX-MESA GATEWAY

R-256

R-194
R-143
(19)
R-215
R-171
R-131
R-025
R-285
GBN R-344
GBN R-025

85
71
39
60
52
35
20

Turbojets: Cross at 250K IAS.
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect to cross at 11,000.
Turboprops: Expect to cross at 10,000.

BARD
116.8 BZA
Chan 115

WILLIE
113.3 IWA
Chan 80

GILA BEND
116.6 GBN
Chan 113

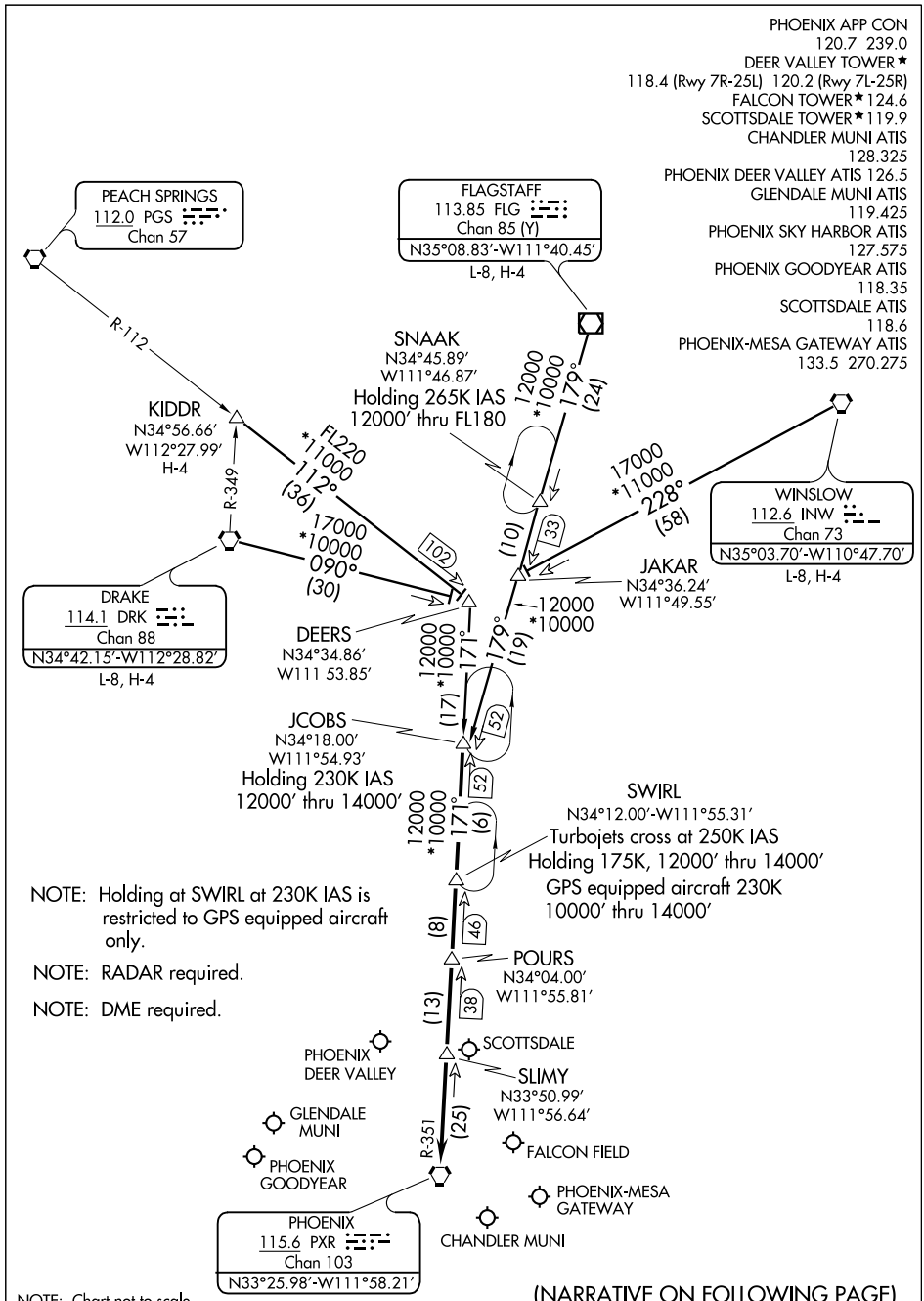
N

NOTE: Blythe Arrival for aircraft FL 230 or below.

NOTE: Chart not to scale.

JCOBS TWO ARRIVAL

SCOTTSDALE, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

JCOBS TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

DRAKE TRANSITION (DRK.JCOBS2): From over DRK VORTAC via DRK R-090 to DEERS INT, then via PXR R-351 to JCOBS INT. Thence....

FLAGSTAFF TRANSITION (FLG.JCOBS2): From over FLG VOR/DME via FLG R-179 to JCOBS INT. Thence....

KIDDR TRANSITION (KIDDR.JCOBS2): From over KIDDR INT via PGS R-112 to DEERS INT then via PXR R-351 to JCOBS INT. Thence....

WINSLOW TRANSITION (INW.JCOBS2): From over INW VORTAC via INW R-228 to JAKAR INT, then via FLG R-179 to JCOBS INT. Thence....

... From over JCOBS INT via PXR R-351 to SWIRL DME, then via PXR R-351 to SLIMY DME, then direct PXR VORTAC. After POURS, expect radar vectors to final approach course.

LOST COMMUNICATIONS: From DRK VORTAC via DRK R-090 to intercept PXR R-351at DEERS INT direct PXR VORTAC. From FLG VORTAC, proceed direct to JCOBS INT then direct PXR VORTAC. From KIDDR INT to DEERS INT via PGS R-112 to intercept PXR R-351 to PXR VORTAC. From INW VORTAC to JAKAR INT via INW R-228 to intercept FLG R-179 to JCOBS INT to intercept PXR R-351 to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

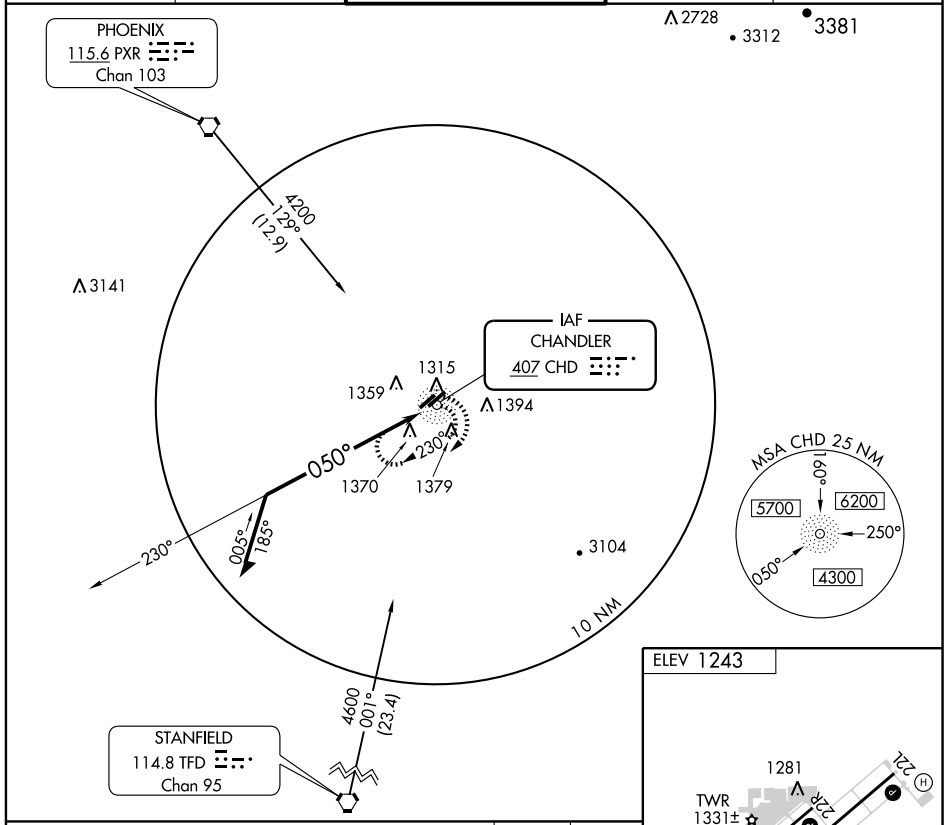
NDB CHD	APP CRS	Rwy Idg	4870
407	050°	TDZE	1239
		Apt Elev	1243

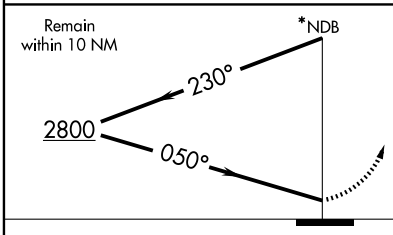
NDB RWY 4R
CHANDLER MUNI (CHD)

NA When VGSI inoperative, circling Rwy 4L NA at night.

MISSED APPROACH: Climbing right turn to 3000 in CHD holding pattern.

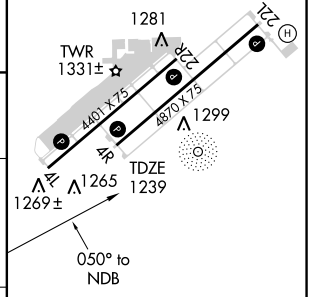
ATIS	PHOENIX APP CON	CHANDLER TOWER*	GND CON	UNICOM
128.325	123.7 363.0	126.1 (CTAF) 133.1 (North and West) (South and East)	124.4	122.95





3000 CHD 407

*Maintain 3400 or above until established outbound for procedure turn.



CATEGORY	A	B	C	D
S-4R	1780-1	541 (600-1)	1780-1½ 541 (600-1½)	NA
CIRCLING	1780-1	538 (600-1)	1780-1½ 538 (600-1½)	NA

REIL Rwys 4R and 22L
MIRL Rwys 4L-22R and 4R-22L

SW-4, 22 OCT 2009 to 19 NOV 2009

CHANDLER, ARIZONA

AL-6494 (FAA)

RNAV (GPS) RWY 4R

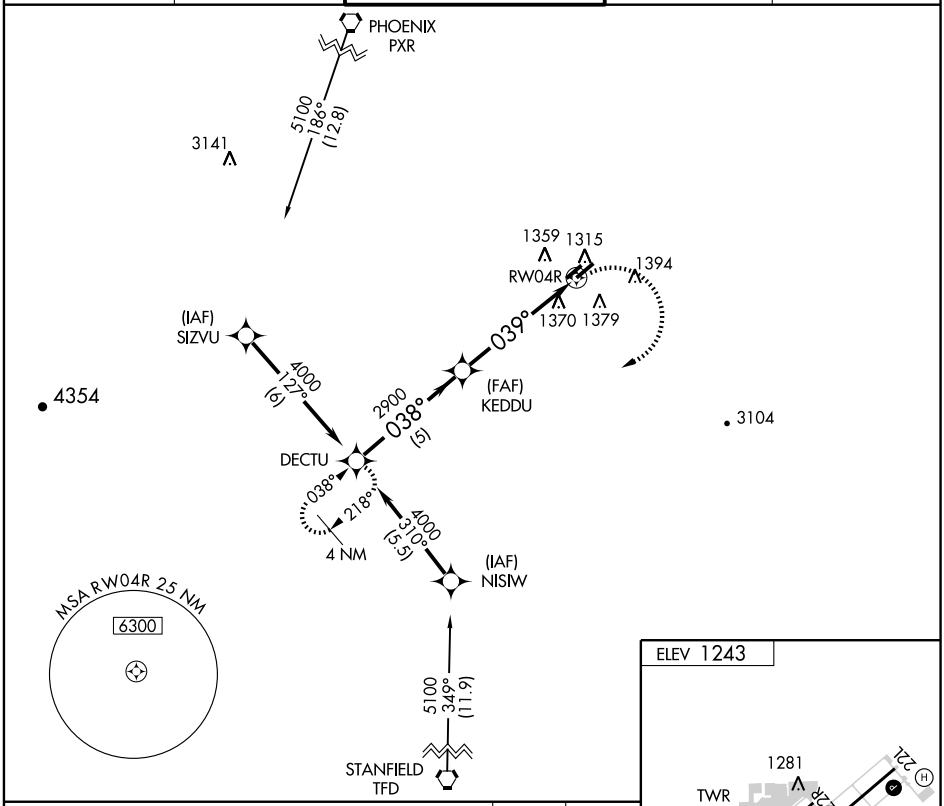
CHANDLER MUNI (CHD)

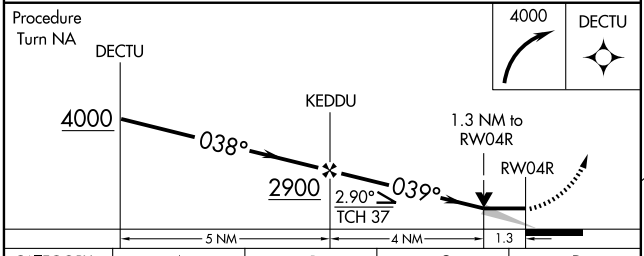
APP CRS	Rwy ldg	4870
039°	TDZE	1240
	Apt Elev	1243

NA — GPS or RNP- 0.3 required. DME/DME RNP-0.3 NA. When VGSI inoperative, circling to Rwy 4L NA at night.

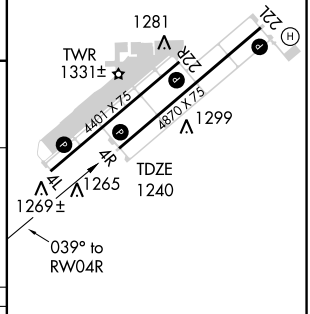
MISSED APPROACH: Climbing right turn to 4000 direct to DECTU WP and hold.

ATIS	PHOENIX APP CON	CHANDLER TOWER ★	GND CON	UNICOM
128.325	123.7 363.0	126.1 (CTAF) L (North and West) 133.1 (South and East)	124.4	122.95





CATEGORY	A	B	C	D
LNAV MDA	1680-1	440 (500-1)	1680-1¼ 440 (500-1¼)	NA
CIRCLING	1720-1	477 (500-1)	1720-1½ 477 (500-1½)	NA



REIL Rwys 4R and 22L L
MIRL Rwys 4L-22R and 4R-22L L

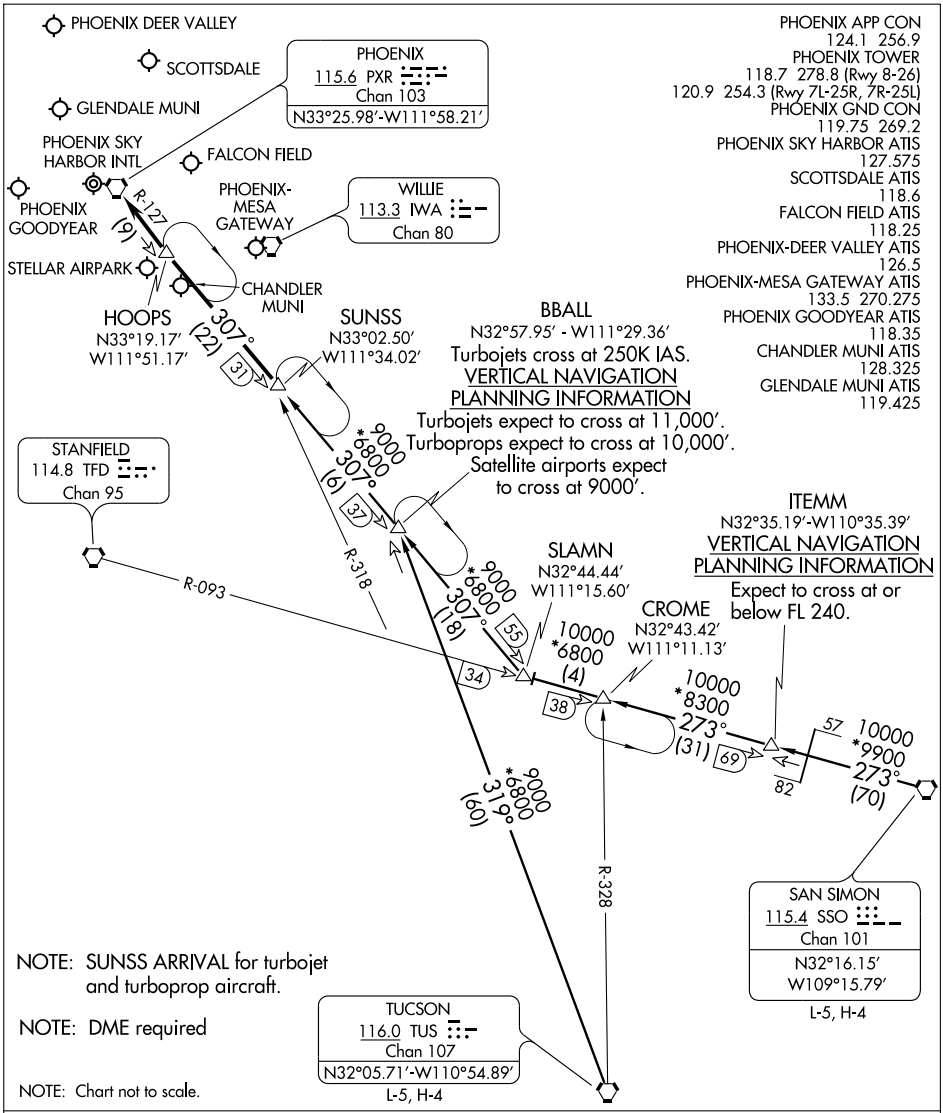
SW-4, 22 OCT 2009 to 19 NOV 2009

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

CHANDLER, ARIZONA

VORTAC IWA	APP CRS	Rwy Idg	4870
113.3	062°	TDZE	1240
Chan 80		Apt Elev	1243

AL-6494 (FAA)

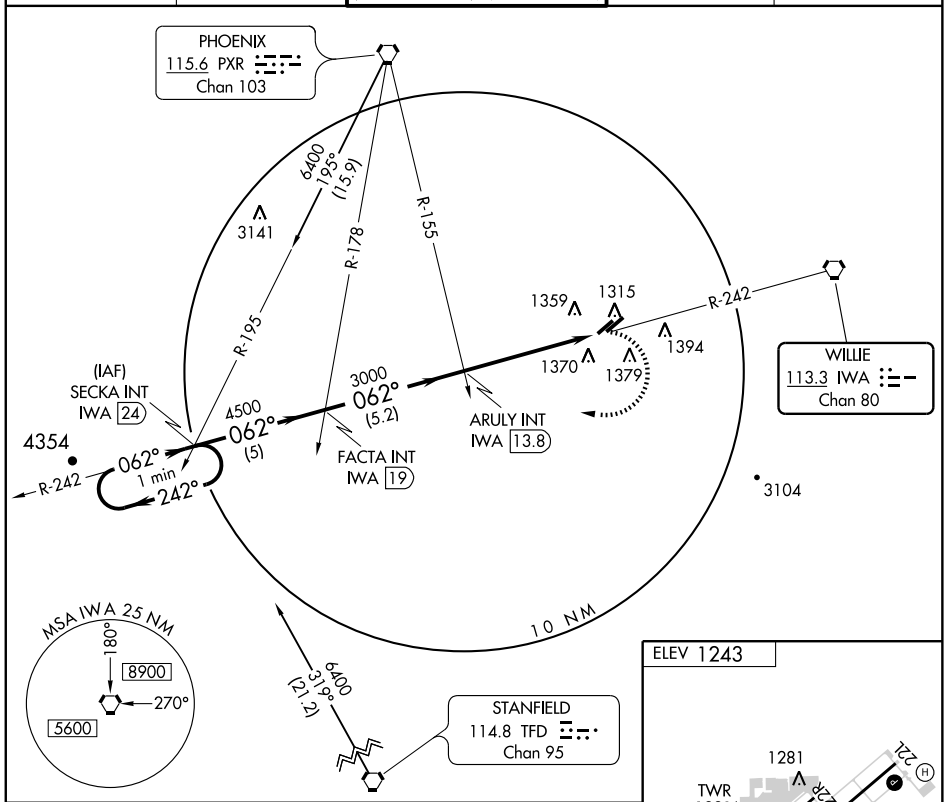
VOR RWY 4R

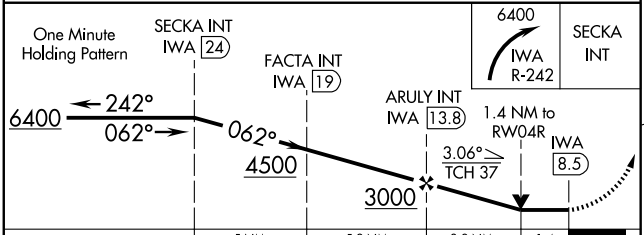
CHANDLER MUNI (CHD)

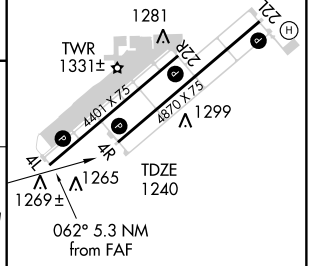
When VGSI inoperative, circling Rwy 4L NA at night.

MISSED APPROACH: Climbing right turn to 6400 via IWA R-242 to SECKA Int and hold.

ATIS	PHOENIX APP CON	CHANDLER TOWER★	GND CON	UNICOM
128.325	123.7 363.0	126.1 (CTAF) L (North and West) 133.1 (South and East)	124.4	122.95







CATEGORY	A	B	C	D
S-4R	1680-1	440 (500-1)	1680-1¼ 440 (500-1¼)	NA
CIRCLING	1720-1	477 (500-1)	1720-1½ 477 (500-1½)	NA

REIL Rwys 4R and 22L L
MIRL Rwys 4L-22R and 4R-22L L

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

SW-4, 22 OCT 2009 to 19 NOV 2009

BLYTHE TRANSITION (BLH.ARLIN3): From over BLH VORTAC via BLH R-089 and IWA R-256 to ARLIN INT. Thence....

MOHAK TRANSITION (MOHAK.ARLIN3): From over MOHAK INT via GBN R-247 and BXK R-215 to HYDRR INT, then via IWA R-256 to ARLIN INT. Thence....

....From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect vectors after ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT. Expect vectors prior to TUKEE INT to final approach course.

SATELLITE AIRPORTS: Expect vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
PHOENIX SKY HARBOR ATIS
127.575
PHOENIX DEER VALLEY ATIS
126.5
SCOTTSDALE ATIS
118.6
FALCON FIELD ATIS
118.25
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
PHOENIX
115.6 PXR
Chan 103
N33°25.98' W111°58.21'
FALCON FIELD
PHOENIX-SKY HARBOR INTL
BUCKEYE
110.6 BXK
Chan 43
BLYTHE
117.4 BLH
Chan 121
N33°35.76' W114°45.67'
L-4-5, H-4
SCOLE
N33°27.76'-W114°04.91'
VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or below FL 250
HYDRR
N33°16.46'
W113°04.18'
AMBRR
N33°17.46'
W112°20.83'
STELLAR AIRPARK
PHOENIX-MESA GATEWAY
CHANDLER MUNI
FL 180
*5000
089°
(35)
11,000
*6000
089°
(48)
10,000
*4500
076°
(4)
10,000
*4500
(11)
(8)
076°
(17)
(15)
R-215
R-171
R-131
R-194
R-143
R-256
GBN R-025
N
MOHAK
N32°46.55'-W113°58.33'
L-5, H-4
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at or below FL 250
Turboprops expect to cross at or below 15,000
CALIE
N33°16.34'
W113°08.76'
PAYNT
N33°16.80'
W112°50.65'
Cross at 250K IAS
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at 11,000.
Turboprops expect to cross at 10,000.
ARLIN
N33°17.02'
W112°41.11'
ALEYS
N33°17.80'
W112°02.94'
TUKEE
N33°17.96'
W111°53.85'
WILLIE
113.3 IWA
Chan 80
10,000
*6500
035°
(42)
R-344
R-247
116.8 BZA
Chan 115
R-075
10,000
*6500
067°
(15)
JUDTH
N32°48.99'
W113°41.30'
GILA BEND
116.6 GBN
Chan 113

NOTE: BLYTHE TRANSITION for turbojet aircraft FL 240 and above. Turboprop aircraft plan BLYTHE FOUR ARRIVAL at or below FL 230.

NOTE: MOHAK TRANSITION for turbojet and turboprop aircraft.

NOTE: Chart not to scale.

BLYTHE TRANSITION (BLH.BLH4): From over BLH VORTAC via BLH R-082 to SALOM INT, then via GBN R-285 and IWA R-256 to ARLIN INT. Thence . . . .

. . . .From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect radar vectors after passing ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT, expect radar vectors prior to TUKEE INT to final approach course.

ALL SATELLITE AIRPORTS: Expect radar vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
FALCON FIELD ATIS
118.25
PHOENIX DEER VALLEY ATIS
126.5
PHOENIX SKY HARBOR ATIS
127.575
SCOTTSDALE ATIS
118.6
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
FALCON FIELD
PHOENIX-SKY HARBOR INTL

BLYTHE
117.4 BLH
Chan 121
N33°35.76′ W114°45.67′
L-4-5, H-4

SALOM
N33°30.97′ - W113°53.33
VERTICAL NAVIGATION PLANNING INFORMATION
Turboprop aircraft expect to cross at or below 17,000′

BUCKEYE
110.6 BXK
Chan 43

PHOENIX
115.6 PXR
Chan 103
N33°25.98′ W111°58.21′

10,000
*5800
082°
(44)

10,000
*5200
105°
(31)

HYDRR
N33°16.46′
W113°04.18′

10,000
*4800
076°
(14)

SADLL
N33°16.01′
W113°20.71

10,000
*4500
(11)

ARLIN
N33°17.02′
W112°41.11′

AMBRR
N33°17.46′
W112°20.83′

076°
(17)

(8)

STELLAR AIRPARK

ALEYS
N33°17.80′
W112°02.94′

PAYNT
N33°16.80′-W112°50.65′

TUKEE
N33°17.96′
W111°53.85′

(15)

(8)

CHANDLER MUNI

PHOENIX-MESA GATEWAY

R-256

R-194
R-143
(19)
R-215
R-171
R-131
R-025
R-285
GBN R-344
GBN R-025

85
71
39
60
52
35
20

Turbojets: Cross at 250K IAS.
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect to cross at 11,000.
Turboprops: Expect to cross at 10,000.

BARD
116.8 BZA
Chan 115

WILLIE
113.3 IWA
Chan 80

GILA BEND
116.6 GBN
Chan 113

N

NOTE: Blythe Arrival for aircraft FL 230 or below.

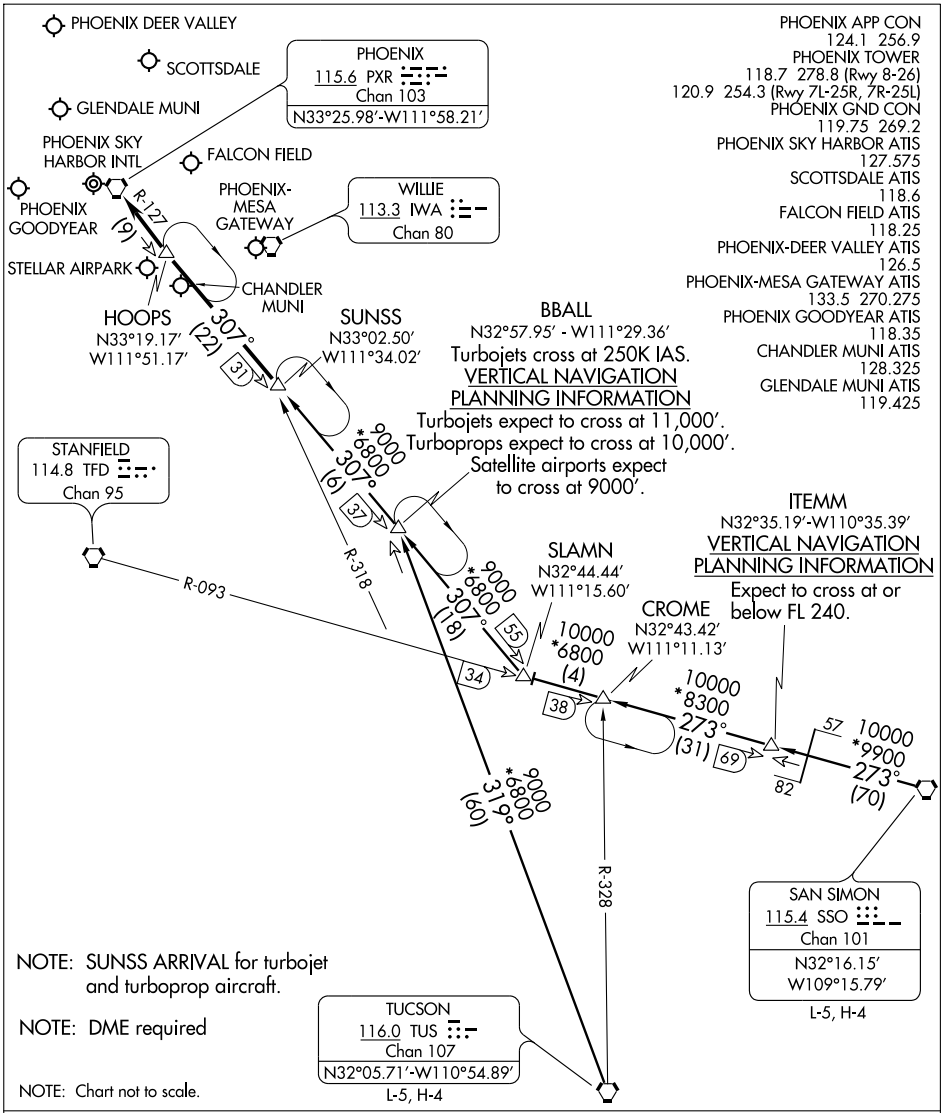
NOTE: Chart not to scale.

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

VORTAC PXR	APP CRS	Rwy Idg	N/A
115.6	330°	TDZE	N/A
Chan 103		Apt Elev	1180

VOR or GPS-A

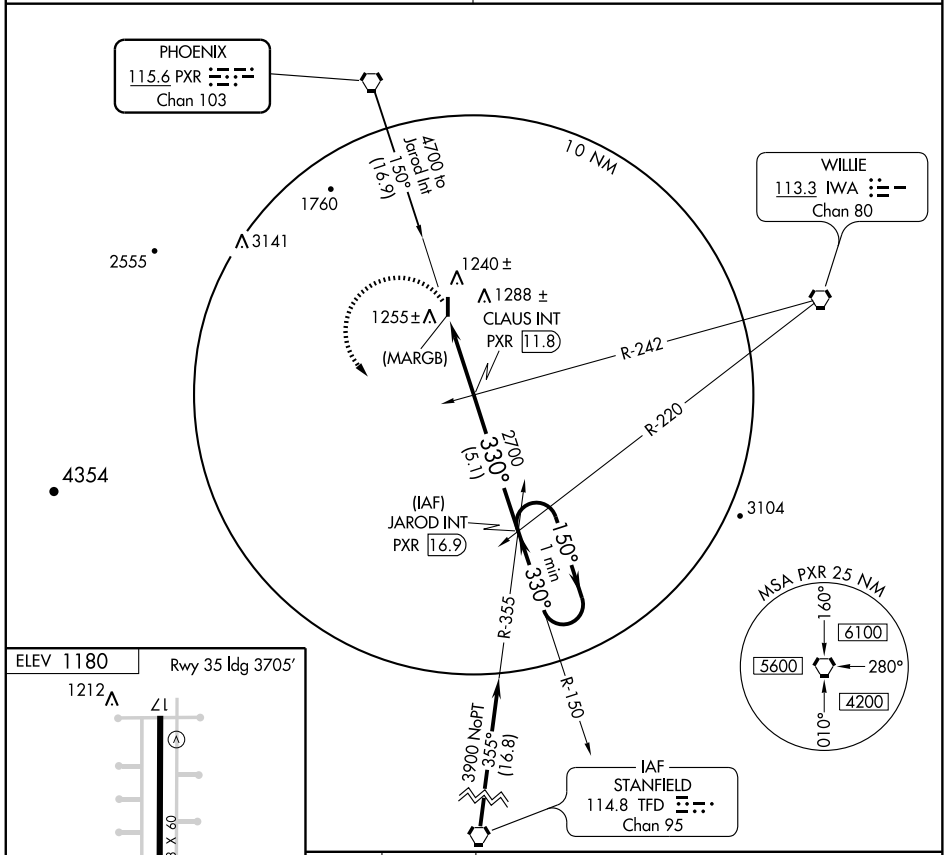
CHANDLER/ STELLAR AIRPARK (P19)

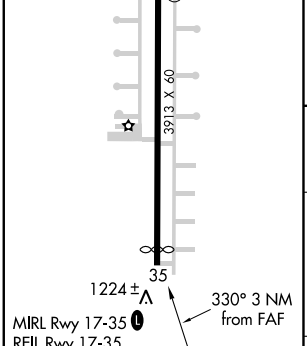
T
NA

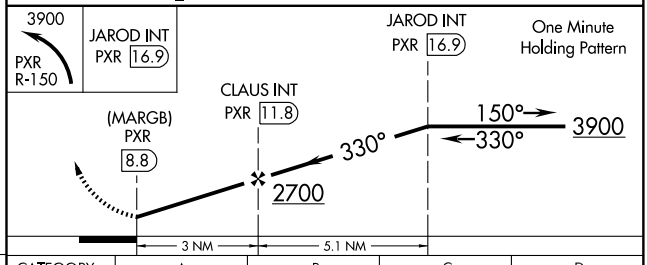
Use Phoenix Sky Harbor Intl altimeter setting.
Procedure not authorized at night.

MISSED APPROACH: Climbing left turn to 3900 via PXR R-150 to JAROD Int/PXR 16.9 DME and hold.

PHOENIX APP CON	CTAF
123.7 363.0	122.9 L







FAF to MAP 3 NM					
Knots	60	90	120	150	180
Min:Sec	3:00	2:00	1:30	1:12	1:00

CATEGORY	A	B	C	D
CIRCLING	1600-1 420 (500-1)	1640-1 460 (500-1)	1640-1½ 460 (500-1½)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

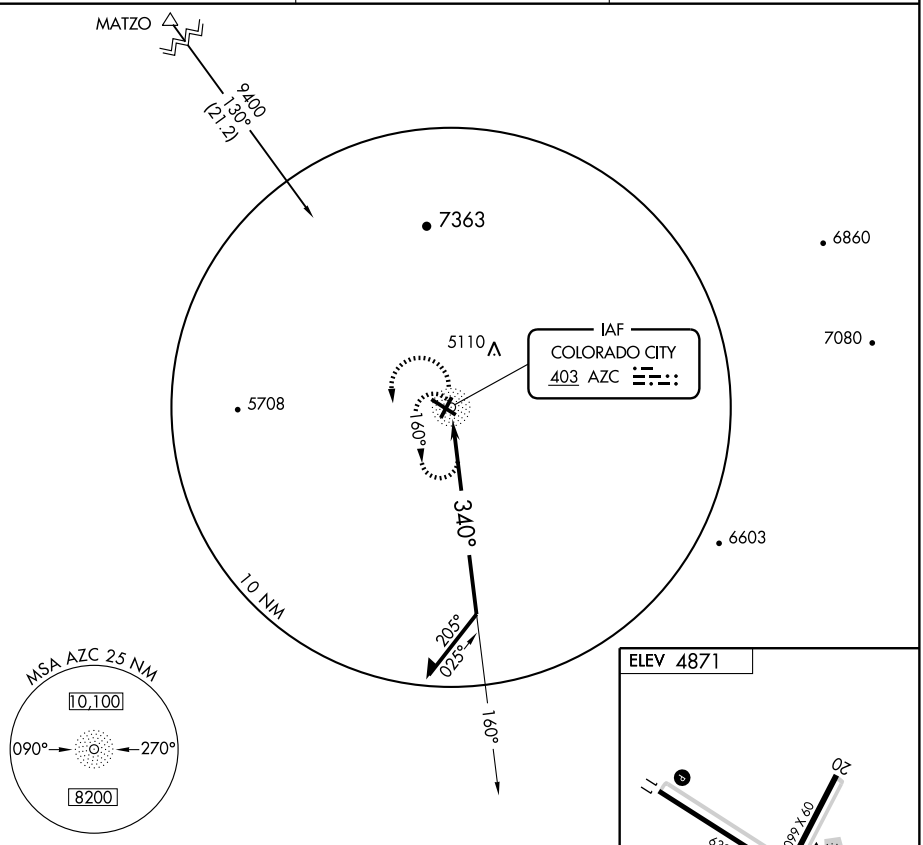
NDB AZC 403	APP CRS 340°	Rwy Idg N/A TDZE N/A Apt Elev 4871

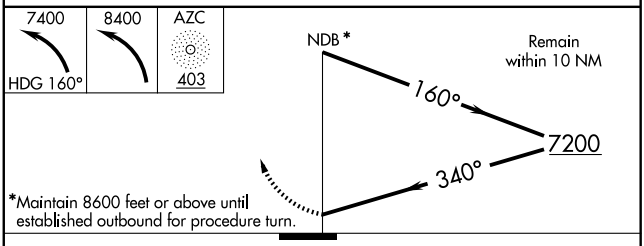
NDB or GPS-A
COLORADO CITY MUNI (AZC)

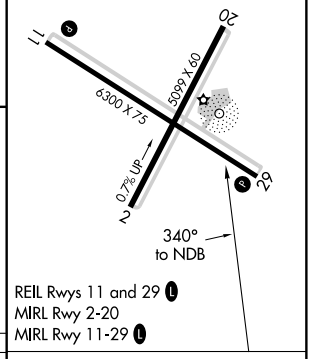
▼ When local altimeter setting not received, procedure not authorized.
▲ NA

MISSED APPROACH: Climbing left turn to 7400 via heading 160°, then climbing left turn to 8400 direct AZC NDB and hold.

AWOS-3	LOS ANGELES CENTER	UNICOM
118.375	124.2 343.6	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5700-1 829 (900-1)	5700-1¼ 829 (900-1¼)	5700-2½ 829 (900-2½)	5700-2¾ 829 (900-2¾)

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5528
228°	TDZE	1574
	Apt Elev	1574

GPS RWY 23
COOLIDGE MUNI (P08)

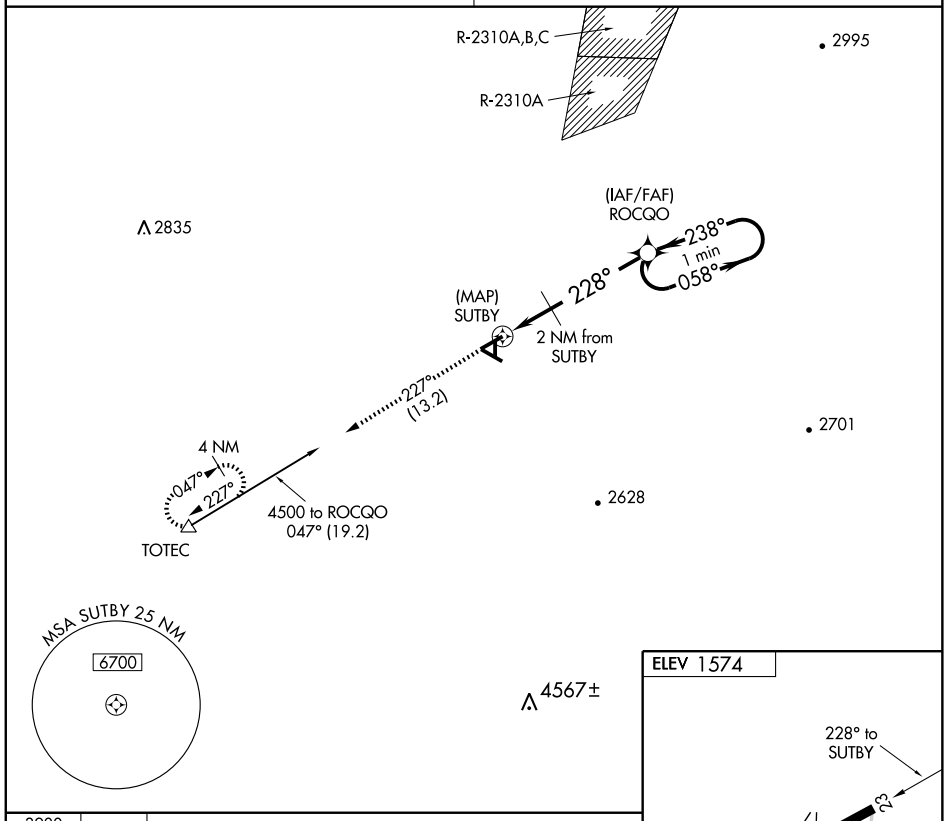
NA

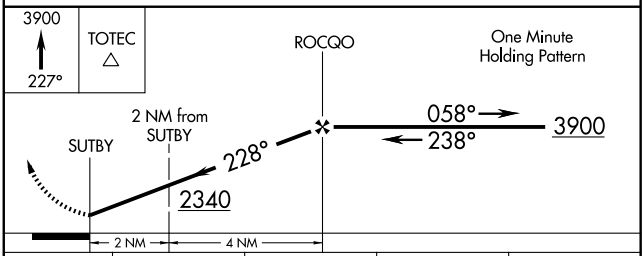
Use Casa Grande Muni altimeter setting.

MISSED APPROACH: Climb to 3900 via 227° course to TOTEC and hold.

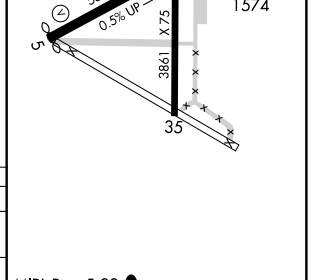
ALBUQUERQUE CENTER
125.4 269.3

UNICOM
123.075 (CTAF) L





CATEGORY	A	B	C	D
S-23	2060-1	486 (500-1)	NA	
CIRCLING	2100-1	526 (600-1)	NA	



MIRL Rwy 5-23 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC TFD 114.8 Chan 95	APP CRS 071°	Rwy Idg 5478 TDZE 1548 Apt Elev 1574

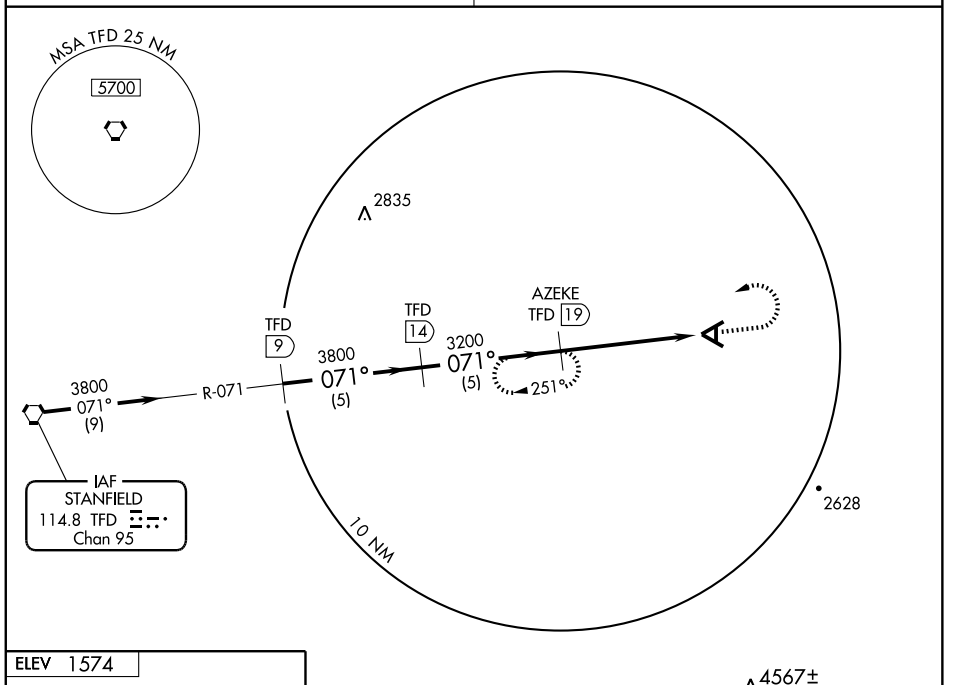
VOR/DME RWY 5
COOLIDGE MUNI (P08)

NA

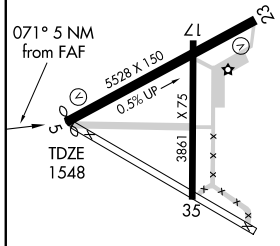
Use Casa Grande Muni altimeter setting.

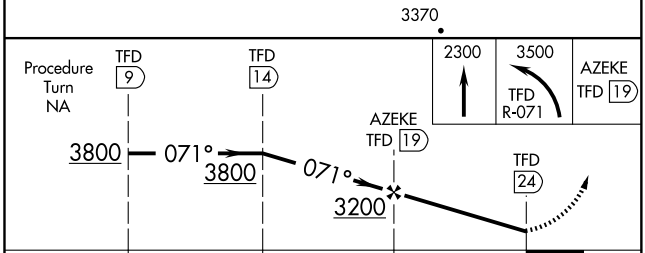
MISSED APPROACH: Climb to 2300, then climbing left turn to 3500 via TFD VORTAC R-071 to AZEKE/19 DME and hold.

ALBUQUERQUE CENTER	UNICOM
125.4 269.3	123.075 (CTAF) L



ELEV 1574





CATEGORY	A	B	C	D
S-5	2000-1 452 (500-1)	2000-1¼ 452 (500-1¼)	NA	
CIRCLING	2100-1 526 (600-1)	2100-1¼ 526 (600-1¼)	NA	

MIRL Rwy 5-23 L

SW-4, 22 OCT 2009 to 19 NOV 2009

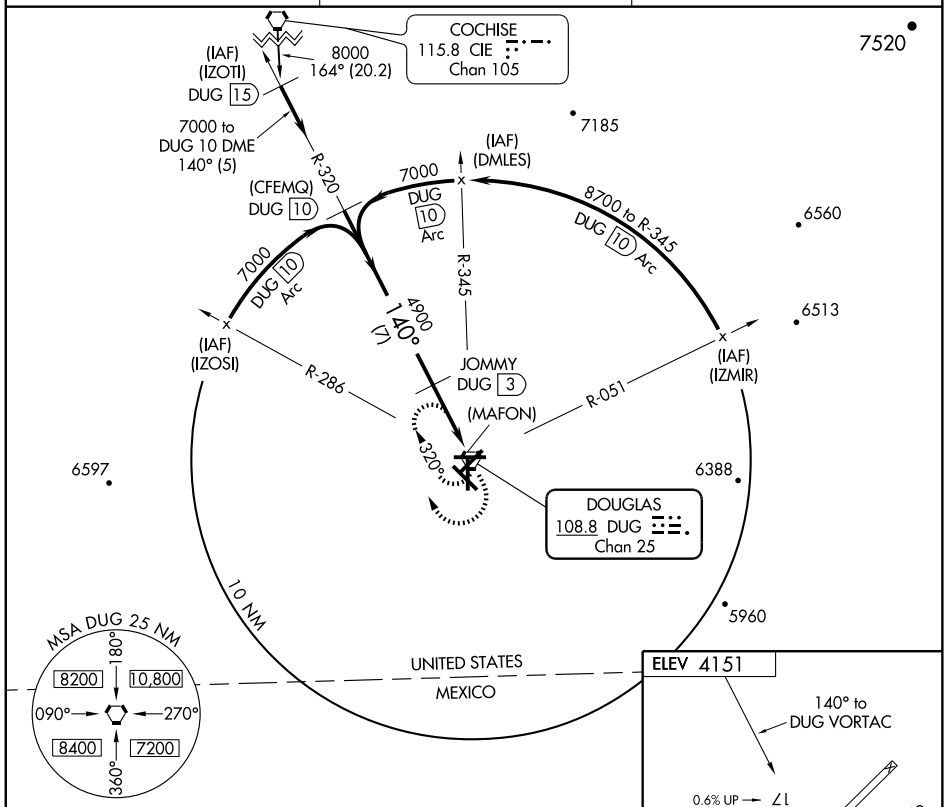
VORTAC DUG	APP CRS	Rwy Idg	7311
108.8	140°	TDZE	4123
Chan 25		Apt Elev	4151

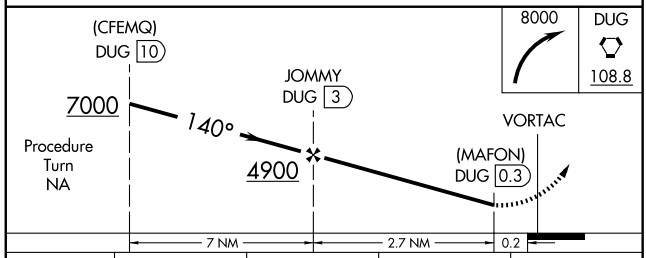
VOR/DME or GPS RWY 17

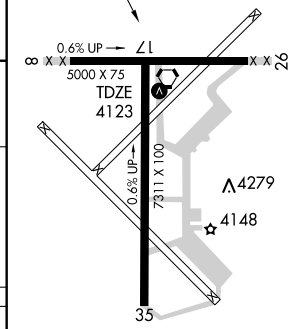
DOUGLAS-BISBEE / BISBEE-DOUGLAS INTL (DUG)

MISSED APPROACH: Climbing right turn to 8000 in DUG VORTAC holding pattern.

ASOS	PRESCOTT RADIO	UNICOM
119.275	122.6	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-17	4440-1 317 (300-1)			
CIRCLING	4580-1 429 (500-1)	4620-1 469 (500-1)	4620-1½ 469 (500-1½)	4720-2 569 (600-2)

MIRL Rwy 17-35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

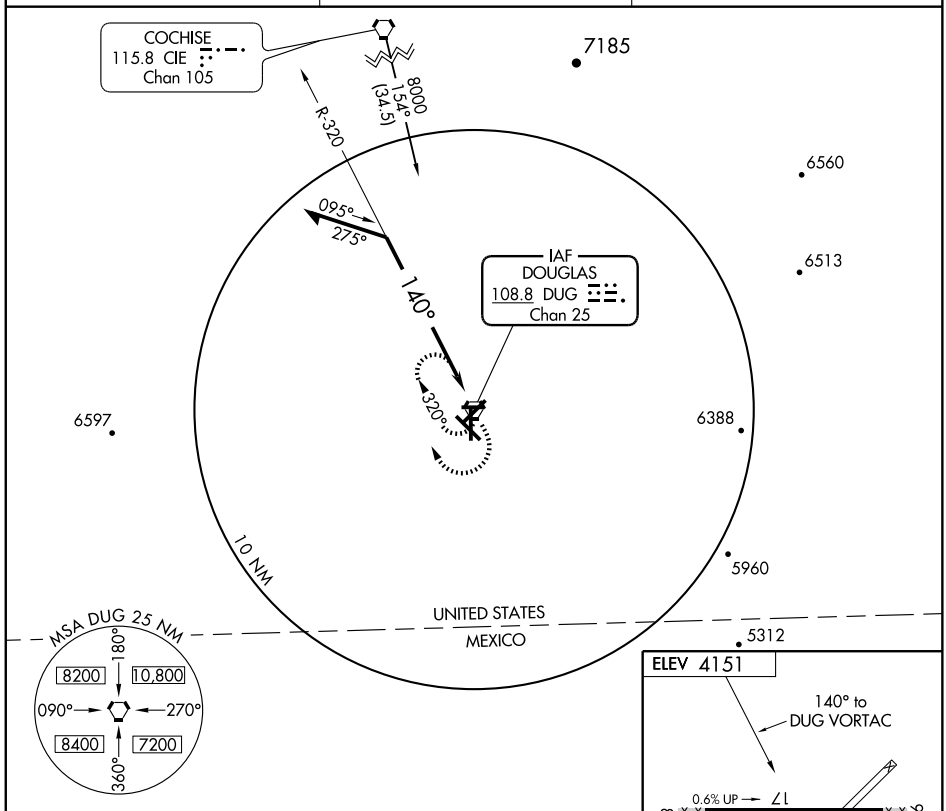
VORTAC DUG	APP CRS	Rwy Idg	7311
108.8	140°	TDZE	4123
Chan 25		Apt Elev	4151

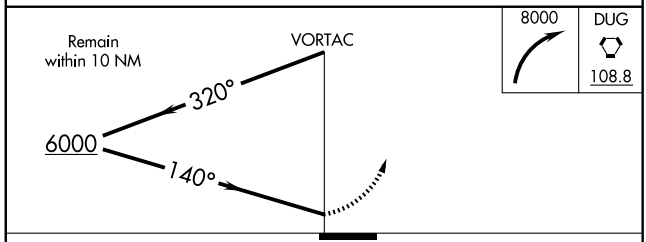
VOR RWY 17

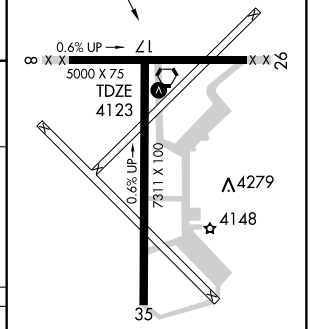
DOUGLAS-BISBEE / BISBEE-DOUGLAS INTL (DUG)

MISSED APPROACH: Climbing right turn to 8000 in DUG VORTAC holding pattern.

ASOS	PRESCOTT RADIO	UNICOM
119.275	122.6	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-17	4580-1 457 (500-1)		4580-1¼ 457 (500-1¼)	4580-1½ 457 (500-1½)
CIRCLING	4580-1 429 (500-1)	4620-1 469 (500-1)	4620-1½ 469 (500-1½)	4720-2 569 (600-2)

MIRL Rwy 17-35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

09239

AIRPORT DIAGRAM

AL-5034 (FAA)

FLAGSTAFF PULLIAM (FLG)

FLAGSTAFF, ARIZONA

ATIS
125.8
FLAGSTAFF TOWER★
134.55 226.3
GND CON
121.9

D

35°09'N

ELEV
6996

209.4°

VAR 11.8°E

JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W

CONTROL
TOWER
7069

FIRE
STATION

TERMINAL

HANGARS

RWY 3-21
S30, D95, ST120, DT140

8800 X 150

FBO

7081 ☆

029.4°

FIELD
ELEV
7014

35°08'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

111°41'W

111°40'W

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8800
027°	TDZE	7011
	Apt Elev	7011

GPS RWY 3
FLAGSTAFF PULLIAM (FLG)

T
NA

MISSED APPROACH: Climbing right turn to 9500 direct TAWNE and hold.

ATIS	ALBUQUERQUE CENTER	FLAGSTAFF TOWER ★	GND CON	UNICOM
125.8	124.5 306.2	134.55 (CTAF) L 226.3	121.9	122.95

9300
8047
7231
7389±
FLAGSTAFF
FLG
8045
7119±
RW03
10500 to SEZCY
205° (10.9)
3 NM to RW03
(FAF)
TOHQU
8600
027°
(5)
(IAF)
SEZCY
027°
1 min
207°
7712
8745
8000
9600 NoPT
314°
(9.6)
(IAF)
OATES
7 NM
083°
263°
TAWNE
MSA RW 03 25 NM
13700

SW-4, 22 OCT 2009 to 19 NOV 2009

One Minute Holding Pattern
SEZCY
9600
207°
027°
027°
TOHQU
3 NM to RW03
8600
8000
RW03
2.90°
5 NM
2 NM
2 NM
1 NM

9500
TAWNE

ELEV 7011 D
21
7071±
7069
8800 X 150
7081
TDZE
7011
027° to RW03

CATEGORY	A	B	C	D
S-3	7380-1 369 (400-1)			7380-1¼ 369 (400-1¼)
CIRCLING	7600-1 589 (600-1)	7620-1 609 (700-1)	7620-1¾ 609 (700-1¾)	7640-2 629 (700-2)

HIRL Rwy 3-21 L

LOC I-FLG	APP CRS	Rwy Idg	7000
110.5	210°	TDZE	7000
		Apt Elev	7011

ILS or LOC/DME RWY 21

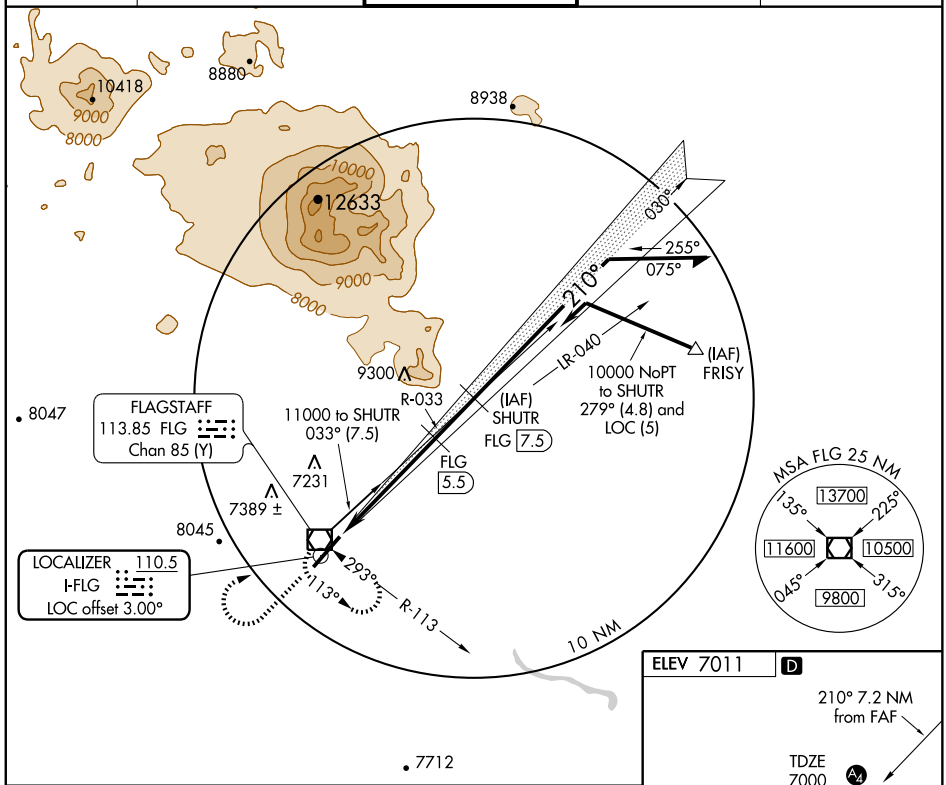
FLAGSTAFF PULLIAM (FLG)

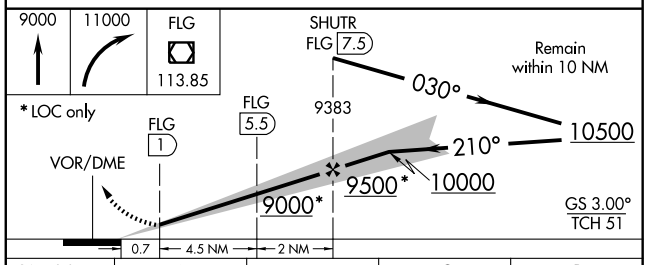
T A DME from FLG VOR/DME. Simultaneous reception of I-FLG and FLG DME required.
Auto coupled approach not authorized below 7640 feet MSL.

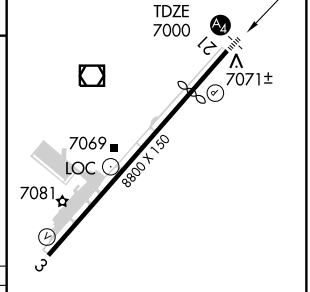
MALS

MISSED APPROACH: Climb to 9000 then climbing right turn to 11000 direct to FLG VOR/DME and hold.

ATIS	ALBUQUERQUE CENTER	FLAGSTAFF TOWER ★	GND CON	UNICOM
125.8	124.5 306.2	134.55 (CTAF) L 226.3	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 21	7250-½ 250 (300-½)			
S-LOC 21	7480-½ 480 (500-½)		7480-¾ 480 (500-¾)	7480-1 480 (500-1)
CIRCLING	7600-1 589 (600-1)	7620-1 609 (700-1)	7620-1¾ 609 (700-1¾)	7640-2 629 (700-2)

HIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7000
222°	TDZE	7003
	Apt Elev	7014

RNAV (GPS) Y RWY 21

FLAGSTAFF PULLIAM (FLG)

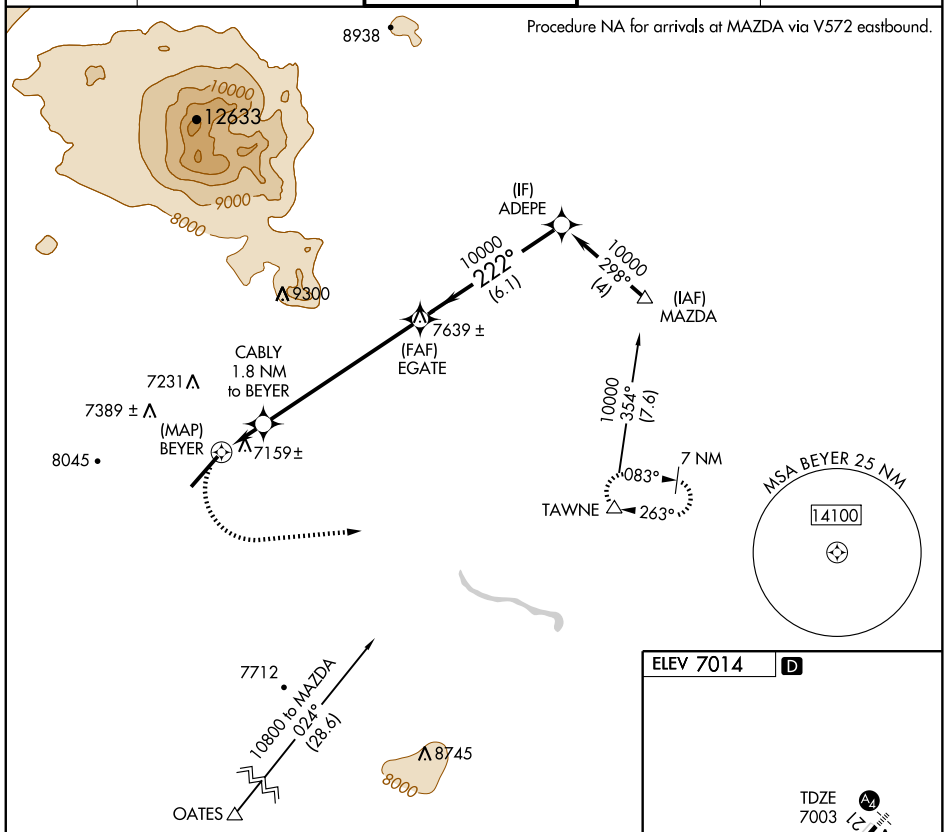
When local altimeter setting not received, procedure NA.
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.

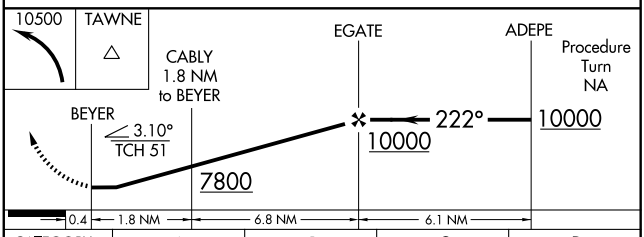
MALS

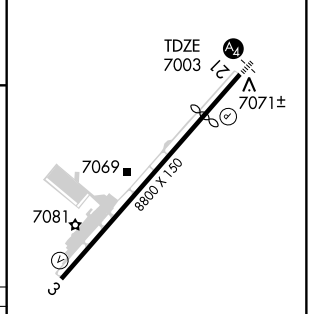
MISSED APPROACH: Climbing left turn to 10500 direct TAWNE and hold, continue climb-in-hold to 10500.

ATIS	ALBUQUERQUE CENTER	FLAGSTAFF TOWER ★	GND CON	UNICOM
125.8	124.5 306.2	134.55 (CTAF) L 226.3	121.9	122.95

Procedure NA for arrivals at MAZDA via V572 eastbound.







CATEGORY	A	B	C	D
LNAV MDA	7420-1	417 (500-1)	7420-1¼ 417 (500-1¼)	7420-1⅞ 417 (500-1⅞)
CIRCLING	7520-1 506 (600-1)	7560-1 546 (600-1)	7560-1½ 546 (600-1½)	7580-2 566 (600-2)

HIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	7000
CH 65711	210°	TDZE	7003
W21A		Apt Elev	7014

RNAV (GPS) Z RWY 21

FLAGSTAFF PULLIAM (FLG)

When local altimeter setting not received, procedure NA. DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.

MALS

MISSED APPROACH: Climb to 10500 direct WELAT and via 162° track to SECOK and left turn via 043° track to TAWNE and hold.

ATIS	ALBUQUERQUE CENTER	FLAGSTAFF TOWER ★	GND CON	UNICOM
125.8	124.5 306.2	134.55 (CTAF) L 226.3	121.9	122.95

Procedure NA for arrivals at MAZDA via V572 eastbound.

12633 9000 8000 9300 (IF) YANUP 10000 210° (6) 10000 301° (7) (IAF) MAZDA ZIGNO • 8047 7231 7389± 8045 • (MAP) (INUZE) WELAT 162° 10000 354° (7.6) 7 NM 083° 263° TAWNE 7712 043° 8745 8000 MSA INUZE 25 NM 14100 SECOK 10800 to MAZDA 024° (28.6) OATES

10500	WELAT	162° trk	SECOK	043° trk	TAWNE

Procedure Turn NA

ELEV 7014 D

210° to (INUZE) TDZE 7003 21 7071± 7069 8800 X 150 7081

ZIGNO YANUP (INUZE) 210° 10000 10000 GS 3.00° TCH 51 9 NM 6 NM

CATEGORY	A	B	C	D
LPV DA	7303-1 300 (300-1)			

HIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME FLG	APP CRS	Rwy Idg	7000
113.85	236°	TDZE	7000
Chan 85 (Y)		Apt Elev	7011

VOR/DME RWY 21

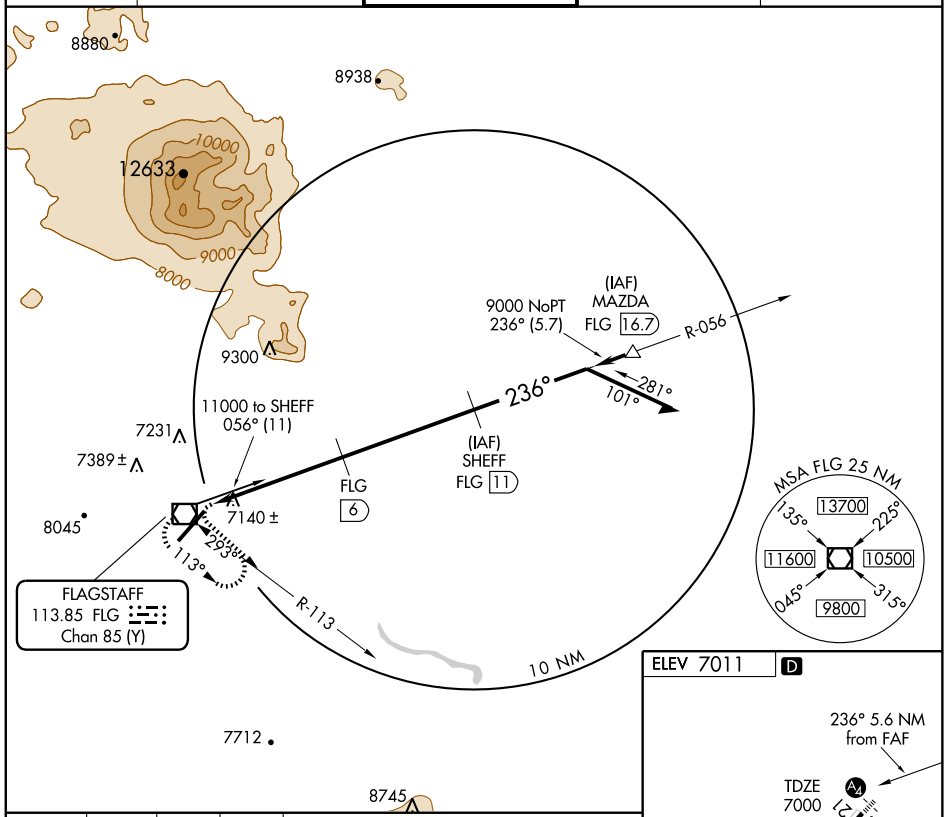
FLAGSTAFF PULLIAM (FLG)

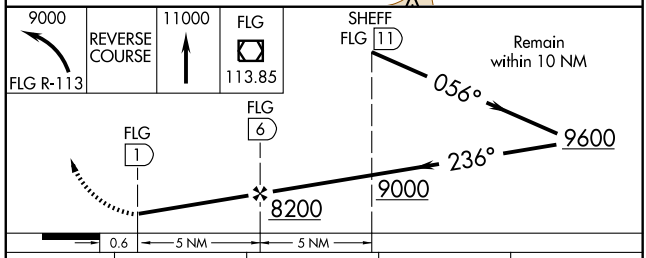
Inoperative table does not apply.

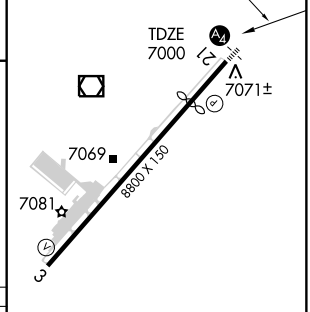
MALS

MISSED APPROACH: Climbing left turn to 9000 via FLG R-113, reverse course climbing to 11000 direct to FLG VOR/DME and hold.

ATIS	ALBUQUERQUE CENTER	FLAGSTAFF TOWER ★	GND CON	UNICOM
125.8	124.5 306.2	134.55 (CTAF) L 226.3	121.9	122.95







CATEGORY	A	B	C	D
S-21	7800-1 800 (800-1)	7800-1¼ 800 (800-1¼)	7800-2¼ 800 (800-2¼)	7800-2½ 800 (800-2½)
CIRCLING	7800-1 789 (800-1)	7800-1¼ 789 (800-1¼)	7800-2¼ 789 (800-2¼)	7800-2½ 789 (800-2½)

HIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

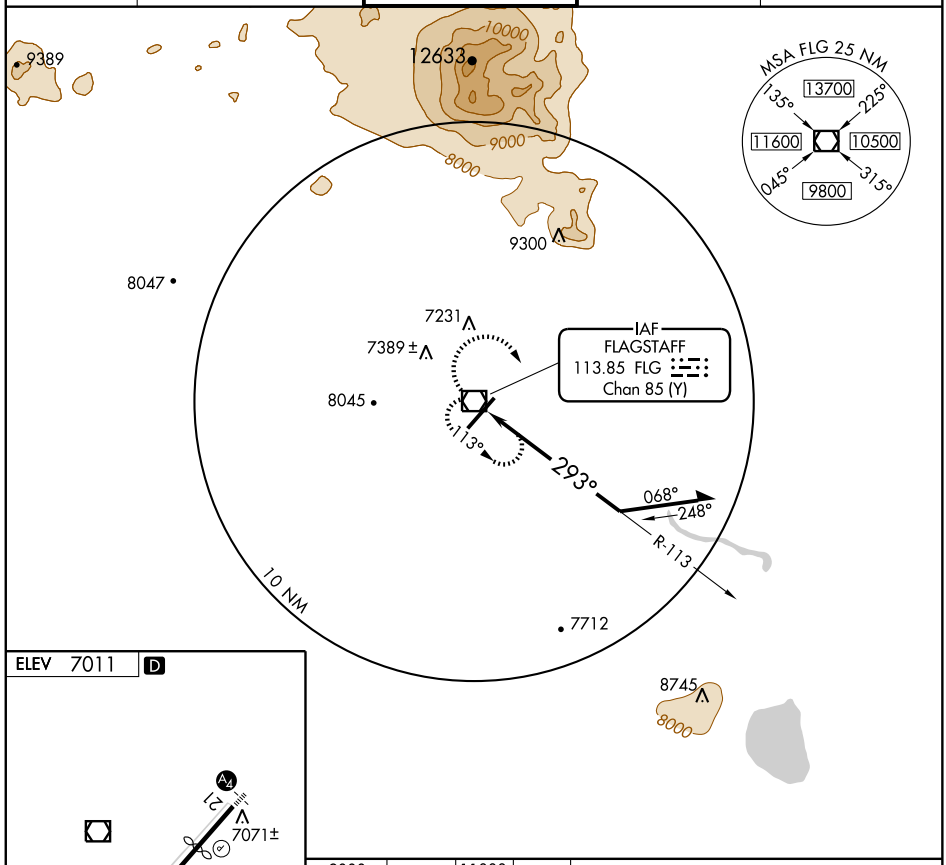
VOR/DME FLG	APP CRS	Rwy Idg	N/A
113.85	293°	TDZE	N/A
Chan 85 (Y)		Apt Elev	7011

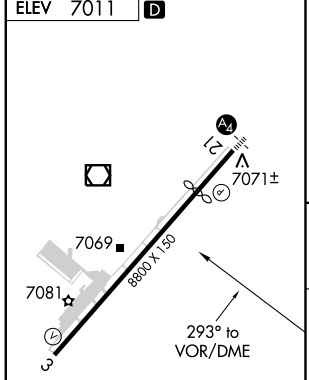
VOR or GPS-A

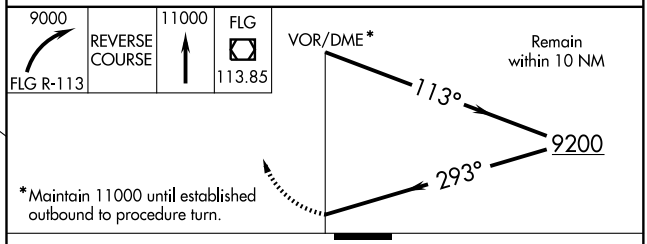
FLAGSTAFF PULLIAM (FLG)

MISSED APPROACH: Climbing right turn to 9000 via FLG R-113 reverse course climbing to 11000 direct to FLG VOR/DME and hold.

ATIS	ALBUQUERQUE CENTER	FLAGSTAFF TOWER ★	GND CON	UNICOM
125.8	124.5 306.2	134.55 (CTAF) L 226.3	121.9	122.95

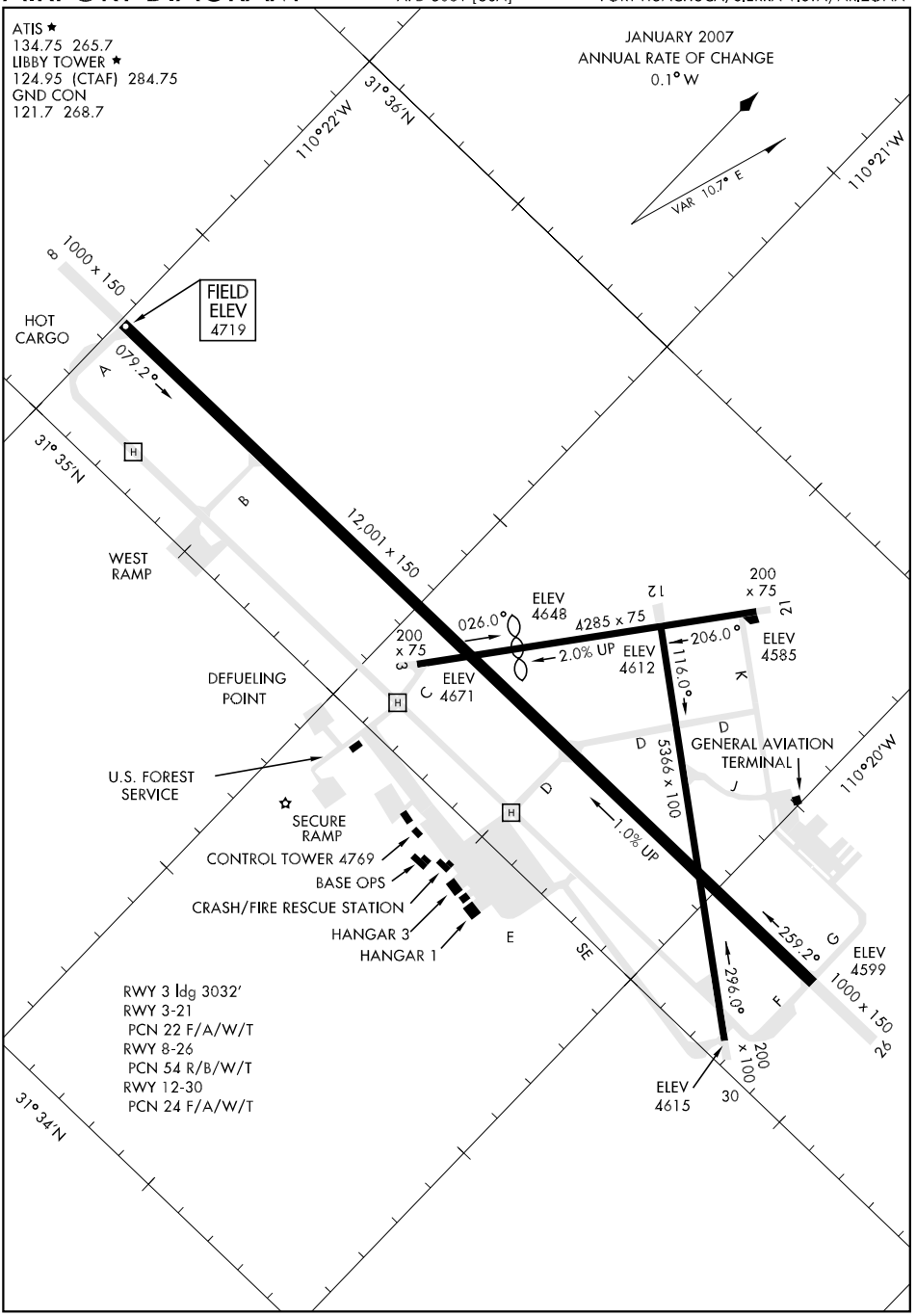






CATEGORY	A	B	C	D
CIRCLING	7700-1	688 (700-1)	7700-2 688 (700-2)	7700-2¼ 688 (700-2¼)

SW-4, 22 OCT 2009 to 19 NOV 2009


ATIS ★
134.75 265.7
LIBBY TOWER ★
124.95 (CTAF) 284.75
GND CON
121.7 268.7
JANUARY 2007
ANNUAL RATE OF CHANGE
0.1° W
VAR 10.7° E
31°36'N
110°22'W
110°21'W
31°35'N
31°34'N
110°20'W
FIELD ELEV 4719
1000 x 150
HOT CARGO
079.2°
12,001 x 150
WEST RAMP
DEFUELING POINT
ELEV 4671
ELEV 4648
026.0°
4285 x 75
2.0% UP
ELEV 4612
206.0°
ELEV 4585
200 x 75
116.0°
5366 x 100
1.0% UP
GENERAL AVIATION TERMINAL
U.S. FOREST SERVICE
SECURE RAMP
CONTROL TOWER 4769
BASE OPS
CRASH/FIRE RESCUE STATION
HANGAR 3
HANGAR 1
259.2°
ELEV 4599
1000 x 150
296.0°
200 x 100
ELEV 4615
RWY 3 ldg 3032'
RWY 3-21
PCN 22 F/A/W/T
RWY 8-26
PCN 54 R/B/W/T
RWY 12-30
PCN 24 F/A/W/T

FORT HUACHUCA-SIERRA-VISTA, ARIZONA AL-5081 (FAA)

LOC I-FHU	APP CRS	Rwy Idg	12001
109.9	257°	TDZE	4629
		Apt Elev	4719

ILS or LOC RWY 26

FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

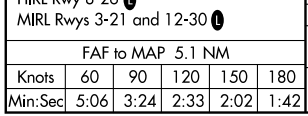
Circling not authorized south of Rwys 8 and 30.
ASR/PAR

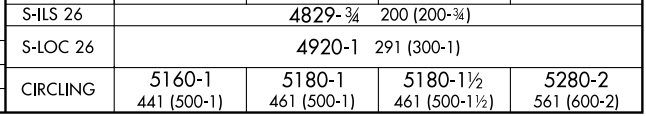
MISSED APPROACH: Climb to 5300, then climbing right turn to 9500 via FHU R-021 to TOMBS and hold.

ATIS	ASOS	LIBBY AAF GCA★	LIBBY TOWER★	GND CON	UNICOM
134.75 265.7	119.675	127.05 254.35	124.95 (CTAF) L 284.75	121.7 268.7	122.95

TOMBS
DUG 36
106°
286°
FHU R-021
MSA FHU 25 NM
9000
240°
110°
16000
10700
020°
115.8 CE Chan 105
R-200
R-286
(IAF) CAYLA
8300
200° (6.3)
108.8 DUG Chan 25
R-2303B
6469
LIBBY
113.6 FHU
SERRA
ARH 5.7
RADAR
FHU LR-070
6300
257°
(6.9)
077°
LOCALIZER 109.9
I-FHU
5018
MICCO INT
ARH 12.5
RADAR
R-2303A and B
FORT HUACHUCA
Chan 53
ARH
(111.6)
6171
8410
7161
15000
R-2303C
R-2303B
R-2312
10 NM
7370
9466
ELEV 4719

RADAR or DME REQUIRED





HIRL Rwy 8-26 L
MIRL Rwys 3-21 and 12-30 L

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
S-ILS 26	4829-¾ 200 (200-¾)			
S-LOC 26	4920-1 291 (300-1)			
CIRCLING	5160-1 441 (500-1)	5180-1 461 (500-1)	5180-1½ 461 (500-1½)	5280-2 561 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

NDB DAO	APP CRS	Rwy Idg	12001
410	255°	TDZE	4629
		Apt Elev	4719

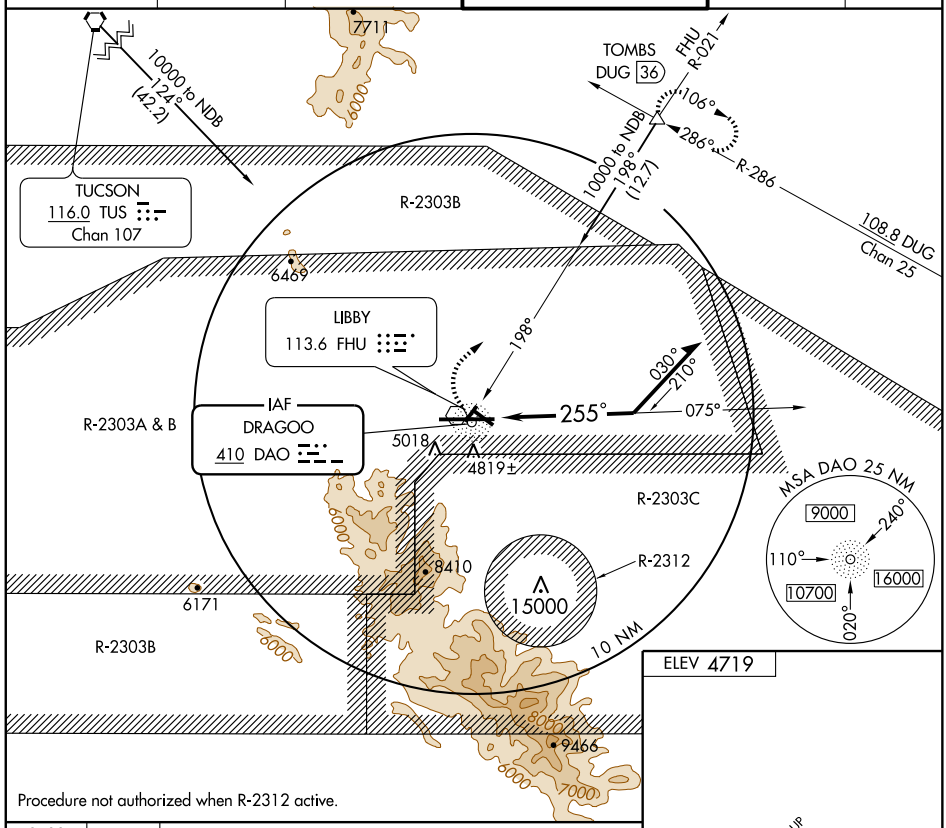
NDB RWY 26

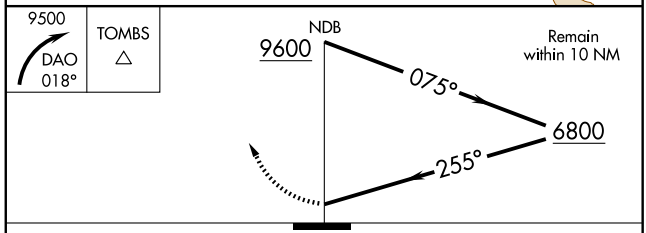
FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

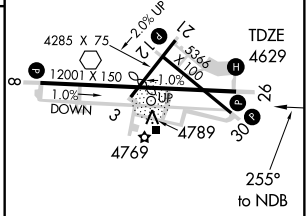
Circling not authorized south of Rwys 8 and 30.
ASR/PAR

MISSED APPROACH: Climbing right turn to 9500 via DAO NDB 018° bearing to TOMBS Int/DUG 36 DME and hold.

ATIS	ASOS	LIBBY AAF GCA★	LIBBY TOWER★	GND CON	UNICOM
134.75 265.7	119.675	127.05 254.35	124.95 (CTAF) L 284.75	121.7 268.7	122.95







CATEGORY	A	B	C	D
S-26	5300-1	671 (600-1)	5300-2 671 (600-2)	5300-2¼ 671 (600-2¼)
CIRCLING	5300-1	581 (600-1)	5300-2 581 (600-2)	5300-2¼ 581 (600-2¼)

HIRL Rwy 8-26 L
MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12001
077°	TDZE	4719
	Apt Elev	4719

RNAV (GPS) RWY 8

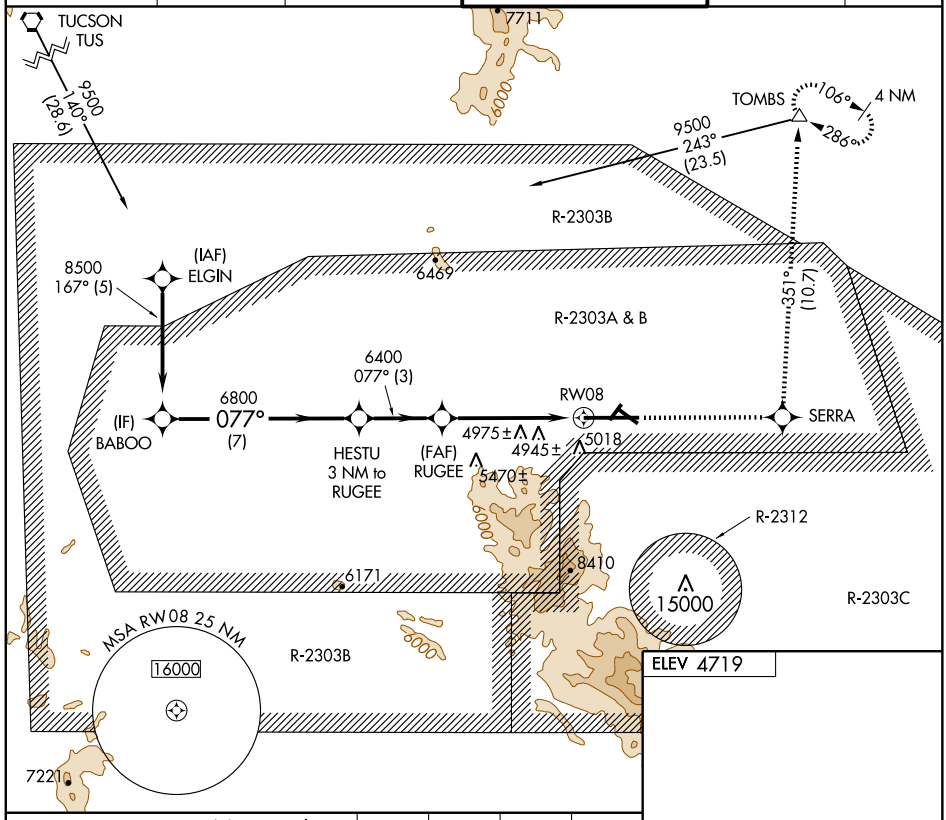
FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

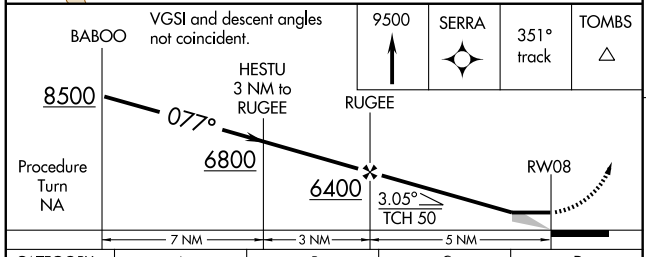
T A ASR/PAR

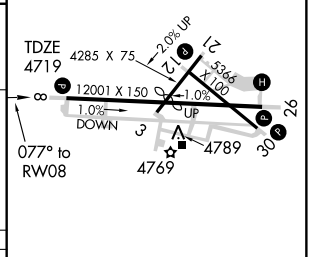
DME/DME RNP-0.3 NA.
Circling not authorized south of runways 8 and 30.

MISSED APPROACH: Climb to 9500 direct SERRA and via 351° track to TOMBS and hold.

ATIS	ASOS	LIBBY AAF GCA★	LIBBY TOWER★	GND CON	UNICOM
134.75 265.7	119.675	127.05 254.35	124.95 (CTAF) L 284.75	121.7 268.7	122.95







CATEGORY	A	B	C	D
LNAV MDA	5920-1¼ 1201 (1300-1¼)	5920-1½ 1201 (1300-1½)	5920-3 1201 (1300-3)	
CIRCLING	5920-1¼ 1201 (1300-1¼)	5920-1½ 1201 (1300-1½)	5920-3 1201 (1300-3)	

HIRL Rwy 8-26 L
MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12001
257°	TDZE	4629
	Apt Elev	4719

RNAV (GPS) RWY 26

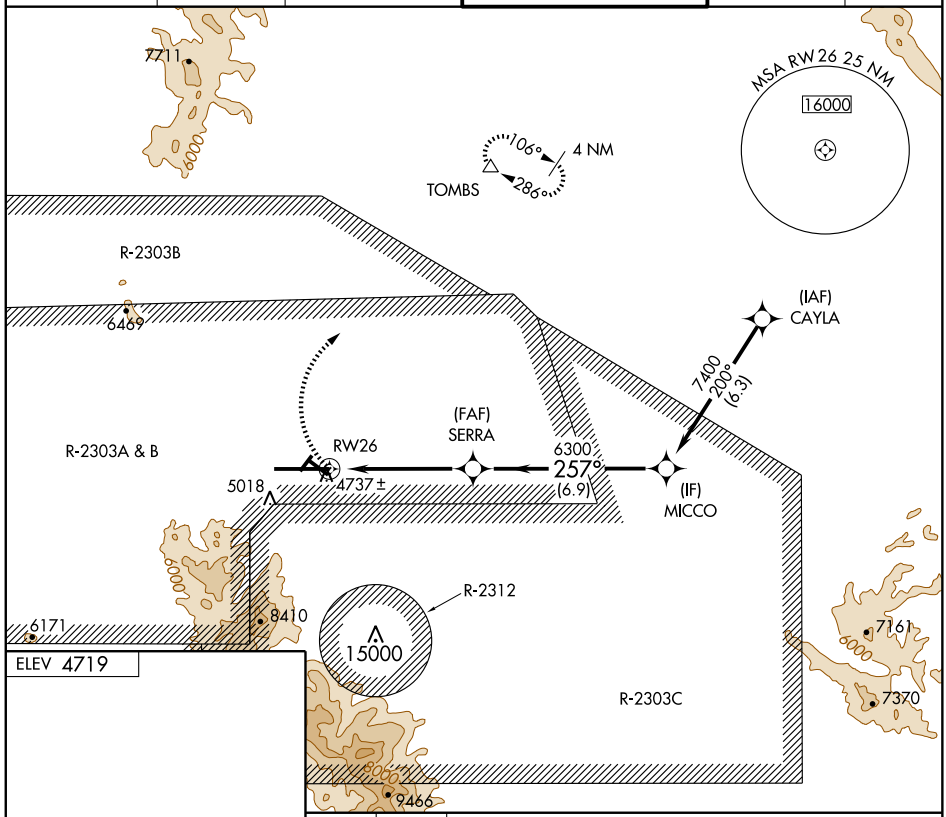
FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

T ASR/PAR

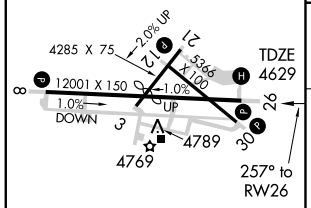
DME/DME RNP-0.3 NA.
Circling not authorized south of runways 8 and 30.

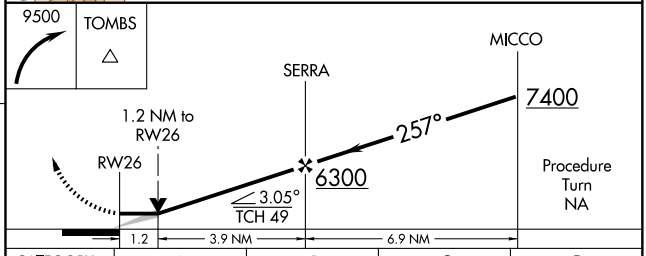
MISSED APPROACH: Climbing right turn to 9500 direct TOMBS and hold.

ATIS	ASOS	LIBBY AAF GCA★	LIBBY TOWER★	GND CON	UNICOM
134.75 265.7	119.675	127.05 254.35	124.95 (CTAF) L 284.75	121.7 268.7	122.95



ELEV 4719





CATEGORY	A	B	C	D
LNAV MDA	5040-1 411 (400-1)		5040-1¼ 411 (400-1¼)	
CIRCLING	5160-1 441 (500-1)	5180-1 461 (500-1)	5180-1½ 461 (500-1½)	5280-2 561 (600-2)

HIRL Rwy 8-26 L
MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 8

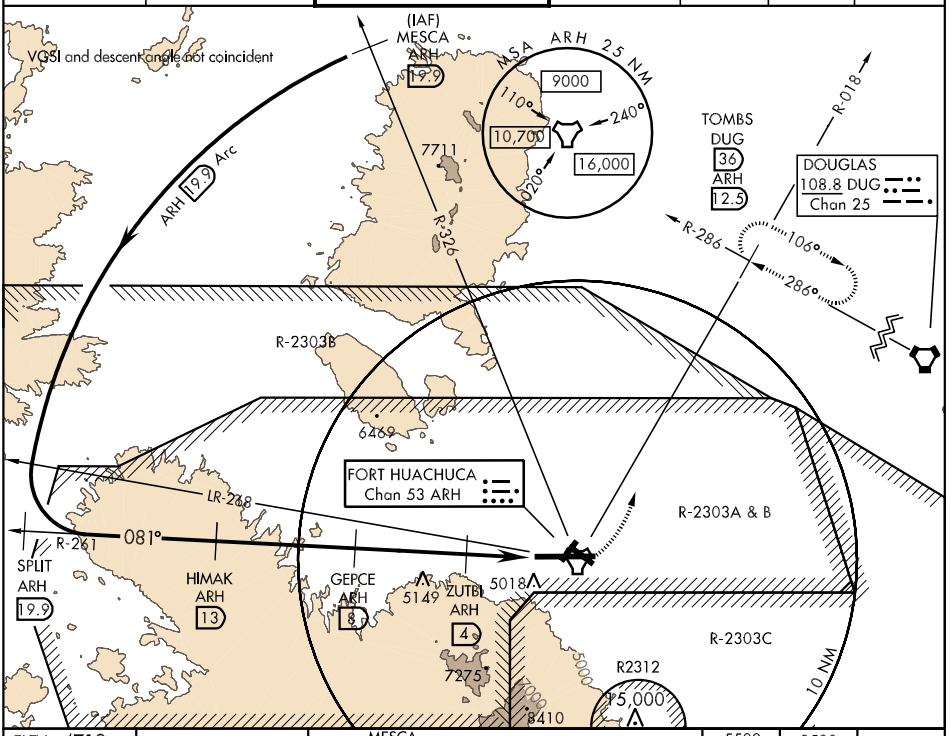
FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

TACAN ARH Chan 53	APCH CRS 081°	Rwy ldg 12,001 TDZE 4719 Arpt Elev 4719	AL-5081 [USA]

▼ * Circling not authorized South of Rwys 8 and 30.

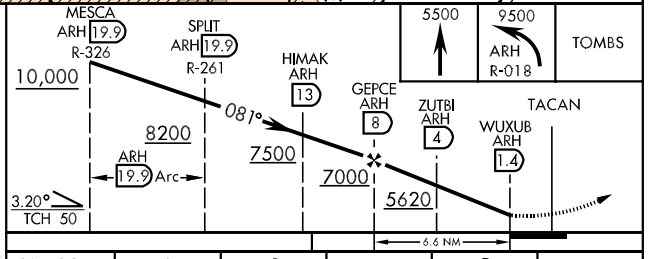
MISSED APPROACH: Climb to 5500 then climbing left turn to 9500 via ARH R-018 to TOMBS INT/DUG 36 DME and hold.

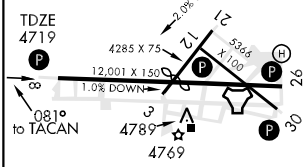
ATIS *	LIBBY AAF GCA	LIBBY TOWER *	GND CON	ASR/PAR	UNICOM	AWOS-3
134.75 265.7	127.05 254.35	124.95 (CTAF) 284.75	121.7 268.7		122.95	119.675



SW-4, 22 OCT 2009 to 19 NOV 2009

ELEV 4719 Rwy 3 ldg 3032'





MIRL Rwy 3-21
HIRL Rwy 8-26
MIRL Rwy 12-30

CATEGORY	A	B	C	D	E
S-8	5260-1 541 (600-1)		5260-1½ 541 (600-1½)	5260-1¾ 541 (600-1¾)	5260-2 541 (600-2)
CIRCLING *	5260-1 541 (600-1)		5260-1½ 541 (600-1½)	5280-2 561 (600-2)	
S-PAR 8	4916- ¾ 200 (200-¾)			GS 3.00°	

TACAN RWY 26

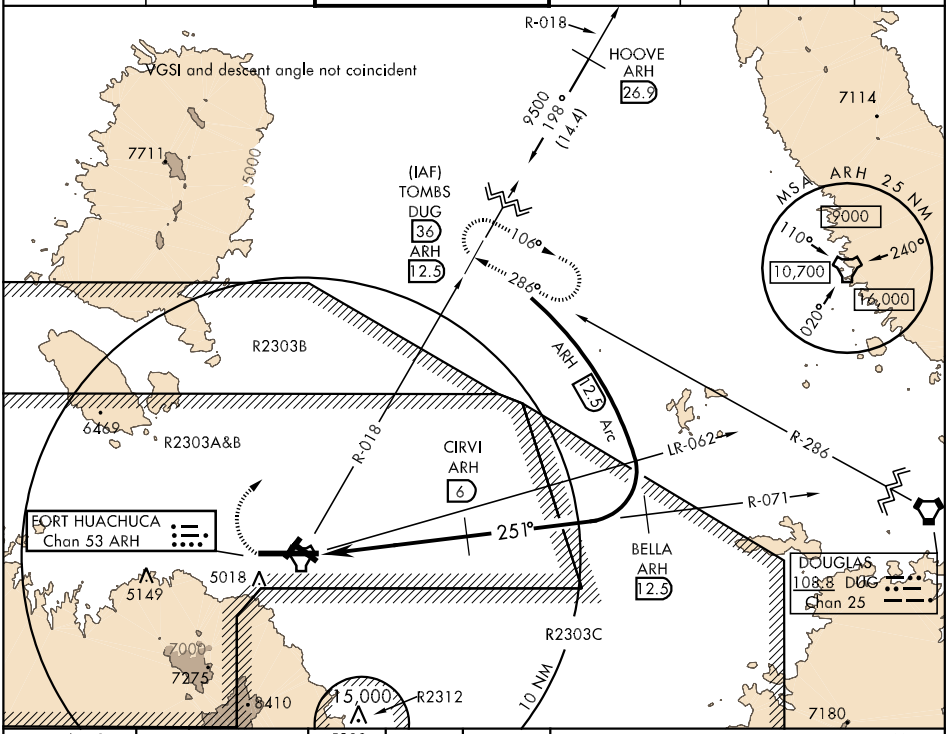
TACAN ARH Chan 53	APCH CRS 251°	Rwy ldg 12,001 TDZE 4629 Arpt Elev 4719	AL-5081 [USA]

FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

▼ * Circling not authorized South of Rwys 8 and 30.

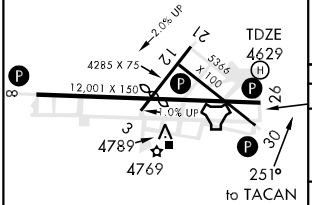
MISSED APPROACH: Climb to 5300 then climbing right turn to 9500 via ARH R-018 to TOMBS INT/DUG 36 DME and hold.

ATIS *	LIBBY AAF GCA	LIBBY TOWER *	GND CON	ASR/PAR	UNICOM	AWOS-3
134.75 265.7	127.05 254.35	124.95 (CTAF) L 284.75	121.7 268.7		122.95	119.675

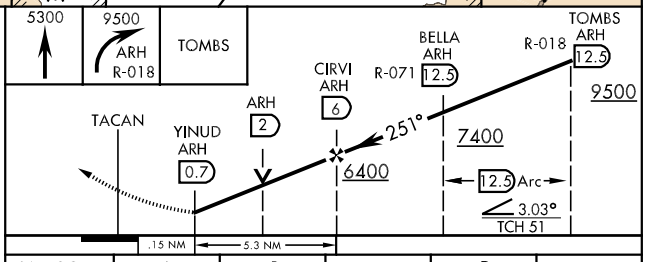


SW-4, 22 OCT 2009 to 19 NOV 2009

ELEV 4719 Rwy 3 ldg 3032'



MIRL Rwy 3-21 L
HIRL Rwy 8-26 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D	E
S-26	5100-1 471 (500-1)		5100-1¼ 471 (500-1¼)	5100-1½ 471 (500-1½)	5100-1¾ 471 (500-1¾)
CIRCLING *	5160-1 441 (500-1)	5180-1 461 (500-1)	5180-1½ 461 (500-1½)	5280-2 561 (600-2)	
S-PAR 26	4826- ¾ 200 (200-¾)			GS 3.00°	

VOR FHU	APP CRS	Rwy Idg	12001
113.6	259°	TDZE	4629
		Apt Elev	4719

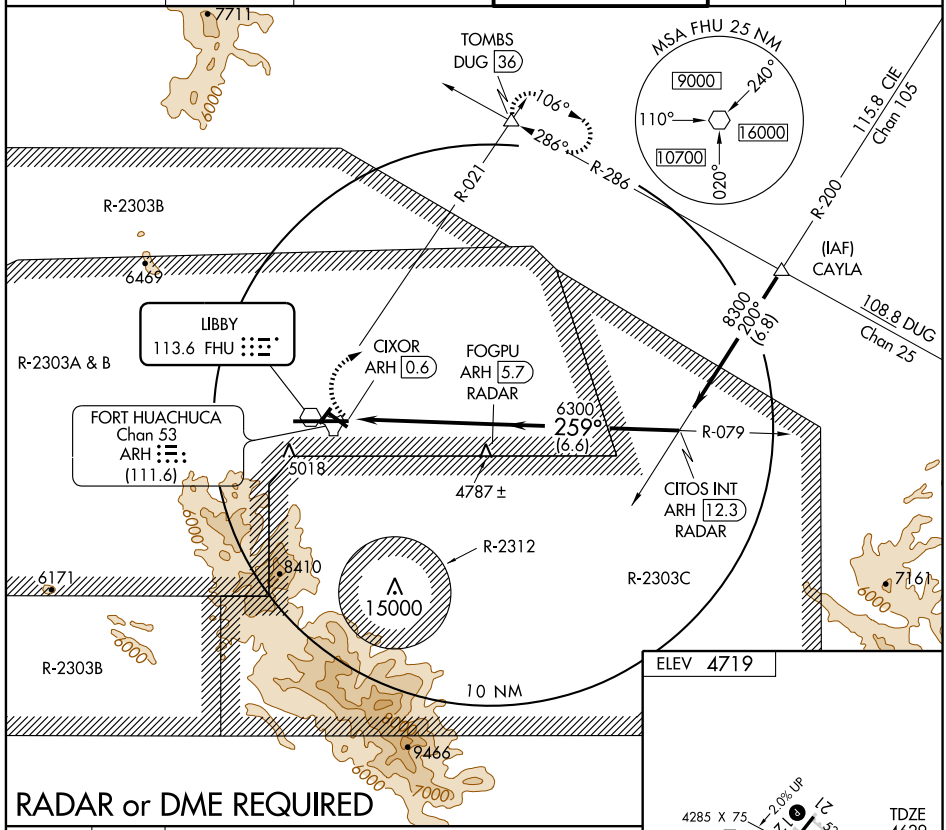
VOR RWY 26

FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

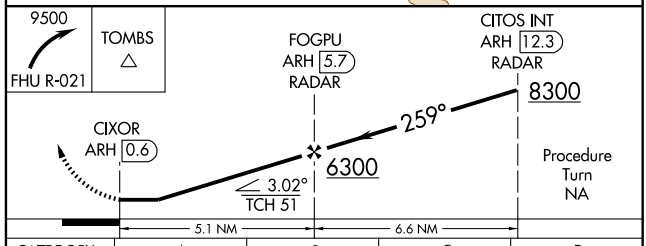
Circling not authorized south of Rwys 8 and 30.
ASR/PAR

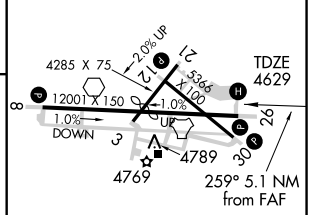
MISSED APPROACH: Climbing right turn to 9500 via FHU R-021 to TOMBS Int/DUG 36 DME and hold.

ATIS	ASOS	LIBBY AAF GCA ★	LIBBY TOWER ★	GND CON	UNICOM
134.75 265.7	119.675	127.05 254.35	124.95 (CTAF) L 284.75	121.7 268.7	122.95



RADAR or DME REQUIRED





CATEGORY	A	B	C	D
S-26	5140-1 511 (500-1)		5140-1½ 511 (500-1½)	
CIRCLING	5160-1 441 (500-1)	5180-1 461 (500-1)	5180-1½ 461 (500-1½)	5280-2 561 (600-2)

HIRL Rwy 8-26 L
MIRL Rwys 3-21 and 12-30 L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

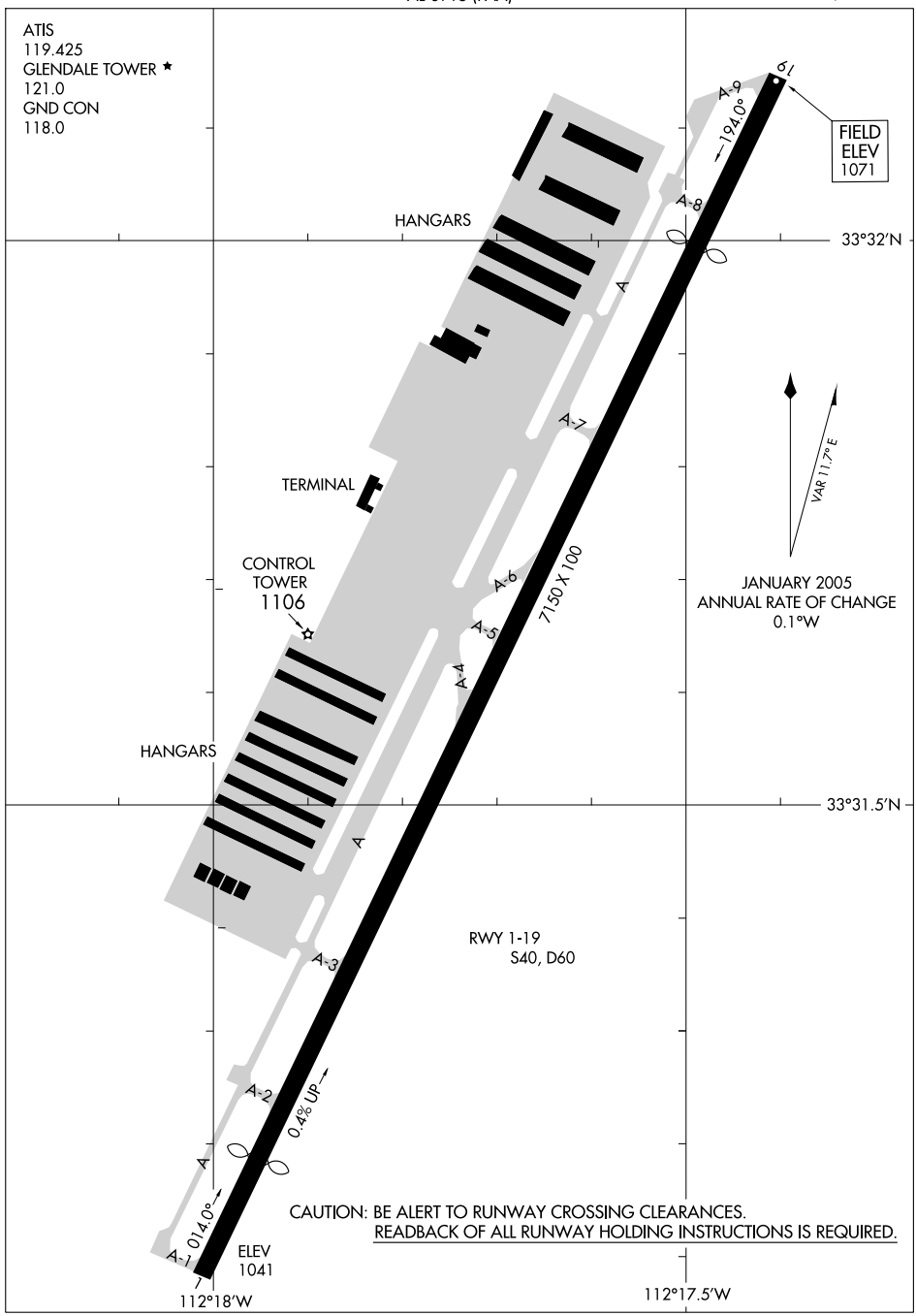
SW-4, 22 OCT 2009 to 19 NOV 2009

09071

AIRPORT DIAGRAM

AL-6915 (FAA)

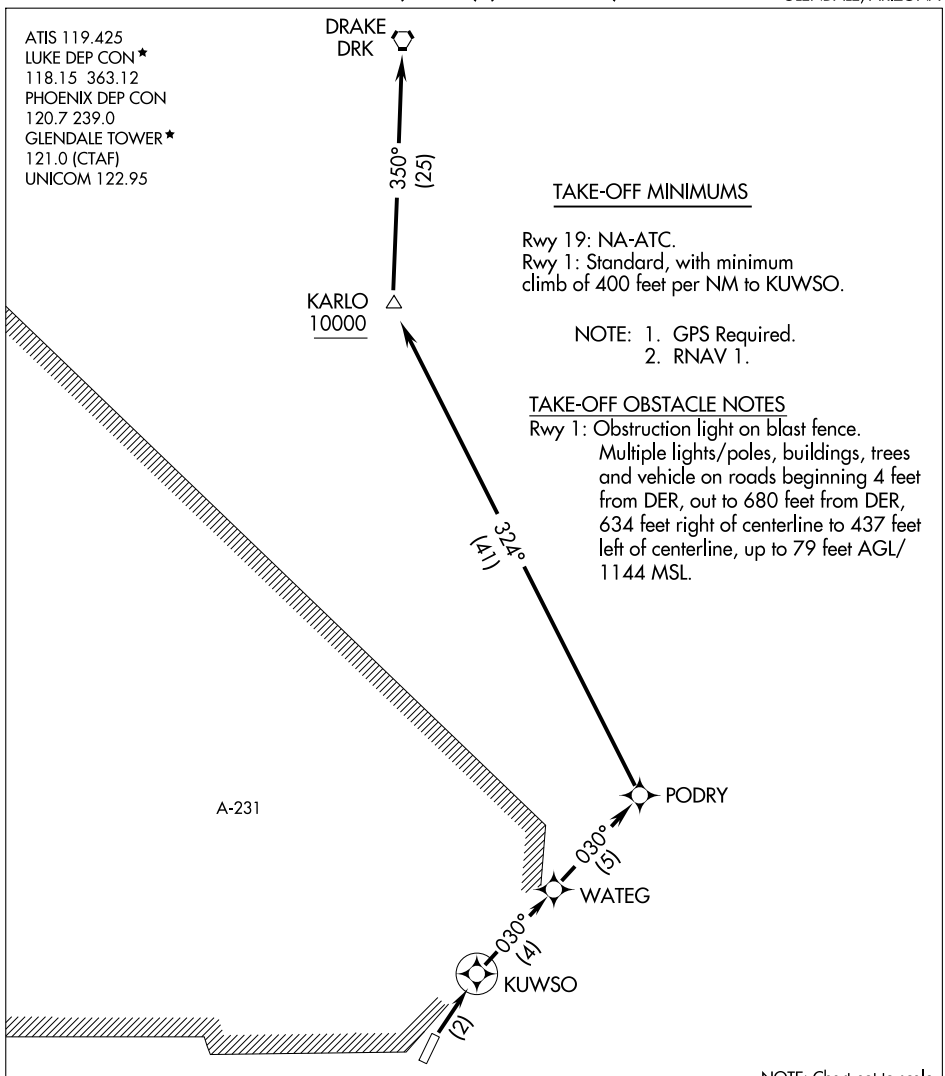
GLENDALE MUNI (GEU)
GLENDALE, ARIZONA



SW-4, 22 OCT 2009 to 19 NOV 2009

DRAKE ONE DEPARTURE (RNAV) (OBSTACLE)

GLENDALE MUNI(GEU)
GLENDALE, ARIZONA



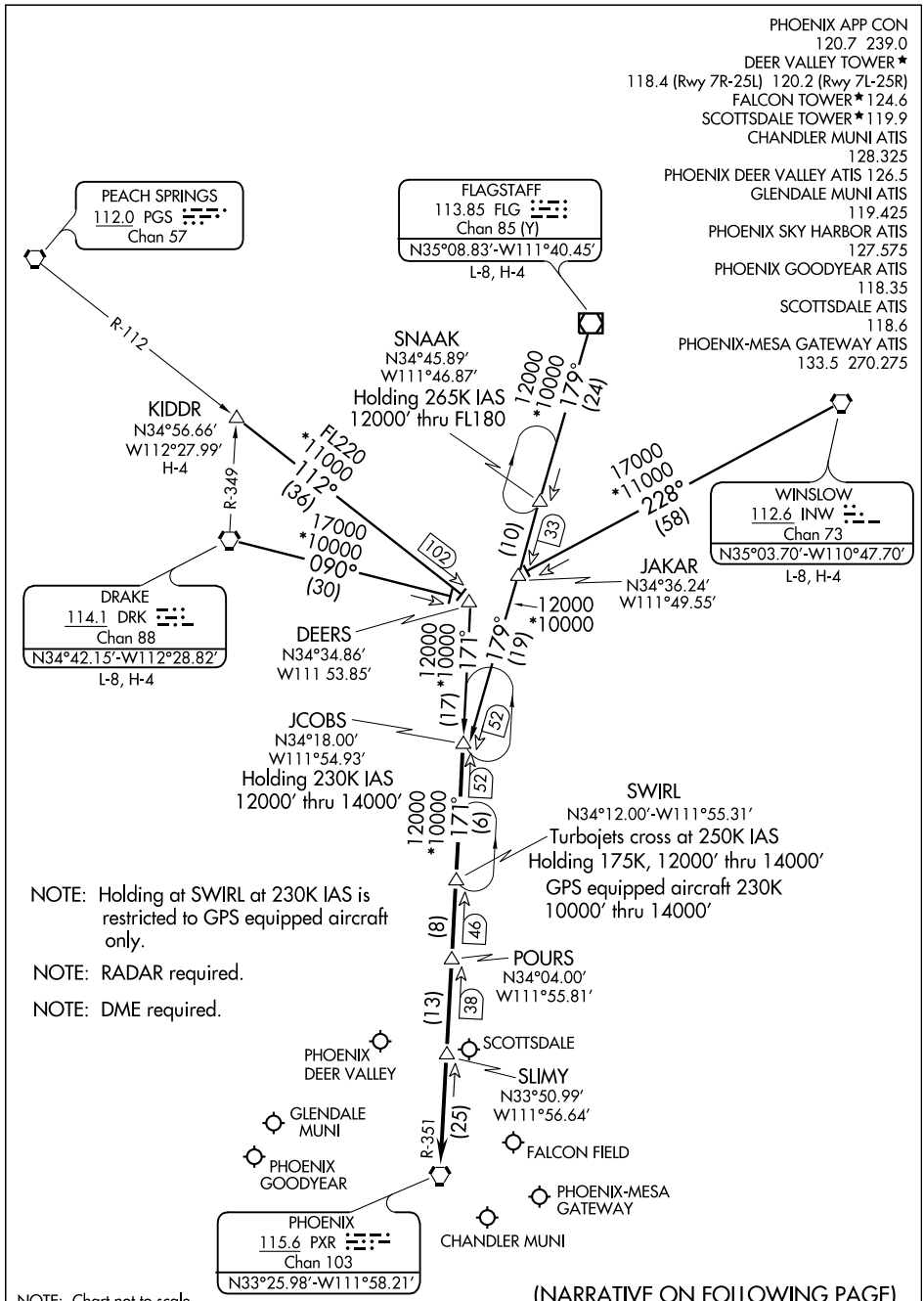
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1: Climb direct KUWSO, then via depicted route to cross KARLO at or above 10,000.

SW-4, 22 OCT 2009 to 19 NOV 2009

JCOBS TWO ARRIVAL

SCOTTSDALE, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

JCOBS TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

DRAKE TRANSITION (DRK.JCOBS2): From over DRK VORTAC via DRK R-090 to DEERS INT, then via PXR R-351 to JCOBS INT. Thence....

FLAGSTAFF TRANSITION (FLG.JCOBS2): From over FLG VOR/DME via FLG R-179 to JCOBS INT. Thence....

KIDDR TRANSITION (KIDDR.JCOBS2): From over KIDDR INT via PGS R-112 to DEERS INT then via PXR R-351 to JCOBS INT. Thence....

WINSLOW TRANSITION (INW.JCOBS2): From over INW VORTAC via INW R-228 to JAKAR INT, then via FLG R-179 to JCOBS INT. Thence....

... From over JCOBS INT via PXR R-351 to SWIRL DME, then via PXR R-351 to SLIMY DME, then direct PXR VORTAC. After POURS, expect radar vectors to final approach course.

LOST COMMUNICATIONS: From DRK VORTAC via DRK R-090 to intercept PXR R-351at DEERS INT direct PXR VORTAC. From FLG VORTAC, proceed direct to JCOBS INT then direct PXR VORTAC. From KIDDR INT to DEERS INT via PGS R-112 to intercept PXR R-351 to PXR VORTAC. From INW VORTAC to JAKAR INT via INW R-228 to intercept FLG R-179 to JCOBS INT to intercept PXR R-351 to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

GLENDALE, ARIZONA

AL-6915 (FAA)

WAAS CH 90306 W01A	APP CRS 014°	Rwy ldg 6449 TDZE 1049 Apt Elev 1071

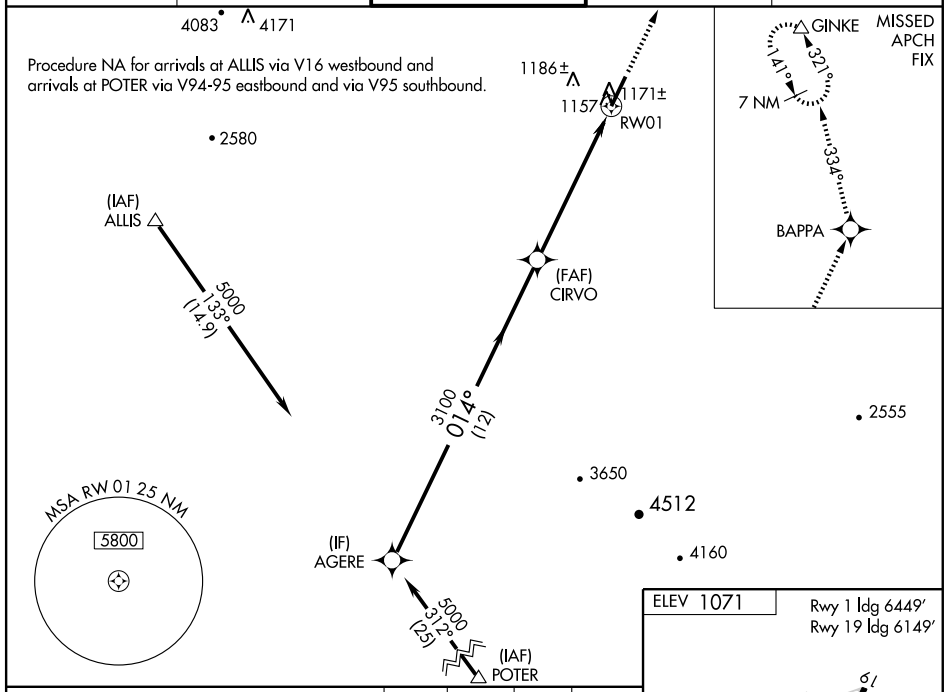
RNAV (GPS) RWY 1

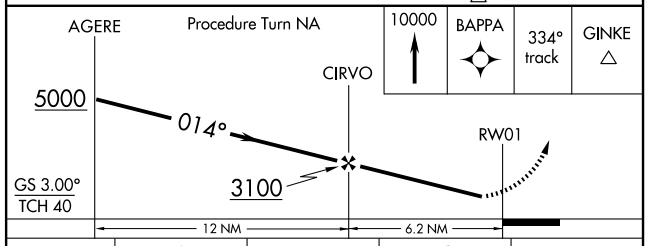
GLENDALE MUNI (GEU)

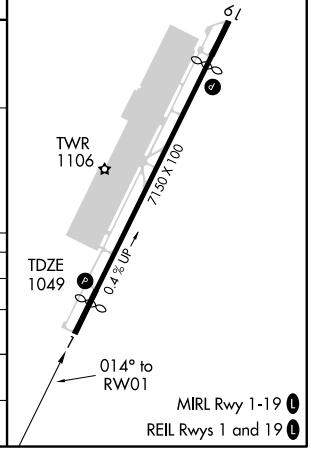
Circling not authorized west of Rwy 1-19. DME/DME RNP- 0.3 NA. Baro-VNAV NA when using Phoenix Sky Harbor Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (117°F). When local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting and increase all DAs/MDAs 60 feet, LNAV/VNAV all Cats visibility 1/4 mile and LNAV Cat C/D visibility 1/4 mile.

MISSED APPROACH: Climb to 10000 direct BAPPA and via 334° track to GINKE and hold, continue climb-in-hold to 10000.

ATIS	LUKE APP CON ★	GLENDALE TOWER ★	GND CON	UNICOM
119.425	118.15 363.12	121.0 (CTAF) L	118.0	122.95







CATEGORY	A	B	C	D
LPV DA	1378-1¼ 329 (400-1¼)			
LNAV/VNAV DA	1457-1½ 408 (400-1½)			
LNAV MDA	1440-1 391 (400-1)			1440-1¼ 391 (400-1¼)
CIRCLING	1460-1 389 (400-1)	1540-1 469 (500-1)	1540-1½ 469 (500-1½)	1640-2 569 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

GLENDALE, ARIZONA

AL-6915 (FAA)

WAAS	APP CRS	Rwy Idg	6149
CH 87004	194°	TDZE	1065
W19A		Apt Elev	1071

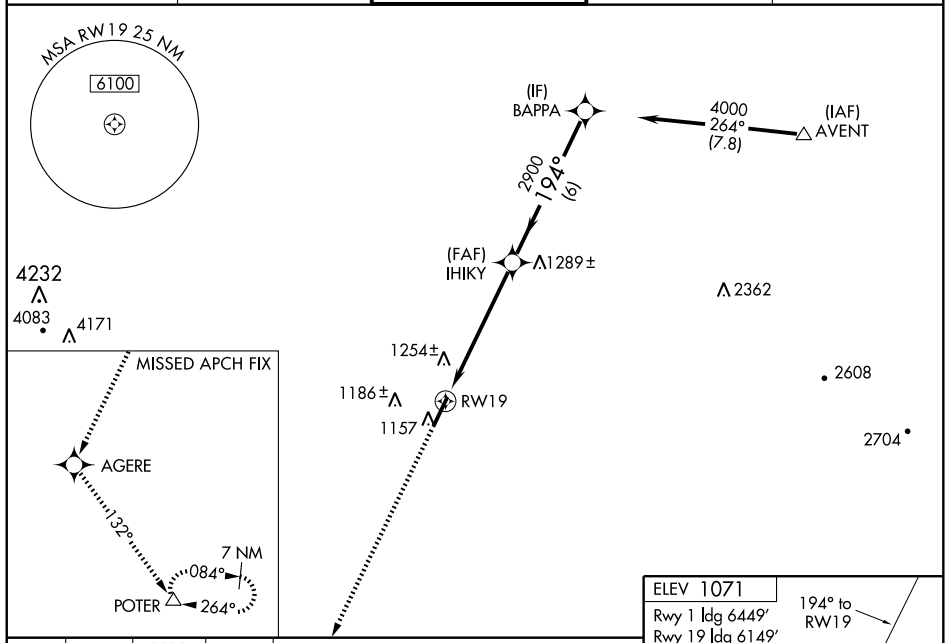
RNAV (GPS) RWY 19

GLENDALE MUNI (GEU)

Circling not authorized west of Rwy 1-19. DME/DME RNP- 0.3 NA. If local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting and increase all DAs/MDAs 60 feet. VDP and Baro-VNAV NA when using Phoenix Sky Harbor Intl altimeter setting. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F).

MISSED APPROACH: Climb to 5000 direct AGERE then climb to 8000 via 132° track to POTER and hold.

ATIS	LUKE APP CON★	GLENDALE TOWER★	GND CON	UNICOM
119.425	118.15 363.12	121.0 (CTAF) L	118.0	122.95

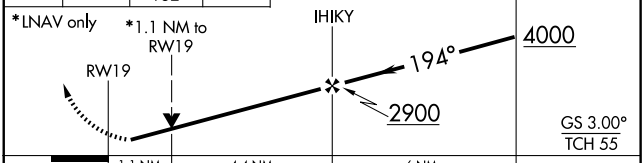


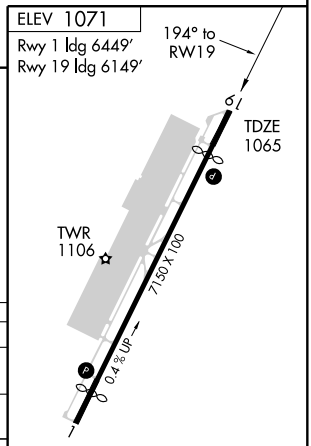
5000	AGERE	8000	POTER
		132°	

VGSI and RNAV glidepath not coincident.

Procedure Turn NA

BAPPA





CATEGORY	A	B	C	D
LPV DA	1339-1 274 (300-1)			
LNAV/ VNAV DA	1572-1¾ 507 (600-1¾)			
LNAV MDA	1540-1 475 (500-1)		1540-1¼ 475 (500-1¼)	1540-1½ 475 (500-1½)
CIRCLING	1540-1 469 (500-1)		1540-1½ 469 (500-1½)	1640-2 569 (600-2)

MIRL Rwy 1-19 L

REIL Rwys 1 and 19 L

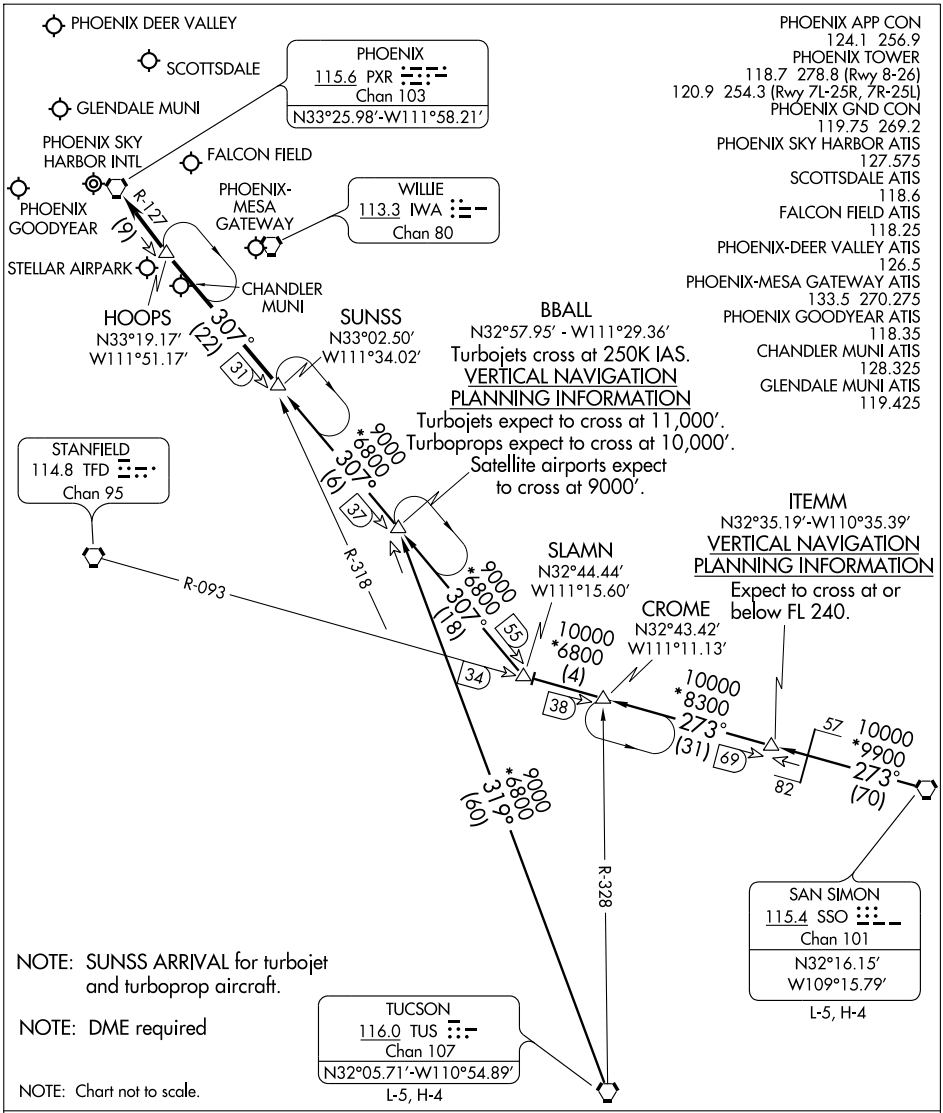
SW-4, 22 OCT 2009 to 19 NOV 2009

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

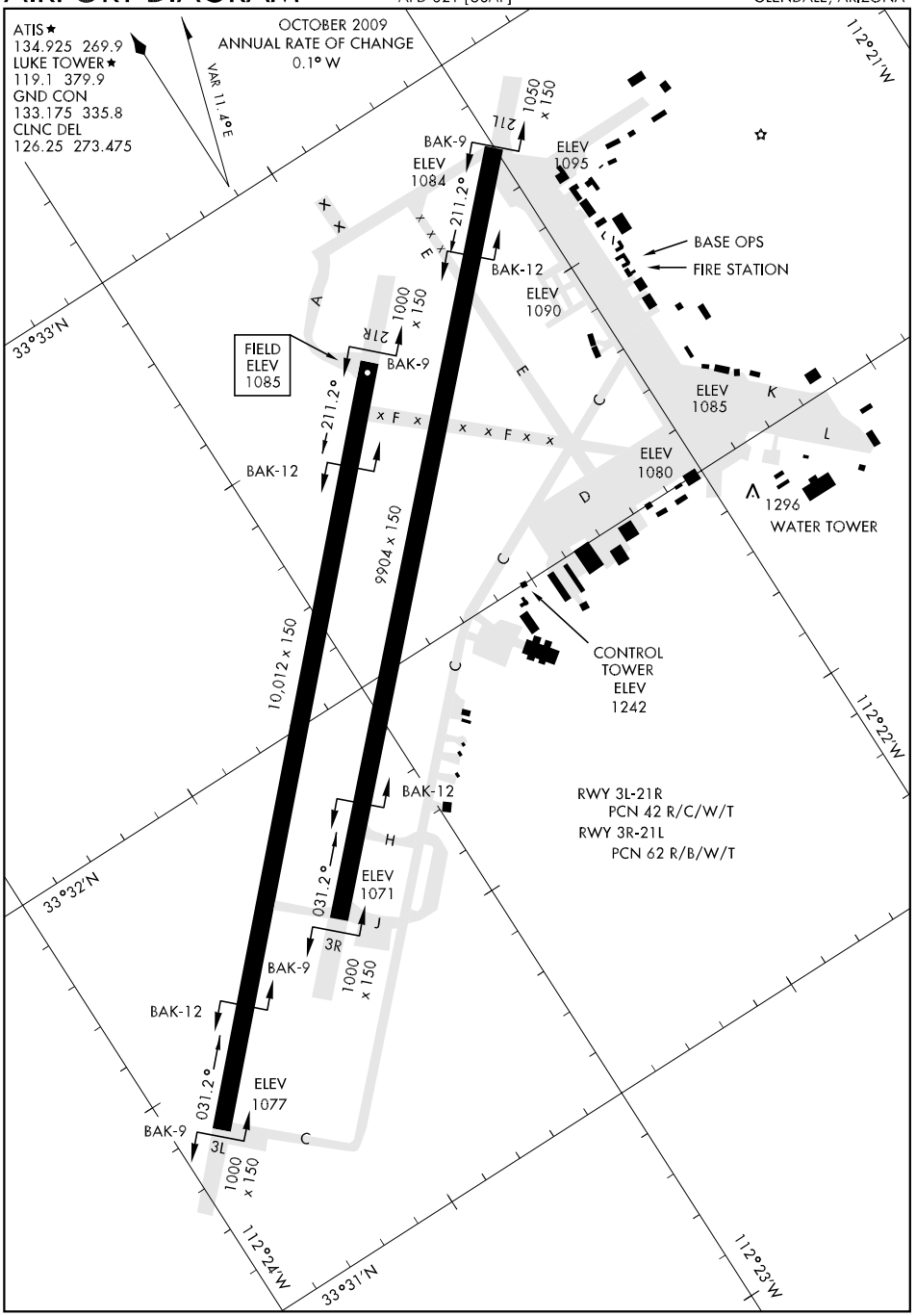
NOTE: Chart not to scale.

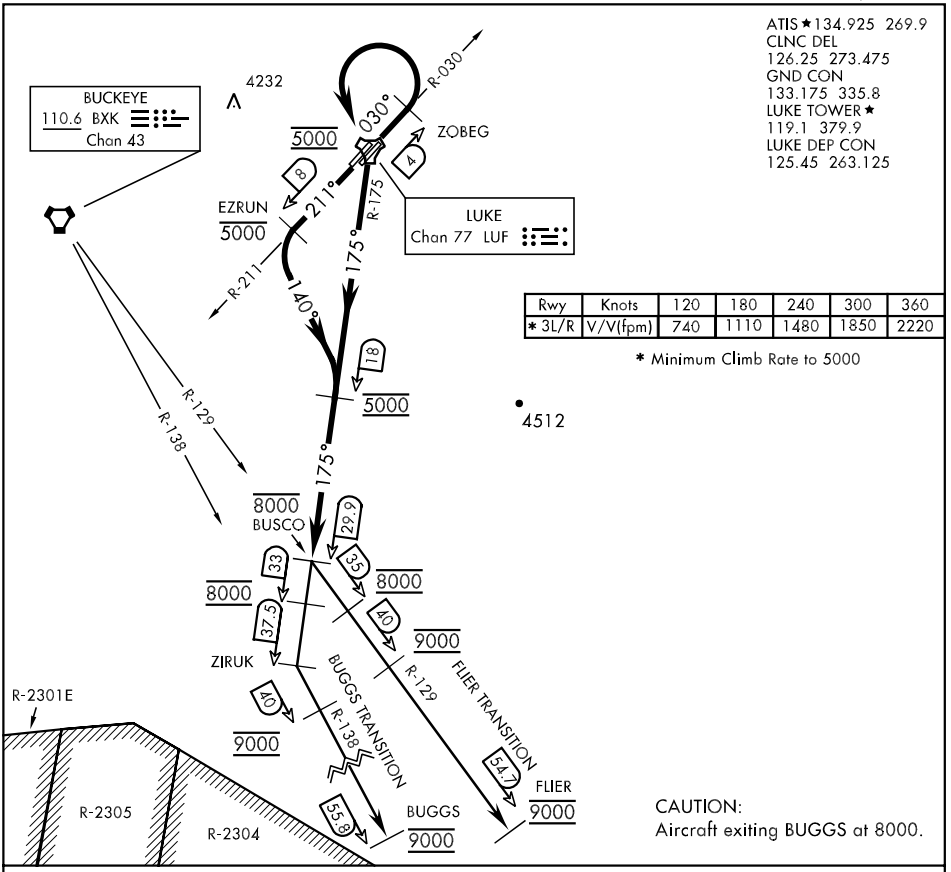
SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.


ATIS ★
134.925 269.9
LUKE TOWER ★
119.1 379.9
GND CON
133.175 335.8
CLNC DEL
126.25 273.475
OCTOBER 2009
ANNUAL RATE OF CHANGE
0.1° W
VAR 11.4°E
112°21'W
33°33'N
BAK-9
ELEV 1084
211
1050 x 150
ELEV 1095
BAK-12
211.2°
BASE OPS
FIRE STATION
ELEV 1090
FIELD ELEV 1085
21R
1000 x 150
ELEV 1085
ELEV 1080
1296
WATER TOWER
9904 x 150
10,012 x 150
CONTROL TOWER ELEV 1242
112°22'W
RWY 3L-21R
PCN 42 R/C/W/T
RWY 3R-21L
PCN 62 R/B/W/T
33°32'N
031.2°
ELEV 1071
3R
ELEV 1077
3L
112°24'W
33°31'N
112°23'W



SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L/R: Climb tracking 030°. Abeam ZOBEG (LUF TACAN R-030/4 DME) turn left direct LUF. Cross LUF at 5000 and proceed outbound via LUF R-175 to 29.9 DME (BUSCO), cross LUF 18 DME at 5000, cross BUSCO at or below 8000 (or as assigned by ATC). Then via assigned route/transition.

TAKE-OFF RWY 21L/R: Climb tracking 211°. Abeam EZRUN (LUF TACAN R-211/8 DME) turn left heading 140° to intercept and proceed via LUF R-175 to 29.9 DME (BUSCO). Cross abeam EZRUN at or below 5000, cross LUF 18 DME at 5000, cross BUSCO at or below 8000, (or as assigned by ATC). Then via assigned route/transition.

BUGGS TRANSITION (BUSCO9•BUGGS): Proceed via LUF R-175 to 37.5 DME (ZIRUK). Intercept and proceed via BXK VORTAC R-138 to 55.8 DME (BUGGS). Cross LUF R-175/ 33 DME at 8000, cross BXK R-138/40 DME at 9000, cross BUGGS at and maintain 9000 (or as assigned by ATC). CAUTION: Aircraft exiting BUGGS at 8000.

FLIER TRANSITION (BUSCO9•FLIER): Intercept and proceed via the BXK VORTAC R-129 to 54.7 DME (FLIER). Cross BXK 35 DME at 8000, cross BXK 40 DME at 9000, cross FLIER at and maintain 9000 (or as assigned by ATC)

HI-ILS or LOC/DME RWY 3R

LOC I-LUF	APCH CRS	Rwy ldg	9904
108.7	030°	TDZE	1074
		Arpt Elev	1085

JAL-321 [USAF]

LUKE AFB (KLUF)

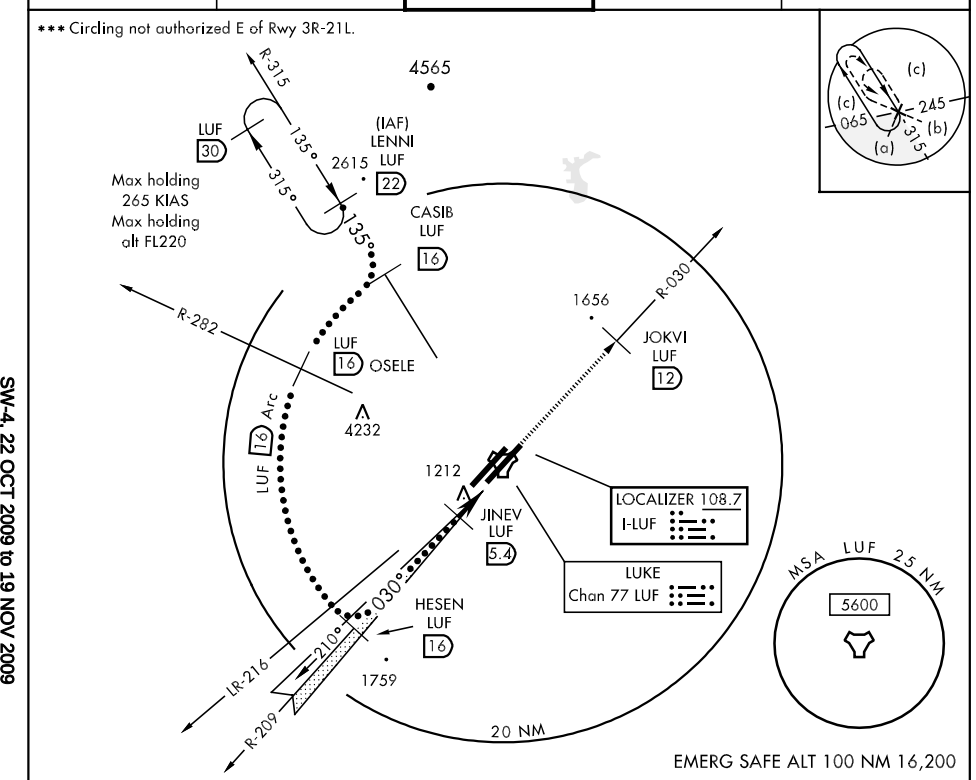
T * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT CD RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.

ALSF-1

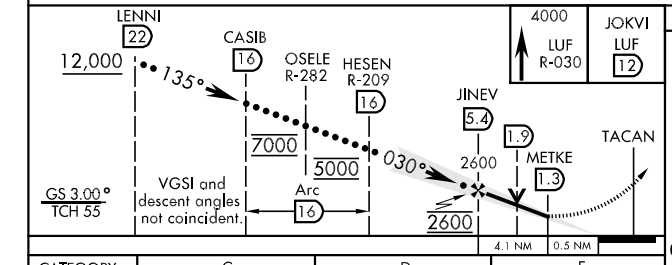
MISSED APPROACH: Track heading 030° to 4000, intercept LUF TACAN R-030 to JOKVI (LUF R-030/12 DME). Ctc LUKE APP CON.

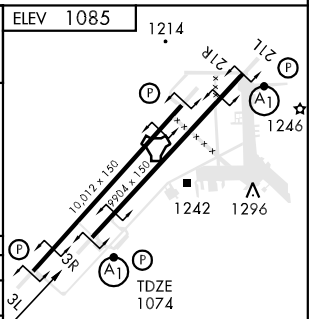
ATIS ★	LUKE APP CON	LUKE TOWER ★	GND CON	CLNC DEL
134.925 269.9	118.15 363.12	119.1 379.9	133.175 335.8	126.25 273.475

*** Circling not authorized E of Rwy 3R-21L.



EMERG SAFE ALT 100 NM 16,200





CATEGORY	C	D	E
S-ILS 3R *	1274/24 200 (200-½)		
S-LOC/DME 3R **	1480/40 406 (400-¾)		1480/50 406 (400-1)
CIRCLING ***	1560-1½ 475 (500-1½)	1640-2 555 (600-2)	NOT AUTHORIZED

SW-4, 22 OCT 2009 to 19 NOV 2009

HI-ILS or LOC/DME RWY 21L

LOC I-EMJ	APCH CRS	Rwy ldg / TDZE / Arpt Elev
110.9	210°	9904 / 1084 / 1085

JAL-321 [USAF] — LUKE AFB (KLUF)

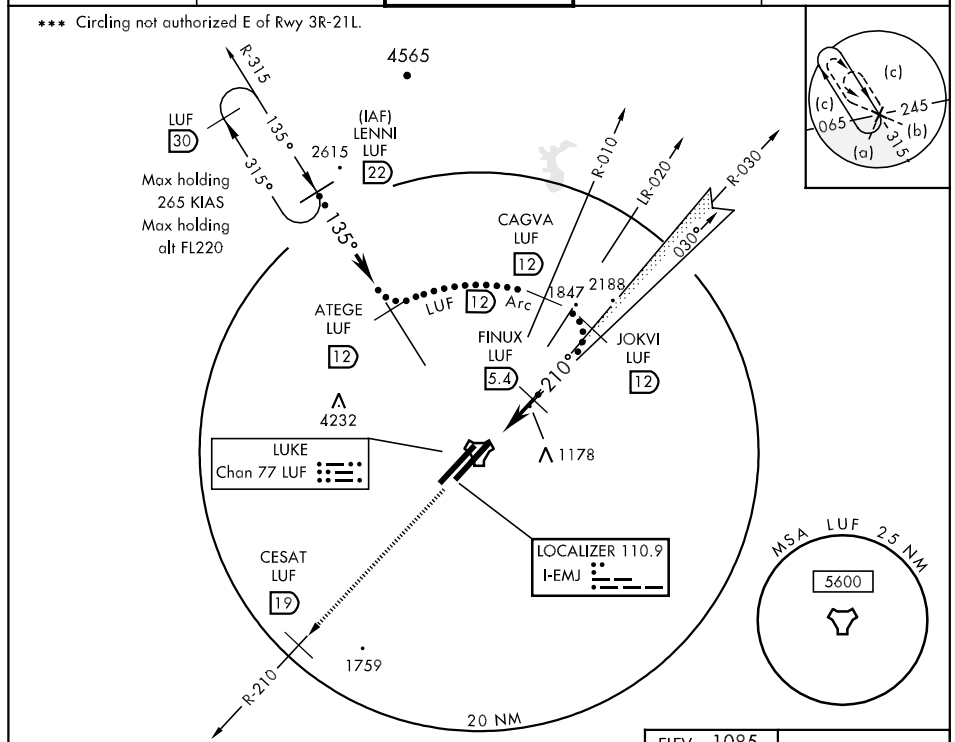
▼ * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT DE vis to 1½ miles.

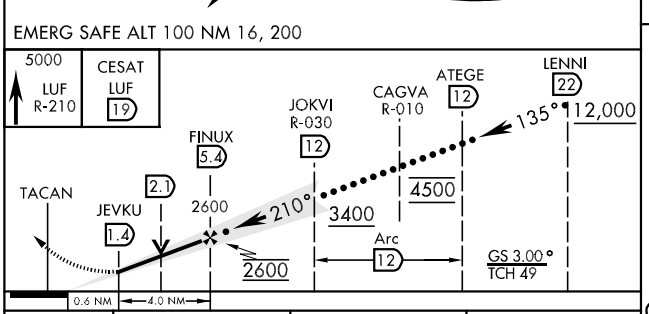
ALSF-1

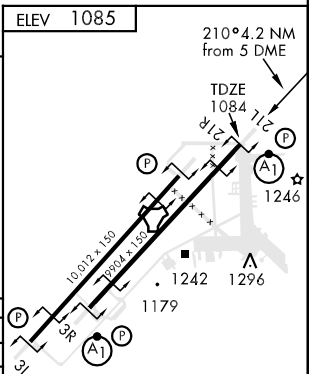
MISSED APPROACH: Track heading 210° to 5000. Intercept LUF TACAN R-210 at CESAT (LUF R-210/19 DME). Ctc LUKE APP CON.

ATIS ★	LUKE APP CON	LUKE TOWER ★	GND CON	CLNC DEL
134.925 269.9	118.15 363.12	119.1 379.9	133.175 335.8	126.25 273.475

*** Circling not authorized E of Rwy 3R-21L.







CATEGORY	C	D	E
S-ILS 21L *	1284/24	200 (200-½)	
S-LOC/ ** DME 21L	1540- /40 456 (500-¾)	1540/50 456 (500-1)	
CIRCLING ***	1560-1½ 475 (500-1½)	1640-2 555 (600-2)	NOT AUTHORIZED

HI-TACAN RWY 3L

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
LUF Chan 77	032°	10,012	1077	1085

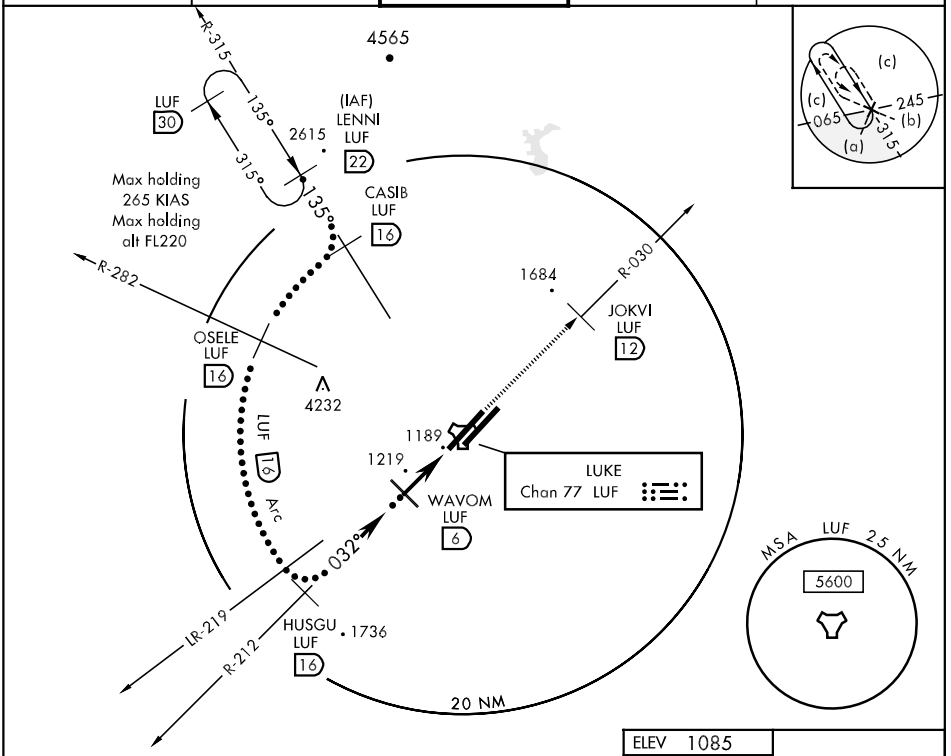
JAL-321 [USAF]

LUKE AFB (KLUF)

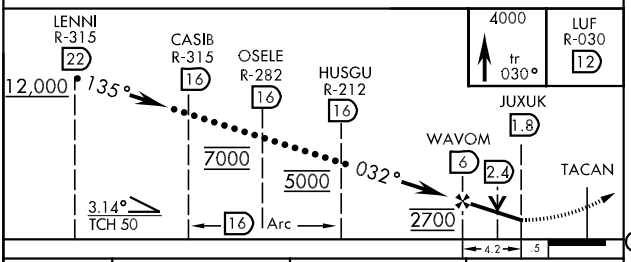
▼ * Circling not authorized E of Rwy 03L-21R.

MISSED APPROACH: Track heading 030° to 4000, intercept LUF R-030 to JOKVI (LUF R-030/12 DME). Ctc LUKE APP CON.

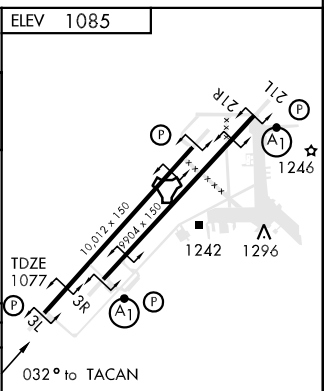
ATIS ★	LUKE APP CON	LUKE TOWER ★	GND CON	CLNC DEL
134.925 269.9	118.15 363.12	119.1 379.9	133.175 335.8	126.25 273.475



EMERG SAFE ALT 100 NM 16,200



CATEGORY	C	D	E
S-3L	1500-1¼ 423 (500-1¼)		1500-1½ 423 (500-1½)
CIRCLING *	1560-1½ 475 (500-1½)	1640-2 555 (600-2)	NOT AUTHORIZED



SW-4, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 3R

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
LUF Chan 77	026°	9904	1074	1085

JAL-321 [USAF]

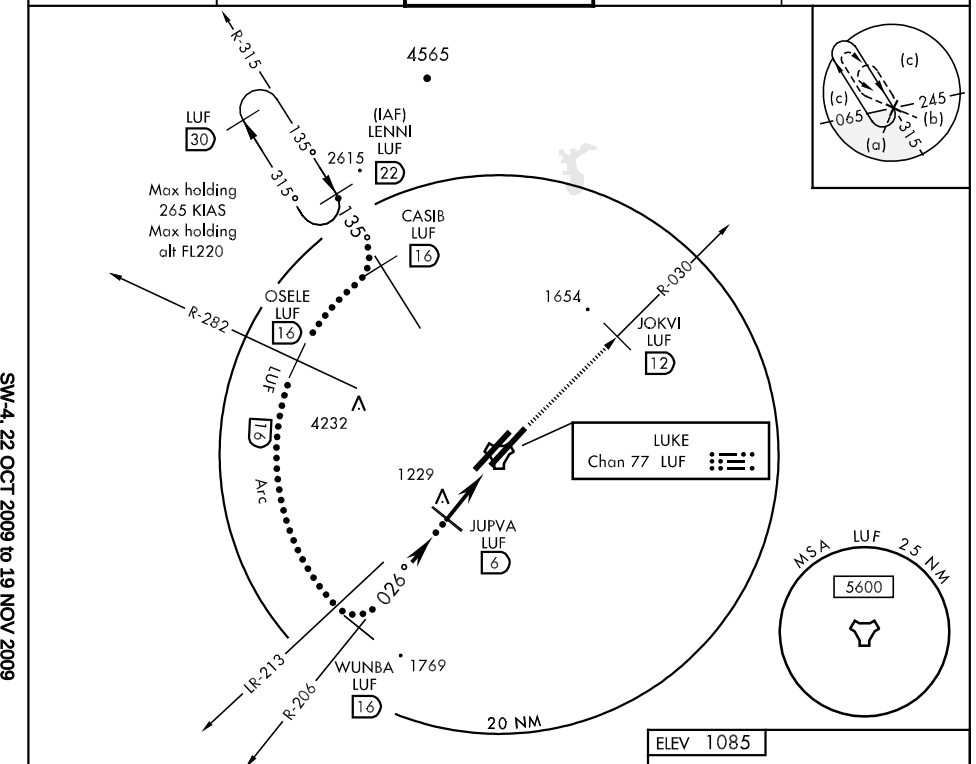
LUKE AFB (KLUF)

▼ * When ALS inop, increase CAT CD RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.
** Circling not authorized E of Rwy 3R-21L.

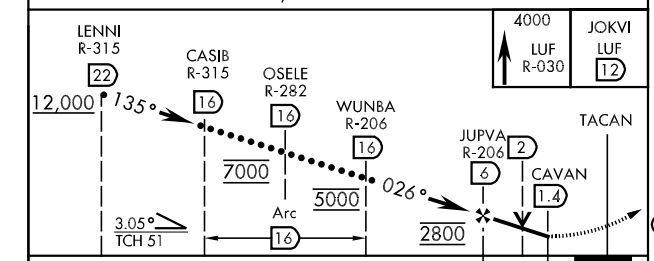
ALSF-1

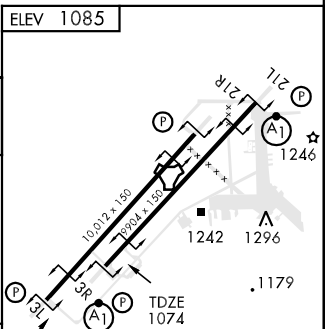
MISSED APPROACH: Track heading 030° to 4000, intercept LUF TACAN R-030 to JOKVI (LUF R-030/12 DME). Contact Luke APP CON.

ATIS ★	LUKE APP CON	LUKE TOWER ★	GND CON	CLNC DEL
134.925 269.9	118.15 363.12	119.1 379.9	133.175 335.8	126.25 273.475



EMERG SAFE ALT 100 NM 16,200





CATEGORY	C	D	E
S-3R *	1500/40 426 (500-¾)		1500/50 426 (500-1)
CIRCLING **	1560-1½ 475 (500-1½)	1640-2 555 (600-2)	NOT AUTHORIZED

HIRL all Rwy

HI-TACAN RWY 21L

TACAN	LUF	APCH CRS	Rwy Idg	9904
Chan	77	213°	TDZE	1084
			Arpt Elev	1085

JAL-321 [USAF]

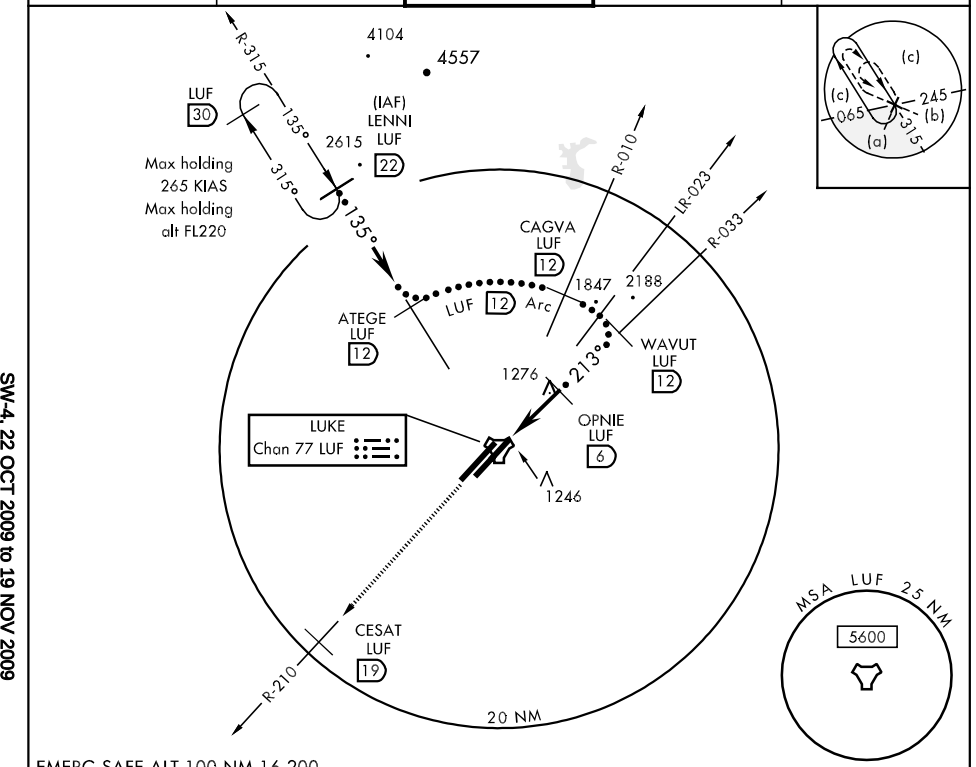
LUKE AFB (KLUF)

▼ * When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, increase CAT DE vis by ½ mile.
** Circling not authorized E of Rwy 3R-21L.

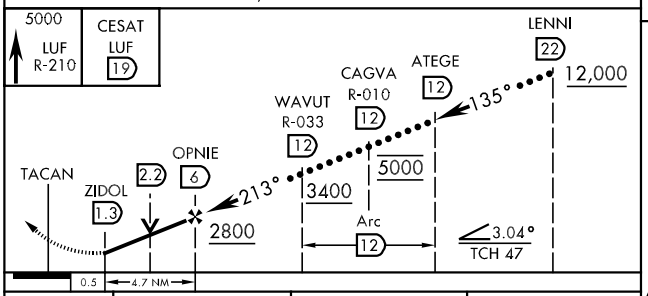
ALSF-1

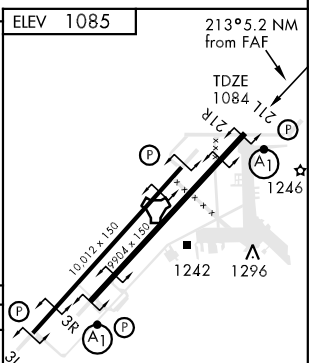
MISSED APPROACH: Track heading 210° to 5000. Intercept LUF TACAN R-210 to CESAT (LUF R-210/19 DME). Contact LUKE APP CON.

ATIS ★	LUKE APP CON	LUKE TOWER ★	GND CON	CLNC DEL
134.925 269.9	118.15 363.12	119.1 379.9	133.175 335.8	126.25 273.475



EMERG SAFE ALT 100 NM 16,200





CATEGORY	C	D	E
S-21L *	1580/40 496 (500-¾)	1580/50 496 (500-1)	1580/60 496 (500-1¼)
CIRCLING **	1580-1½ 495 (500-1½)	1640-2 555 (600-2)	NOT AUTHORIZED

HIRL all Rwy

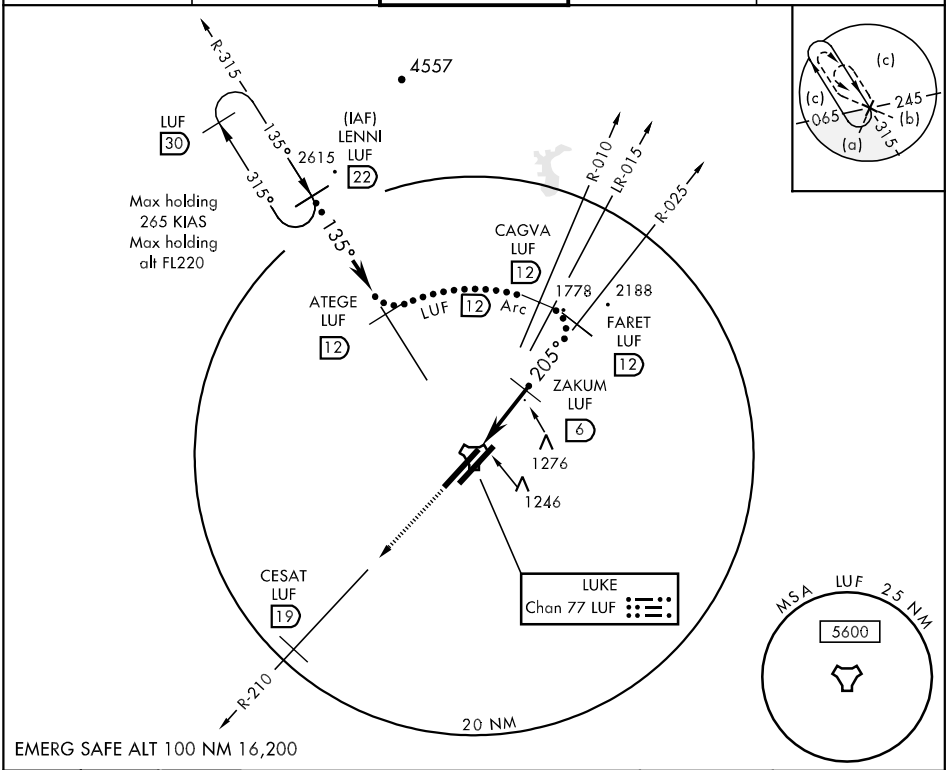
HI-TACAN RWY 21R

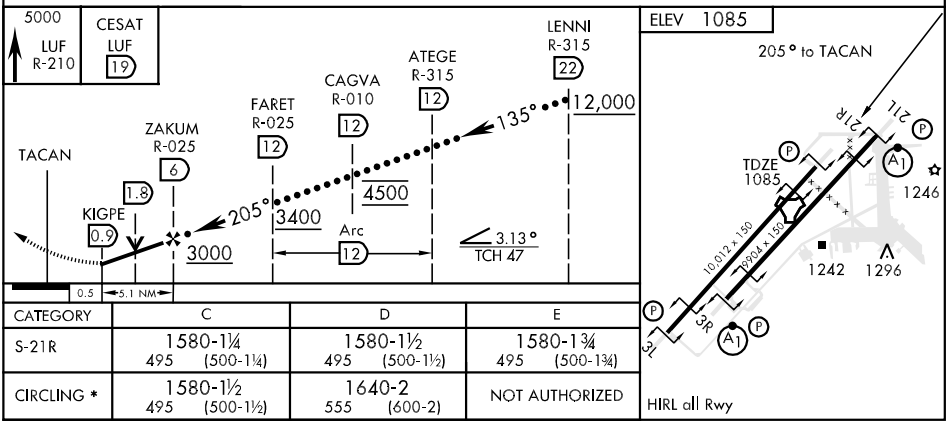
TACAN LUF Chan 77	APCH CRS 205°	Rwy ldg 10,012 TDZE 1085 Arpt Elev 1085	JAL-321 [USAF]	LUKE AFB (KLUF)

* Circling not authorized E of Rwy 3R-21L.

MISSED APPROACH: Track heading 210° to 5000. Intercept LUF TACAN R-210 to CESAT (LUF R-210/19 DME). Contact LUKE APP CON.

ATIS ★	LUKE APP CON	LUKE TOWER ★	GND CON	CLNC DEL
134.925 269.9	118.15 363.12	119.1 379.9	133.175 335.8	126.25 273.475





CATEGORY	C	D	E
S-21R	1580-1¼ 495 (500-1¼)	1580-1½ 495 (500-1½)	1580-1¾ 495 (500-1¾)
CIRCLING *	1580-1½ 495 (500-1½)	1640-2 555 (600-2)	NOT AUTHORIZED

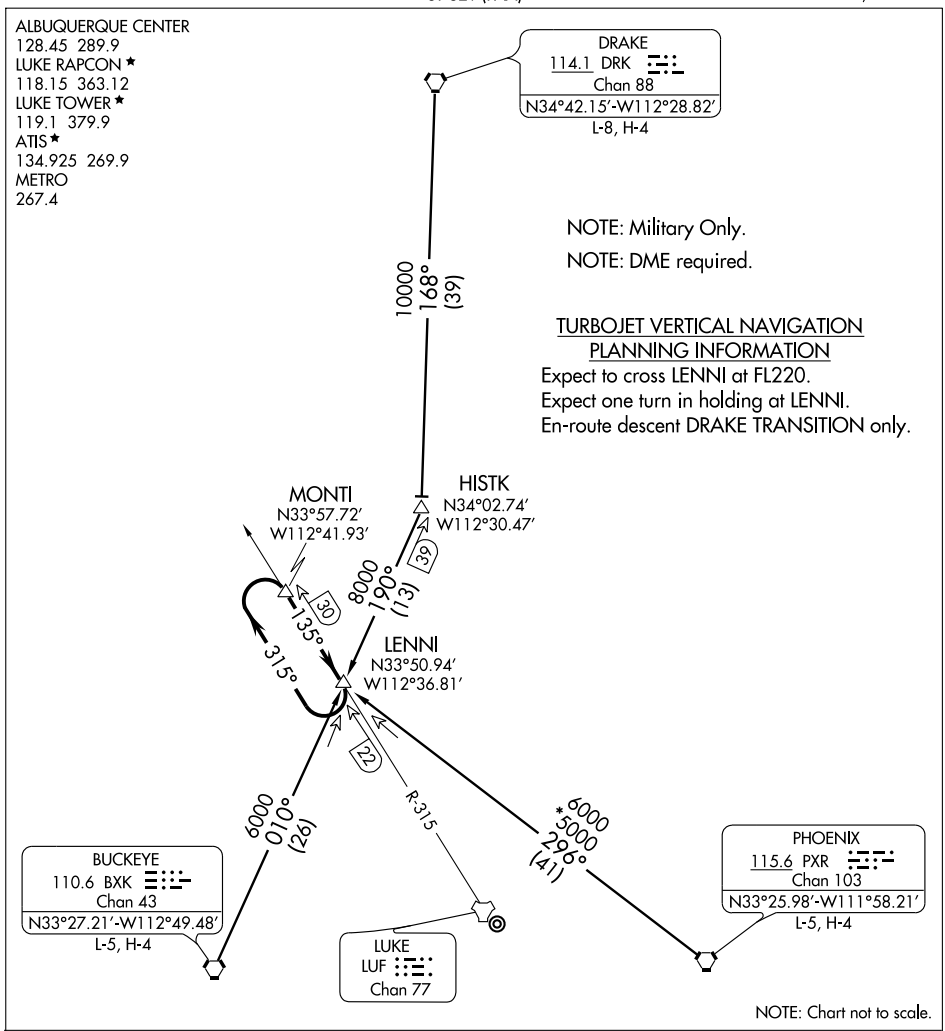
SW-4, 22 OCT 2009 to 19 NOV 2009

(LENNI.LENNI3) 08325

LENNI THREE ARRIVAL

ST-321 (FAA)

LUKE AIR FORCE BASE
GLENDALE, ARIZONA



BUCKEYE TRANSITION (BXK.LENNI3): From over BXK VORTAC via BXK R-010 to LENNI INT. Thence . . . .

DRAKE TRANSITION (DRK.LENNI3): From over DRK VORTAC via DRK R-168 and BXK R-010 to LENNI INT. Thence . . . .

PHOENIX TRANSITION (PXR.LENNI3): From over PXR VORTAC via PXR R-296 to LENNI INT. Thence . . . .

. . . . Expect one turn in holding at LENNI INT followed by HI-TACAN/HI-ILS or LOC/DME to Luke AFB.

SW-4, 22 OCT 2009 to 19 NOV 2009

LUKE-ONE DEPARTURE (LUKE1•DRK)

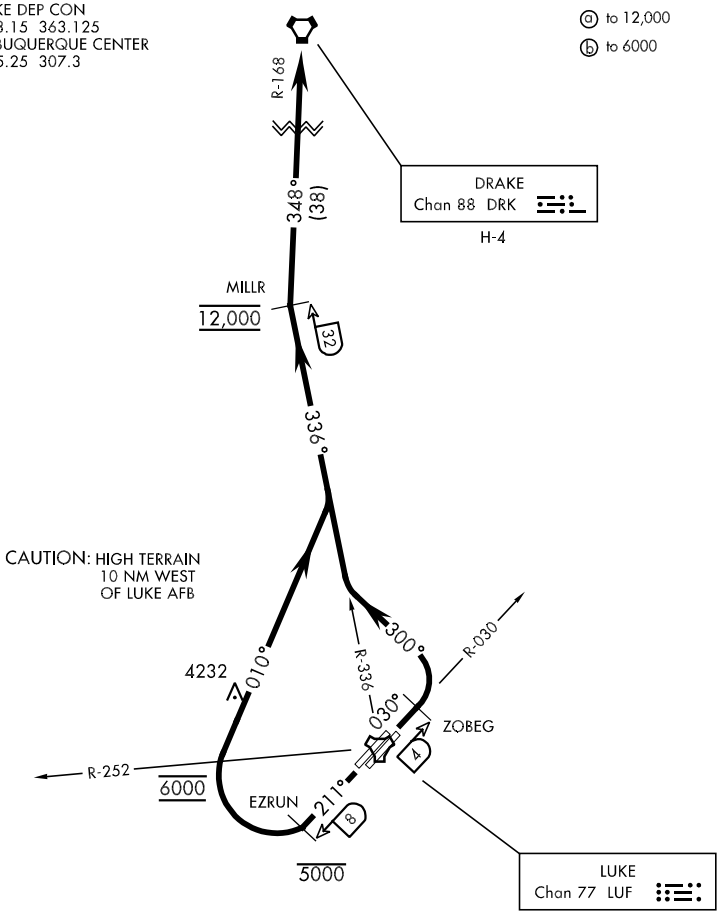
GLENDALE, ARIZONA

ATIS ★134.925 269.9
CLNC DEL
126.25 273.475
GND CON
133.175 335.8
LUKE TOWER ★
119.1 379.9
LUKE DEP CON
118.15 363.125
ALBUQUERQUE CENTER
125.25 307.3

SH-321 [USAF]

Rwy	Knots	120	180	240	300	360
† 3L ⓐ	V/V(fpm)	670	1000	1340	1670	2000
† 3R ⓐ	V/V(fpm)	670	1010	1340	1680	2010
*21L/R ⓑ	V/V(fpm)	860	1290	1720	2150	2580

* Minimum † ATC Climb Rate
ⓐ to 12,000
ⓑ to 6000



SW-4, 22 OCT 2009 to 19 NOV 2009

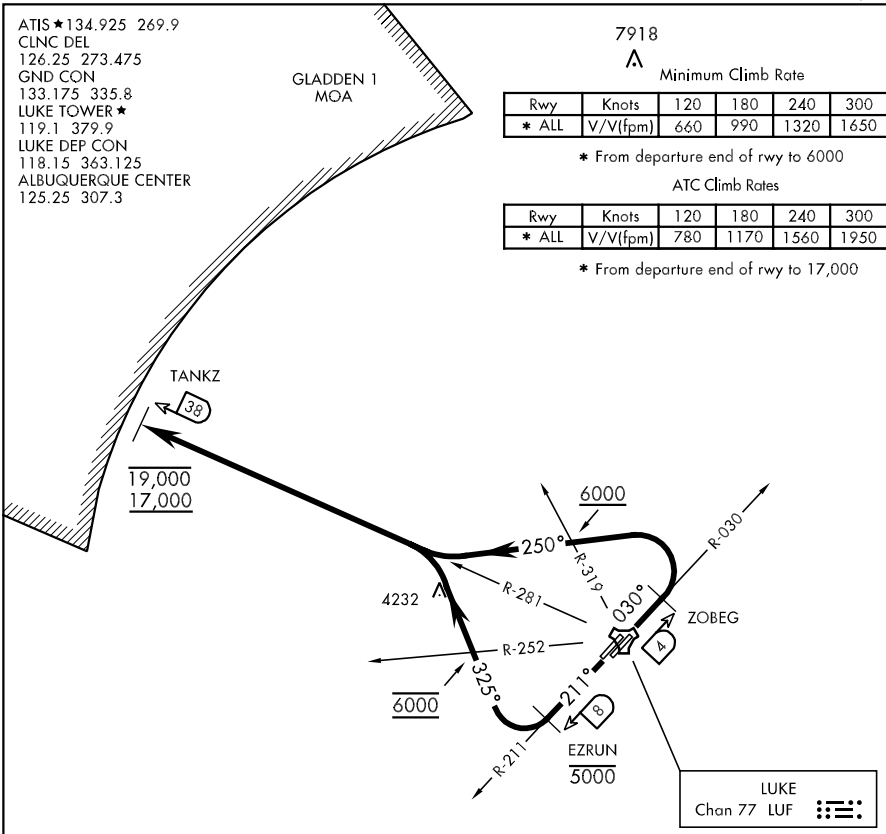
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3 L/R: Climb on a track of 030°. Abeam ZOBEG (LUF R-030/04) turn left and track 300° to intcp and proceed via LUF R-336 to MILLR (LUF R-336/32) then via DRK R-168 to DRK. Cross MILLR at and maintain 12,000 or as assigned by ATC.

TAKE-OFF RWY 21 L/R: Climb on a track of 211°. Abeam EZRUN (LUF R-211/08) turn right to track 010° to intcp and proceed via LUF R-336 to MILLR (LUF R-336/32) then via DRK R-168 to DRK. Cross 8 DME at or below 5000, cross LUF R-252 at 6000, cross MILLR at and maintain 12,000 or as assigned by ATC.

LUKE-ONE DEPARTURE (LUKE1•DRK)

GLENDALE, ARIZONA



SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3 L/R: Climb on a track of 030°. Abeam LUF TACAN R-030/04 (ZOBEG) turn left heading 250° to intercept and proceed via LUF R-281 to 38 DME (TANKZ). Cross LUF R-319 at or above 6000. Cross TANKZ at or above 17,000 and below 19,000 (or as assigned by ATC).

TAKE-OFF RWY 21 L/R: Climb on a track of 211°. Abeam LUF TACAN R-211/08 (EZRUN) turn right heading 325° to intercept and proceed via LUF R-281 to 38 DME (TANKZ). Cross 8 DME at or below 5000. Cross LUF R-252 at 6000. Cross TANKZ at or above 17,000 and below 19,000 (or as assigned by ATC).

TIRON-SEVEN DEPARTURE (TIRON7)

SH-321 [USAF]

GLENDALE, ARIZONA

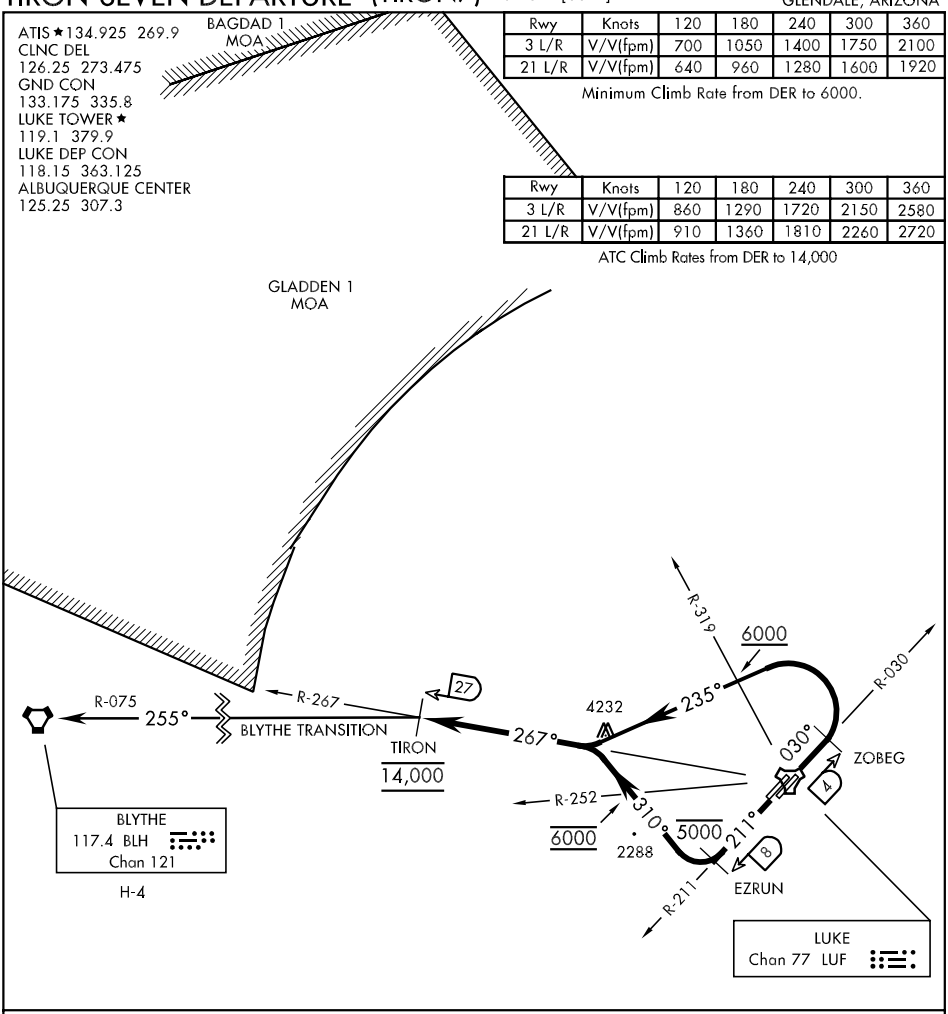
ATIS ★134.925 269.9
CLNC DEL
126.25 273.475
GND CON
133.175 335.8
LUKE TOWER ★
119.1 379.9
LUKE DEP CON
118.15 363.125
ALBUQUERQUE CENTER
125.25 307.3

Rwy	Knots	120	180	240	300	360
3 L/R	V/V(fpm)	700	1050	1400	1750	2100
21 L/R	V/V(fpm)	640	960	1280	1600	1920

Minimum Climb Rate from DER to 6000.

Rwy	Knots	120	180	240	300	360
3 L/R	V/V(fpm)	860	1290	1720	2150	2580
21 L/R	V/V(fpm)	910	1360	1810	2260	2720

ATC Climb Rates from DER to 14,000



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3 L/R: Climb tracking 030°. Abeam LUF TACAN R-030/04 DME (ZOBEG) turn left heading 235° to intercept and proceed via LUF R-267 to LUF 27 DME (TIRON). Cross LUF R-319 at or above 6000. Cross TIRON at 14,000 (or as assigned by ATC). Then via assigned route or transition.

TAKE-OFF RWY 21 L/R: Climb tracking 211°. Abeam LUF TACAN R-211/08 DME (EZRUN) turn right heading 310° to intercept and proceed via LUF R-267 to LUF 27 DME (TIRON). Cross abeam EZRUN at or below 5000. Cross LUF R-252 at 6000, Cross TIRON at 14,000 (or as assigned by ATC). Then via assigned route or transition.

BLYTHE TRANSITION (TIRON7•BLH): Via the BLH VORTAC R-075 to BLH.

TIRON-SEVEN DEPARTURE (TIRON7)

GLENDALE, ARIZONA

GLOBE, ARIZONA

AL-6635 (FAA)

APP CRS	Rwy Idg	6500
260°	TDZE	3200
	Apt Elev	3235

GPS RWY 27

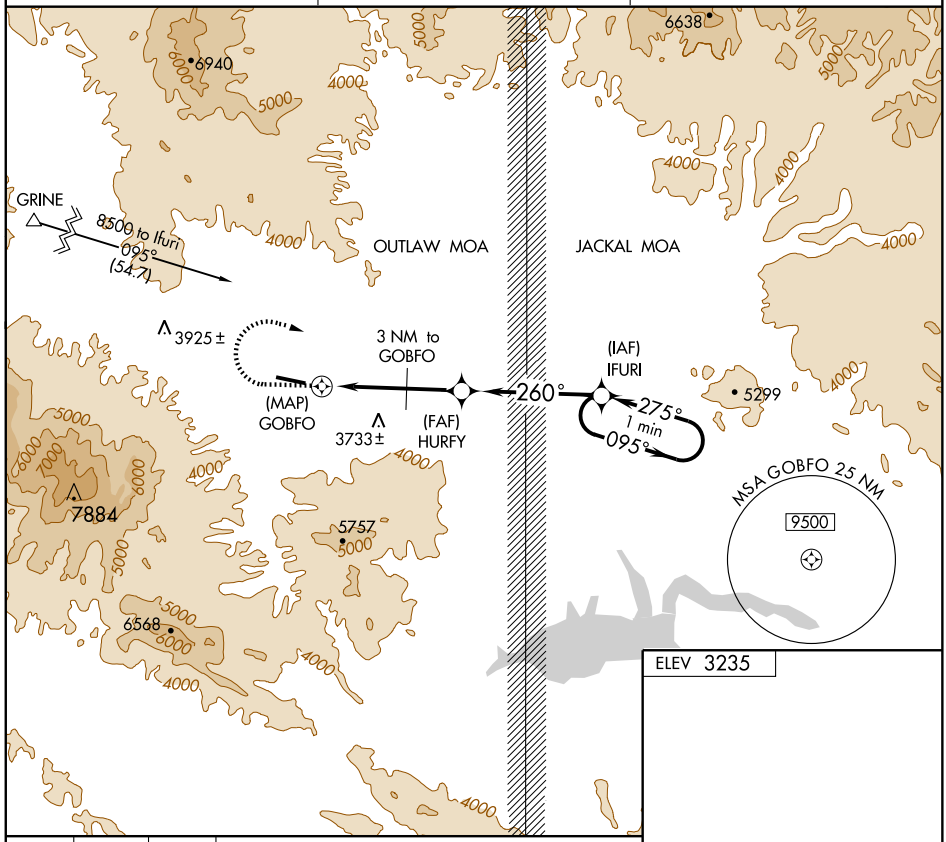
GLOBE/SAN CARLOS APACHE (P13)

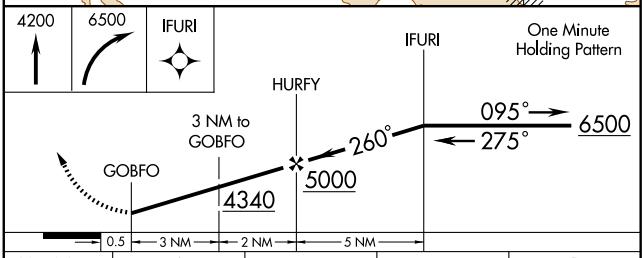
T
NA

Obtain local altimeter setting on CTAF; when not received, procedure not authorized.

MISSED APPROACH: Climb to 4200, then climbing right turn to 6500 direct IFURI WP and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
120.075	125.4 269.3	122.8 (CTAF) L



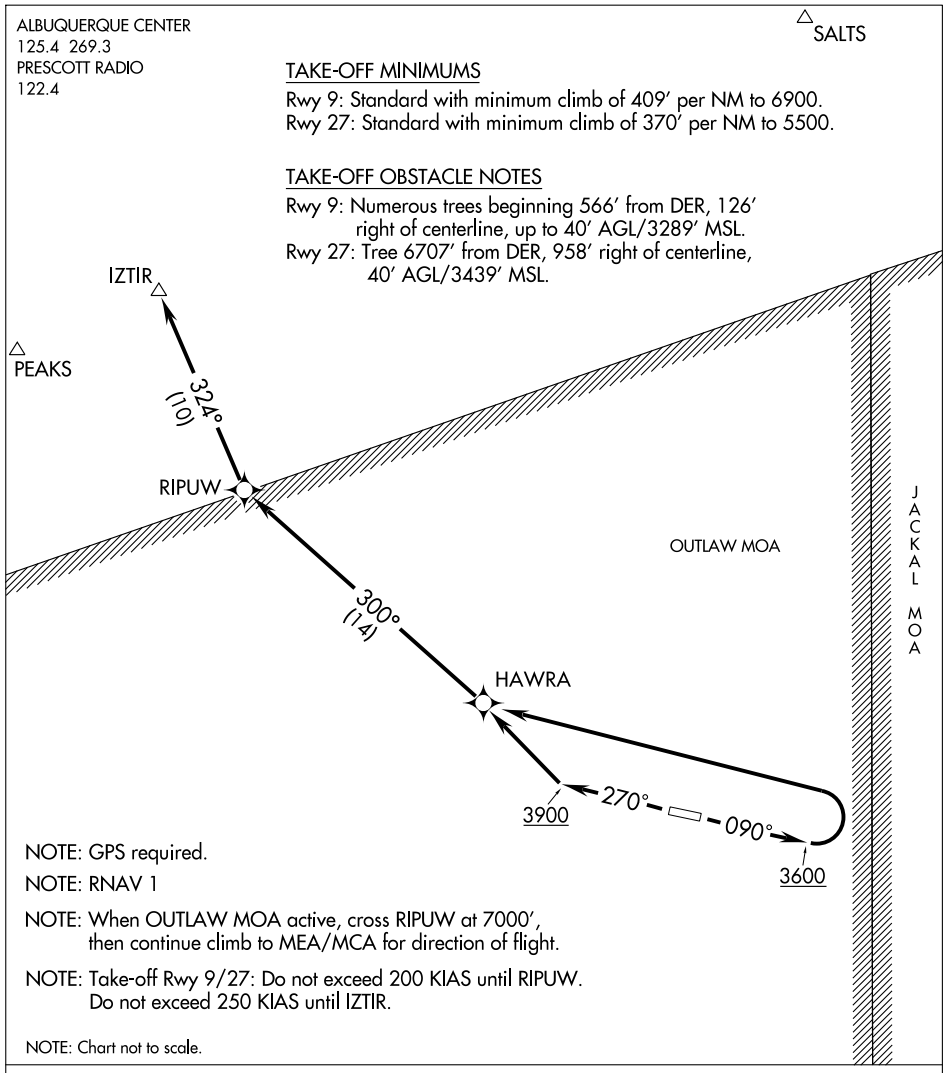


CATEGORY	A	B	C	D
S-27	3780-1	580 (600-1)	NA	
CIRCLING	3980-1 745 (800-1)	3980-1¼ 745 (800-1¼)	NA	

MIRL Rwy 9-27 L
REIL Rwys 9 and 27

SW-4, 22 OCT 2009 to 19 NOV 2009

IZTIR TWO DEPARTURE (RNAV) (OBSTACLE)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climb heading 090° to 3600, then climbing left turn direct HAWRA, then via depicted route to IZTIR. Thence....

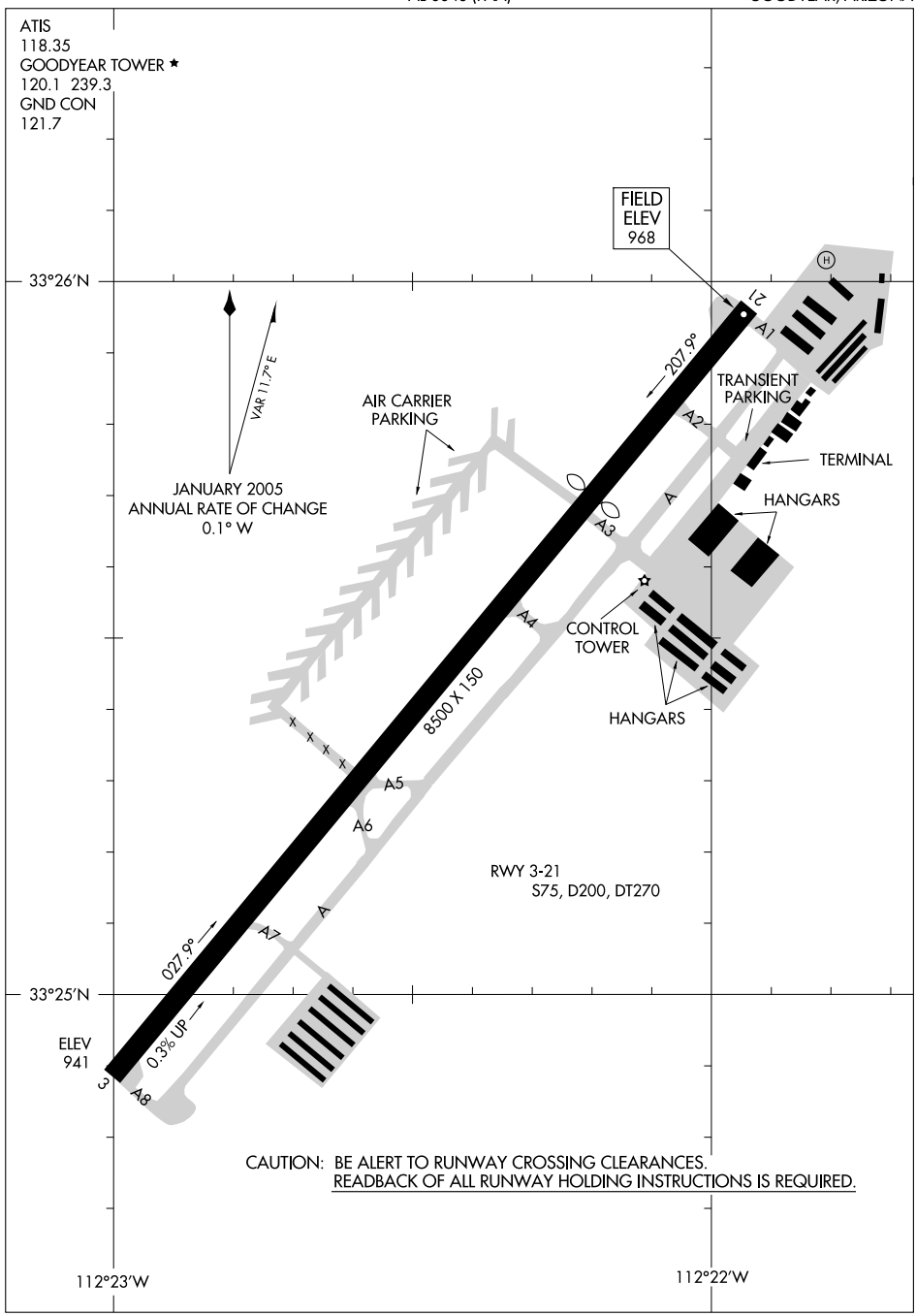
TAKE-OFF RUNWAY 27: Climb heading 270° to 3900, then climbing right turn direct HAWRA, then via depicted route to IZTIR. Thence....

....climb on course to MEA for assigned route of flight.

SW-4, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

GOODYEAR/ PHOENIX GOODYEAR (GYR)
GOODYEAR, ARIZONA

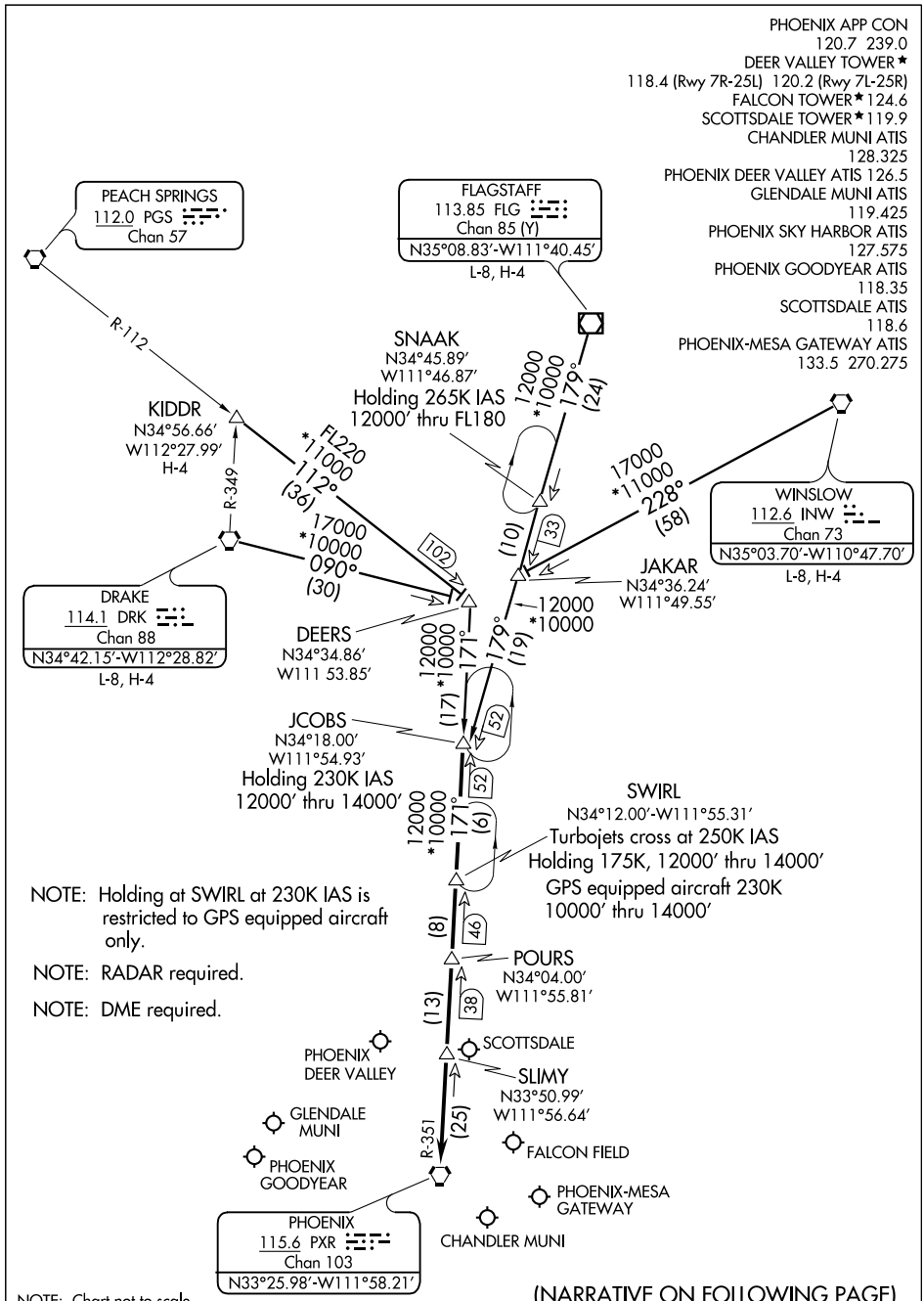


CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-4, 22 OCT 2009 to 19 NOV 2009

JCOBS TWO ARRIVAL

SCOTTSDALE, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

JCOBS TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

DRAKE TRANSITION (DRK.JCOBS2): From over DRK VORTAC via DRK R-090 to DEERS INT, then via PXR R-351 to JCOBS INT. Thence....

FLAGSTAFF TRANSITION (FLG.JCOBS2): From over FLG VOR/DME via FLG R-179 to JCOBS INT. Thence....

KIDDR TRANSITION (KIDDR.JCOBS2): From over KIDDR INT via PGS R-112 to DEERS INT then via PXR R-351 to JCOBS INT. Thence....

WINSLOW TRANSITION (INW.JCOBS2): From over INW VORTAC via INW R-228 to JAKAR INT, then via FLG R-179 to JCOBS INT. Thence....

... From over JCOBS INT via PXR R-351 to SWIRL DME, then via PXR R-351 to SLIMY DME, then direct PXR VORTAC. After POURS, expect radar vectors to final approach course.

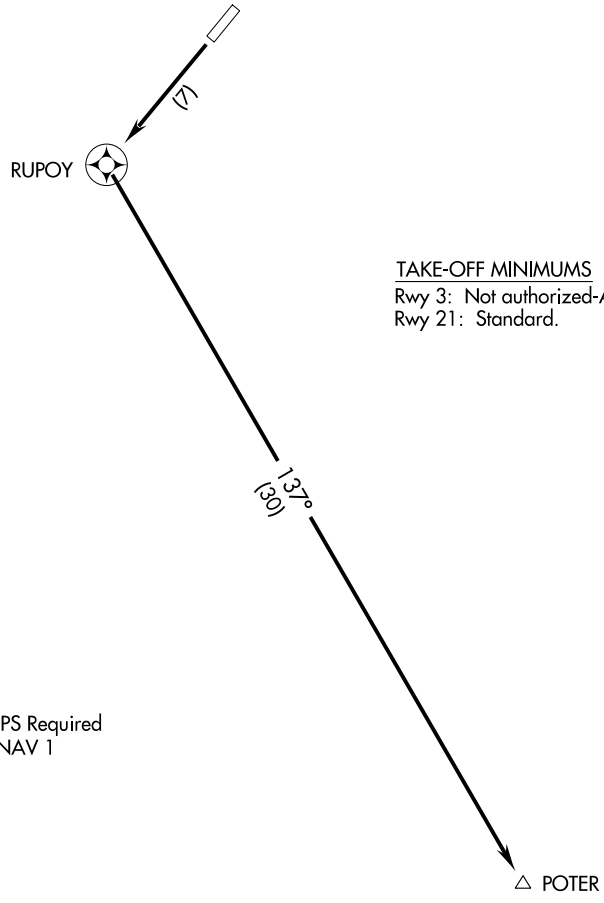
LOST COMMUNICATIONS: From DRK VORTAC via DRK R-090 to intercept PXR R-351at DEERS INT direct PXR VORTAC. From FLG VORTAC, proceed direct to JCOBS INT then direct PXR VORTAC. From KIDDR INT to DEERS INT via PGS R-112 to intercept PXR R-351 to PXR VORTAC. From INW VORTAC to JAKAR INT via INW R-228 to intercept FLG R-179 to JCOBS INT to intercept PXR R-351 to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

POTER ONE DEPARTURE (RNAV) (OBSTACLE)

GOODYEAR, ARIZONA

ATIS 118.35
GND CON 121.7
GOODYEAR TOWER ★ 120.1
LUKE DEP CON★ 125.45



TAKE-OFF MINIMUMS
Rwy 3: Not authorized-ATC.
Rwy 21: Standard.

NOTE: 1. GPS Required
2. RNAV 1

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 21: Climb to 8000 direct RUPOY and via 137° track to POTER.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8500
027°	TDZE	953
	Apt Elev	968

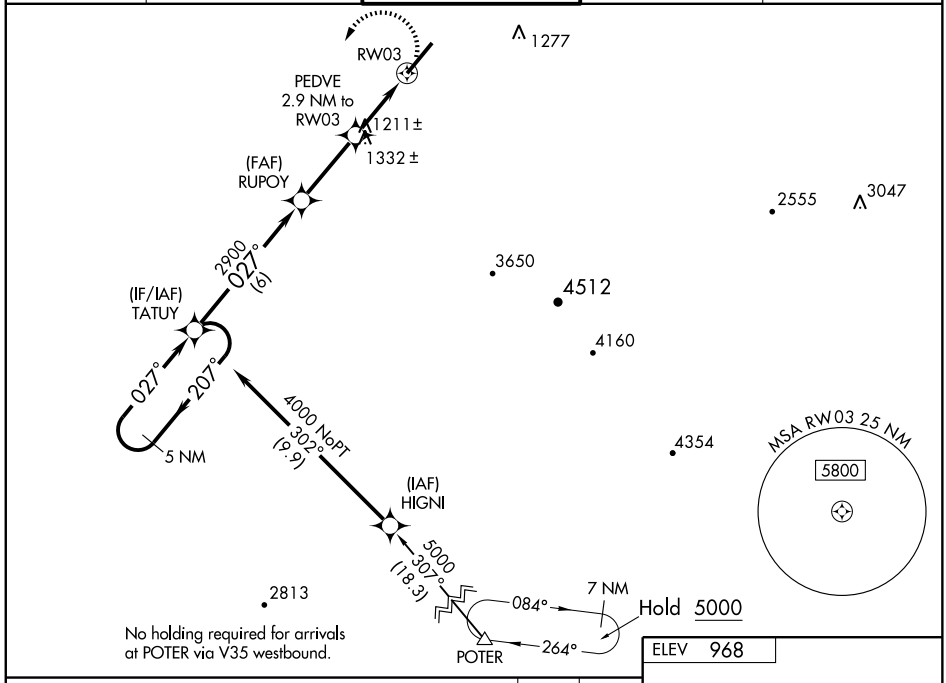
RNAV (GPS) RWY 3

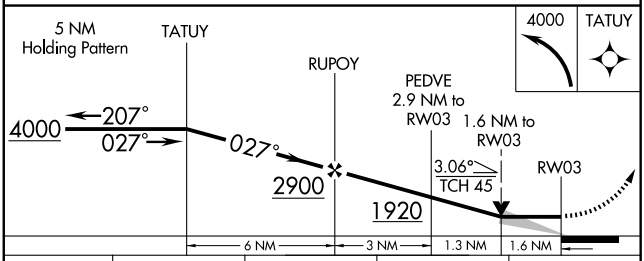
GOODYEAR/ PHOENIX GOODYEAR (GYR)

Procedure NA at night. DME/DME RNP -0.3 NA.
When local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting.
VDP NA when using Phoenix Sky Harbor Intl altimeter setting.

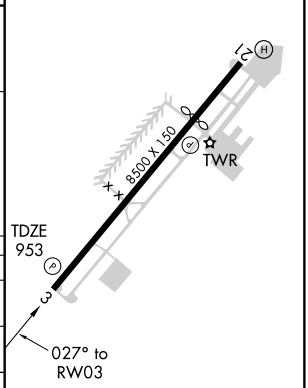
MISSED APPROACH: Climbing left turn to 4000 direct TATUY and hold.

ATIS	LUKE APP CON ★	GOODYEAR TOWER ★	GND CON	UNICOM
118.35	125.45 263.125	120.1 (CTAF) 239.3	121.7	122.95





CATEGORY	A	B	C	D
LNAV MDA	1480-1 527 (600-1)		1480-1½ 527 (600-1½)	1480-1¾ 527 (600-1¾)
CIRCLING	1480-1 512 (600-1)		1480-1½ 512 (600-1½)	1620-2 652 (700-2)
PHOENIX SKY HARBOR INTL ALTIMETER SETTING MINIMUMS				
LNAV MDA	1540-1 587 (600-1)		1540-1½ 587 (600-1½)	1540-1¾ 587 (600-1¾)
CIRCLING	1540-1 572 (600-1)		1540-1½ 572 (600-1½)	1680-2¼ 712 (800-2¼)



REIL Rwys 3 and 21
MIRL Rwy 3-21

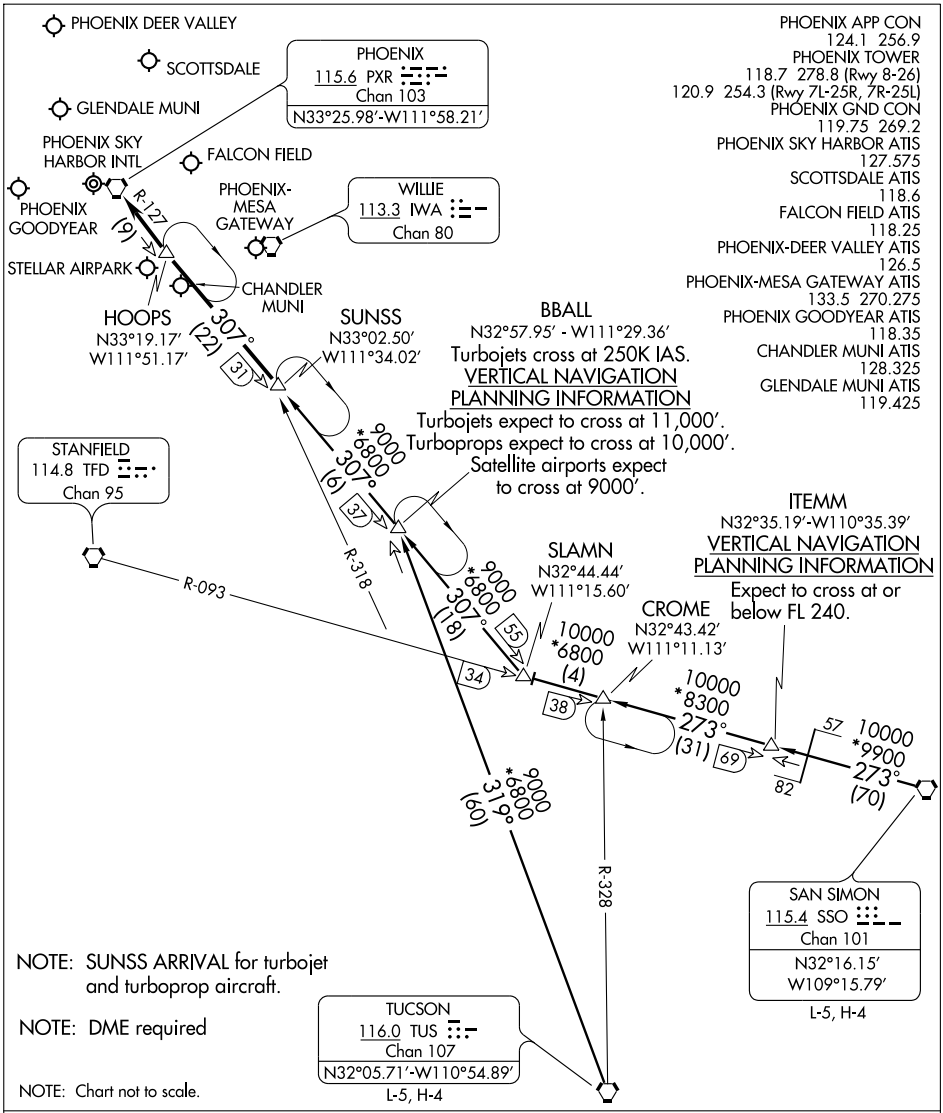
SW-4, 22 OCT 2009 to 19 NOV 2009

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

APP CRS	Rwy Idg	4199
008°	TDZE	5999
	Apt Elev	6002

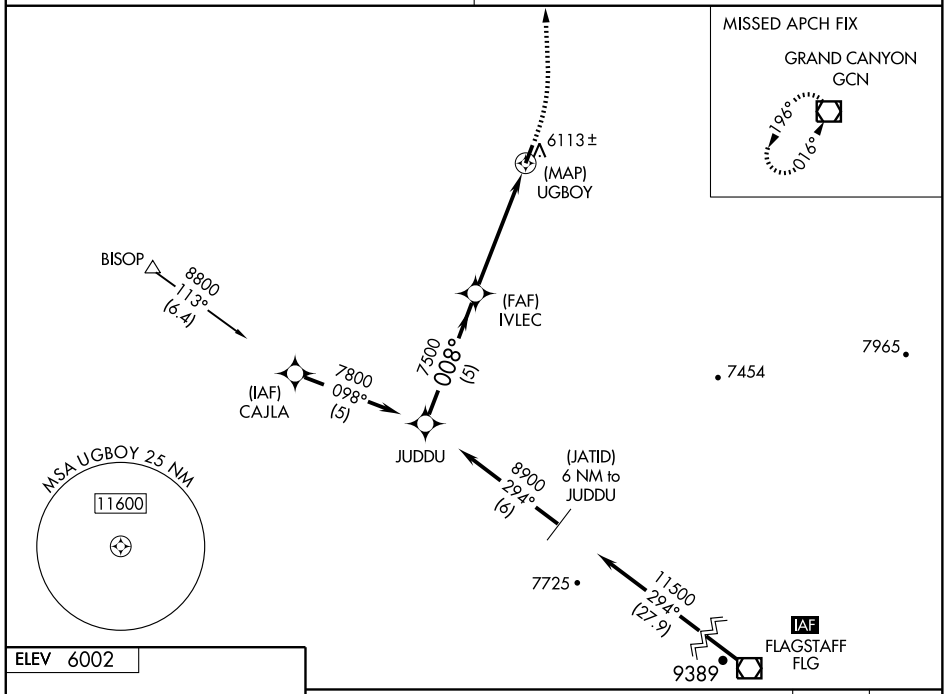
GPS RWY 1

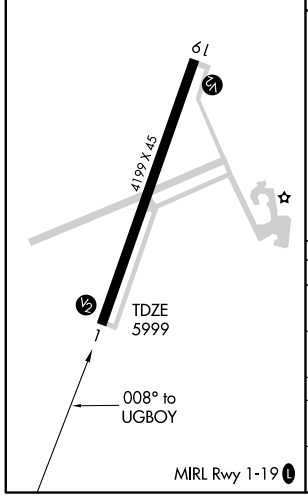
GRAND CANYON/ VALLE (4ØG)

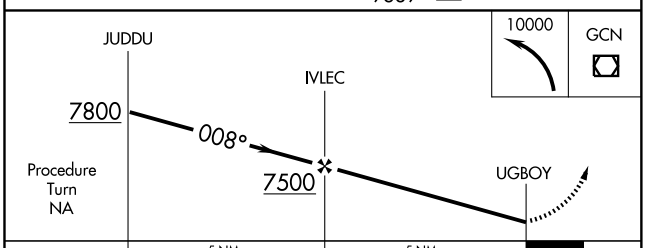
NA IAF ARM APPROACH MODE PRIOR TO IAF.
Obtain local altimeter setting on CTAF; when not received use Grand Canyon National Park altimeter setting. When neither received procedure not authorized.

MISSED APPROACH: Climbing left turn to 10000 direct to GCN VOR/DME and hold.

LOS ANGELES CENTER	UNICOM
124.85 319.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-1	6480-1 481 (500-1)		6480-1¼ 481 (500-1¼)	NA
CIRCLING	6480-1 478 (500-1)		6500-1½ 498 (500-1½)	NA
GRAND CANYON NATIONAL PARK ALTIMETER SETTING MINIMUMS				
S-1	6620-1 621 (700-1)		6620-1¾ 621 (700-1¾)	NA
CIRCLING	6620-1 618 (700-1)		6640-1¾ 638 (700-1¾)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4199
188°	TDZE	5996
	Apt Elev	6002

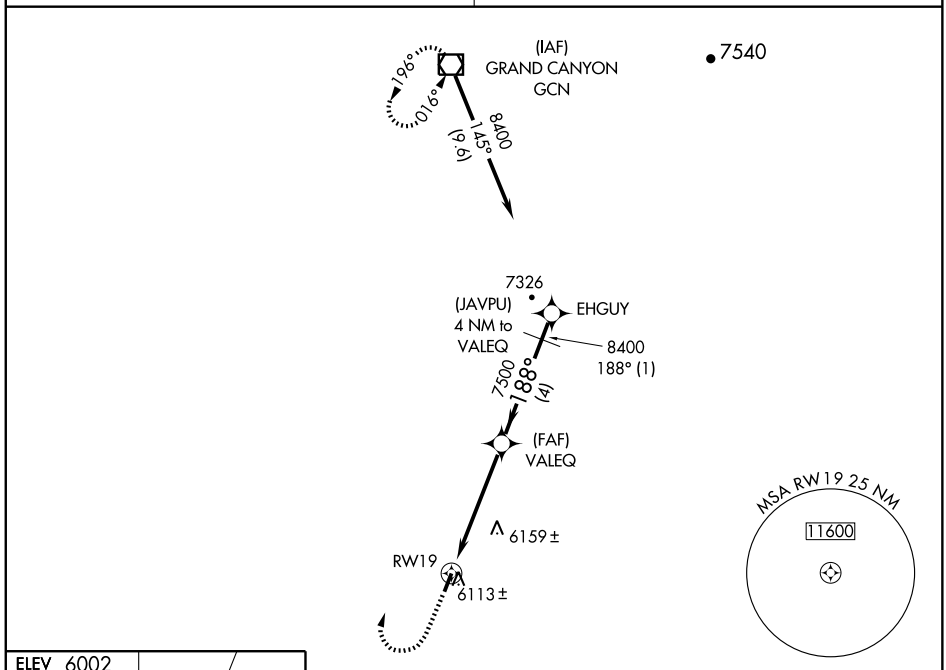
GPS RWY 19

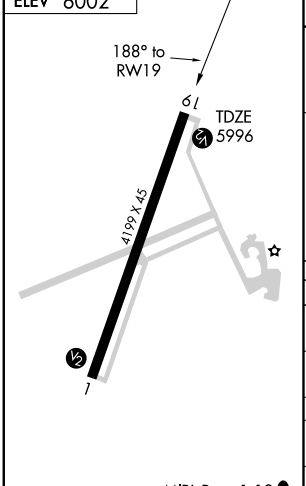
GRAND CANYON/ VALLE (4ØG)

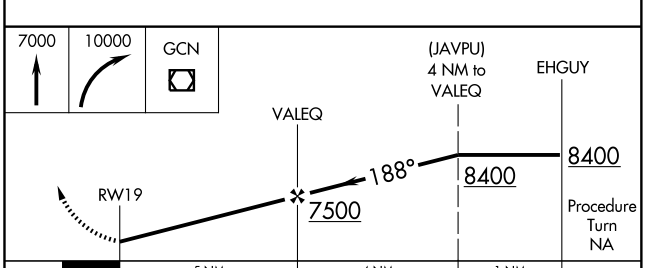
NA Obtain local altimeter setting on CTAF; when not received use Grand Canyon National Park altimeter setting. When neither received procedure not authorized.

MISSED APPROACH: Climb to 7000 then climbing right turn to 10000 direct GCN VOR/DME and hold.

LOS ANGELES CENTER	UNICOM
124.85 319.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-19	6420-1 424 (500-1)		6420-1¼ 424 (500-1¼)	NA
CIRCLING	6480-1 478 (500-1)		6500-1½ 498 (500-1½)	NA
GRAND CANYON NATIONAL PARK ALTIMETER SETTING MINIMUMS				
S-19	6540-1 544 (600-1)		6540-1½ 544 (600-1½)	NA
CIRCLING	6620-1 618 (700-1)		6640-1¾ 638 (700-1¾)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME GCN	APP CRS	Rwy Idg	4199
113.1	166°	TDZE	5996
Chan 78		Apt Elev	6002

VOR/DME RWY 19

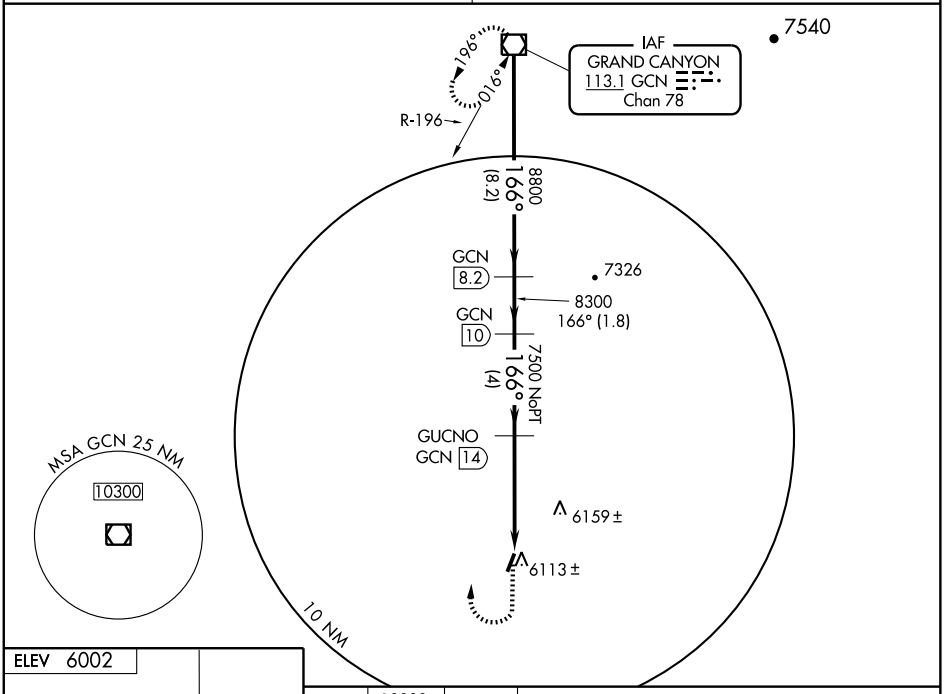
GRAND CANYON/ VALLE (4ØG)

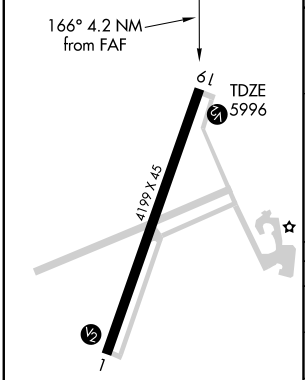
⚠ Obtain local altimeter setting on CTAF; when not received use Grand Canyon National Park altimeter setting. When neither received procedure not authorized.

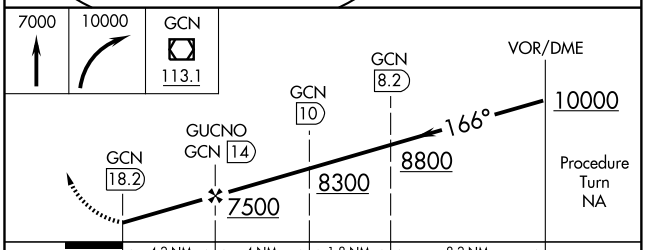
MISSED APPROACH: Climb to 7000 then climbing right turn to 10000 direct GCN VOR/DME and hold.

LOS ANGELES CENTER
124.85 319.2

UNICOM
122.8 (CTAF) L







CATEGORY	A	B	C	D
S-19	6420-1	424 (500-1)	6420-1¼ 424 (500-1¼)	NA
CIRCLING	6480-1	478 (500-1)	6500-1½ 498 (500-1½)	NA
GRAND CANYON NATIONAL PARK ALTIMETER SETTING MINIMUMS				
S-19	6540-1	544 (600-1)	6540-1½ 544 (600-1½)	NA
CIRCLING	6620-1	618 (700-1)	6640-1¾ 638 (700-1¾)	NA

MIRL Rwy 1-19 L

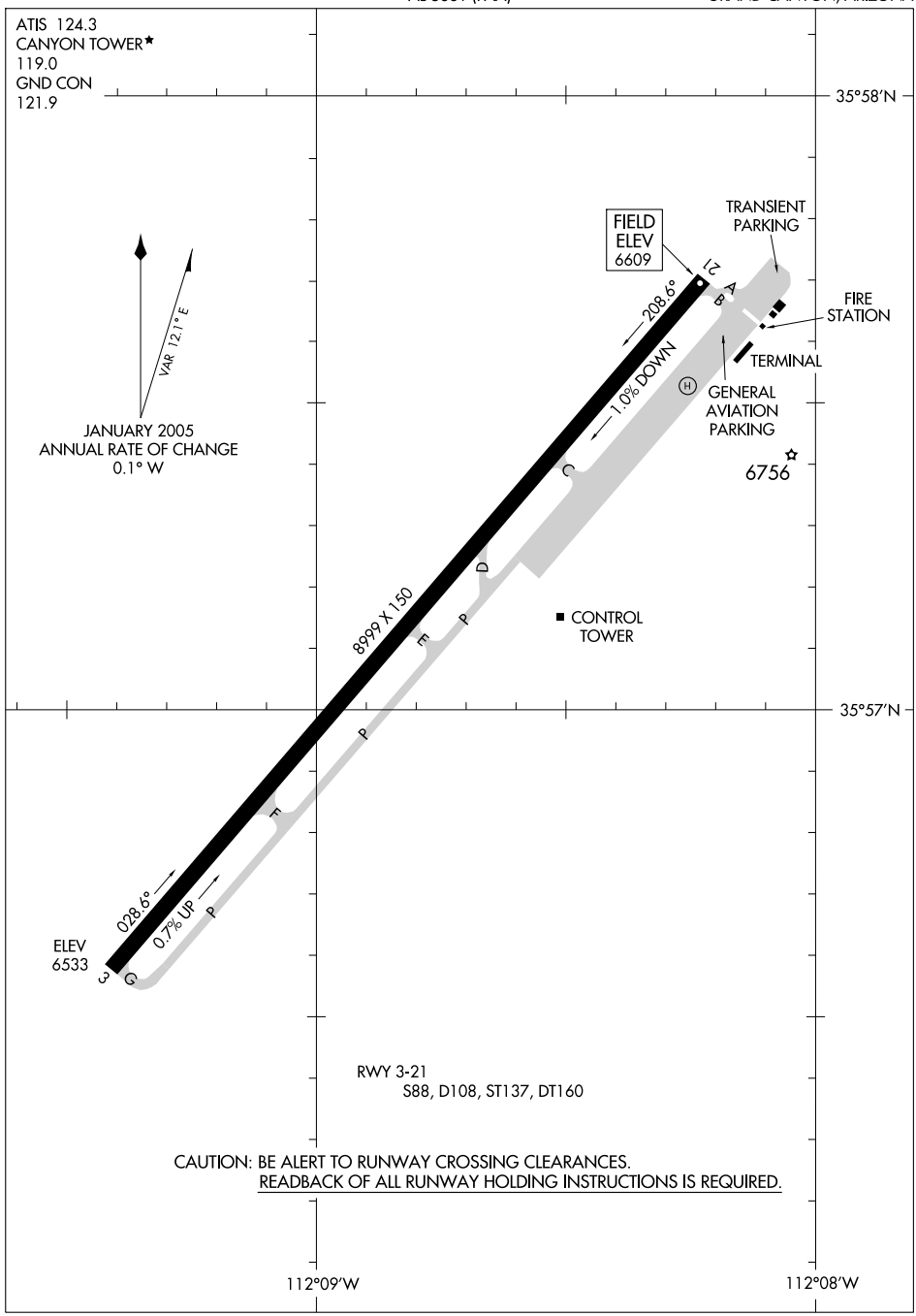
SW-4, 22 OCT 2009 to 19 NOV 2009

06271

AIRPORT DIAGRAM

AL-5381 (FAA)

GRAND CANYON NATIONAL PARK (GCN)
GRAND CANYON, ARIZONA



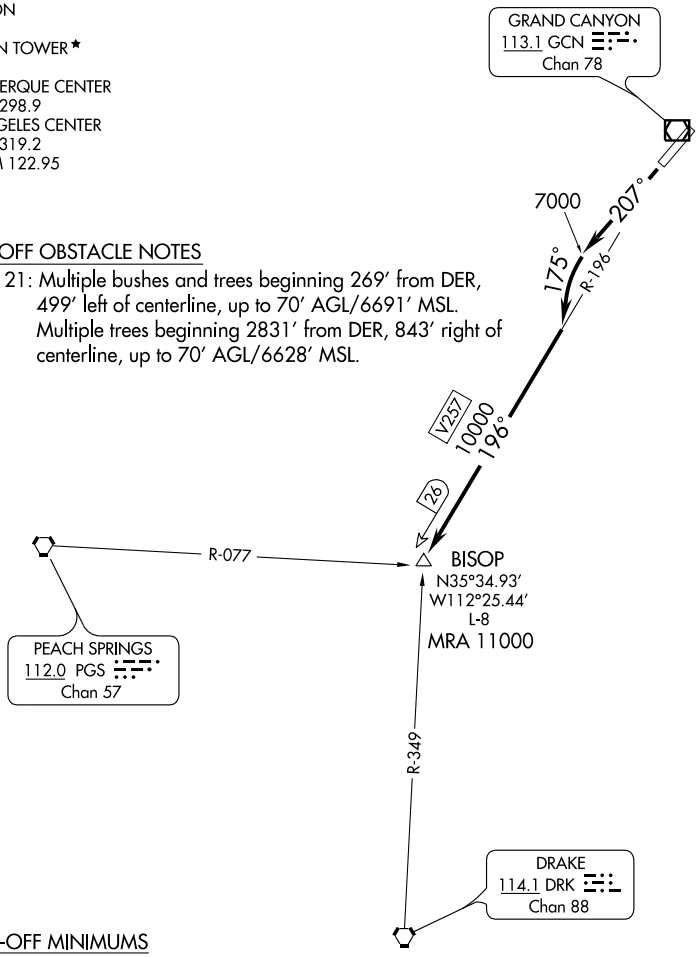
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-4, 22 OCT 2009 to 19 NOV 2009

GRAND TWO DEPARTURE (OBSTACLE)

GRAND CANYON NATIONAL PARK (GCN)
GRAND CANYON, ARIZONA

ATIS 124.3
GND CON
121.9
CANYON TOWER ★
119.0
ALBUQUERQUE CENTER
128.45 298.9
LOS ANGELES CENTER
124.85 319.2
UNICOM 122.95



TAKEOFF OBSTACLE NOTES

RWY 21: Multiple bushes and trees beginning 269' from DER, 499' left of centerline, up to 70' AGL/6691' MSL. Multiple trees beginning 2831' from DER, 843' right of centerline, up to 70' AGL/6628' MSL.

TAKE-OFF MINIMUMS

Rwy 3, NA.
Rwy 21: 200-1¼ or standard with minimum climb of 234' per NM to 7000', or alternatively, with standard takeoff minimums and normal 200 feet/NM climb gradient, takeoff must occur no later than 1800 feet prior to departure end of runway.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: NA.

TAKE-OFF RUNWAY 21: Climb heading 207° to 7000', then turn left heading 175° to intercept GCN R-196 to BISOP INT. Expect filed altitude 10 minutes after departure.

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC I-GCN	APP CRS	Rwy Idg	8999
108.9	027°	TDZE	6556
		Apt Elev	6609

ILS or LOC/DME RWY 3

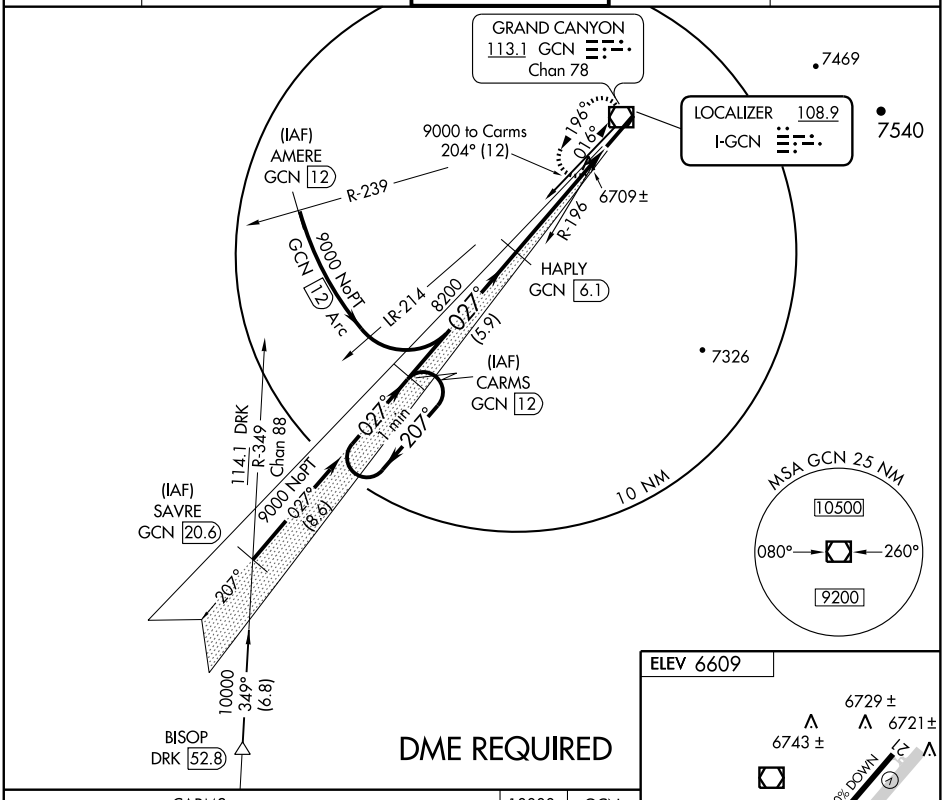
GRAND CANYON NATIONAL PARK (GCN)

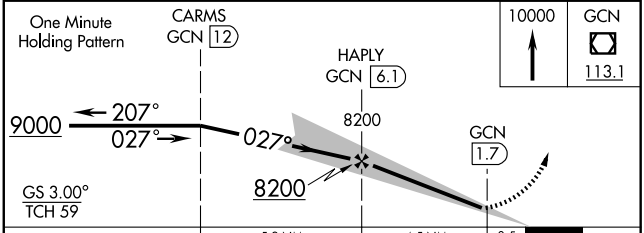
DME from GCN VOR/DME. Simultaneous reception of I-GCN and GCN DME required.
Inoperative table does not apply to S-LOC 3 CAT C.

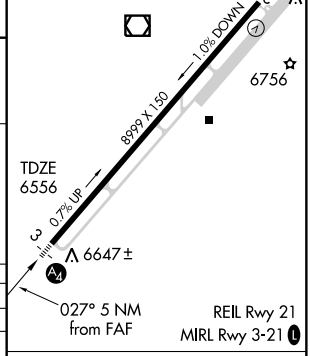
MALS

MISSED APPROACH: Climb to 10000 direct GCN VOR/DME and hold.

ATIS	LOS ANGELES CENTER	CANYON TOWER ★	GND CON	UNICOM
124.3	124.85 319.2	119.0 (CTAF) L	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 3	6765-¾ 209 (200-¾)			
S-LOC 3	6960-¾ 404 (400-¾)		6960-1¼ 404 (400-1¼)	
CIRCLING	7140-1 531 (600-1)		7160-1½ 551 (600-1½)	7220-2 611 (700-2)

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

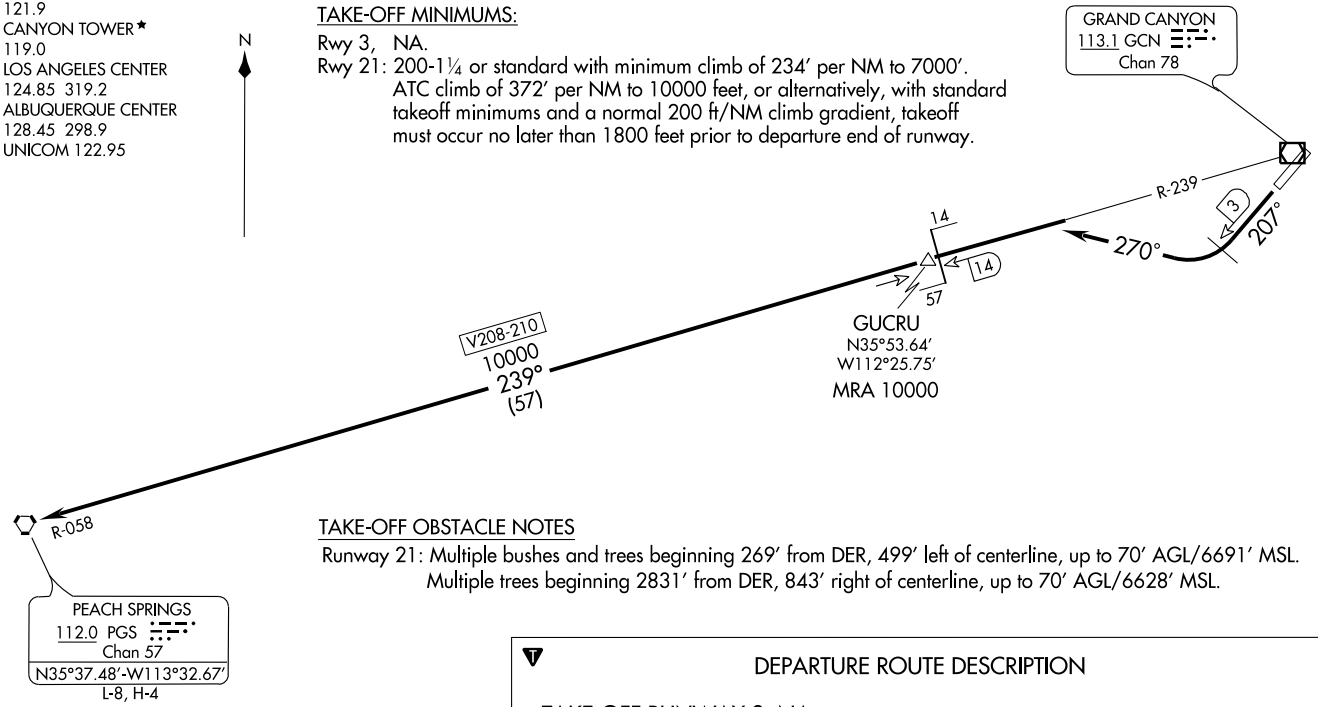
PARKS TWO DEPARTURE

ATIS 124.3
GND CON
121.9
CANYON TOWER ★
119.0
LOS ANGELES CENTER
124.85 319.2
ALBUQUERQUE CENTER
128.45 298.9
UNICOM 122.95

N

TAKE-OFF MINIMUMS:

Rwy 3, NA.
Rwy 21: 200-1¼ or standard with minimum climb of 234′ per NM to 7000′. ATC climb of 372′ per NM to 10000 feet, or alternatively, with standard takeoff minimums and a normal 200 ft/NM climb gradient, takeoff must occur no later than 1800 feet prior to departure end of runway.



TAKE-OFF OBSTACLE NOTES

Runway 21: Multiple bushes and trees beginning 269′ from DER, 499′ left of centerline, up to 70′ AGL/6691′ MSL. Multiple trees beginning 2831′ from DER, 843′ right of centerline, up to 70′ AGL/6628′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: NA

TAKE-OFF RUNWAY 21: Climb heading 207° until GCN 3 DME, then turn right heading 270° to intercept GCN R-239 to GUCRU/GCN 14 DME at or above 10000′ then via V208-210 to PGS VORTAC. Expect filed altitude 10 minutes after departure.

NOTE: DME required.

NOTE: Chart not to scale.

APP CRS	Rwy Idg	8999
027°	TDZE	6556
	Apt Elev	6609

RNAV (GPS) RWY 3

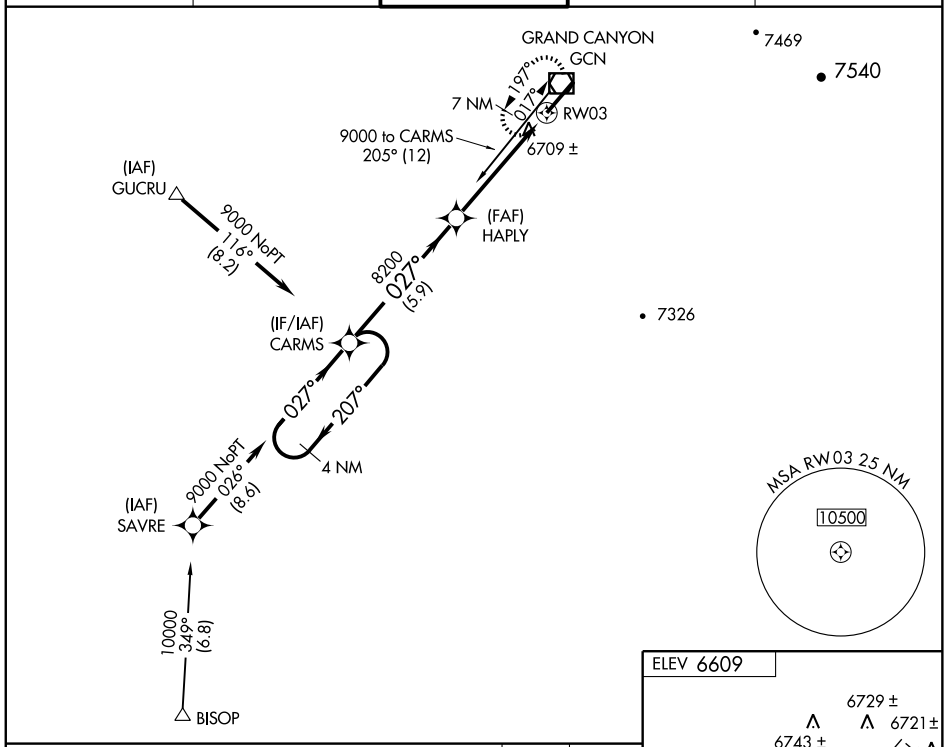
GRAND CANYON NATIONAL PARK (GCN)

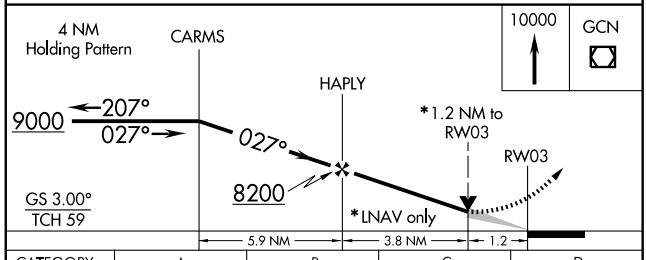
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Baro-VNAV NA below -28°C (-18°F).
Inoperative table does not apply to LNAV Cat C.

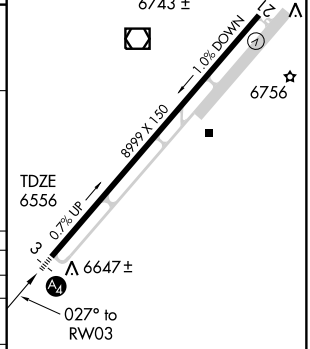
MALS

MISSED APPROACH: Climb to 10000 direct GCN VOR/DME and hold.

ATIS	LOS ANGELES CENTER	CANYON TOWER★	GND CON	UNICOM
124.3	124.85 319.2	119.0 (CTAF) L	121.9	122.95







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	6960-1½ 404 (400-1½)			
LNAV MDA	6960-¾ 404 (400-¾)		6960-1¼ 404 (400-1¼)	
CIRCLING	7140-1½ 531 (600-1½)		7160-1½ 551 (600-1½)	7220-2 611 (700-2)

REIL Rwy 21
MIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME GCN	APP CRS	Rwy Idg	8999
113.1	016°	TDZE	6556
Chan 78		Apt Elev	6609

VOR RWY 3

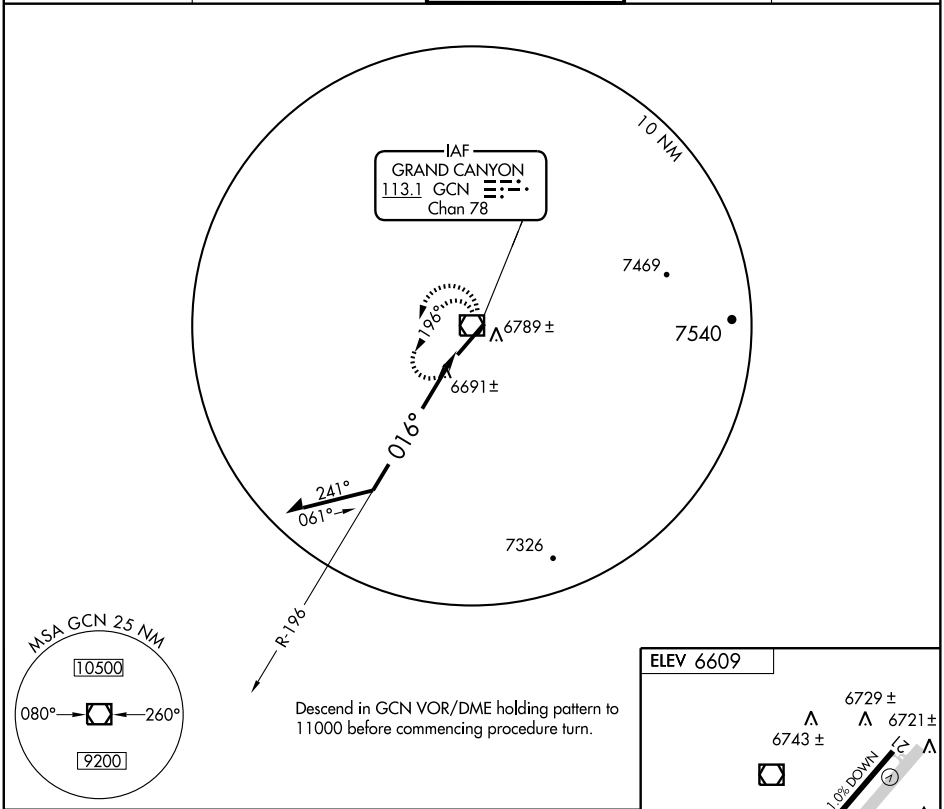
GRAND CANYON NATIONAL PARK (GCN)

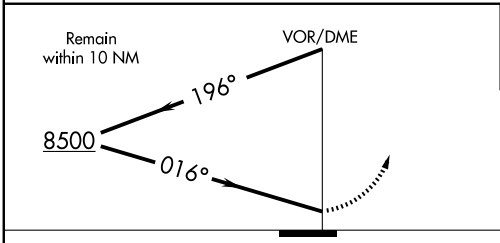
Inoperative table does not apply to S-3 Cat C.

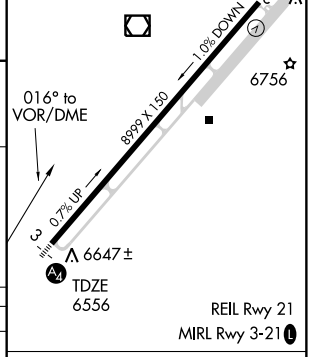
MALS

MISSED APPROACH: Climb to 8800 in GCN VOR/DME holding pattern.

ATIS	LOS ANGELES CENTER	CANYON TOWER ★	GND CON	UNICOM
124.3	124.85 319.2	119.0 (CTAF) L	121.9	122.95







CATEGORY	A	B	C	D
S-3	7100-¾ 544 (600-¾)		7100-1½ 544 (600-1½)	7100-1¾ 544 (600-1¾)
CIRCLING	7140-1 531 (600-1)		7160-1½ 551 (600-1½)	7220-2 611 (700-2)

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 86312 W03A	APP CRS 033°	Rwy Idg 6827 TDZE 3412 Apt Elev 3449

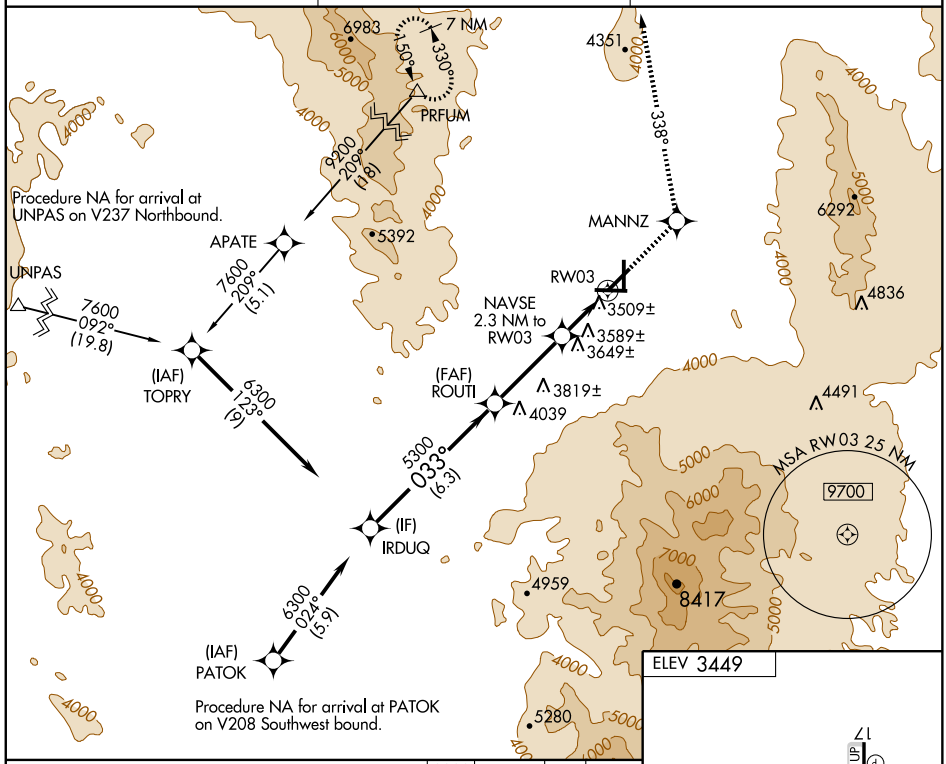
RNAV (GPS) RWY 3

KINGMAN (IGM)

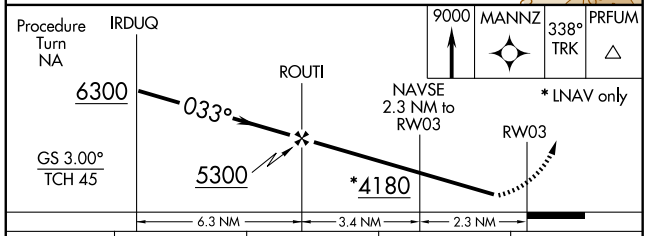
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 42°C (107°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

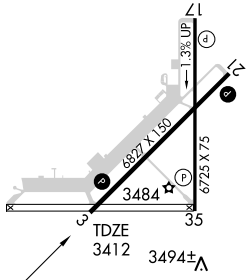
MISSED APPROACH: Climb to 9000 direct MANNZ and via track 338° to PRFUM and hold, continue climb-in-hold to 9000.

ASOS	PRESCOTT RADIO	UNICOM
119.275	122.1R	122.8 (CTAF) L



ELEV 3449





CATEGORY	A	B	C	D
LPV DA		3713-1	301 (400-1)	
LNAV/VNAV DA		3952-2	540 (600-2)	
LNAV MDA	3840-1 428 (500-1)		3840-1¼ 428 (500-1¼)	3840-1½ 428 (500-1½)
CIRCLING	3980-1 531 (600-1)	4020-1 571 (600-1)	4020-1½ 571 (600-1½)	4140-2¼ 691 (700-2¼)

REIL Rwys 3 and 21 L
MIRL Rwys 3-21 and 17-35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

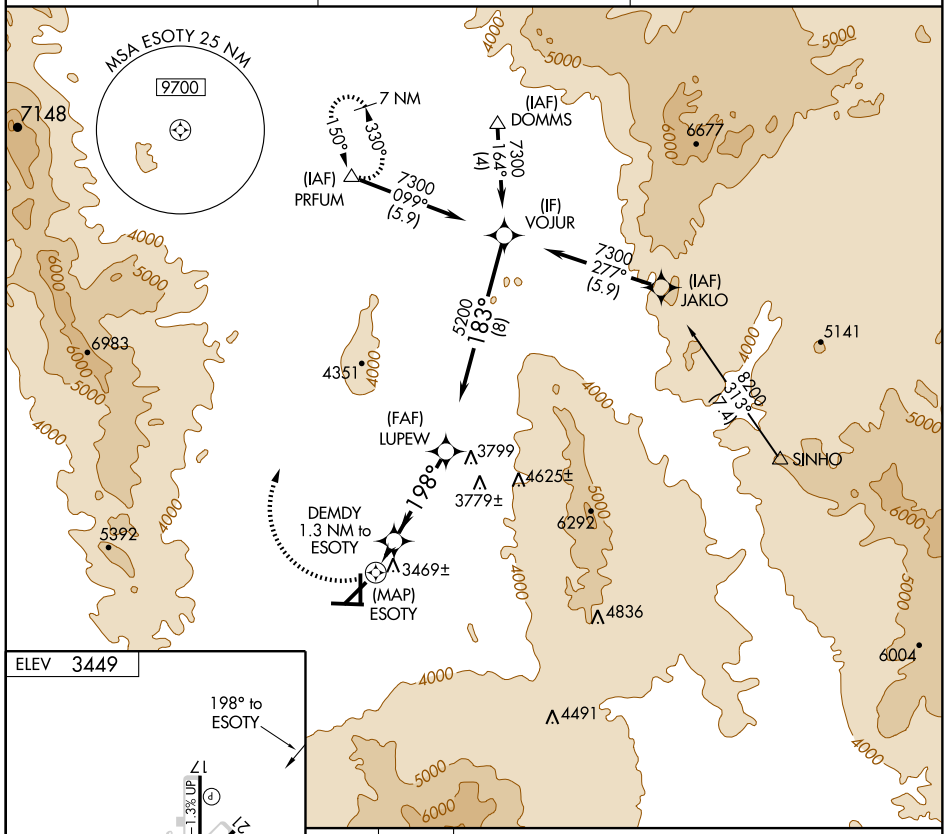
APP CRS	Rwy Idg	6827
198°	TDZE	3403
	Apt Elev	3449

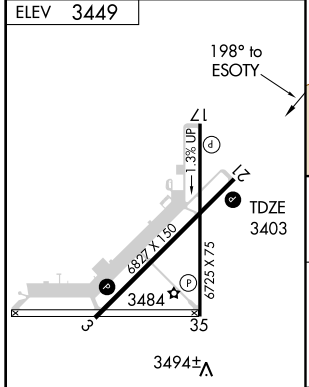
RNAV (GPS) Y RWY 21
KINGMAN (IGM)

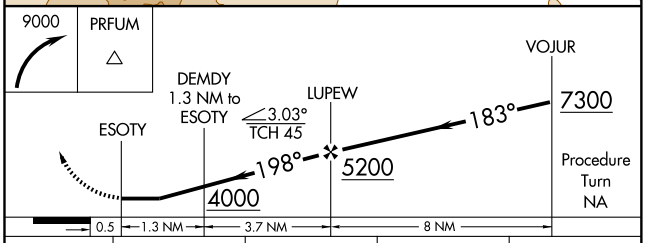
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 9000 direct PRFUM and hold, continue climb-in-hold to 9000.

ASOS	PRESCOTT RADIO	UNICOM
119.275	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3820-1	417 (500-1)	3820-1¼	417 (500-1¼)
CIRCLING	3980-1 531 (600-1)	4020-1 571 (600-1)	4020-1½ 571 (600-1½)	4140-2¼ 691 (700-2¼)

REIL Rwys 3 and 21 L
MIRL Rwys 3-21 and 17-35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

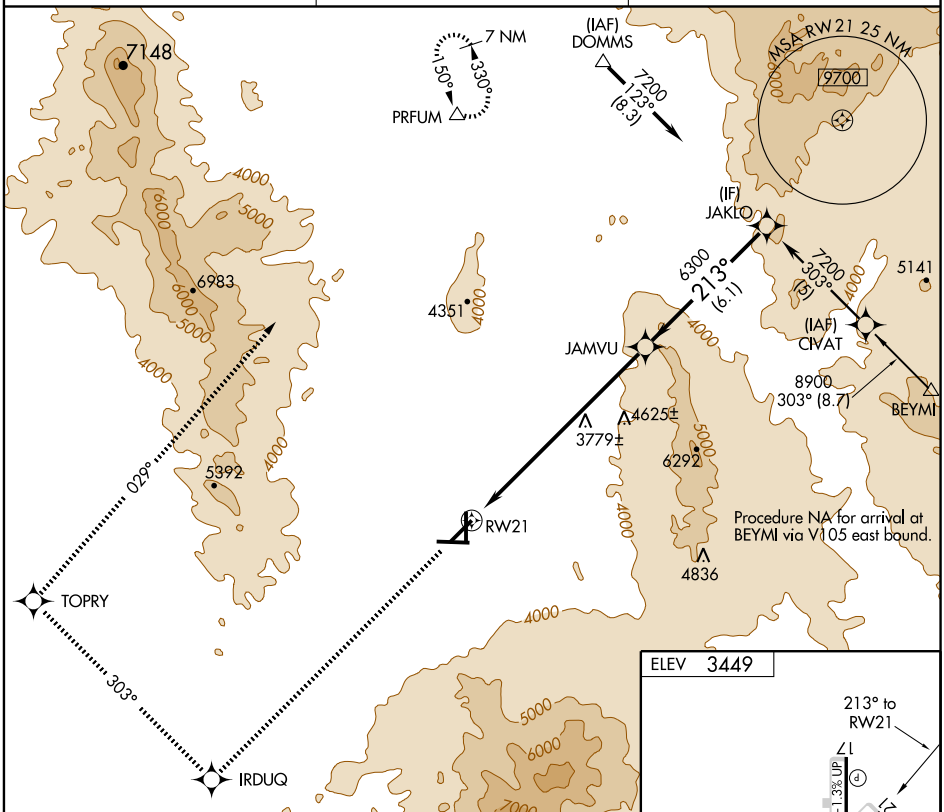
WAAS	APP CRS	Rwy Idg	6827
CH 70612	213°	TDZE	3403
W21A		Apt Elev	3449

RNAV (GPS) Z RWY 21
KINGMAN (IGM)

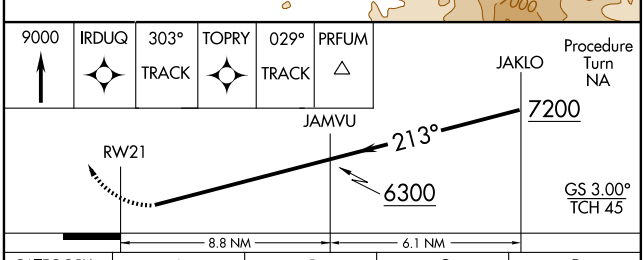
DME/DME RNP-0.3 NA.
NA Visibility reduction by helicopters NA.

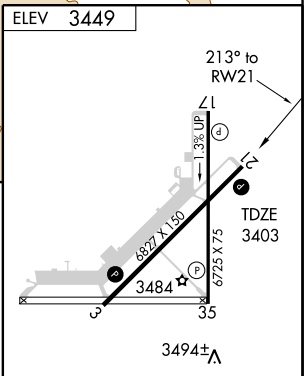
MISSED APPROACH: Climb to 9000 direct IRDUQ and via track 303° to TOPRY and via track 029° to PRFUM and hold.

ASOS	PRESCOTT RADIO	UNICOM
119.275	122.1R	122.8 (CTAF) L



9000	IRDUQ	303° TRACK	TOPRY	029° TRACK	PRFUM





CATEGORY	A	B	C	D
LPV DA	3653-1 250 (300-1)			
CIRCLING	3980-1 531 (600-1)	4020-1 571 (600-1)	4020-1½ 571 (600-1½)	4140-2¼ 691 (700-2¼)

REIL Rwys 3 and 21 L
MIRL Rwys 3-21 and 17-35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

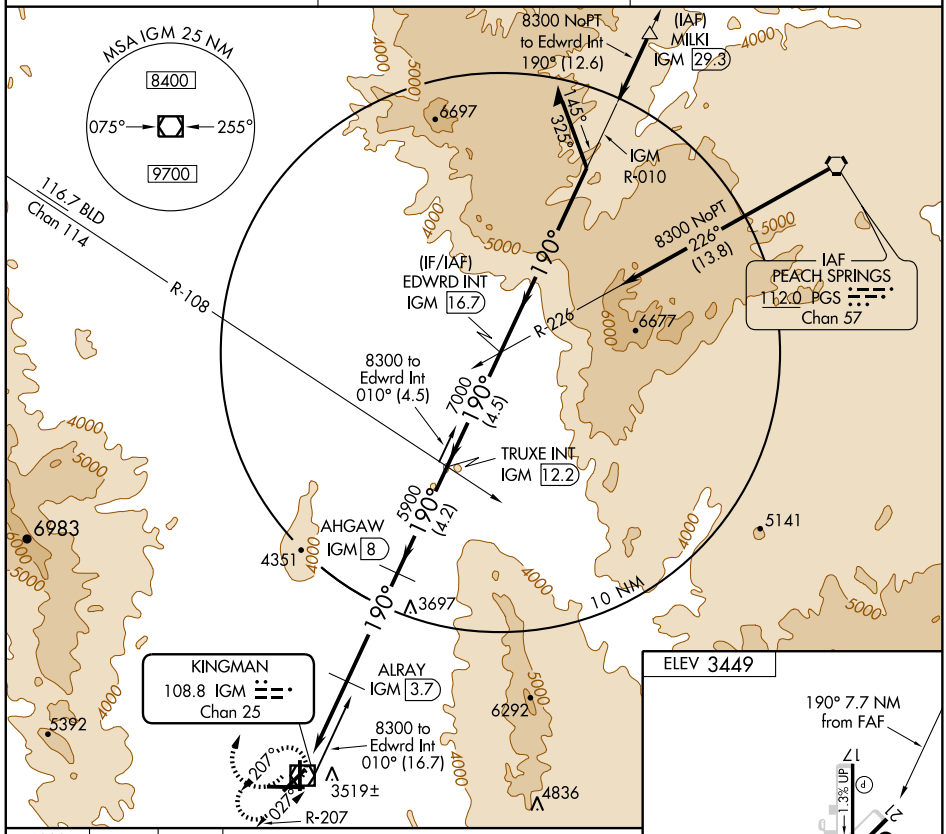
VOR/DME IGM 108.8 Chan 25	APP CRS 190°	Rwy Idg 6827 TDZE 3403 Apt Elev 3449

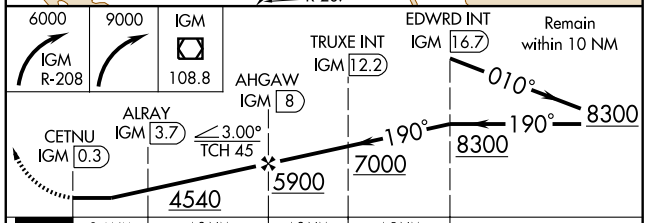
VOR/DME RWY 21
KINGMAN (IGM)

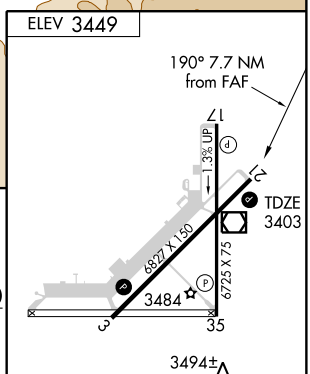
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 6000 via IGM VOR/DME R-208 then climbing right turn to 9000 direct IGM VOR/DME and hold.

ASOS 119.275	PRESCOTT RADIO 122.1R	UNICOM 122.8 (CTAF) L







CATEGORY	A	B	C	D
S-21	3880-1	477 (500-1)	3880-1¼ 477 (500-1¼)	3880-1½ 477 (500-1½)
CIRCLING	3980-1 531 (600-1)	4020-1 571 (600-1)	4020-1½ 571 (600-1½)	4140-2¼ 691 (700-2¼)

MIRL Rwys 3-21 and 17-35 L
REIL Rwys 3 and 21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8001
CH 49110	317°	TDZE	783
W32A		Apt Elev	783

RNAV (GPS) RWY 32

LAKE HAVASU CITY (HII)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Needles altimeter setting and increase all DA/MDA 80 feet and all visibilities ½ mile. VDP NA when using Needles altimeter setting. Circling NA northeast of Rwy 14-32.

MISSED APPROACH: Climb to 6300 direct JADUV and via 307° track to GORSY and hold, continue climb-in-hold to 6300.

AWOS-3	LOS ANGELES CENTER	UNICOM
119.025 364	134.65 314.2	122.7 (CTAF) L

MISSED APCH FIX

109° 7 NM GORSY 289°

307° 1249± JADUV RW32

1549± REKVE 3.5 NM to RW32

1574± (FAF) HODKI

3500 317° (6.1)

MEMPE 7000 155° (20.5)

5100 4000 2000 3000 2986 2560

(IAF) TASGE 4400 227° (8) 2700

(IF) OGSOE

MSA RW32 25 NM 8300

4130 3000 2000 2695

2768 4400 002° (8)

5000 058° (22.9)

(IAF) UCAYI

PARKER PKE

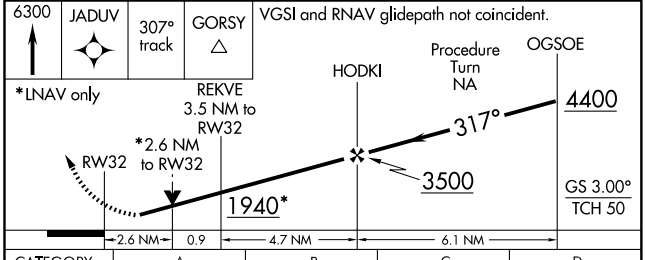
Procedure NA for arrivals at PKE VORTAC via V135 southbound.

ELEV 783

0.4% UP 8001 X 100 909 TDZE 783 818± 317° to RW32

REIL Rwys 14 and 32
MIRL Rwy 14-32 L

VGSI and RNAV glidepath not coincident.



CATEGORY	A	B	C	D
LPV DA	1265-1¾ 482 (500-1¾)			
LNAV MDA	1660-1 877 (900-1)	1660-1¼ 877 (900-1¼)	1660-2½ 877 (900-2½)	1660-2¾ 877 (900-2¾)
CIRCLING	1660-1 877 (900-1)	1660-1¼ 877 (900-1¼)	1660-2½ 877 (900-2½)	1660-2¾ 877 (900-2¾)

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC EED 115.2 Chan 99	APP CRS 139°	Rwy Idg N/A TDZE N/A Apt Elev 783

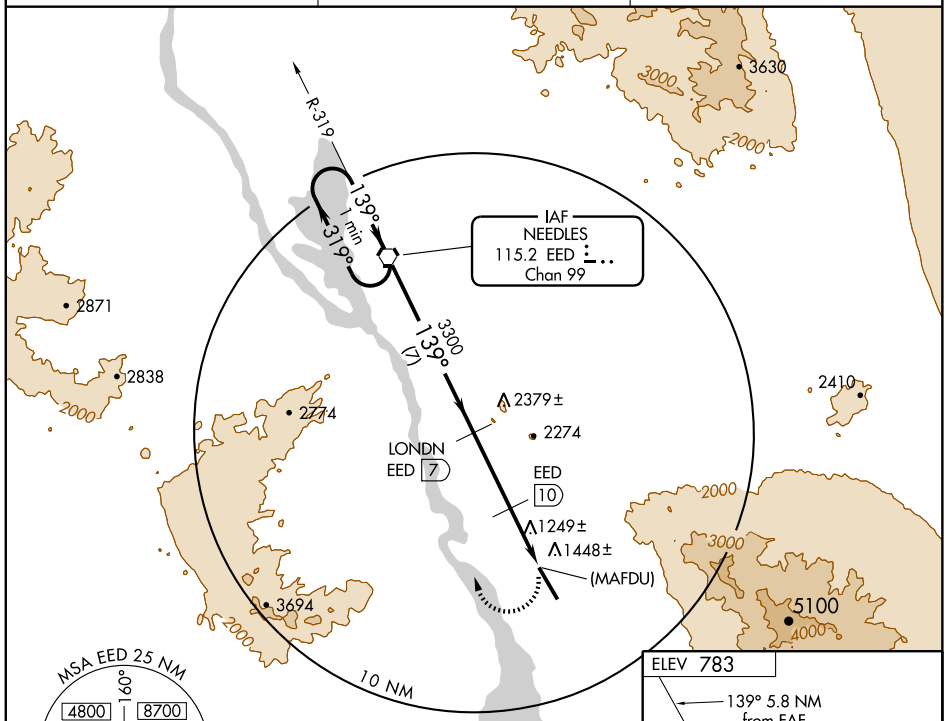
VOR/DME or GPS-A

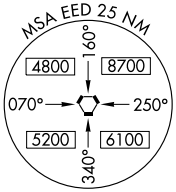
LAKE HAVASU CITY (HII)

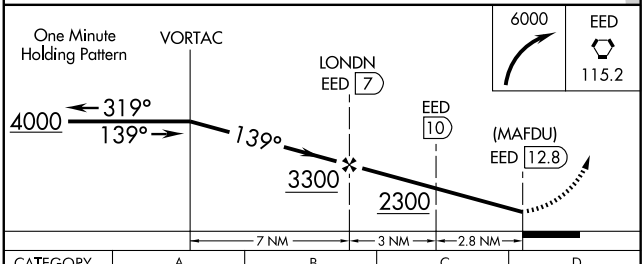
Circling not authorized northeast of Rwy 14-32.

MISSED APPROACH: Climbing right turn to 6000 direct EED VORTAC and hold.

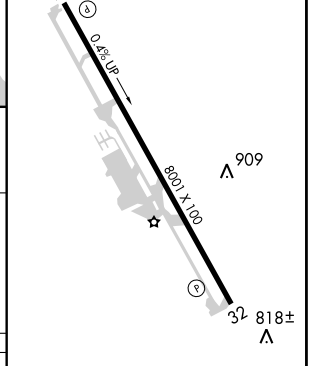
AWOS-3	LOS ANGELES CENTER	UNICOM
119.025 364	134.65 314.2	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1800-1¼ 1017 (1100-1¼)	1800-1½ 1017 (1100-1½)	1800-3 1017 (1100-3)	



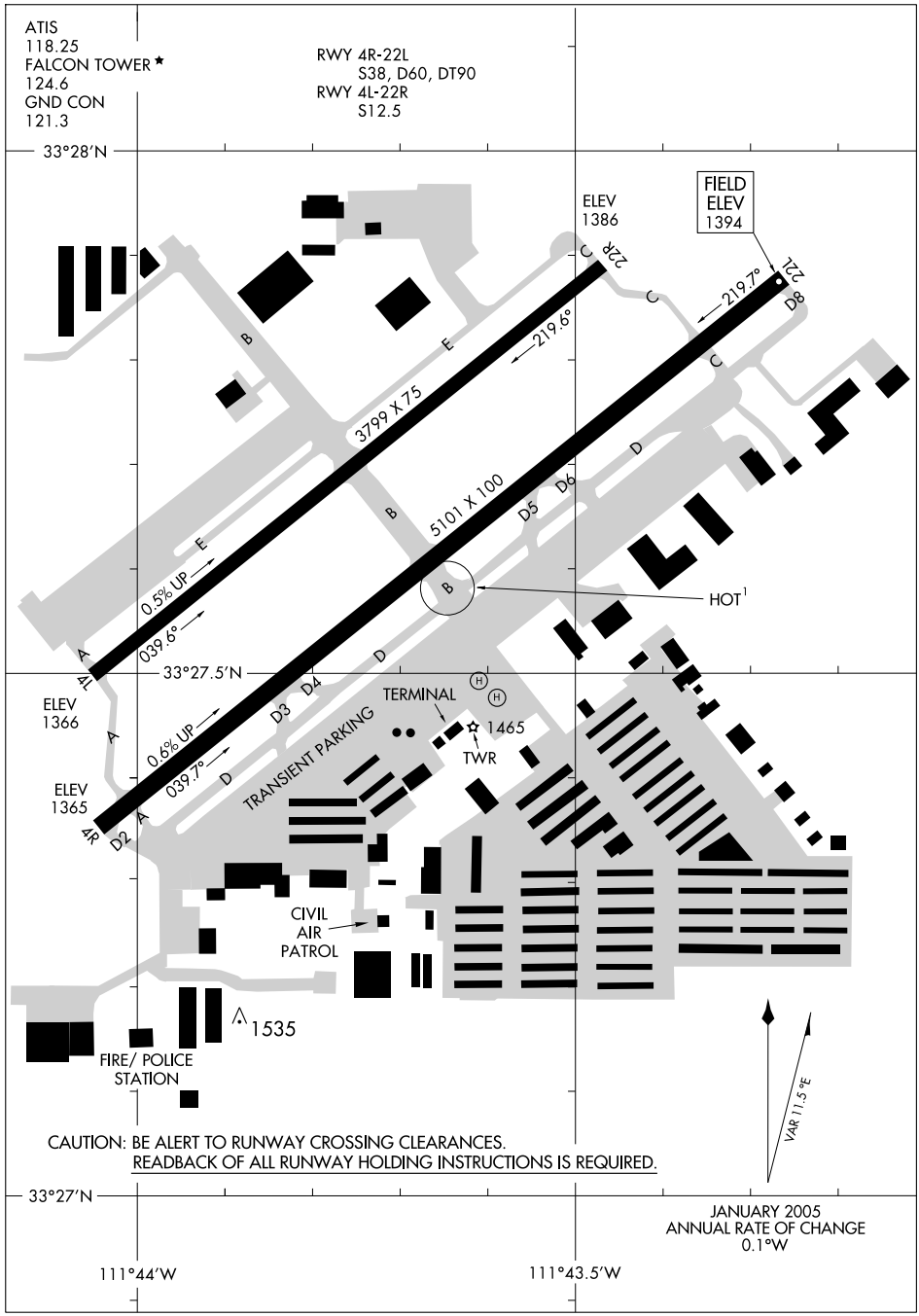
REIL Rwys 14 and 32
MIRL Rwy 14-32 L

SW-4, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-6647 (FAA)

MESA/ FALCON FIELD (FFZ)
MESA, ARIZONA



SW-4, 22 OCT 2009 to 19 NOV 2009

BLYTHE TRANSITION (BLH.ARLIN3): From over BLH VORTAC via BLH R-089 and IWA R-256 to ARLIN INT. Thence....

MOHAK TRANSITION (MOHAK.ARLIN3): From over MOHAK INT via GBN R-247 and BXK R-215 to HYDRR INT, then via IWA R-256 to ARLIN INT. Thence....

....From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect vectors after ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT. Expect vectors prior to TUKEE INT to final approach course.

SATELLITE AIRPORTS: Expect vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
PHOENIX SKY HARBOR ATIS
127.575
PHOENIX DEER VALLEY ATIS
126.5
SCOTTSDALE ATIS
118.6
FALCON FIELD ATIS
118.25
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
PHOENIX
115.6 PXR
Chan 103
N33°25.98' W111°58.21'
FALCON FIELD
PHOENIX-SKY HARBOR INTL
BUCKEYE
110.6 BXK
Chan 43
BLYTHE
117.4 BLH
Chan 121
N33°35.76' W114°45.67'
L-4-5, H-4
SCOLE
N33°27.76'-W114°04.91'
VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or below FL 250
HYDRR
N33°16.46'
W113°04.18'
AMBRR
N33°17.46'
W112°20.83'
STELLAR AIRPARK
PHOENIX-MESA GATEWAY
CHANDLER MUNI
FL 180
*5000
089°
(35)
11,000
*6000
089°
(48)
10,000
*4500
076°
(4)
10,000
*4500
(11)
(8)
076°
(17)
(15)
R-215
R-171
R-131
R-194
R-143
R-256
GBN R-025
N
MOHAK
N32°46.55'-W113°58.33'
L-5, H-4
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at or below FL 250
Turboprops expect to cross at or below 15,000
CALIE
N33°16.34'
W113°08.76'
PAYNT
N33°16.80'
W112°50.65'
Cross at 250K IAS
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at 11,000.
Turboprops expect to cross at 10,000.
ARLIN
N33°17.02'
W112°41.11'
ALEYS
N33°17.80'
W112°02.94'
TUKEE
N33°17.96'
W111°53.85'
WILLIE
113.3 IWA
Chan 80
10,000
*6500
035°
(42)
R-344
R-247
116.8 BZA
Chan 115
R-075
10,000
*6500
067°
(15)
JUDTH
N32°48.99'
W113°41.30'
GILA BEND
116.6 GBN
Chan 113

NOTE: BLYTHE TRANSITION for turbojet aircraft FL 240 and above. Turboprop aircraft plan BLYTHE FOUR ARRIVAL at or below FL 230.

NOTE: MOHAK TRANSITION for turbojet and turboprop aircraft.

NOTE: Chart not to scale.

BLYTHE TRANSITION (BLH.BLH4): From over BLH VORTAC via BLH R-082 to SALOM INT, then via GBN R-285 and IWA R-256 to ARLIN INT. Thence . . . .

. . . .From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect radar vectors after passing ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT, expect radar vectors prior to TUKEE INT to final approach course.

ALL SATELLITE AIRPORTS: Expect radar vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
FALCON FIELD ATIS
118.25
PHOENIX DEER VALLEY ATIS
126.5
PHOENIX SKY HARBOR ATIS
127.575
SCOTTSDALE ATIS
118.6
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
FALCON FIELD
PHOENIX-SKY HARBOR INTL

BLYTHE
117.4 BLH
Chan 121
N33°35.76′ W114°45.67′
L-4-5, H-4

SALOM
N33°30.97′ - W113°53.33
VERTICAL NAVIGATION PLANNING INFORMATION
Turboprop aircraft expect to cross at or below 17,000′

BUCKEYE
110.6 BXK
Chan 43

PHOENIX
115.6 PXR
Chan 103
N33°25.98′ W111°58.21′

10,000
*5800
082°
(44)

10,000
*5200
105°
(31)

HYDRR
N33°16.46′
W113°04.18′

10,000
*4800
076°
(14)

SADLL
N33°16.01′
W113°20.71

10,000
*4500
(11)

ARLIN
N33°17.02′
W112°41.11′

AMBRR
N33°17.46′
W112°20.83′

076°
(17)

(8)

STELLAR AIRPARK

ALEYS
N33°17.80′
W112°02.94′

PAYNT
N33°16.80′-W112°50.65′

TUKEE
N33°17.96′
W111°53.85′

(15)

(8)

CHANDLER MUNI

PHOENIX-MESA GATEWAY

R-256

R-194
R-143
(19)
R-215
R-171
R-131
R-025
R-285
GBN R-344
GBN R-025

85
71
39
60
52
35
20

Turbojets: Cross at 250K IAS.
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect to cross at 11,000.
Turboprops: Expect to cross at 10,000.

BARD
116.8 BZA
Chan 115

WILLIE
113.3 IWA
Chan 80

GILA BEND
116.6 GBN
Chan 113

N

NOTE: Blythe Arrival for aircraft FL 230 or below.

NOTE: Chart not to scale.

APP CRS	Rwy Idg	5101
039°	TDZE	1381
	Apt Elev	1392

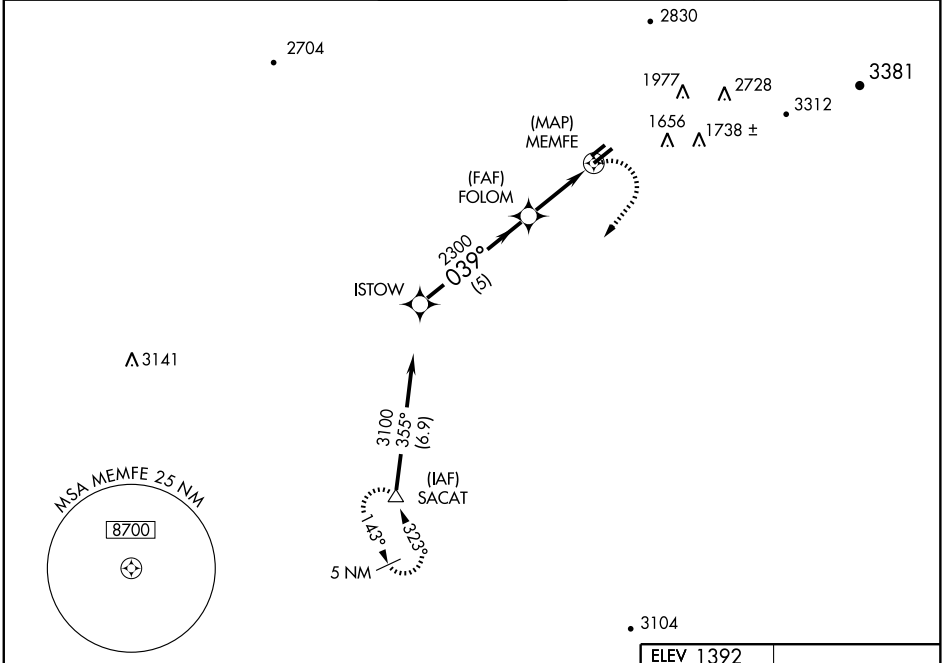
GPS RWY 4R

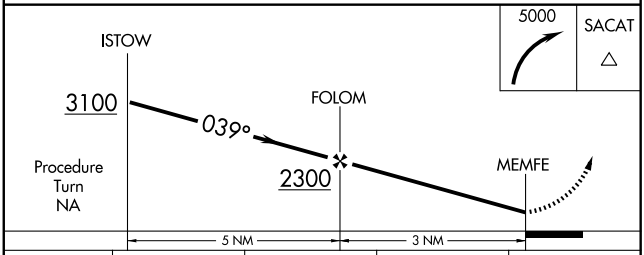
MESA/FALCON FIELD (FFZ)

When control tower closed, use Phoenix Sky Harbor altimeter setting.

MISSED APPROACH: Climbing right turn to 5000 diret SACAT WP and hold.

ATIS	PHOENIX APP CON	FALCON TOWER ★	GND CON	UNICOM
118.25	120.7 239.0	124.6 (CTAF)	121.3	122.95





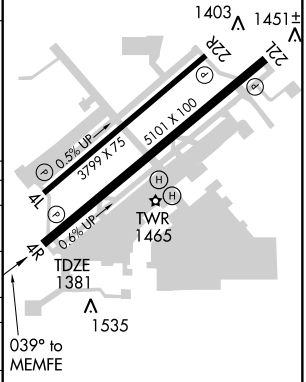
CATEGORY	A	B	C	D
S-4R	1800-1 419 (500-1)		1800-1¼ 419 (500-1¼)	NA
CIRCLING	1860-1 468 (500-1)		1860-1½ 468 (500-1½)	NA
PHOENIX SKY HARBOR ALTIMETER SETTING MINIMUMS				
S-4R	1860-1 479 (500-1)		1860-1¼ 479 (500-1¼)	NA
CIRCLING	1940-1 548 (600-1)		1940-1½ 548 (600-1½)	NA

ELEV 1392

REIL Rwys 4R and 22L

MIRL Rwys 4R-22L (L)

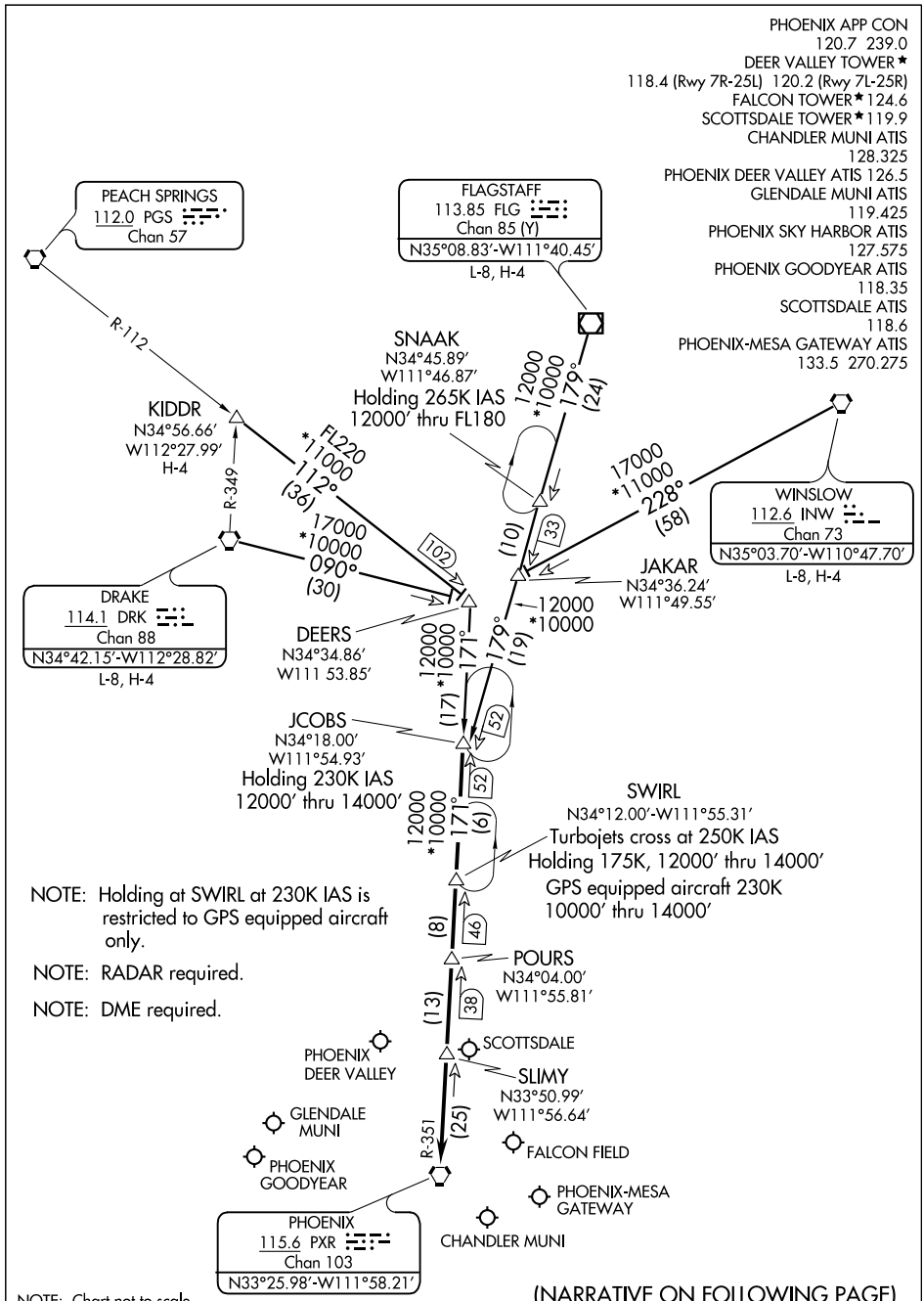
MIRL Rwys 4L-22R



SW-4, 22 OCT 2009 to 19 NOV 2009

JCOBS TWO ARRIVAL

SCOTTSDALE, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

JCOBS TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

DRAKE TRANSITION (DRK.JCOBS2): From over DRK VORTAC via DRK R-090 to DEERS INT, then via PXR R-351 to JCOBS INT. Thence....

FLAGSTAFF TRANSITION (FLG.JCOBS2): From over FLG VOR/DME via FLG R-179 to JCOBS INT. Thence....

KIDDR TRANSITION (KIDDR.JCOBS2): From over KIDDR INT via PGS R-112 to DEERS INT then via PXR R-351 to JCOBS INT. Thence....

WINSLOW TRANSITION (INW.JCOBS2): From over INW VORTAC via INW R-228 to JAKAR INT, then via FLG R-179 to JCOBS INT. Thence....

... From over JCOBS INT via PXR R-351 to SWIRL DME, then via PXR R-351 to SLIMY DME, then direct PXR VORTAC. After POURS, expect radar vectors to final approach course.

LOST COMMUNICATIONS: From DRK VORTAC via DRK R-090 to intercept PXR R-351at DEERS INT direct PXR VORTAC. From FLG VORTAC, proceed direct to JCOBS INT then direct PXR VORTAC. From KIDDR INT to DEERS INT via PGS R-112 to intercept PXR R-351 to PXR VORTAC. From INW VORTAC to JAKAR INT via INW R-228 to intercept FLG R-179 to JCOBS INT to intercept PXR R-351 to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

NDB FFZ 281	APP CRS 124°	Rwy Idg N/A TDZE N/A Apt Elev 1392

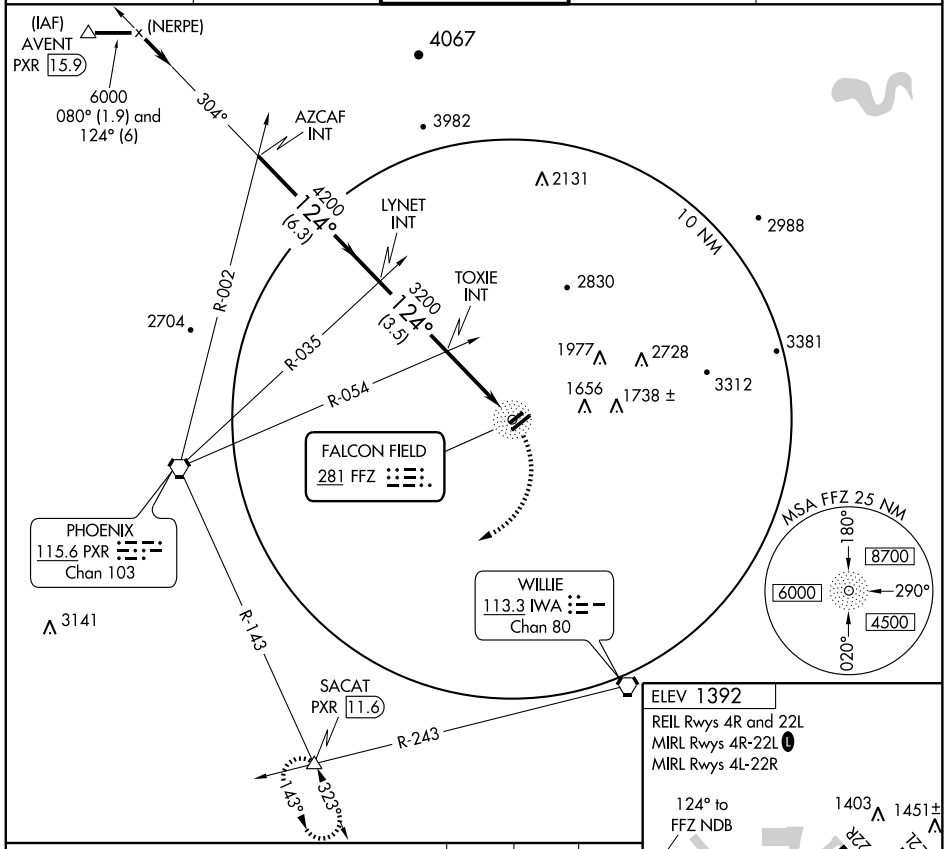
NDB or GPS-A

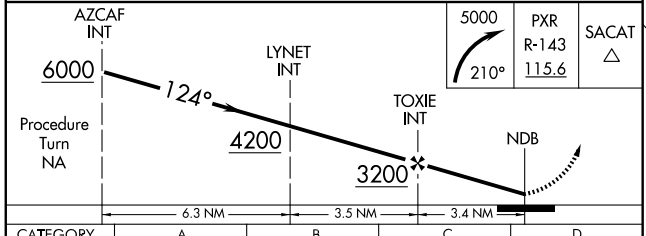
MESA/FALCON FIELD (FFZ)

When local altimeter setting not received, use Phoenix Sky Harbor altimeter setting minimums.

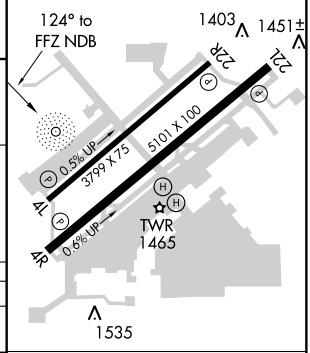
MISSED APPROACH: Climbing right turn to 5000 via heading 210° and PXR R-143 to SACAT Int/PXR 11.6 DME and hold.

ATIS	PHOENIX APP CON	FALCON TOWER ★	GND CON	UNICOM
118.25	120.7 239.0	124.6 (CTAF)	121.3	122.95





CATEGORY	A	B	C	D
CIRCLING	1860-1 468 (500-1)		1880-1½ 488 (500-1½)	NA
PHOENIX SKY HARBOR ALTIMETER SETTING MINIMUMS				
CIRCLING	1920-1 528 (600-1)		1940-1½ 548 (600-1½)	NA



Knots	60	90	120	150	180
Min:Sec					

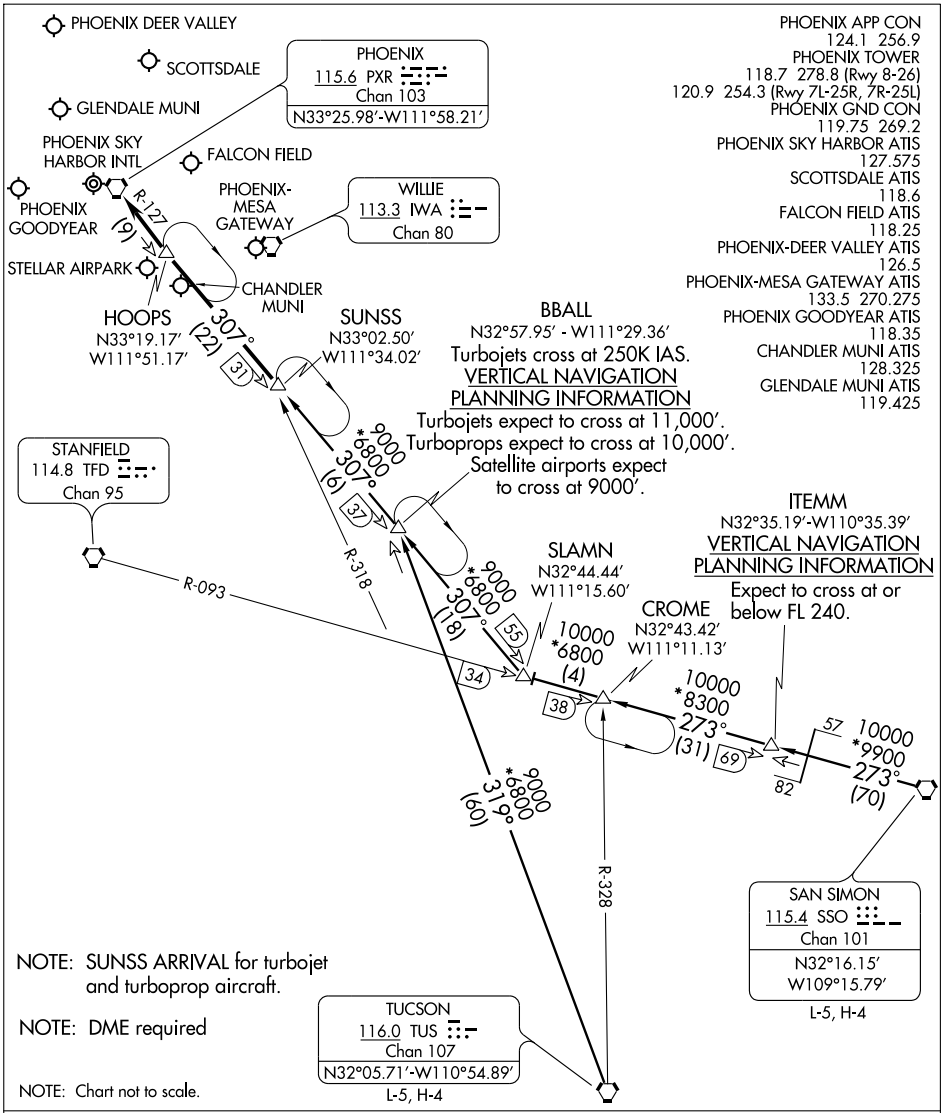
SW-4, 22 OCT 2009 to 19 NOV 2009

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

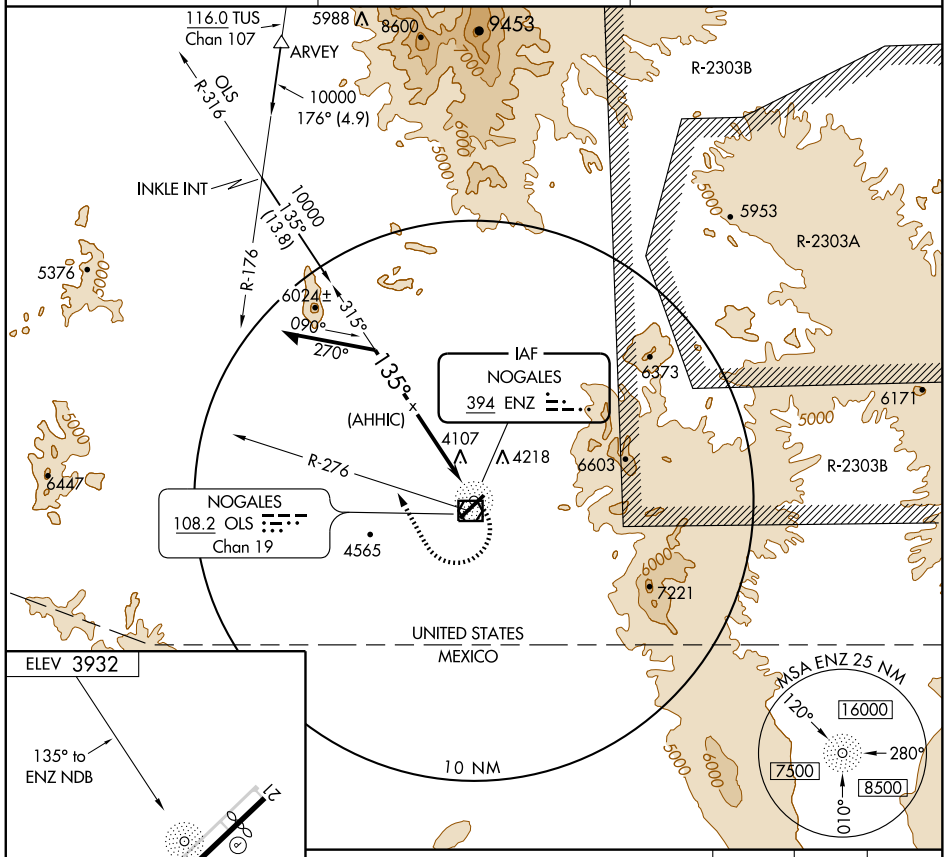
NDB ENZ 394	APP CRS 135°	Rwy Idg N/A TDZE N/A Apt Elev 3932

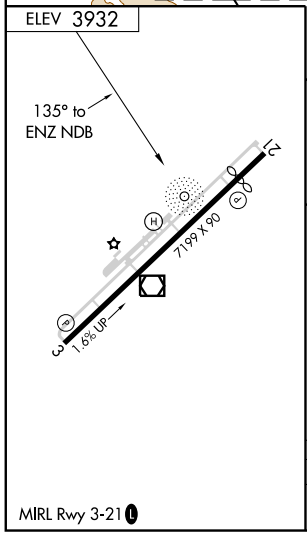
NDB or GPS-C
NOGALES INTL (OLS)

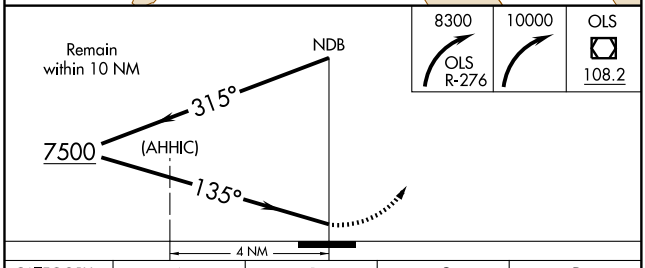
T
NA

MISSED APPROACH: Climbing right turn to 8300 via OLS VOR/DME R-276 then climbing right turn to 10000 direct OLS VOR/DME.

ASOS	TUCSON APP CON	UNICOM
121.125	125.1 269.55	122.8 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	6580-1¼ 2648 (2700-1¼)	6580-1½ 2648 (2700-1½)	6580-3	2648 (2700-3)

MIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

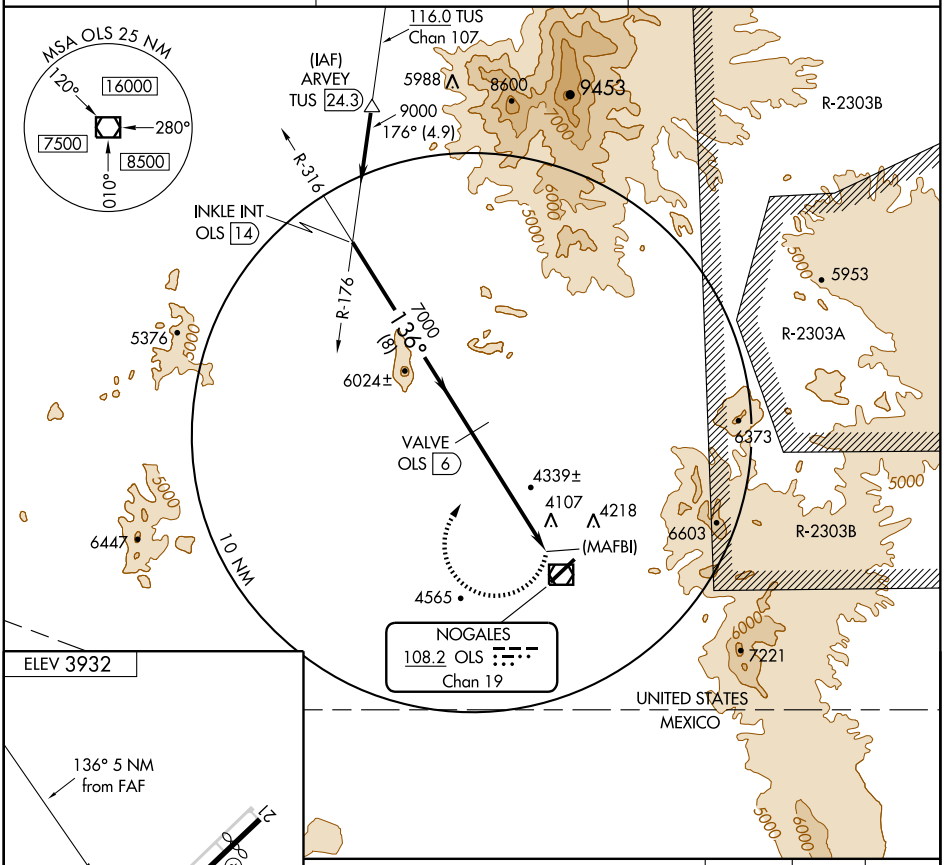
VOR/DME OLS 108.2 Chan 19	APP CRS 136°	Rwy Idg N/A TDZE N/A Apt Elev 3932

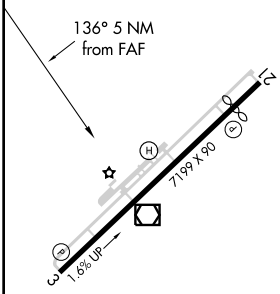
VOR/DME or GPS-B
NOGALES INTL (OLS)

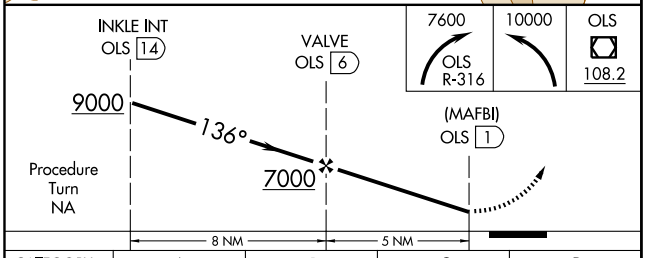
T
NA

MISSED APPROACH: Climbing right turn to 7600 via OLS R-316 then climbing left turn to 10000 direct OLS VOR/DME.

ASOS 121.125	TUCSON APP CON 125.1 269.55	UNICOM 122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5200-1¼ 1268 (1300-1¼)	5200-1½ 1268 (1300-1½)	5200-3	1268 (1300-3)

MIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

NOGALES, ARIZONA

AL-6151 (FAA)

VOR/DME OLS	APP CRS	Rwy Idg	N/A
108.2	096°	TDZE	N/A
Chan 19		Apt Elev	3932

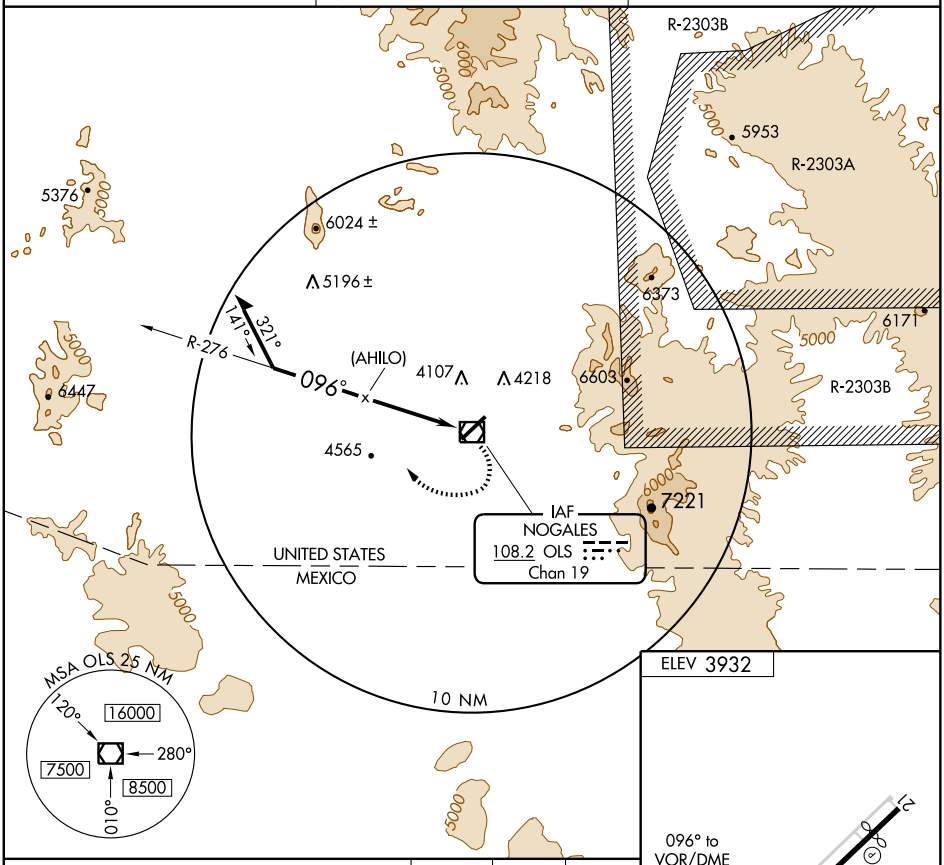
VOR or GPS-A

NOGALES INTL (OLS)

NA

MISSED APPROACH: Climbing right turn to 7800 via OLS R-276 then climbing right turn to 10000 direct OLS VOR/DME.

ASOS	TUCSON APP CON	UNICOM
121.125	125.1 269.55	122.8 (CTAF)



CATEGORY	A	B	C	D
CIRCLING	5500-1¼ 1568 (1600-1¼)	5500-1½ 1568 (1600-1½)	5500-3 1568 (1600-3)	

MIRL Rwy 3-21

SW-4, 22 OCT 2009 to 19 NOV 2009

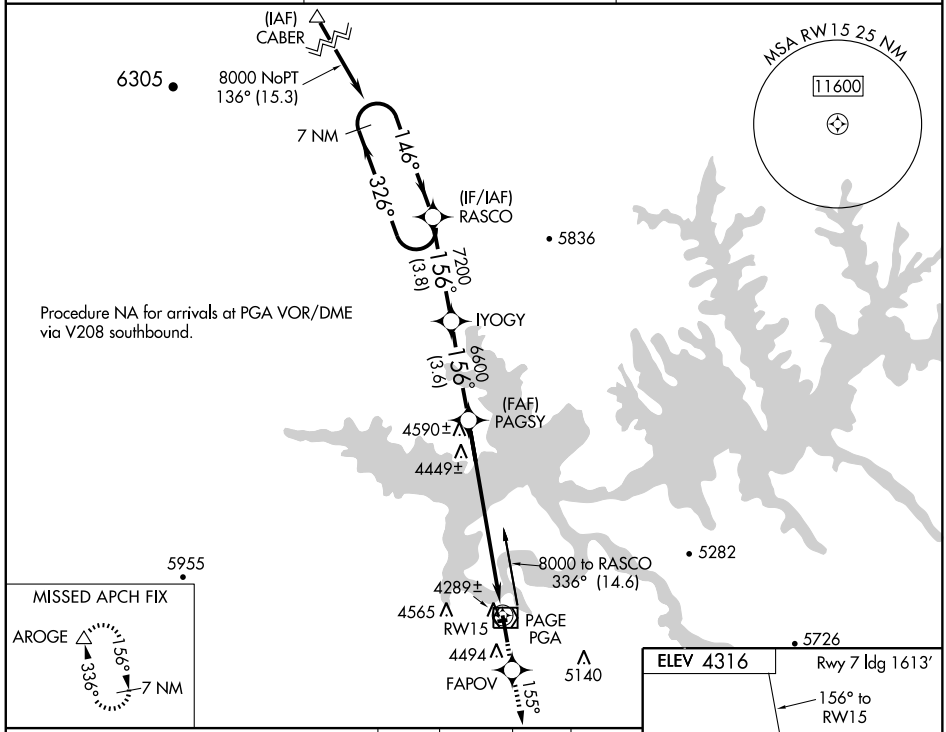
WAAS	APP CRS	Rwy Idg	5950
CH 45604	156°	TDZE	4264
W15A		Apt Elev	4316

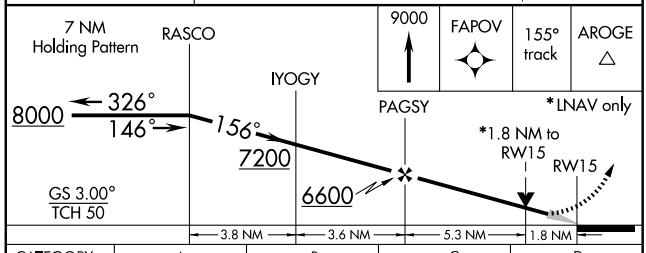
RNAV (GPS) RWY 15
PAGE MUNI (PGA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 41°C (105° F).
DME/DME RNP -0.3 NA. Circling NA to Rwy 7-25

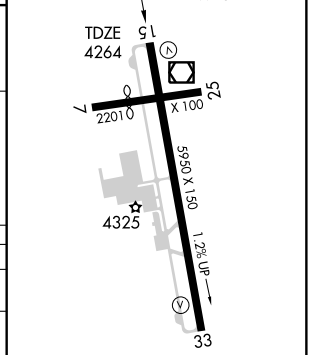
MISSED APPROACH: Climb to 9000 direct FAPOV and via 155° track to AROGE and hold, continue climb-in-hold to 9000.

ASOS	DENVER CENTER	UNICOM
120.625	127.55 343.95	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4599-1¼ 335 (300-1¼)			
LNAV/VNAV DA	4670-1½ 406 (400-1½)			
LNAV MDA	4860-1 596 (600-1)		4860-1½ 596 (600-1½)	4860-1¾ 596 (600-1¾)
CIRCLING	4860-1 544 (600-1)		4860-1½ 544 (600-1½)	4920-2 604 (700-2)



REIL Rwys 15 and 33 L
MIRL Rwy 15-33 L

SW-4, 22 OCT 2009 to 19 NOV 2009

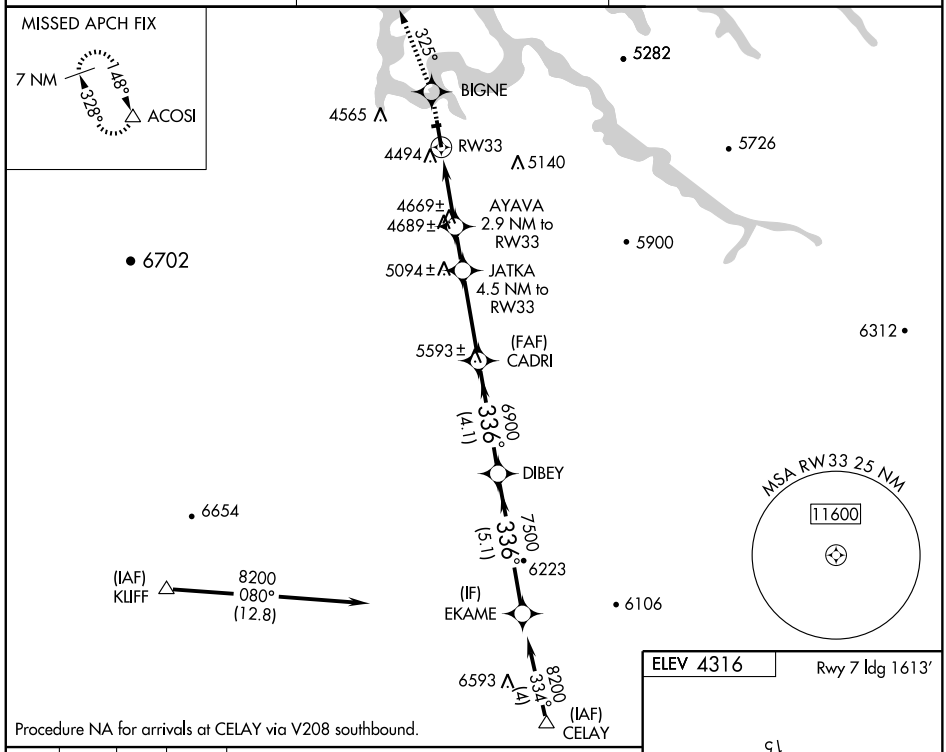
WAAS	APP CRS	Rwy Idg	5950
CH 69204	336°	TDZE	4316
W33A		Apt Elev	4316

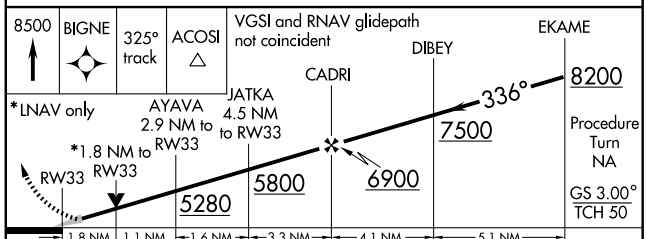
RNAV (GPS) RWY 33
PAGE MUNI (PGA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 41°C (105°F). DME/DME RNP- 0.3 NA. Circling NA to Rwy 7-25.

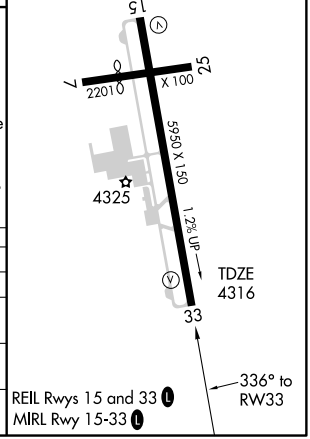
MISSED APPROACH: Climb to 8500 direct BIGNE and via 325° track to ACOSI and hold, continue climb-in-hold to 8500.

ASOS	DENVER CENTER	UNICOM
120.625	127.55 343.95	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4566-1 250 (300-1)			
LNAV/VNAV DA	4744-1½ 428 (500-1½)			
LNAV MDA	4920-1 604 (700-1)		4920-1¾ 604 (700-1¾)	4920-2 604 (700-2)
CIRCLING	4920-1 604 (700-1)		4920-1¾ 604 (700-1¾)	4920-2 604 (700-2)



SW-4, 22 OCT 2009 to 19 NOV 2009

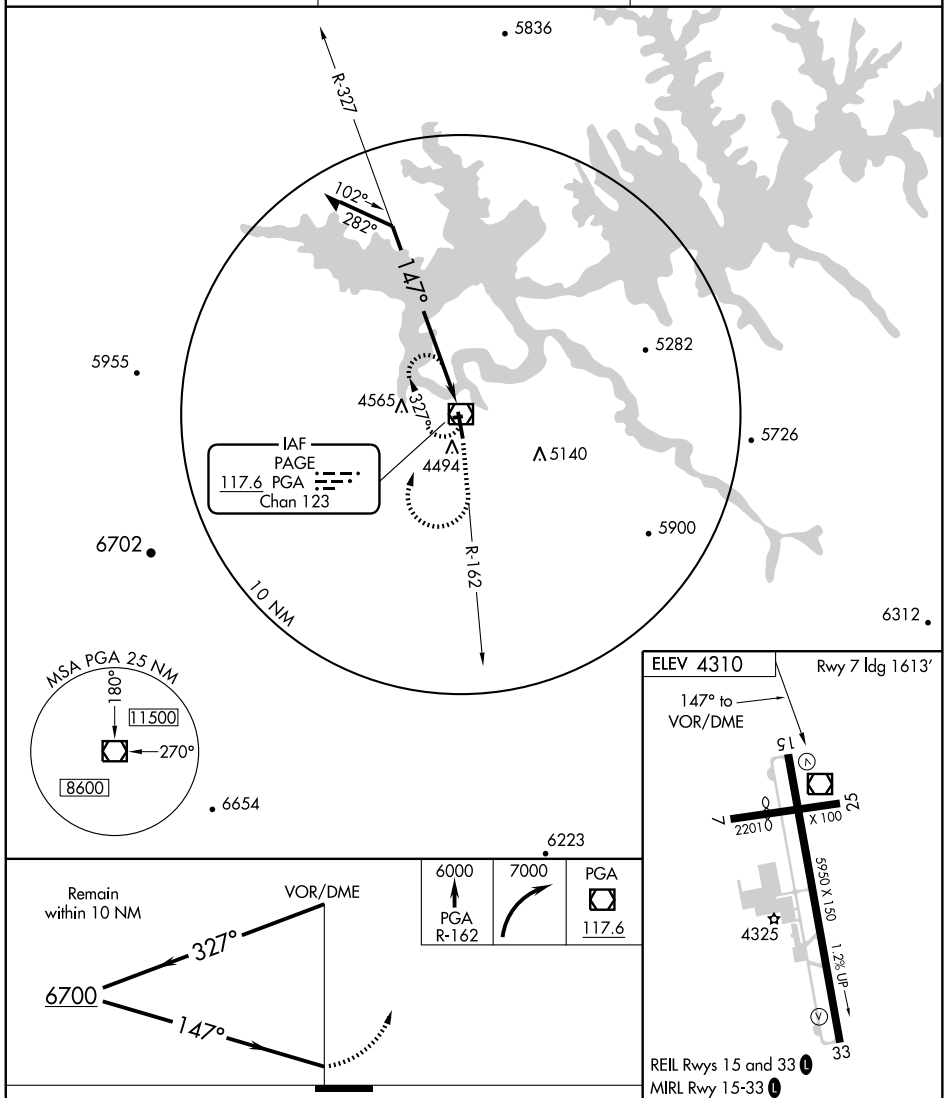
VOR/DME PGA	APP CRS	Rwy Idg	N/A
117.6	147°	TDZE	N/A
Chan 123		Apt Elev	4310

VOR-B
PAGE MUNI (PGA)

NA — Circling not authorized to Rwy 7-25.

MISSED APPROACH: Climb on the PGA R-162 to 6000, then climbing right turn to 7000 direct PGA VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
120.625	127.55 343.95	122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	5200-1¼ 890 (900-1¼)		5200-2¾ 890 (900-2¾)	5200-3 890 (900-3)

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC PKE 117.9 Chan 126	APP CRS 067°	Rwy Idg N/A TDZE N/A Apt Elev 452

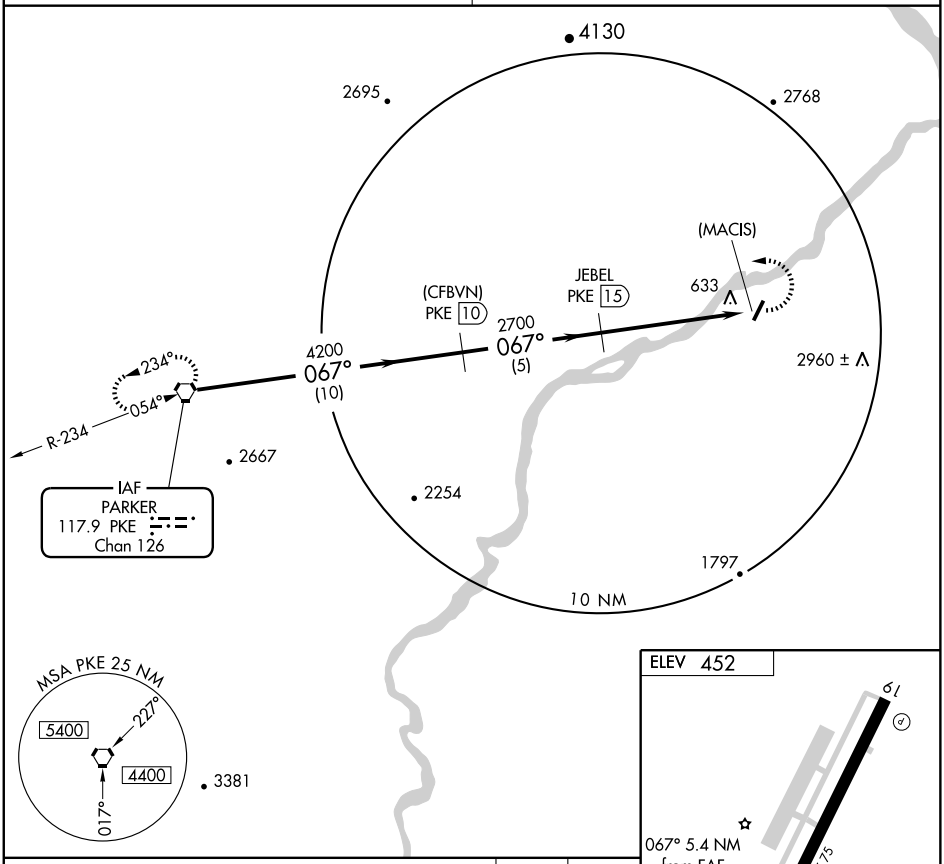
VOR/DME or GPS-A

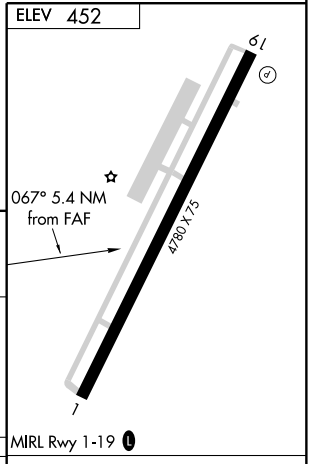
PARKER/ AVI SUQUILLA (P20)

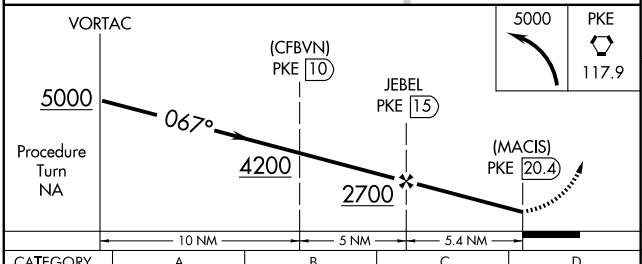
Use Blythe, CA altimeter setting; when not received, procedure not authorized.

MISSED APPROACH: Climbing left turn to 5000 direct PKE VORTAC and hold.

LOS ANGELES CENTER	UNICOM
128.15 285.6	122.725 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	1900-1¼ 1448 (1500-1¼)	1900-1½ 1448 (1500-1½)	1900-3 1448 (1500-3)	NA

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
352°	TDZE	N/A
	Apt Elev	5157

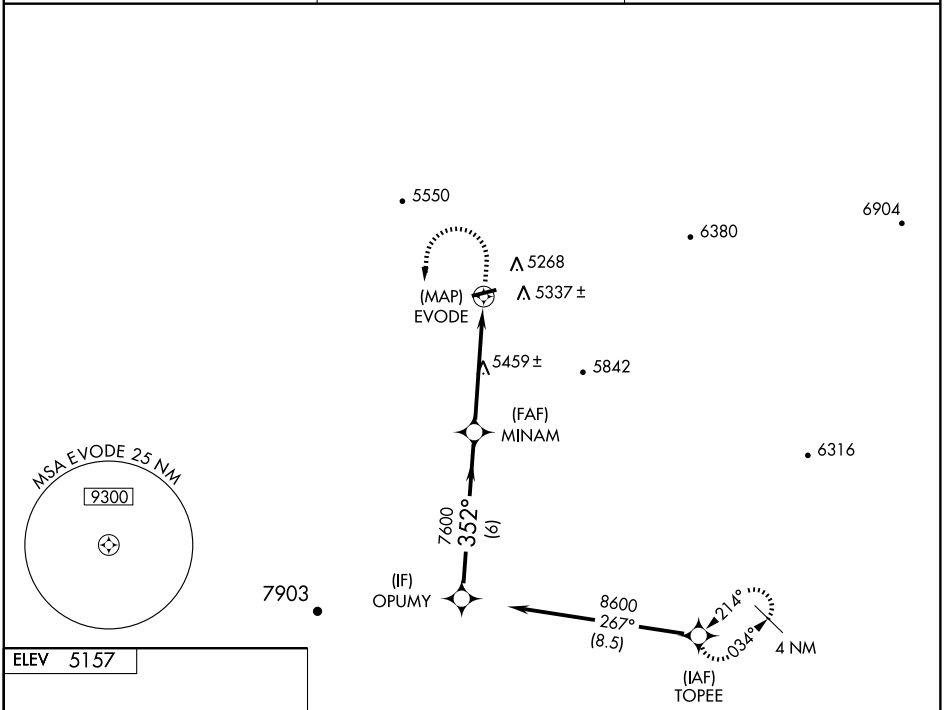
RNAV (GPS)-A

PAYSON (PAN)

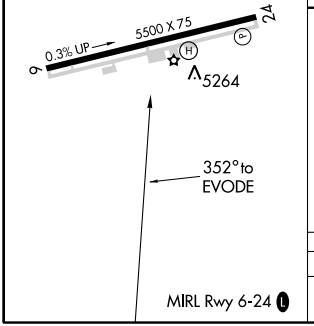
T
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

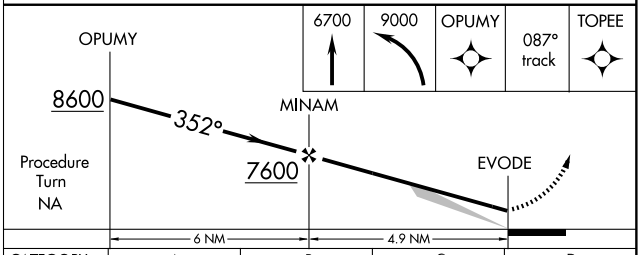
MISSED APPROACH: Climb to 6700 then climbing left turn to 9000 direct OPUMY WP and via 087° track to TOPEE WP and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
119.325	132.9 239.05	122.8 (CTAF) L



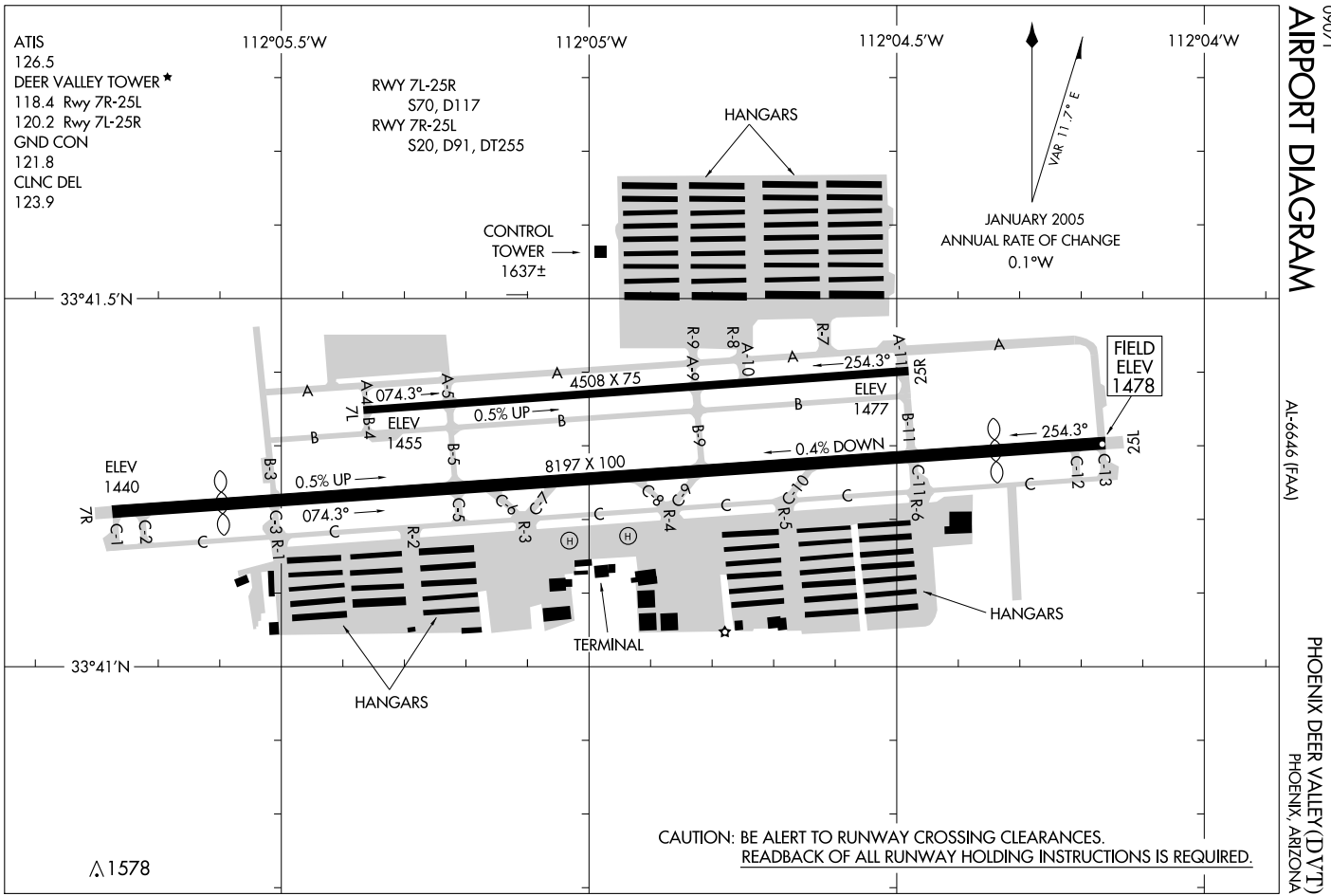
ELEV 5157





CATEGORY	A	B	C	D
CIRCLING	5720-1	563 (600-1)	5760-1¾ 603 (700-1¾)	5760-2 603 (700-2)

SW-4, 22 OCT 2009 to 19 NOV 2009


ATIS
126.5
DEER VALLEY TOWER ★
118.4 Rwy 7R-25L
120.2 Rwy 7L-25R
GND CON
121.8
CLNC DEL
123.9
RWY 7L-25R
S70, D117
RWY 7R-25L
S20, D91, DT255
112°05.5'W
112°05'W
112°04.5'W
112°04'W
HANGARS
VAR 11.7° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
CONTROL
TOWER
1637±
33°41.5'N
33°41'N
FIELD
ELEV
1478
4508 X 75
254.3°
074.3°
0.5% UP
ELEV
1455
ELEV
1477
0.4% DOWN
8197 X 100
ELEV
1440
0.5% UP
074.3°
254.3°
7L
25R
7R
25L
TERMINAL
HANGARS
HANGARS
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
1578

BLYTHE TRANSITION (BLH.ARLIN3): From over BLH VORTAC via BLH R-089 and IWA R-256 to ARLIN INT. Thence....

MOHAK TRANSITION (MOHAK.ARLIN3): From over MOHAK INT via GBN R-247 and BXK R-215 to HYDRR INT, then via IWA R-256 to ARLIN INT. Thence....

....From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect vectors after ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT. Expect vectors prior to TUKEE INT to final approach course.

SATELLITE AIRPORTS: Expect vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
PHOENIX SKY HARBOR ATIS
127.575
PHOENIX DEER VALLEY ATIS
126.5
SCOTTSDALE ATIS
118.6
FALCON FIELD ATIS
118.25
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
PHOENIX
115.6 PXR
Chan 103
N33°25.98' W111°58.21'
FALCON FIELD
PHOENIX-SKY HARBOR INTL
BUCKEYE
110.6 BXK
Chan 43
BLYTHE
117.4 BLH
Chan 121
N33°35.76' W114°45.67'
L-4-5, H-4
SCOLE
N33°27.76'-W114°04.91'
VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or below FL 250
HYDRR
N33°16.46'
W113°04.18'
AMBRR
N33°17.46'
W112°20.83'
STELLAR AIRPARK
PHOENIX-MESA GATEWAY
CHANDLER MUNI
FL 180
*5000
089°
(35)
11,000
*6000
089°
(48)
10,000
*4500
076°
(4)
10,000
*4500
(11)
(8)
076°
(17)
(15)
R-215
R-171
R-131
R-194
R-143
R-256
GBN R-025
N
MOHAK
N32°46.55'-W113°58.33'
L-5, H-4
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at or below FL 250
Turboprops expect to cross at or below 15,000
CALIE
N33°16.34'
W113°08.76'
PAYNT
N33°16.80'
W112°50.65'
Cross at 250K IAS
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at 11,000.
Turboprops expect to cross at 10,000.
ARLIN
N33°17.02'
W112°41.11'
ALEYS
N33°17.80'
W112°02.94'
TUKEE
N33°17.96'
W111°53.85'
WILLIE
113.3 IWA
Chan 80
10,000
*6500
035°
(42)
R-344
R-247
116.8 BZA
Chan 115
R-075
10,000
*6500
067°
(15)
JUDTH
N32°48.99'
W113°41.30'
GILA BEND
116.6 GBN
Chan 113

NOTE: BLYTHE TRANSITION for turbojet aircraft FL 240 and above. Turboprop aircraft plan BLYTHE FOUR ARRIVAL at or below FL 230.

NOTE: MOHAK TRANSITION for turbojet and turboprop aircraft.

NOTE: Chart not to scale.

BLYTHE TRANSITION (BLH.BLH4): From over BLH VORTAC via BLH R-082 to SALOM INT, then via GBN R-285 and IWA R-256 to ARLIN INT. Thence . . . .

. . . .From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect radar vectors after passing ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT, expect radar vectors prior to TUKEE INT to final approach course.

ALL SATELLITE AIRPORTS: Expect radar vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
FALCON FIELD ATIS
118.25
PHOENIX DEER VALLEY ATIS
126.5
PHOENIX SKY HARBOR ATIS
127.575
SCOTTSDALE ATIS
118.6
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
FALCON FIELD
PHOENIX-SKY HARBOR INTL

BLYTHE
117.4 BLH
Chan 121
N33°35.76′ W114°45.67′
L-4-5, H-4

SALOM
N33°30.97′ - W113°53.33
VERTICAL NAVIGATION PLANNING INFORMATION
Turboprop aircraft expect to cross at or below 17,000′

BUCKEYE
110.6 BXK
Chan 43

PHOENIX
115.6 PXR
Chan 103
N33°25.98′ W111°58.21′

10,000
*5800
082°
(44)

10,000
*5200
105°
(31)

HYDRR
N33°16.46′
W113°04.18′

10,000
*4800
076°
(14)

SADLL
N33°16.01′
W113°20.71

10,000
*4500
(11)

ARLIN
N33°17.02′
W112°41.11′

AMBRR
N33°17.46′
W112°20.83′

076°
(17)

(8)

STELLAR AIRPARK

ALEYS
N33°17.80′
W112°02.94′

PAYNT
N33°16.80′-W112°50.65′

TUKEE
N33°17.96′
W111°53.85′

(15)

(8)

CHANDLER MUNI

PHOENIX-MESA GATEWAY

R-256

R-194
R-143
(19)
R-215
R-171
R-131
R-025
R-285
GBN R-344
GBN R-025

85
71
39
60
52
35
20

Turbojets: Cross at 250K IAS.
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect to cross at 11,000.
Turboprops: Expect to cross at 10,000.

BARD
116.8 BZA
Chan 115

WILLIE
113.3 IWA
Chan 80

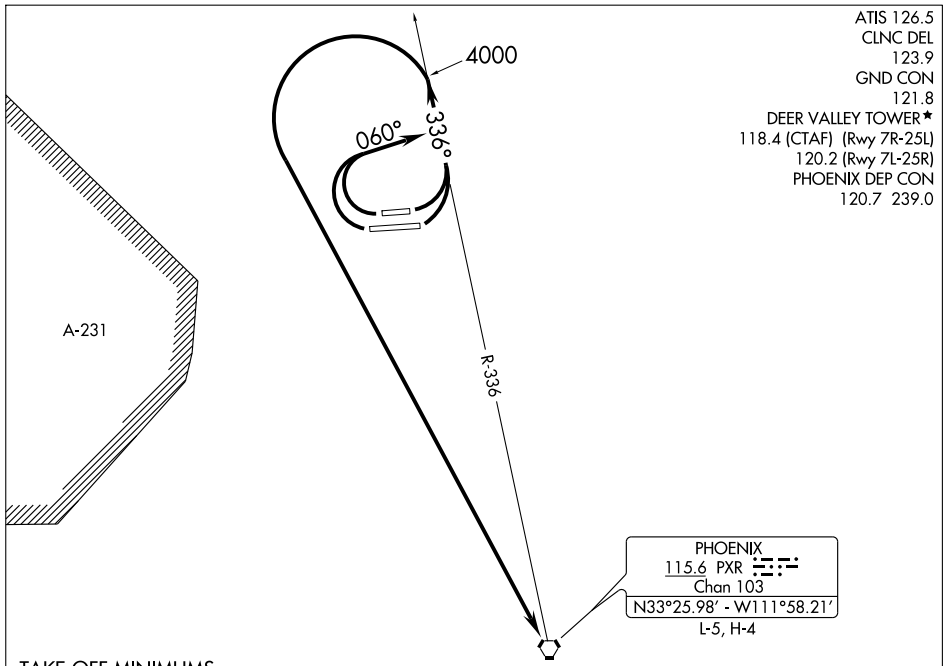
GILA BEND
116.6 GBN
Chan 113

N

NOTE: Blythe Arrival for aircraft FL 230 or below.

NOTE: Chart not to scale.

DEERVALLEY ONE DEPARTURE (OBSTACLE)



TAKE-OFF MINIMUMS

Rwy 7L: Standard with minimum climb of 565' per NM to 2800, or 1000-3 with minimum climb of 370' per NM to 2800, or 1500-3 for climb in visual conditions.

Rwy 7R: 500-1¼ with minimum climb of 488' per NM to 2800, or 1500-3 for climb in visual conditions.

Rwy 25R: Standard with minimum climb of 487' per NM to 2800, or 1500-3 for climb in visual conditions.

Rwy 25L: Standard with minimum climb of 451' per NM to 2800, or 1500-3 for climb in visual conditions.

TAKE-OFF OBSTACLE NOTES

RWY 7L: Multiple poles and vegetation beginning 912' from DER, 125' left of centerline, up to 30' AGL/2423' MSL.
Cactus 3824' from DER, 96' right of centerline, 16' AGL/1596' MSL.
Windsock 340' from DER, 354' right of centerline, 9' AGL/1488' MSL.

RWY 7R: Multiple antennas and vegetation beginning 546' from DER, 267' left of centerline, up to 52' AGL/1952' MSL.
Multiple antennas and vegetation beginning 978' from DER, 431' right of centerline, up to 40' AGL/1609' MSL.

RWY 25R: Multiple antennas beginning 1.4 NM from DER, 1847' right of centerline, up to 96' AGL/1806' MSL.

RWY 25L: Pole 1127' from DER, 498' right of centerline, 36' AGL/1475' MSL.
Pole 1184' from DER, 495' left of centerline, 32' AGL/1471' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7L/R: Climbing left turn via PXR VORTAC R-336 northwestbound to 4000. Thence....Or, climb in visual conditions to cross Phoenix Deer Valley Airport at or above 2800, then via PXR VORTAC R-336 northwestbound to 4000. Thence....

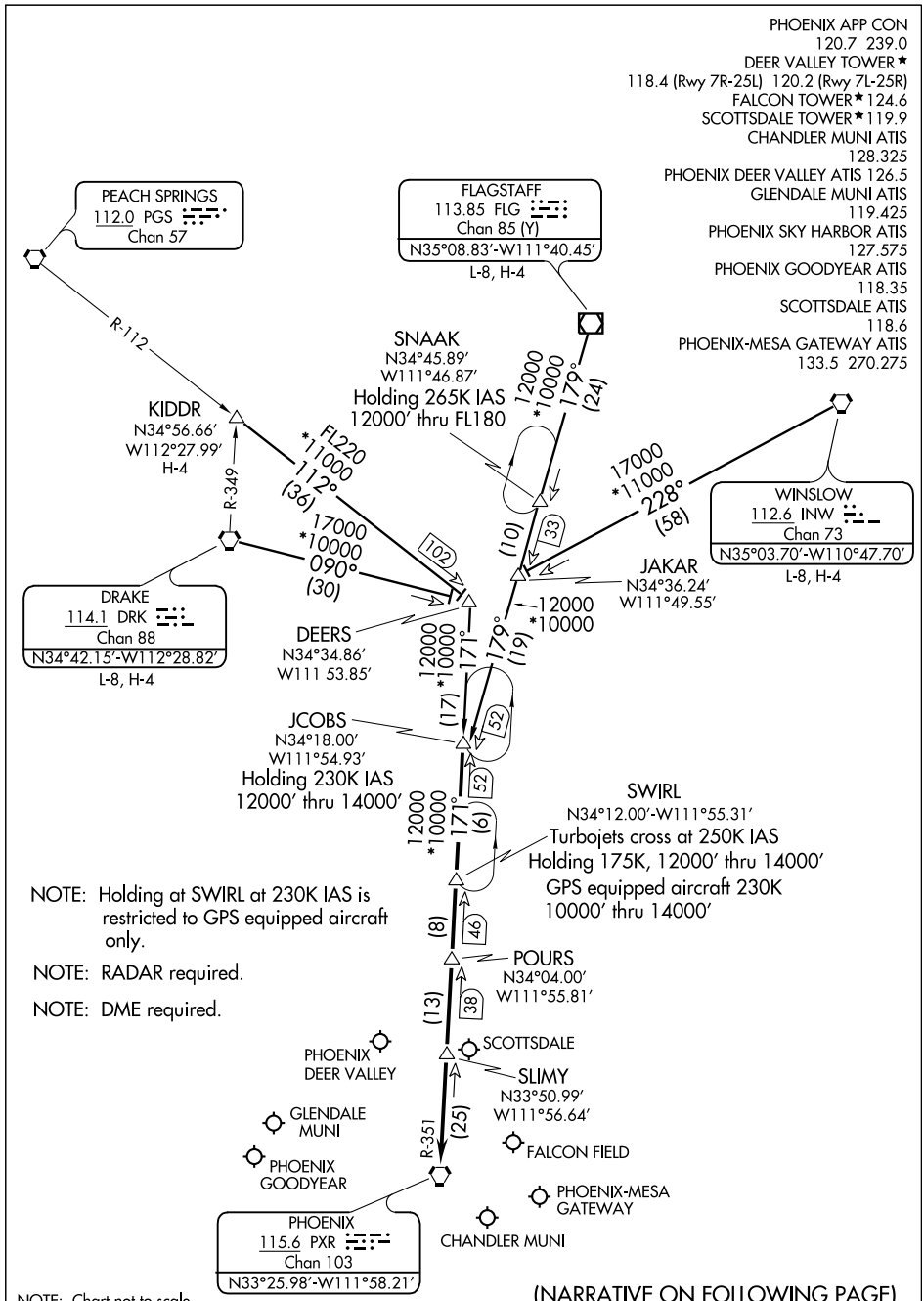
TAKE-OFF RUNWAYS 25L/R: Climbing right turn via heading 060° and PXR VORTAC R-336 northwestbound to 4000. Thence....Or, climb in visual conditions to cross Phoenix Deer Valley Airport at or above 2800, then via PXR VORTAC R-336 northwestbound to 4000. Thence....

....climbing left turn direct PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

JCOBS TWO ARRIVAL

SCOTTSDALE, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

JCOBS TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

DRAKE TRANSITION (DRK.JCOBS2): From over DRK VORTAC via DRK R-090 to DEERS INT, then via PXR R-351 to JCOBS INT. Thence....

FLAGSTAFF TRANSITION (FLG.JCOBS2): From over FLG VOR/DME via FLG R-179 to JCOBS INT. Thence....

KIDDR TRANSITION (KIDDR.JCOBS2): From over KIDDR INT via PGS R-112 to DEERS INT then via PXR R-351 to JCOBS INT. Thence....

WINSLOW TRANSITION (INW.JCOBS2): From over INW VORTAC via INW R-228 to JAKAR INT, then via FLG R-179 to JCOBS INT. Thence....

... From over JCOBS INT via PXR R-351 to SWIRL DME, then via PXR R-351 to SLIMY DME, then direct PXR VORTAC. After POURS, expect radar vectors to final approach course.

LOST COMMUNICATIONS: From DRK VORTAC via DRK R-090 to intercept PXR R-351at DEERS INT direct PXR VORTAC. From FLG VORTAC, proceed direct to JCOBS INT then direct PXR VORTAC. From KIDDR INT to DEERS INT via PGS R-112 to intercept PXR R-351 to PXR VORTAC. From INW VORTAC to JAKAR INT via INW R-228 to intercept FLG R-179 to JCOBS INT to intercept PXR R-351 to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

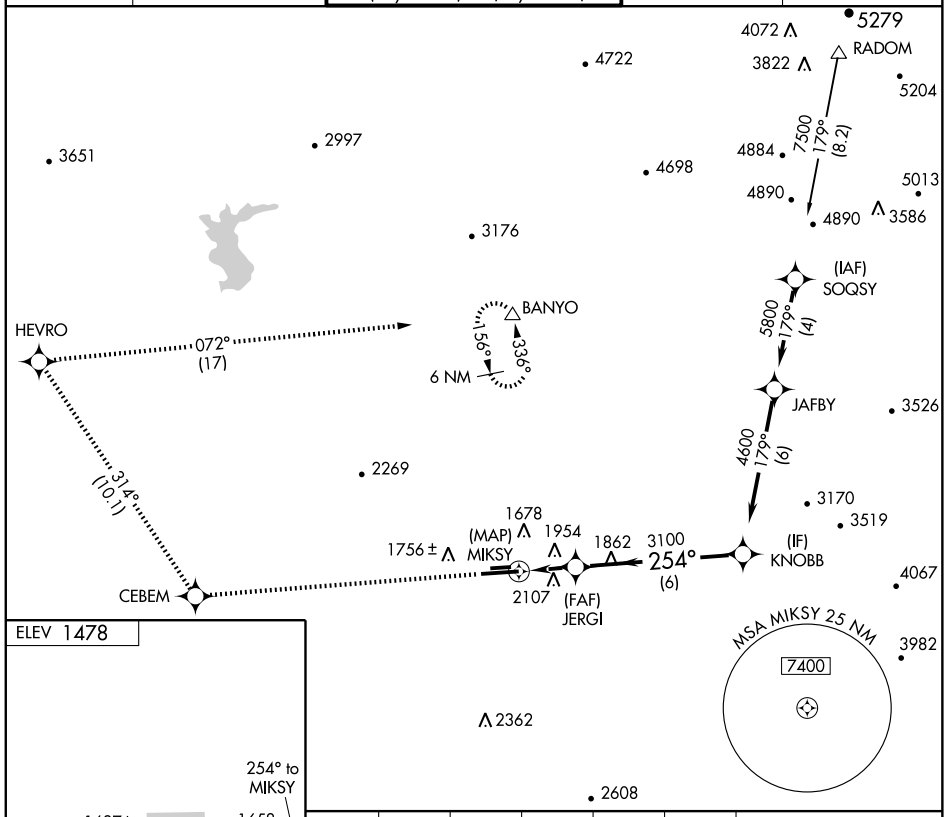
APP CRS	Rwy Idg	N/A
254°	TDZE	N/A
	Apt Elev	1478

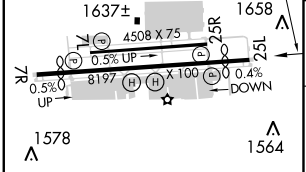
RNAV (GPS)-B
PHOENIX DEER VALLEY (DVT)

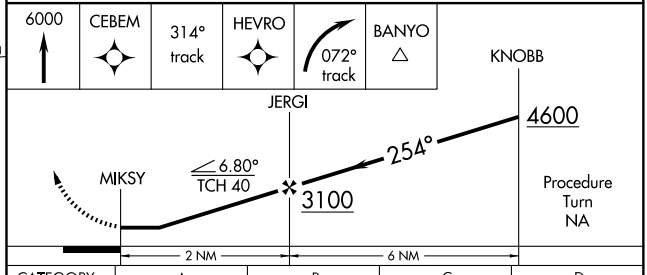
DME/DME RNP-0.3 NA.
When VGSI inop, circling to Rwy 25R NA at night.
Circling not authorized at night north of Rwy 7R-25L.
If local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting and increase all MDAs 100 feet.

MISSED APPROACH: Climb to 6000 direct CEBEM and via 314° track to HEVRO, and right turn via 072° track to BANYO and hold.

ATIS	PHOENIX APP CON	DEER VALLEY TOWER ★	GND CON	CLNC DEL
126.5	120.7 239.0	118.4 (CTAF) (Rwy 7R-25L) 120.2 (Rwy 7L-25R)	121.8	123.9







CATEGORY	A	B	C	D
CIRCLING	2400-1¼ 922 (1000-1¼)	2420-1¼ 942 (1000-1¼)	2420-2¾ 942 (1000-2¾)	NA

MIRL Rwys 7L-25R and 7R-25L
REIL Rwys 7L, 7R, 25L, and 25R

SW-4, 22 OCT 2009 to 19 NOV 2009

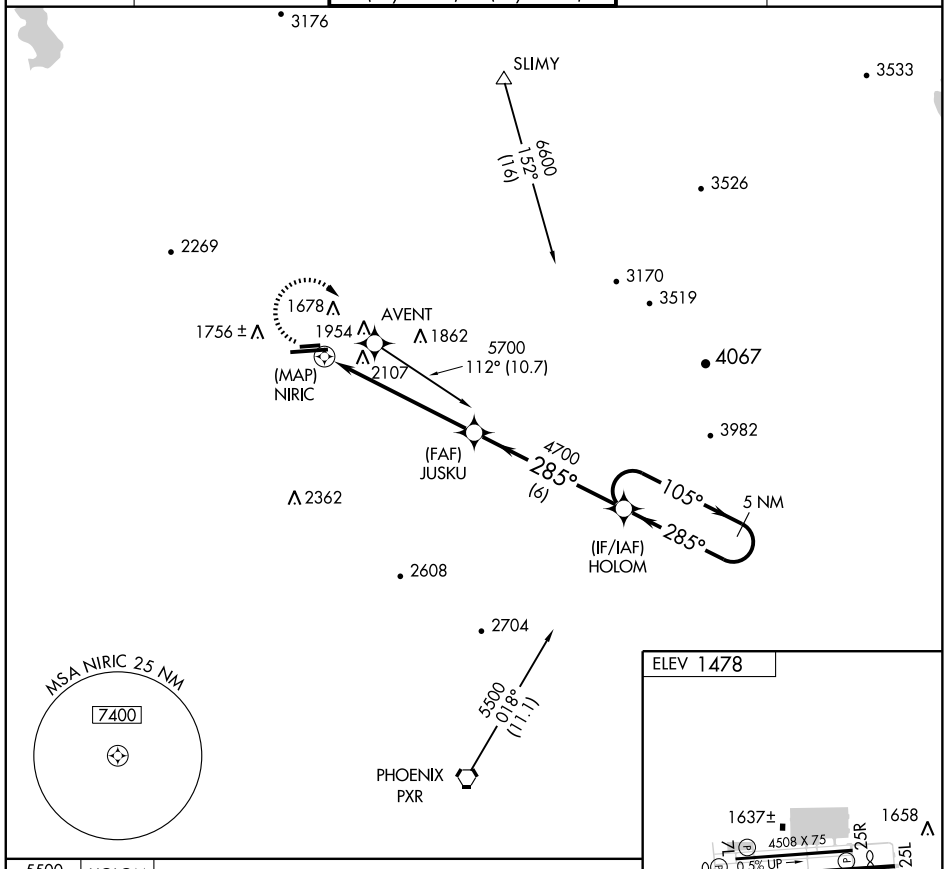
APP CRS	Rwy Idg	N/A
285°	TDZE	N/A
	Apt Elev	1478

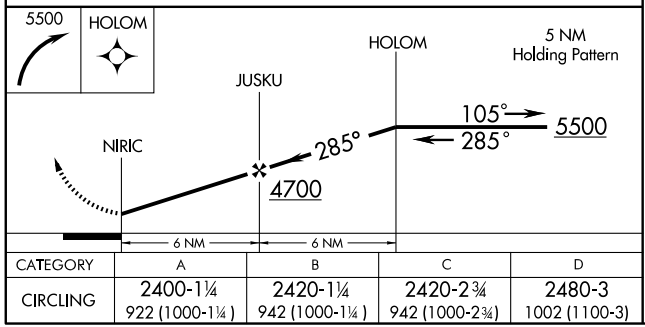
RNAV (GPS)-C
PHOENIX DEER VALLEY (DVT)

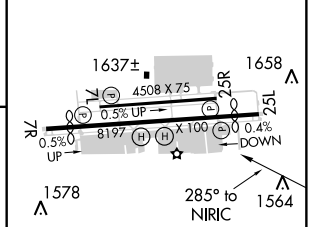
DME/DME RNP-0.3 NA.
Circling not authorized north of Rwy 7R-25L at night.
When VGSI inoperative, circling to Rwy 25R not authorized at night.

MISSED APPROACH: Climbing right turn to 5500 direct HOLOM and hold, continue climb-in-hold to 5500.

ATIS	PHOENIX APP CON	DEER VALLEY TOWER ★		GND CON	CLNC DEL
126.5	120.7 239.0	118.4 (CTAF) (Rwy 7R-25L)	120.2 (Rwy 7L-25R)	121.8	123.9







CATEGORY	A	B	C	D
CIRCLING	2400-1¼ 922 (1000-1¼)	2420-1¼ 942 (1000-1¼)	2420-2¾ 942 (1000-2¾)	2480-3 1002 (1100-3)

MIRL Rwys 7L-25R and 7R-25L
REIL Rwys 7L, 7R, 25L, and 25R

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS		
074°	Rwy Idg	7299
	TDZE	1460
	Apt Elev	1478

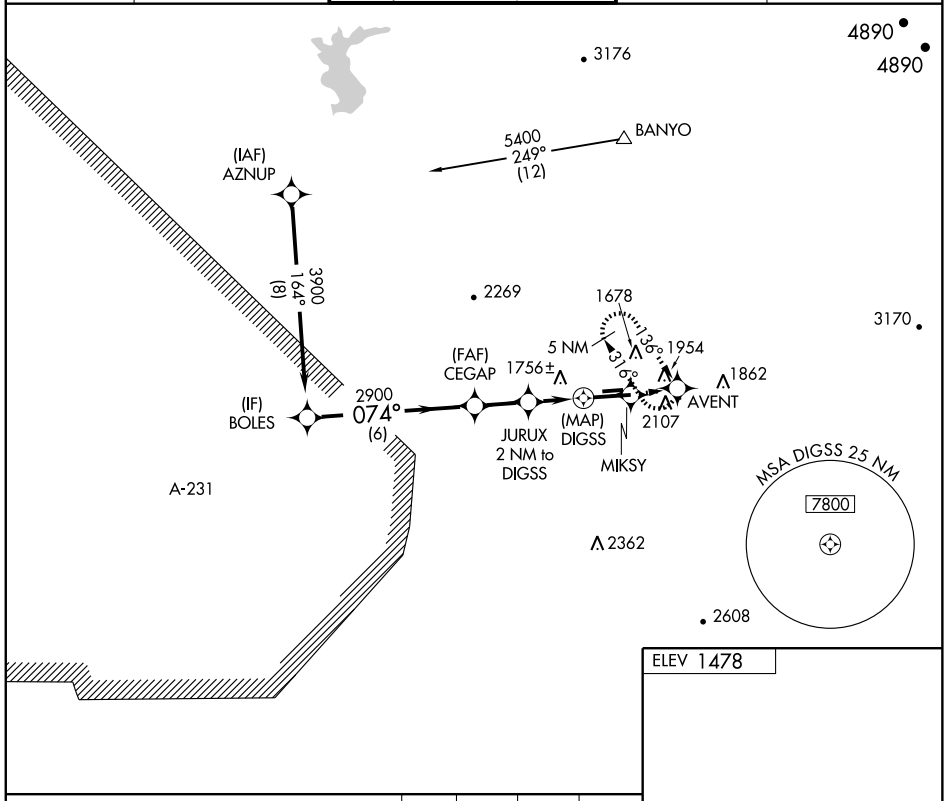
RNAV (GPS) RWY 7R

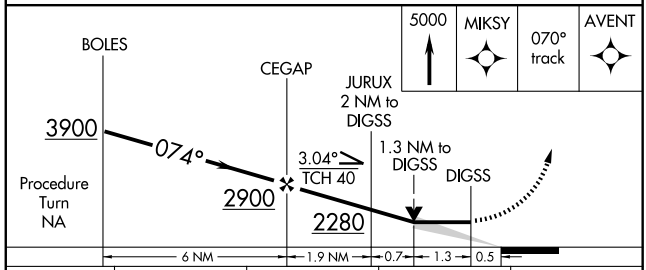
PHOENIX DEER VALLEY (DVT)

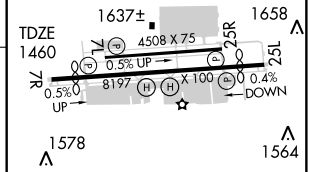
DME/DME RNP-0.3 NA.
Circling not authorized north of Rwy 7R-25L at night.
When VGSI inoperative, circling to Rwy 25R not authorized at night.

MISSED APPROACH: Climb to 5000 direct MIKSY and via 070° track to AVENT and hold, continue climb-in-hold to 5000.

ATIS	PHOENIX APP CON	DEER VALLEY TOWER ★		GND CON	CLNC DEL
126.5	120.7 239.0	118.4 (CTAF) (Rwy 7R-25L)	120.2 (Rwy 7L-25R)	121.8	123.9







CATEGORY	A	B	C	D
LNAV MDA	2060-1 600 (600-1)		2060-1½ 600 (600-1½)	2060-1¾ 600 (600-1¾)
CIRCLING	2400-1¼ 922 (1000-1¼)	2420-1¼ 942 (1000-1¼)	2420-2¾ 942 (1000-2¾)	2420-3 942 (1000-3)

MIRL Rwys 7L-25R and 7R-25L
REIL Rwys 7L, 7R, 25L, and 25R

SW-4, 22 OCT 2009 to 19 NOV 2009

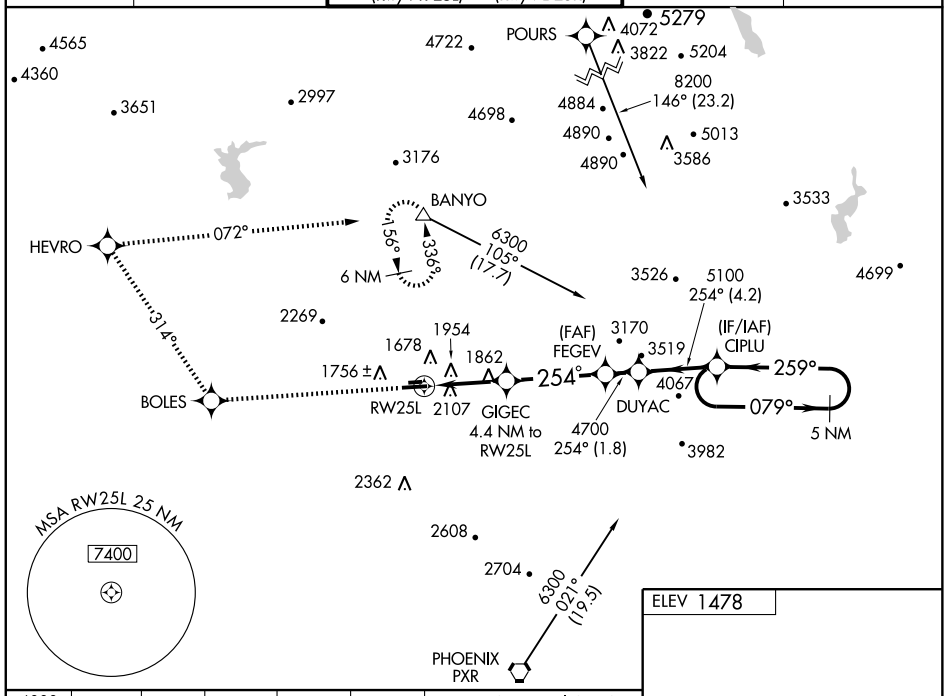
WAAS CH 90117 W25A	APP CRS 254°	Rwy Idg 7280 TDZE 1475 Apt Elev 1478

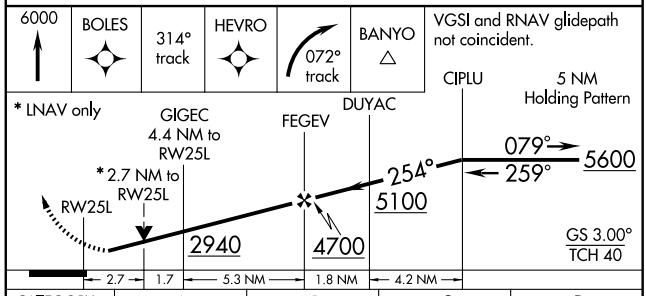
RNAV (GPS) RWY 25L
PHOENIX DEER VALLEY (DVT)

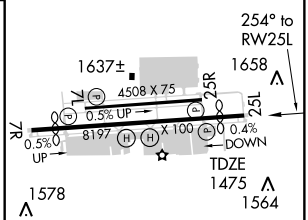
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
Circling not authorized north of Rwy 7R-25L at night.
When VGSI inoperative, circling to Rwy 25R not authorized at night.
If local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting and increase all DAs/MDAs 100 feet.
VDP NA when using Phoenix Sky Harbor Intl altimeter setting.

MISSED APPROACH: Climb to 6000 direct BOLES, and via 314° track to HEVRO, and right turn via 072° track to BANYO and hold.

ATIS	PHOENIX APP CON	DEER VALLEY TOWER★		GND CON	CLNC DEL
126.5	120.7 239.0	118.4 (CTAF) (Rwy 7R-25L)	120.2 (Rwy 7L-25R)	121.8	123.9







CATEGORY	A	B	C	D
LPV DA	1850-1¼ 375 (400-1¼)			
LNAV MDA	2360-1¼ 885 (900-1¼)		2360-2¾ 885 (900-2¾)	2360-3 885 (900-3)
CIRCLING	2400-1¼ 922 (1000-1¼)	2420-1¼ 942 (1000-1¼)	2420-2¾ 942 (1000-2¾)	2420-3 942 (1000-3)

MIRL Rwys 7L-25R and 7R-25L
REIL Rwys 7L, 7R, 25L, and 25R

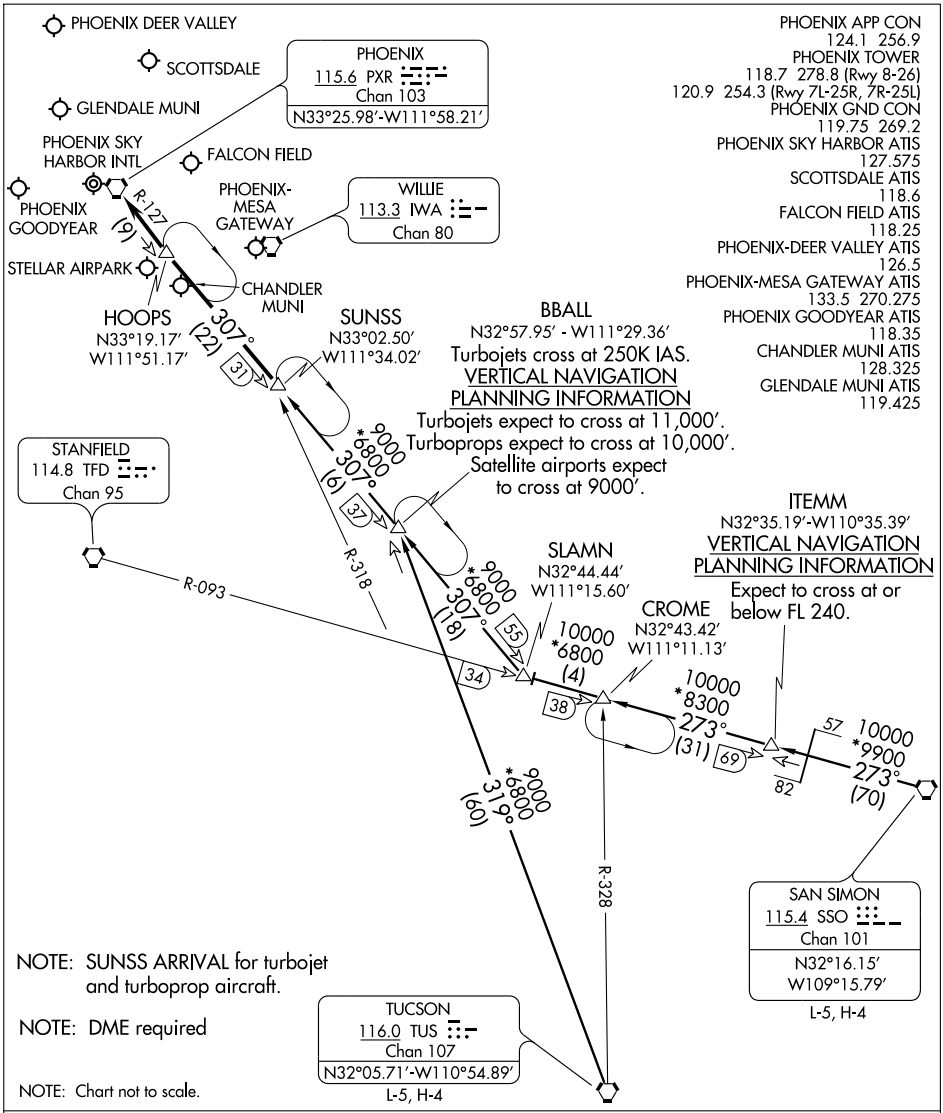
SW-4, 22 OCT 2009 to 19 NOV 2009

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

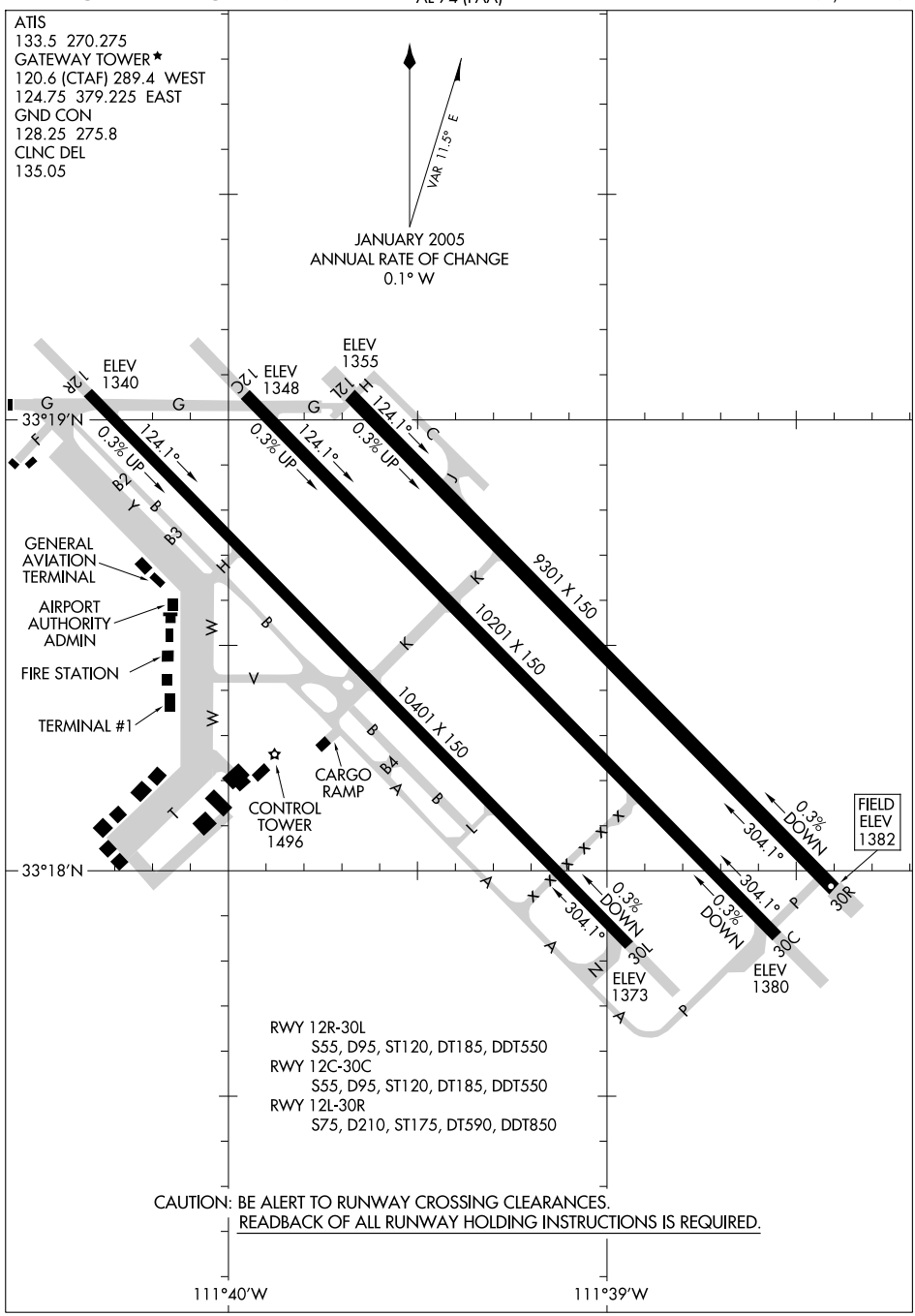
TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

AIRPORT DIAGRAM

AL-74 (FAA)

PHOENIX-MESA GATEWAY (IWA)
PHOENIX, ARIZONA



SW-4, 22 OCT 2009 to 19 NOV 2009

BLYTHE TRANSITION (BLH.ARLIN3): From over BLH VORTAC via BLH R-089 and IWA R-256 to ARLIN INT. Thence....

MOHAK TRANSITION (MOHAK.ARLIN3): From over MOHAK INT via GBN R-247 and BXK R-215 to HYDRR INT, then via IWA R-256 to ARLIN INT. Thence....

....From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect vectors after ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT. Expect vectors prior to TUKEE INT to final approach course.

SATELLITE AIRPORTS: Expect vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
PHOENIX SKY HARBOR ATIS
127.575
PHOENIX DEER VALLEY ATIS
126.5
SCOTTSDALE ATIS
118.6
FALCON FIELD ATIS
118.25
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
PHOENIX
115.6 PXR
Chan 103
N33°25.98' W111°58.21'
FALCON FIELD
PHOENIX-SKY HARBOR INTL
BUCKEYE
110.6 BXK
Chan 43
BLYTHE
117.4 BLH
Chan 121
N33°35.76' W114°45.67'
L-4-5, H-4
SCOLE
N33°27.76'-W114°04.91'
VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or below FL 250
HYDRR
N33°16.46'
W113°04.18'
AMBRR
N33°17.46'
W112°20.83'
STELLAR AIRPARK
PHOENIX-MESA GATEWAY
CHANDLER MUNI
FL 180
*5000
089°
(35)
11,000
*6000
089°
(48)
10,000
*4500
076°
(4)
10,000
*4500
(11)
(8)
076°
(17)
(15)
R-215
R-171
R-131
R-194
R-143
R-256
GBN R-025
N
MOHAK
N32°46.55'-W113°58.33'
L-5, H-4
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at or below FL 250
Turboprops expect to cross at or below 15,000
CALIE
N33°16.34'
W113°08.76'
PAYNT
N33°16.80'
W112°50.65'
Cross at 250K IAS
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at 11,000.
Turboprops expect to cross at 10,000.
ARLIN
N33°17.02'
W112°41.11'
ALEYS
N33°17.80'
W112°02.94'
TUKEE
N33°17.96'
W111°53.85'
WILLIE
113.3 IWA
Chan 80
10,000
*6500
035°
(42)
R-344
R-247
116.8 BZA
Chan 115
R-075
10,000
*6500
067°
(15)
JUDTH
N32°48.99'
W113°41.30'
GILA BEND
116.6 GBN
Chan 113

NOTE: BLYTHE TRANSITION for turbojet aircraft FL 240 and above. Turboprop aircraft plan BLYTHE FOUR ARRIVAL at or below FL 230.

NOTE: MOHAK TRANSITION for turbojet and turboprop aircraft.

NOTE: Chart not to scale.

BLYTHE TRANSITION (BLH.BLH4): From over BLH VORTAC via BLH R-082 to SALOM INT, then via GBN R-285 and IWA R-256 to ARLIN INT. Thence . . . .

. . . .From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect radar vectors after passing ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT, expect radar vectors prior to TUKEE INT to final approach course.

ALL SATELLITE AIRPORTS: Expect radar vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
FALCON FIELD ATIS
118.25
PHOENIX DEER VALLEY ATIS
126.5
PHOENIX SKY HARBOR ATIS
127.575
SCOTTSDALE ATIS
118.6
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
FALCON FIELD
PHOENIX-SKY HARBOR INTL

BLYTHE
117.4 BLH
Chan 121
N33°35.76′ W114°45.67′
L-4-5, H-4

SALOM
N33°30.97′ - W113°53.33
VERTICAL NAVIGATION PLANNING INFORMATION
Turboprop aircraft expect to cross at or below 17,000′

BUCKEYE
110.6 BXK
Chan 43

PHOENIX
115.6 PXR
Chan 103
N33°25.98′ W111°58.21′

10,000
*5800
082°
(44)

10,000
*5200
105°
(31)

HYDRR
N33°16.46′
W113°04.18′

10,000
*4800
076°
(14)

SADLL
N33°16.01′
W113°20.71

10,000
*4500
(11)

ARLIN
N33°17.02′
W112°41.11′

AMBRR
N33°17.46′
W112°20.83′

076°
(17)

(8)

STELLAR AIRPARK

ALEYS
N33°17.80′
W112°02.94′

PAYNT
N33°16.80′-W112°50.65′

TUKEE
N33°17.96′
W111°53.85′

(15)

(8)

CHANDLER MUNI

PHOENIX-MESA GATEWAY

R-256

R-194
R-143
(19)
R-215
R-171
R-131
R-025
R-285
GBN R-344
GBN R-025

85
71
39
60
52
35
20

Turbojets: Cross at 250K IAS.
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect to cross at 11,000.
Turboprops: Expect to cross at 10,000.

BARD
116.8 BZA
Chan 115

WILLIE
113.3 IWA
Chan 80

GILA BEND
116.6 GBN
Chan 113

N

NOTE: Blythe Arrival for aircraft FL 230 or below.

NOTE: Chart not to scale.

HI-ILS RWY 30C

LOC I-IWA	APCH CRS	Rwy ldg / TDZE / Arpt Elev
110.15	303°	10,201 / 1380 / 1382

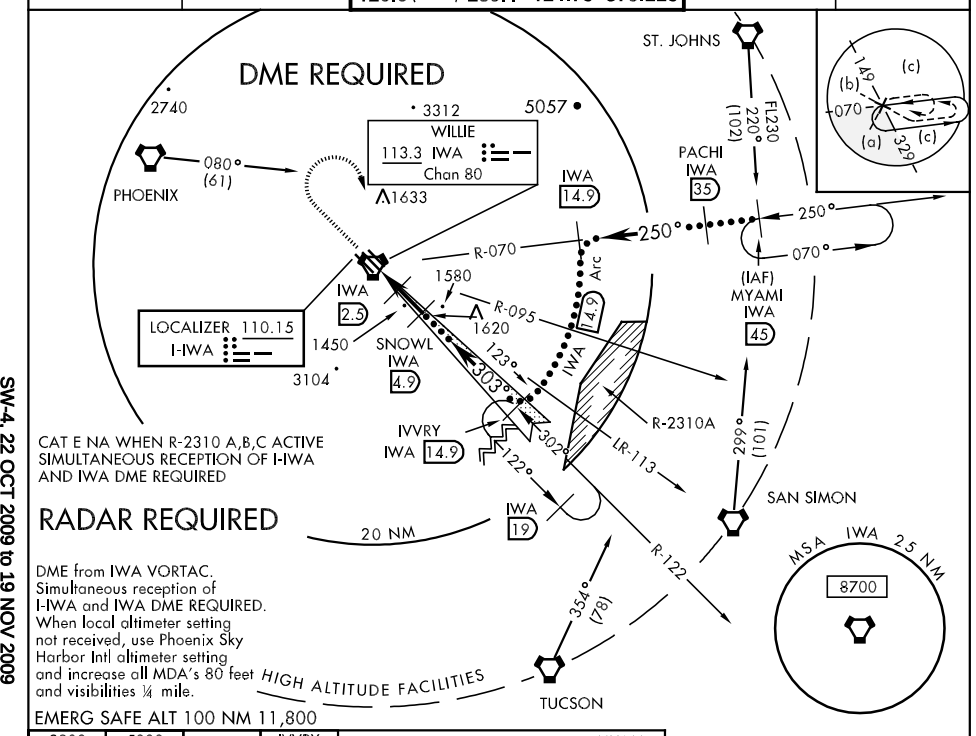
JAL-74 [USAF]

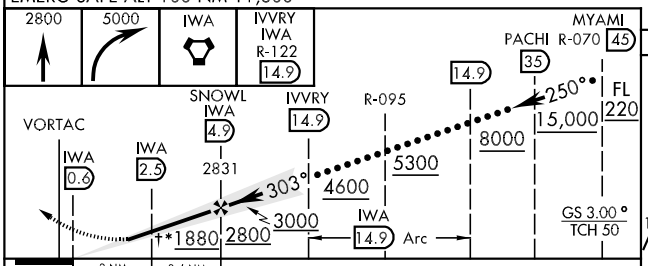
PHOENIX-MESA GATEWAY (KIWA)

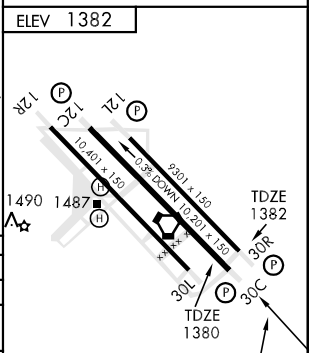
▼ *1960 when using Phoenix Sky Harbor Intl altimeter setting.
† LOC only

MISSED APPROACH: Climb to 2800 then climbing right turn to 5000 direct IWA VORTAC then via IWA R-122 to IVVRY 14.9 DME and hold.

ATIS	PHOENIX APP CON	GATEWAY TOWER ★ WEST	GATEWAY TOWER ★ EAST	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4	124.75 379.225	128.25 275.8	128.25 275.8







CATEGORY	C	D	E
S-ILS 30C	1580- ¾	200	(200- ¾)
S-LOC 30C	1700-1	320	(400-1)
SIDESTEP 30R	1700-1½ 318 (400-1½)	1700-2 318	(400-2)
CIRCLING	1840-1½ 458 (500-1½)	1940-2 558	(600-2)

HI-VOR/DME or TACAN RWY 30C

TACAN IWA Chan 80	APCH CRS 302°	Rwy ldg 10,201 TDZE 1380 Arpt Elev 1382

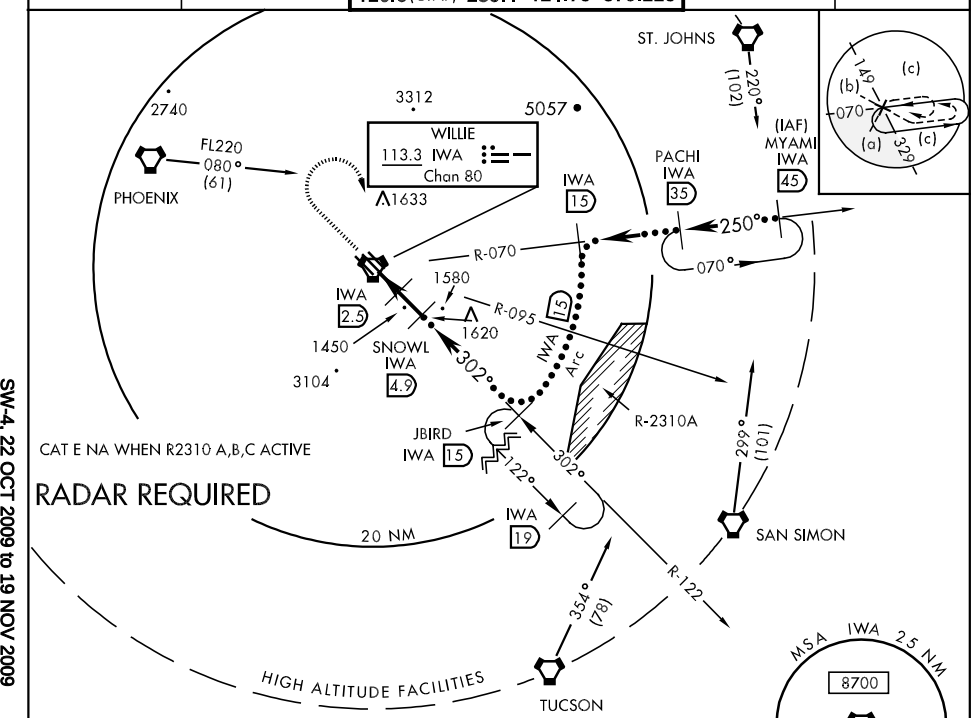
JAL-74 [USAF]

PHOENIX-MESA GATEWAY (KIWA)

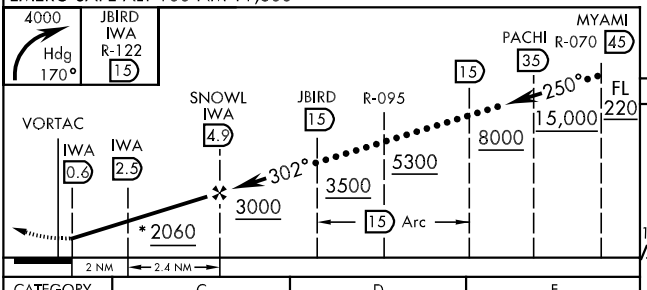
When local altimeter not received, use Phoenix Sky Harbor Intl altimeter setting and increase all MDA's 80 feet and visibilities ¼ mile.
* 2140 when using Phoenix Sky Harbor Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 4000 via heading 170° and IWA R-122 to JBIRD 15 DME and hold.

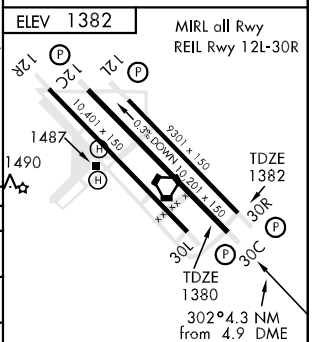
ATIS	PHOENIX APP CON	GATEWAY TOWER ★ WEST	GATEWAY TOWER ★ EAST	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4	124.75 379.225	128.25 275.8	128.25 275.8



EMERG SAFE ALT 100 NM 11,800



CATEGORY	C	D	E
S-30C	1700-¾ 320	(400-¾)	1700-1¼ 320 (400-1¼)
SIDESTEP 30R	1700-1½ 318 (400-1½)	1700-2 318 (400-2)	
CIRCLING	1840-1½ 458 (500-1½)	1940-2 558 (600-2)	



PHOENIX, ARIZONA

AL-74 (FAA)

LOC I-IWA	APP CRS	Rwy Idg	10201
110.15	303°	TDZE	1380
		Apt Elev	1382

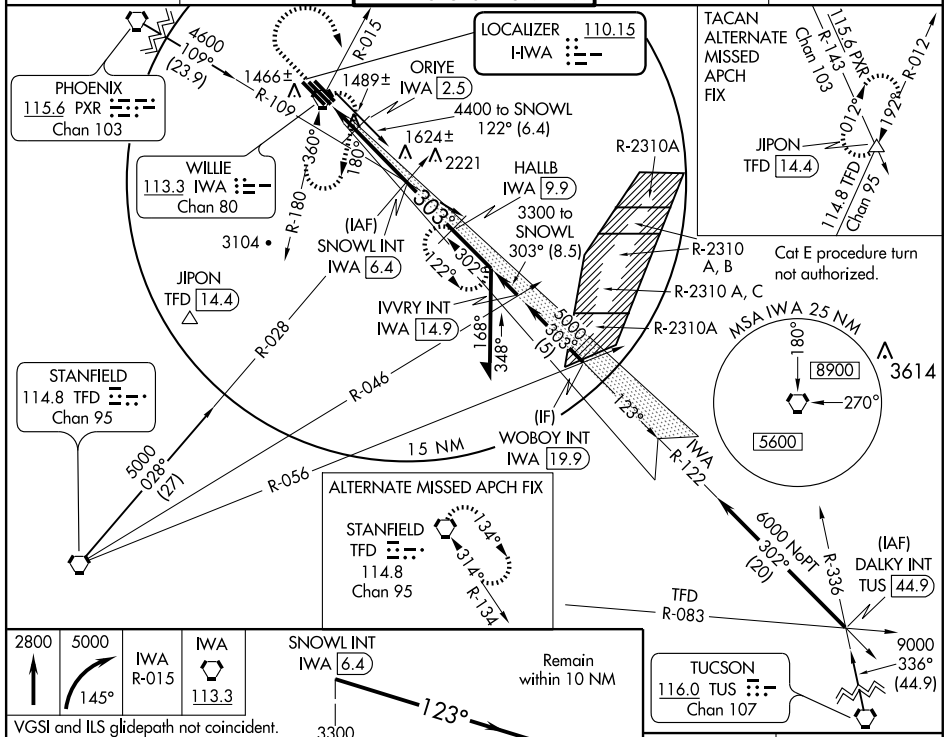
ILS or LOC RWY 30C

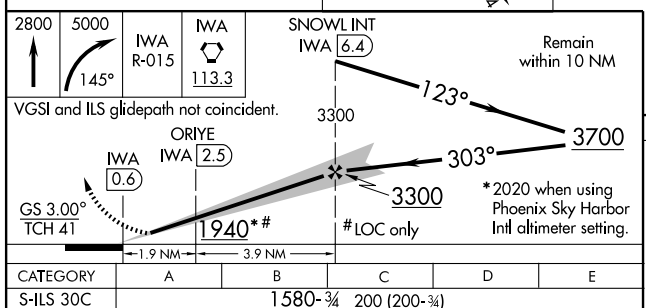
PHOENIX-MESA GATEWAY (IWA)

When local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting and increase all DA/MDA 80 feet, increase S-ILS 30C, S-LOC 30C all Cats visibility ¼ mile, circling Cats A/B/C visibility ¼ mile, Cat E ½ mile.

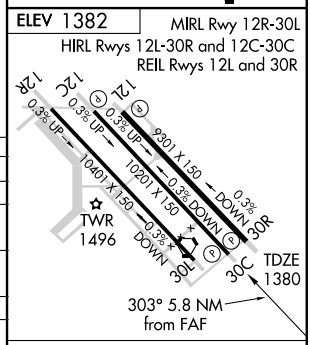
MISSED APPROACH: Climb to 2800 then climbing right turn to 5000 via heading 145° and IWA VORTAC R-015 to IWA VORTAC and hold, continue climb-in-hold to 5000 (TACAN aircraft continue via IWA VORTAC R-122 to HALLB/9.9 DME and hold, continue climb-in-hold to 5000, hold SE, LT, 302° inbound).

ATIS	PHOENIX APP CON	GATEWAY TOWER ★	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4 (WEST) 124.75 379.225 (EAST)	128.25 275.8	135.05





CATEGORY	A	B	C	D	E
S-ILS 30C	1580-¾ 200 (200-¾)				
S-LOC 30C	1940-1 560 (600-1)		1940-1½ 560 (600-1½)	1940-1¾ 560 (600-1¾)	1940-2 560 (600-2)
CIRCLING	1940-1 558 (600-1)		1940-1½ 558 (600-1½)	1940-2 558 (600-2)	1980-2 598 (600-2)
ORIYE FIX MINIMUMS					
S-LOC 30C	1800-1 420 (500-1)		1800-1¼ 420 (500-1¼)		1800-1½ 420 (500-1½)
CIRCLING	1800-1 418 (500-1)	1840-1 458 (500-1)	1840-1½ 458 (500-1½)	1940-2 558 (600-2)	1980-2 598 (600-2)



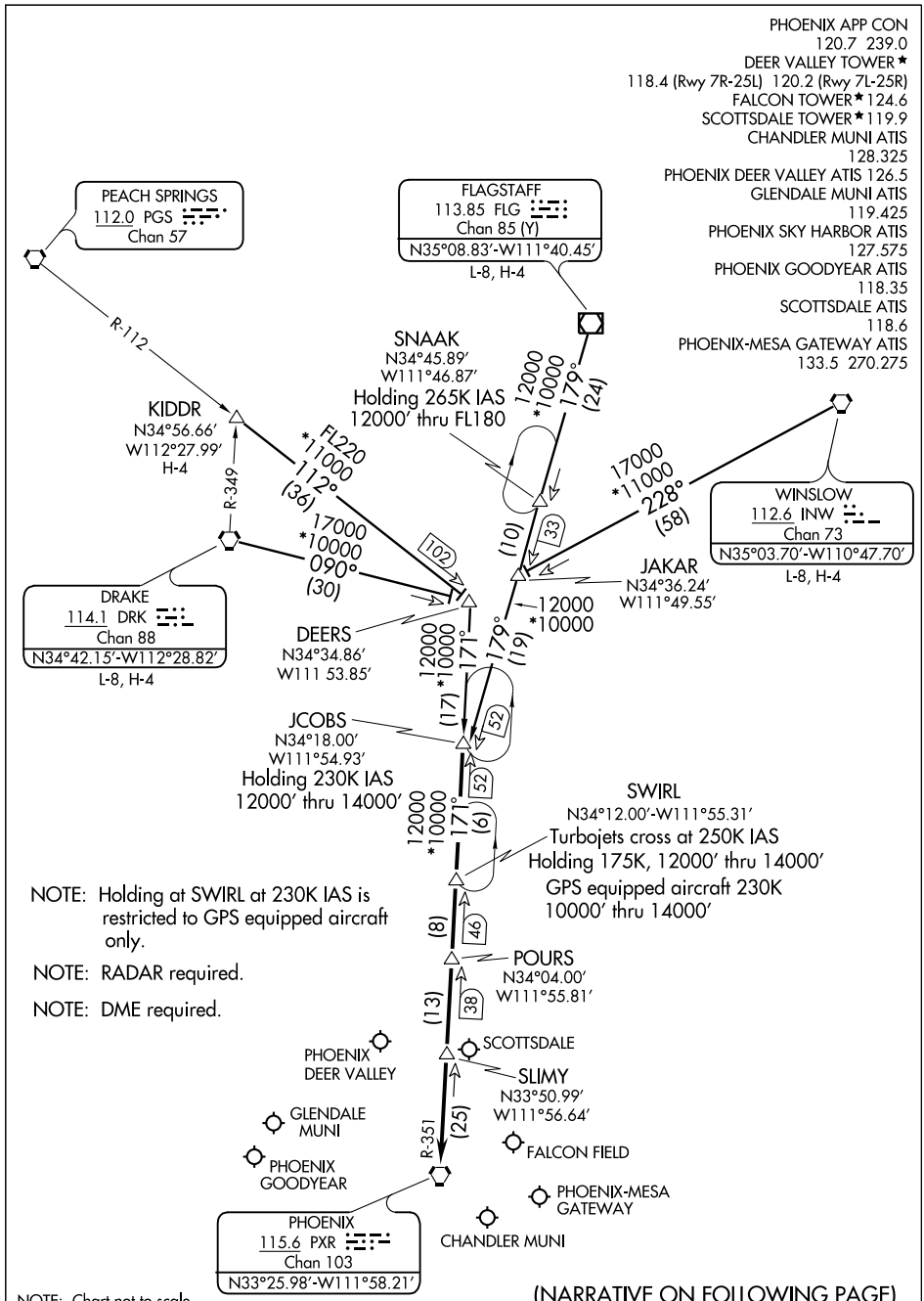
FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

SW-4, 22 OCT 2009 to 19 NOV 2009

JCOBS TWO ARRIVAL

SCOTTSDALE, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

JCOBS TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

DRAKE TRANSITION (DRK.JCOBS2): From over DRK VORTAC via DRK R-090 to DEERS INT, then via PXR R-351 to JCOBS INT. Thence....

FLAGSTAFF TRANSITION (FLG.JCOBS2): From over FLG VOR/DME via FLG R-179 to JCOBS INT. Thence....

KIDDR TRANSITION (KIDDR.JCOBS2): From over KIDDR INT via PGS R-112 to DEERS INT then via PXR R-351 to JCOBS INT. Thence....

WINSLOW TRANSITION (INW.JCOBS2): From over INW VORTAC via INW R-228 to JAKAR INT, then via FLG R-179 to JCOBS INT. Thence....

... From over JCOBS INT via PXR R-351 to SWIRL DME, then via PXR R-351 to SLIMY DME, then direct PXR VORTAC. After POURS, expect radar vectors to final approach course.

LOST COMMUNICATIONS: From DRK VORTAC via DRK R-090 to intercept PXR R-351at DEERS INT direct PXR VORTAC. From FLG VORTAC, proceed direct to JCOBS INT then direct PXR VORTAC. From KIDDR INT to DEERS INT via PGS R-112 to intercept PXR R-351 to PXR VORTAC. From INW VORTAC to JAKAR INT via INW R-228 to intercept FLG R-179 to JCOBS INT to intercept PXR R-351 to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-74 (FAA)

WAAS	APP CRS	Rwy Idg	10201
CH 58200	123°	TDZE	1358
W12A		Apt Elev	1382

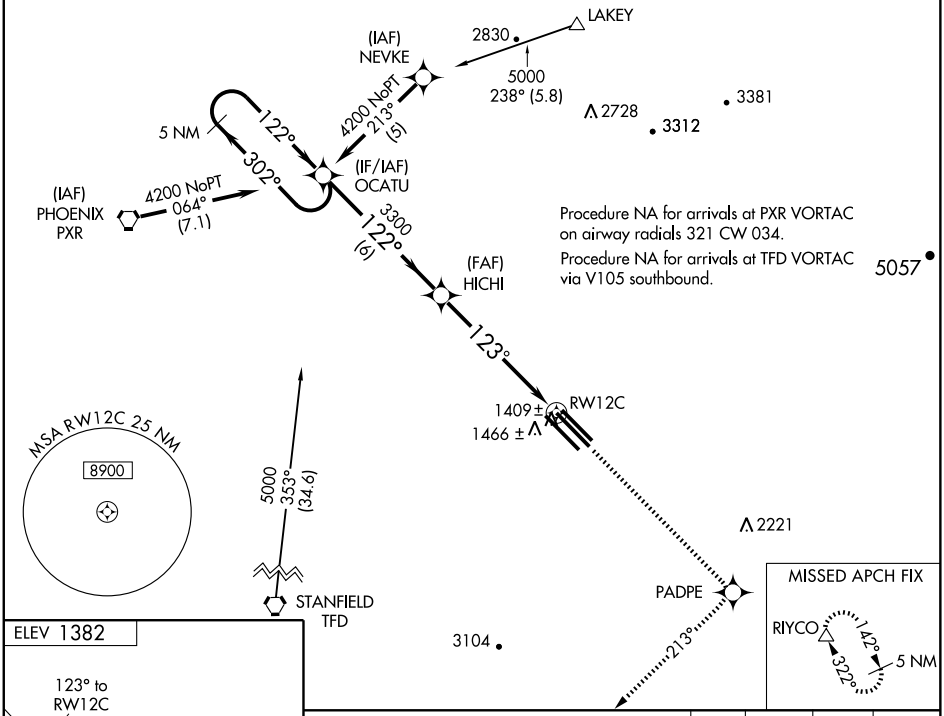
RNAV (GPS) RWY 12C

PHOENIX-MESA GATEWAY (IWA)

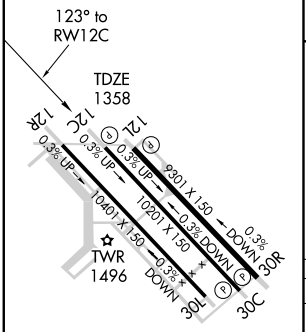
DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems LNAV/VNAV NA below -17°C (2°F) or above 46°C (115°F).

MISSED APPROACH: Climb to 5000 direct PADPE and via 213° track to RIYCO and hold.

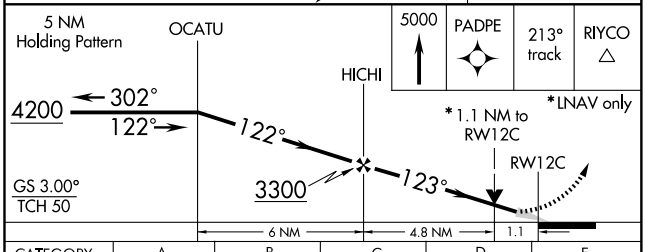
ATIS	PHOENIX APP CON	GATEWAY TOWER ★	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4 (WEST) 124.75 379.225 (EAST)	128.25 275.8	135.05



ELEV 1382



MIRL Rwy 12R-30L
HIRL Rwys 12L-30R and 12C-30C
REIL Rwys 12L and 30R



CATEGORY	A	B	C	D	E
LPV DA	1608-1 250 (300-1)				
LNAV/VNAV DA	1685-1¼ 327 (400-1¼)				
LNAV MDA	1740-1 382 (400-1)			1740-1¼ 382 (400-1¼)	
CIRCLING	1800-1¼ 418 (500-1¼)	1840-1¼ 458 (500-1¼)	1840-1½ 458 (500-1½)	1940-2 558 (600-2)	

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-74 (FAA)

RNAV (GPS) RWY 12R

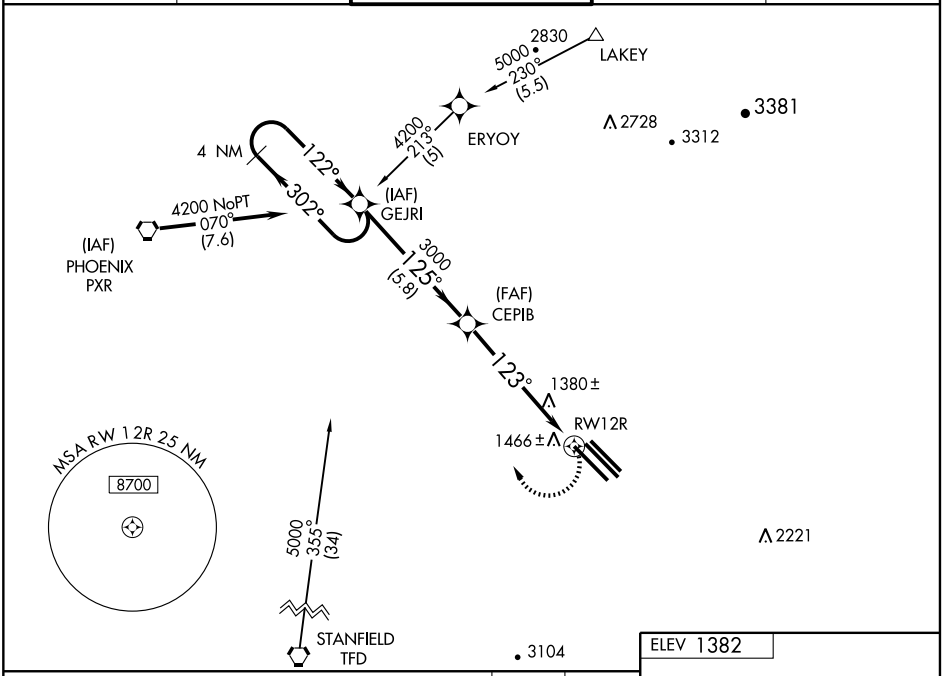
PHOENIX-MESA GATEWAY (IWA)

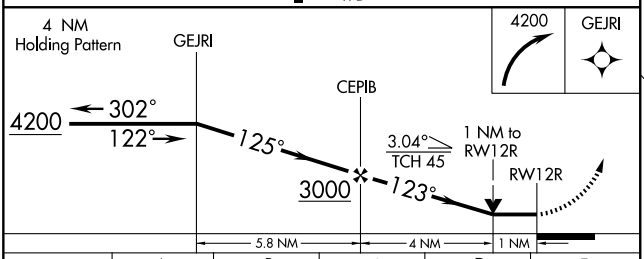
APP CRS	Rwy Idg	10401
123°	TDZE	1373
	Apt Elev	1382

When local altimeter setting not received, use Phoenix Sky Habor Intl altimeter setting.
VDP NA with Phoenix Sky Harbor Intl altimeter setting.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

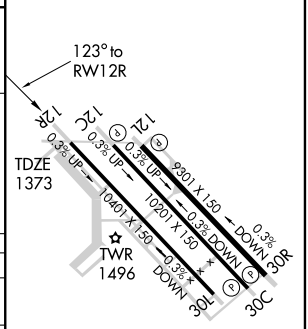
MISSED APPROACH: Climbing right turn to 4200 direct GEJRI WP and hold.

ATIS	PHOENIX APP CON	GATEWAY TOWER ★	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4 (WEST) 124.75 379.225 (EAST)	128.25 275.8	135.05





CATEGORY	A	B	C	D	E
LNAV MDA	1720-1 347 (400-1)			1720-1¼ 347 (400-1¼)	
CIRCLING	1800-1 418 (500-1)	1840-1 458 (500-1)	1840-1½ 458 (500-1½)	1940-2 558 (600-2)	
PHOENIX SKY HARBOR INTL ALTIMETER SETTING MINIMUMS					
LNAV MDA	1800-1 427 (500-1)		1800-1¼ 427 (500-1¼)	1800-1½ 427 (500-1½)	
CIRCLING	1880-1 498 (500-1)	1920-1 538 (600-1)	1920-1½ 538 (600-1½)	1940-2 558 (600-2)	2000-2¼ 618 (700-2¼)



MIRL Rwy 12R-30L
HIRL Rwys 12L-30R and 12C-30C
REIL Rwys 12L and 30R

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 62911 W30A	APP CRS 303°	Rwy Idg 10201 TDZE 1380 Apt Elev 1382

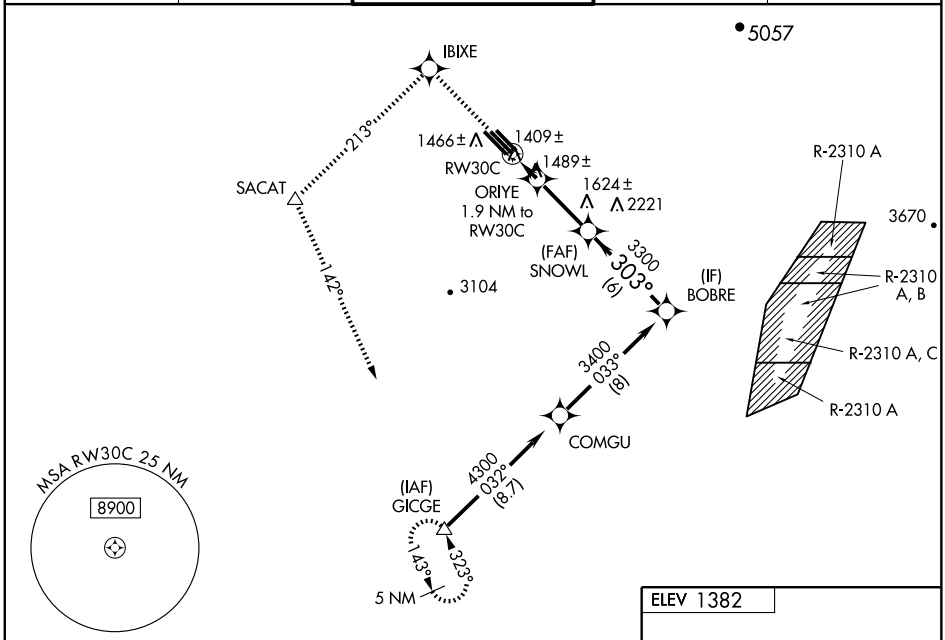
RNAV (GPS) RWY 30C

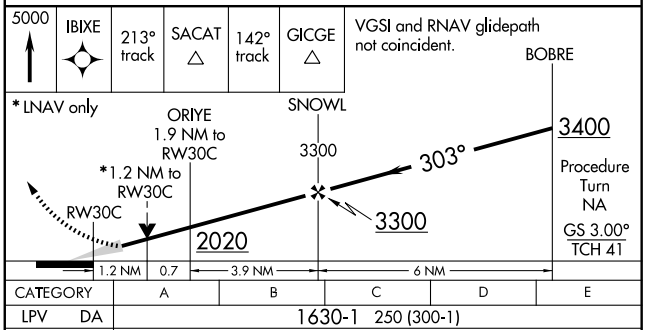
PHOENIX-MESA GATEWAY (IWA)

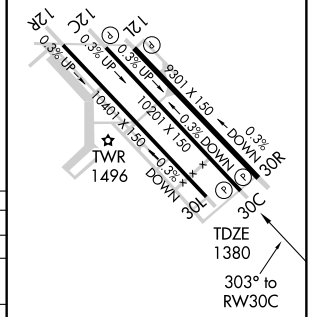
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP- 0.3 NA.
When local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting and increase all DA/MDA 80 feet and increase LPV, LNAV/VNAV, LNAV all Cats visibility ¼ mile, increase circling Cat A/B/C visibility ¼ mile, Cat E ½ mile. VDP and Baro-VNAV NA when using Phoenix Sky Harbor Intl altimeter setting.

MISSED APPROACH: Climb to 5000 direct IBIXE and via 213° track to SACAT and 142° track to GICGE and hold.

ATIS	PHOENIX APP CON	GATEWAY TOWER ★	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4 (WEST) 124.75 379.225 (EAST)	128.25 275.8	135.05







CATEGORY	A	B	C	D	E
LPV DA	1630-1 250 (300-1)				
LNAV/VNAV DA	1680-1 300 (300-1)				
LNAV MDA	1800-1 420 (500-1)		1800-1¼ 420 (500-1¼)		1800-1½ 420 (500-1½)
CIRCLING	1800-1 418 (500-1)	1840-1 458 (500-1)	1840-1½ 458 (500-1½)	1940-2 558 (600-2)	1980-2 598 (600-2)

MIRL Rwy 12R-30L
HIRL Rwys 12L-30R and 12C-30C
REIL Rwys 12L and 30R

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-74 (FAA)

RNAV (GPS) RWY 30L

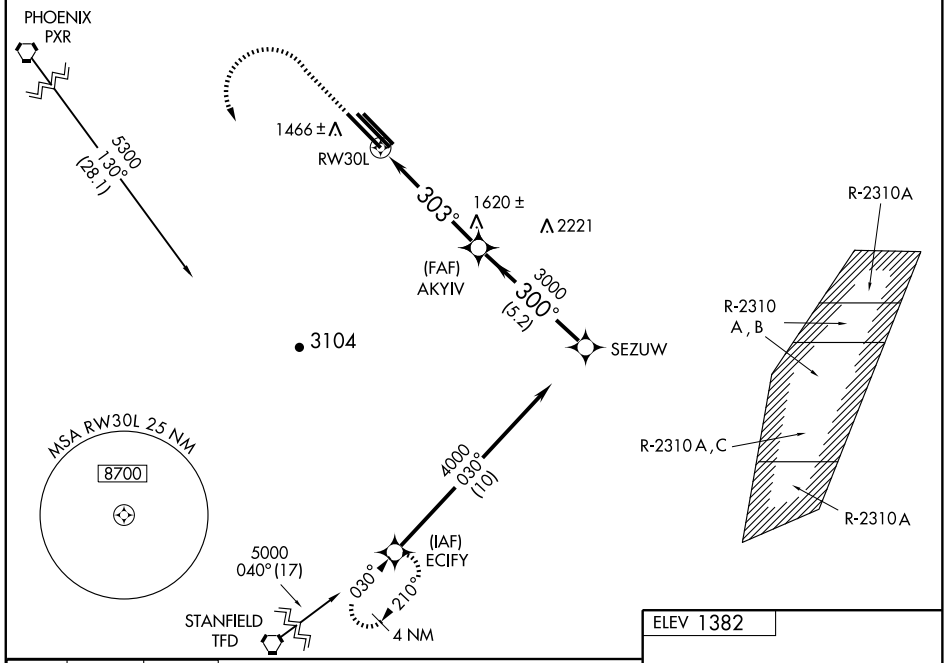
PHOENIX-MESA GATEWAY (IWA)

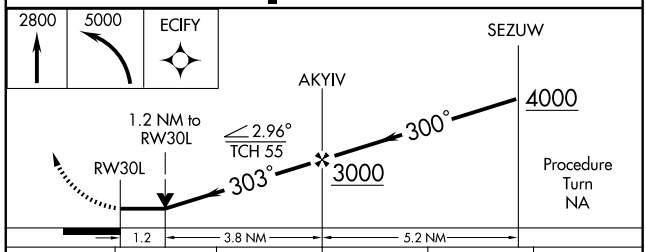
APP CRS	Rwy Idg	10401
303°	TDZE	1373
	Apt Elev	1382

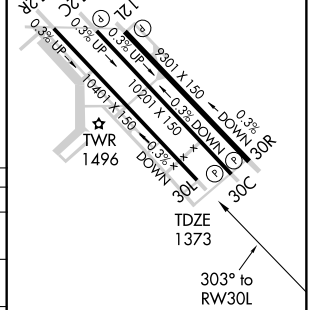
When local altimeter setting not received, use Phoenix Sky Habor Intl altimeter setting.
VDP NA with Phoenix Sky Harbor Intl altimeter setting.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2800 then climbing left turn to 5000 to ECIFY WP and hold.

ATIS	PHOENIX APP CON	GATEWAY TOWER ★	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4 (WEST) 124.75 379.225 (EAST)	128.25 275.8	135.05







CATEGORY	A	B	C	D	E
LNAV MDA	1800-1 427 (500-1)		1800-1¼ 427 (500-1¼)	1800-1½ 427 (500-1½)	
CIRCLING	1800-1 418 (500-1)	1840-1 458 (500-1)	1840-1½ 458 (500-1½)	1940-2 558 (600-2)	
PHOENIX SKY HARBOR INTL ALTIMETER SETTING MINIMUMS					
LNAV MDA	1880-1 507 (600-1)		1880-1½ 507 (600-1½)		1880-1¾ 507 (600-1¾)
CIRCLING	1880-1 498 (500-1)	1920-1 538 (600-1)	1920-1½ 538 (600-1½)	1940-2 558 (600-2)	2000-2¼ 618 (700-2¼)

MIRL Rwy 12R-30L
HIRL Rwys 12L-30R and 12C-30C
REIL Rwys 12L and 30R

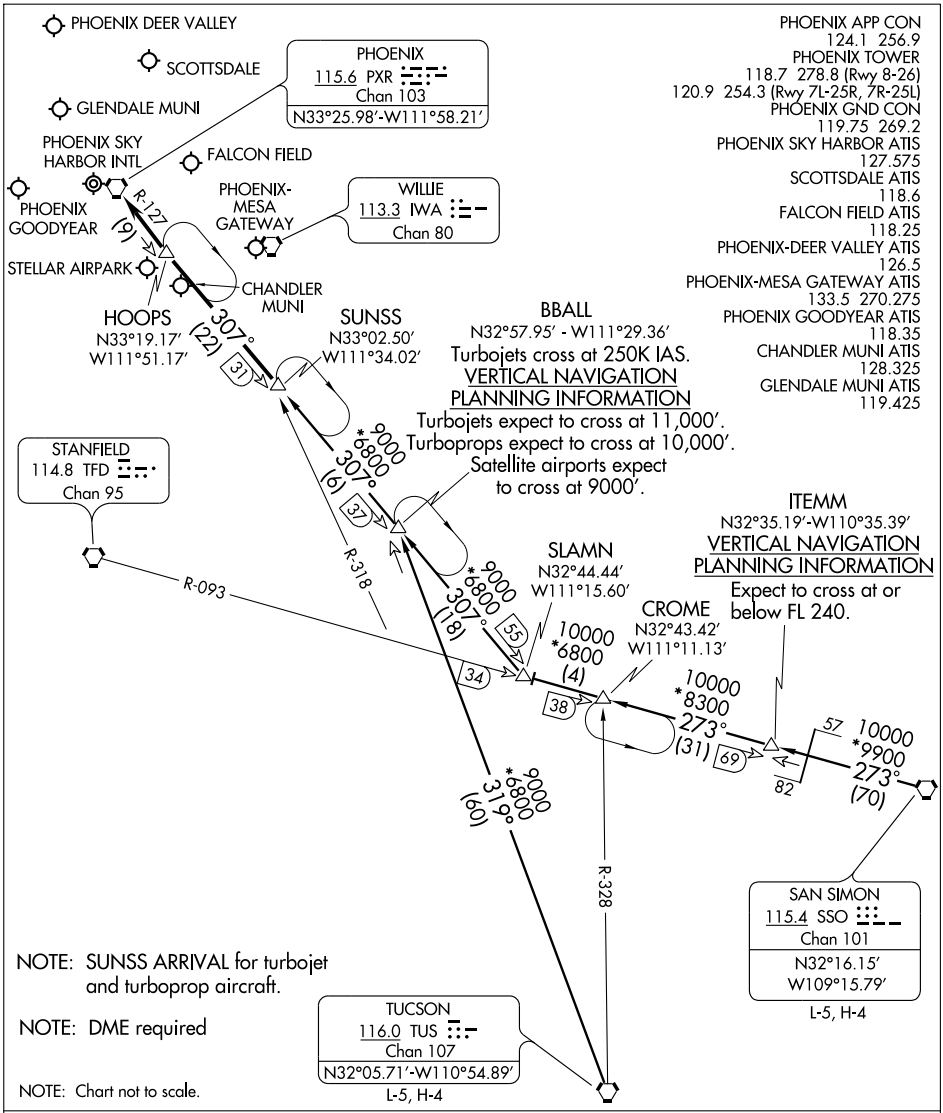
SW-4, 22 OCT 2009 to 19 NOV 2009

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

PHOENIX, ARIZONA AL-74 (FAA)

VORTAC IWA 113.3 Chan 80	APP CRS 302°	Rwy Idg 30C 10201 TDZE 1380 Apt Elev 1382	Rwy Idg 30R 9301 TDZE 1382 Apt Elev 1382

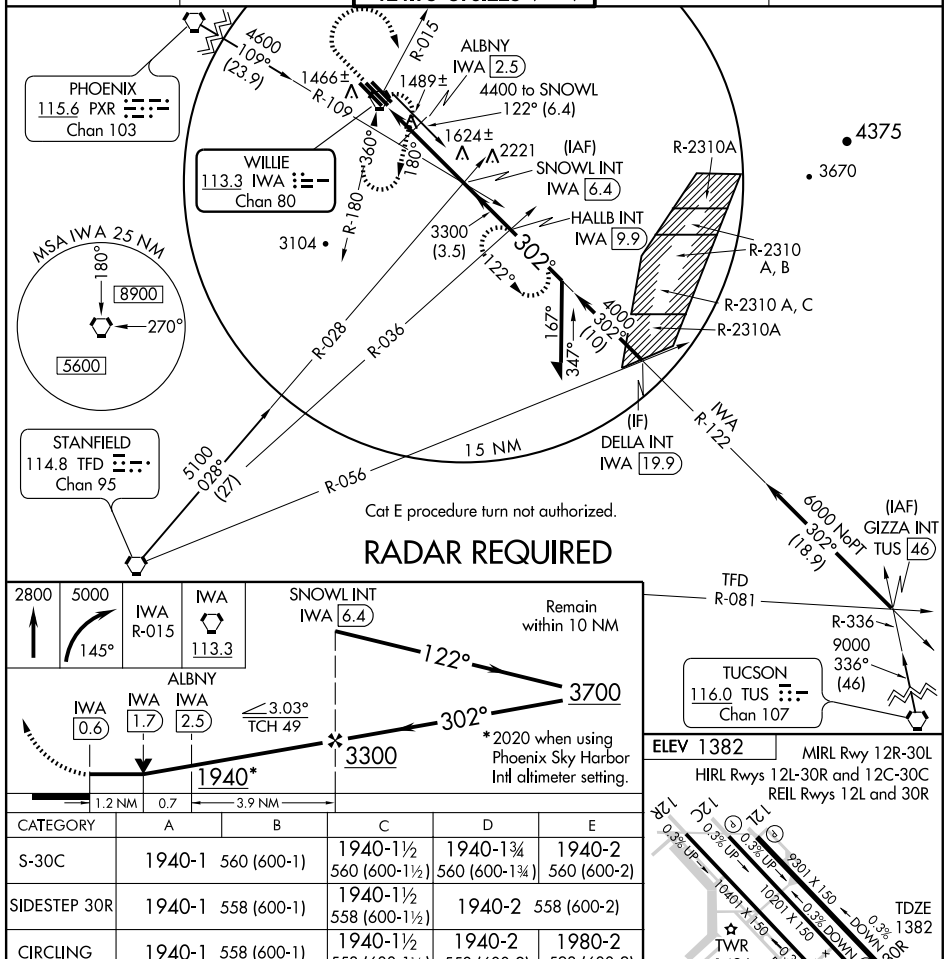
VOR or TACAN RWY 30C

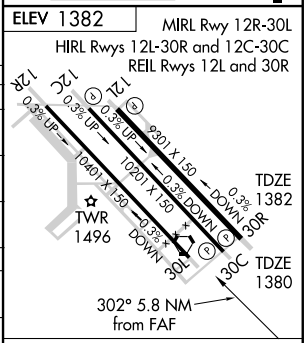
PHOENIX-MESA GATEWAY (IWA)

When local altimeter setting not received, use Phoenix Sky Harbor Intl altimeter setting and increase all MDA 80 feet, increase S-30C, SIDESTEP 30R all Cats visibility ¼ mile, circling Cats A/B/C visibility ¼ mile, Cat E ½ mile.

MISSED APPROACH: Climb to 2800 then climbing right turn to 5000 via heading 145° and IWA VORTAC R-015 to IWA VORTAC and hold, continue climb-in-hold to 5000 (TACAN aircraft continue via IWA VORTAC R-122 to HALLB INT/IWA 9.9 DME and hold, continue climb-in-hold to 5000, hold SE, LT, 302° inbound).

ATIS	PHOENIX APP CON	GATEWAY TOWER ★	GND CON	CLNC DEL
133.5 270.275	124.9 353.8	120.6 (CTAF) 289.4 (WEST) 124.75 379.225 (EAST)	128.25 275.8	135.05



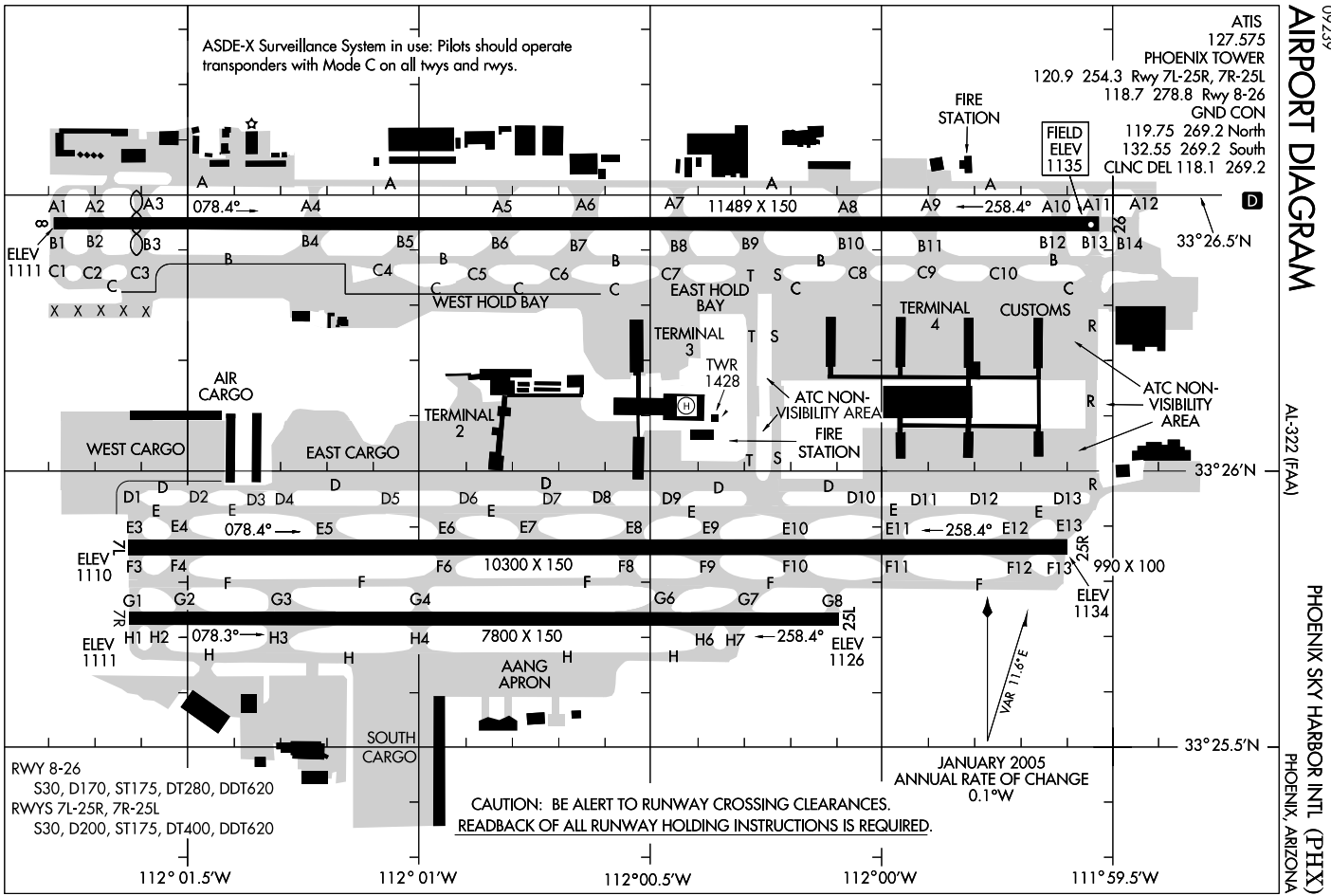


CATEGORY	A	B	C	D	E
S-30C	1940-1 560 (600-1)		1940-1½ 560 (600-1½)	1940-1¾ 560 (600-1¾)	1940-2 560 (600-2)
SIDESTEP 30R	1940-1 558 (600-1)		1940-1½ 558 (600-1½)	1940-2 558 (600-2)	
CIRCLING	1940-1 558 (600-1)		1940-1½ 558 (600-1½)	1940-2 558 (600-2)	1980-2 598 (600-2)
DME MINIMUMS					
S-30C	1800-1 420 (500-1)		1800-1¼ 420 (500-1¼)		1800-1½ 420 (500-1½)
SIDESTEP 30R	1800-1 418 (500-1)		1800-1½ 418 (500-1½)	1800-2 418 (500-2)	
CIRCLING	1800-1 418 (500-1)	1840-1 458 (500-1)	1840-1½ 458 (500-1½)	1940-2 558 (600-2)	1980-2 598 (600-2)

FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

SW-4, 22 OCT 2009 to 19 NOV 2009


AIRPORT DIAGRAM
PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA
AL-322 (FAA)
09249
ATIS
127.575
PHOENIX TOWER
120.9 254.3 Rwy 7L-25R, 7R-25L
118.7 278.8 Rwy 8-26
GND CON
119.75 269.2 North
132.55 269.2 South
CLNC DEL 118.1 269.2
FIELD ELEV 1135
FIRE STATION
ASDE-X Surveillance System in use: Pilots should operate transponders with Mode C on all twys and rwys.
078.4°
11489 X 150
258.4°
ELEV 1111
ELEV 1110
ELEV 1111
078.3°
7800 X 150
258.4°
ELEV 1126
10300 X 150
990 X 100
ELEV 1134
WEST HOLD BAY
EAST HOLD BAY
TERMINAL 3
TERMINAL 4
CUSTOMS
TERMINAL 2
TWR 1428
ATC NON-VISIBILITY AREA
FIRE STATION
AIR CARGO
WEST CARGO
EAST CARGO
AANG APRON
SOUTH CARGO
VAR 11.6°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
33°26.5'N
33°26'N
33°25.5'N
112° 01.5'W
112° 01'W
112°00.5'W
112°00'W
111°59.5'W
RWY 8-26
S30, D170, ST175, DT280, DDT620
RWYS 7L-25R, 7R-25L
S30, D200, ST175, DT400, DDT620
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

BLYTHE TRANSITION (BLH.ARLIN3): From over BLH VORTAC via BLH R-089 and IWA R-256 to ARLIN INT. Thence....

MOHAK TRANSITION (MOHAK.ARLIN3): From over MOHAK INT via GBN R-247 and BXK R-215 to HYDRR INT, then via IWA R-256 to ARLIN INT. Thence....

....From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect vectors after ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT. Expect vectors prior to TUKEE INT to final approach course.

SATELLITE AIRPORTS: Expect vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
PHOENIX SKY HARBOR ATIS
127.575
PHOENIX DEER VALLEY ATIS
126.5
SCOTTSDALE ATIS
118.6
FALCON FIELD ATIS
118.25
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
PHOENIX
115.6 PXR
Chan 103
N33°25.98' W111°58.21'
FALCON FIELD
PHOENIX-SKY HARBOR INTL
BUCKEYE
110.6 BXK
Chan 43
BLYTHE
117.4 BLH
Chan 121
N33°35.76' W114°45.67'
L-4-5, H-4
SCOLE
N33°27.76'-W114°04.91'
VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or below FL 250
HYDRR
N33°16.46'
W113°04.18'
AMBRR
N33°17.46'
W112°20.83'
STELLAR AIRPARK
PHOENIX-MESA GATEWAY
CHANDLER MUNI
FL 180
*5000
089°
(35)
11,000
*6000
089°
(48)
10,000
*4500
076°
(4)
10,000
*4500
(11)
(8)
076°
(17)
(15)
R-215
R-171
R-131
R-194
R-143
R-256
GBN R-025
N
MOHAK
N32°46.55'-W113°58.33'
L-5, H-4
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at or below FL 250
Turboprops expect to cross at or below 15,000
CALIE
N33°16.34'
W113°08.76'
PAYNT
N33°16.80'
W112°50.65'
Cross at 250K IAS
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at 11,000.
Turboprops expect to cross at 10,000.
ARLIN
N33°17.02'
W112°41.11'
ALEYS
N33°17.80'
W112°02.94'
TUKEE
N33°17.96'
W111°53.85'
WILLIE
113.3 IWA
Chan 80
10,000
*6500
035°
(42)
R-344
R-247
116.8 BZA
Chan 115
R-075
10,000
*6500
067°
(15)
JUDTH
N32°48.99'
W113°41.30'
GILA BEND
116.6 GBN
Chan 113

NOTE: BLYTHE TRANSITION for turbojet aircraft FL 240 and above. Turboprop aircraft plan BLYTHE FOUR ARRIVAL at or below FL 230.

NOTE: MOHAK TRANSITION for turbojet and turboprop aircraft.

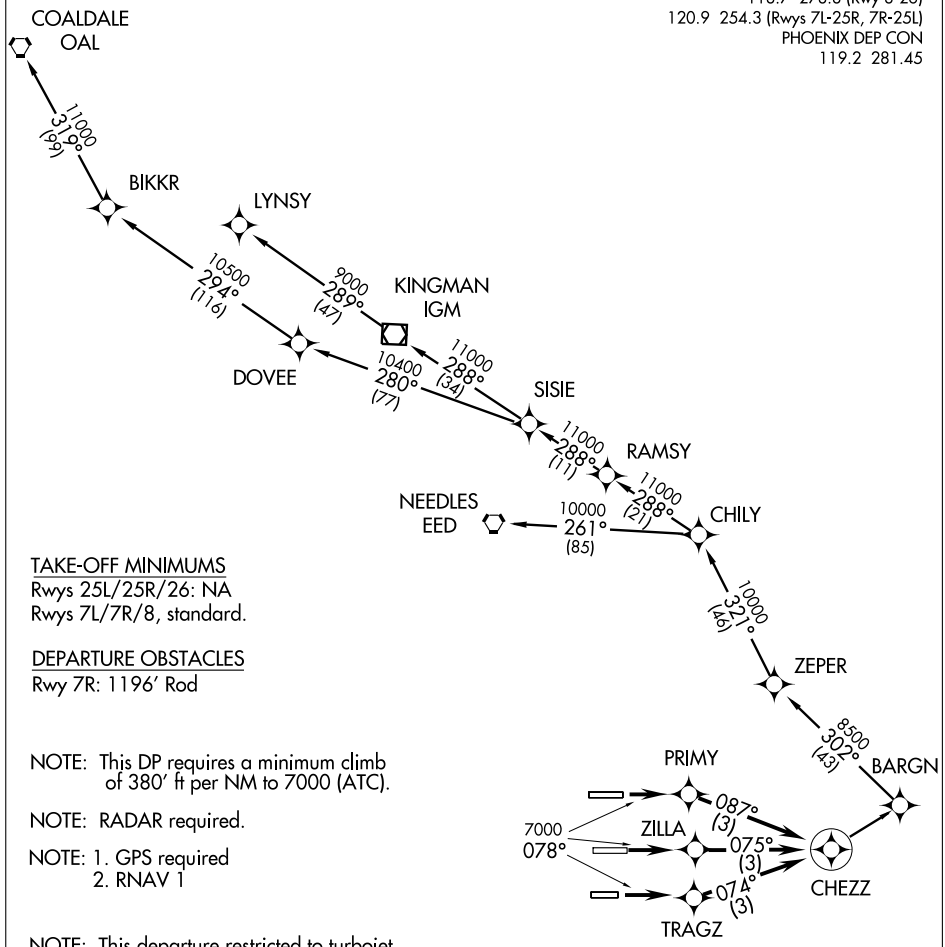
NOTE: Chart not to scale.

(BARGN1.BARGN) 09127 SL-322 (FAA)

BARGN ONE DEPARTURE (RNAV)

PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
119.2 281.45



TAKE-OFF MINIMUMS
Rwys 25L/25R/26: NA
Rwys 7L/7R/8, standard.

DEPARTURE OBSTACLES
Rwy 7R: 1196′ Rod

NOTE: This DP requires a minimum climb of 380′ ft per NM to 7000 (ATC).

NOTE: RADAR required.

NOTE: 1. GPS required
2. RNAV 1

NOTE: This departure restricted to turbojet and turboprop aircraft only.

NOTE: LYNSY TRANSITION for Las Vegas Terminal area turbojet arrivals only.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

BARGN ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7L: Climb via 078° course to ZILLA WP, then via 075° track to CHEZZ WP, then left turn direct BARGN WP, Thence....

TAKE-OFF RUNWAY 7R: Climb via 078° course to TRAGZ WP, then via 074° track to CHEZZ WP, then left turn direct BARGN WP, Thence....

TAKE-OFF RUNWAY 8: Climb via 078° course to PRIMY WP, then via 087° track to CHEZZ WP, then left turn direct BARGN WP, Thence....

....via (transition). Maintain 7000, expect filed altitude within three minutes after departure.

LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure.

COALDALE TRANSITION (BARGN1.OAL)

LYNSY TRANSITION (BARGN1.LYNSY)

NEEDLES TRANSITION (BARGN1.EED)

SW-4, 22 OCT 2009 to 19 NOV 2009

BLYTHE TRANSITION (BLH.BLH4): From over BLH VORTAC via BLH R-082 to SALOM INT, then via GBN R-285 and IWA R-256 to ARLIN INT. Thence . . . .

. . . .From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect radar vectors after passing ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT, expect radar vectors prior to TUKEE INT to final approach course.

ALL SATELLITE AIRPORTS: Expect radar vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
FALCON FIELD ATIS
118.25
PHOENIX DEER VALLEY ATIS
126.5
PHOENIX SKY HARBOR ATIS
127.575
SCOTTSDALE ATIS
118.6
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
FALCON FIELD
PHOENIX-SKY HARBOR INTL

BLYTHE
117.4 BLH
Chan 121
N33°35.76′ W114°45.67′
L-4-5, H-4

SALOM
N33°30.97′ - W113°53.33
VERTICAL NAVIGATION PLANNING INFORMATION
Turboprop aircraft expect to cross at or below 17,000′

BUCKEYE
110.6 BXK
Chan 43

PHOENIX
115.6 PXR
Chan 103
N33°25.98′ W111°58.21′

10,000
*5800
082°
(44)

10,000
*5200
105°
(31)

HYDRR
N33°16.46′
W113°04.18′

10,000
*4800
076°
(14)

SADLL
N33°16.01′
W113°20.71

10,000
*4500
(11)

ARLIN
N33°17.02′
W112°41.11′

AMBRR
N33°17.46′
W112°20.83′

076°
(17)

(8)

STELLAR AIRPARK

ALEYS
N33°17.80′
W112°02.94′

PAYNT
N33°16.80′-W112°50.65′

TUKEE
N33°17.96′
W111°53.85′

(15)

(8)

CHANDLER MUNI

PHOENIX-MESA GATEWAY

R-256

R-194
R-143
(19)
R-215
R-171
R-131
R-025
R-285
GBN R-344
GBN R-025

85
71
39
60
52
35
20

Turbojets: Cross at 250K IAS.
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect to cross at 11,000.
Turboprops: Expect to cross at 10,000.

BARD
116.8 BZA
Chan 115

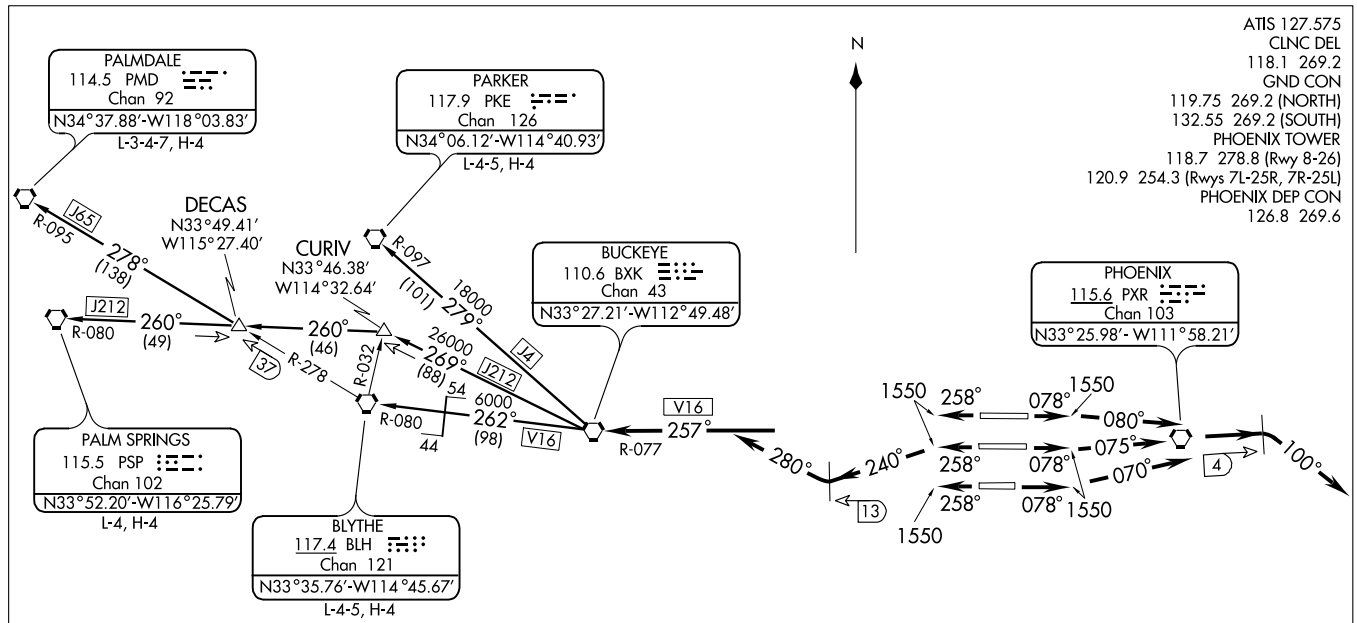
WILLIE
113.3 IWA
Chan 80

GILA BEND
116.6 GBN
Chan 113

N

NOTE: Blythe Arrival for aircraft FL 230 or below.

NOTE: Chart not to scale.



NOTE: Aircraft requesting FL 220 and below must file BLYTHE TRANSITION.

NOTE: BUCKEYE DEPARTURE restricted to turbojet and turboprop aircraft only.

NOTE: Turbojets landing LAX, file PARKER TRANSITION.

NOTE: Aircraft landing other than LAX and turboprops landing at LAX: requesting FL240 and above, file PALMDALE or PALM SPRINGS TRANSITION.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

TAKE-OFF MINIMUMS

Rwy 7L/7R/8: Standard with minimum climb of 300' per NM to 7000.

Rwy 25L/25R/26: Standard with minimum climb of 350' per NM to 7000.

(NOTES CONTINUED ON FOLLOWING PAGE)

(NARRATIVE ON FOLLOWING PAGE)

BUCKEYE TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb via 078° heading to 1550 then climbing right turn heading 080°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°, maintain 7000, expect radar vectors to BXK VORTAC. Expect further clearance to filed altitude 3 minutes after departure.

TAKE-OFF RUNWAY 7L: Climb via 078° heading to 1550 then climbing left turn heading 075°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°, maintain 7000, expect radar vectors to BXK VORTAC. Expect further clearance to filed altitude 3 minutes after departure.

TAKE-OFF RUNWAY 7R: Climb via 078° heading to 1550 then climbing left turn heading 070°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°, maintain 7000, expect radar vectors to BXK VORTAC. Expect further clearance to filed altitude 3 minutes after departure.

TAKE-OFF RUNWAY 25L/25R/26: Climb via 258° heading to 1550 then climbing left turn heading 240°, at 13 DME west of PXR VORTAC, climbing right turn heading 280° to the BXK R-077 to BXK VORTAC. Maintain 7000, expect further clearance to filed altitude 3 minutes after departure.

LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure.

BLYTHE TRANSITION (BXK2.BLH): From over BXK VORTAC via BXK R-262 and BLH R-080 to BLH VORTAC.

PALMDALE TRANSITION (BXK2.PMD): From over BXK VORTAC via BXK R-269 and PSP R-080 to DECAS INT, then via BLH R-278 and PMD R-095 to PMD VORTAC.

PALM SPRINGS TRANSITION (BXK2.PSP): From over BXK VORTAC via BXK R-269 and PSP R-080 to PSP VORTAC.

PARKER TRANSITION (BXK2.PKE): From over BXK VORTAC via BXK R-279 and PKE R-097 to PKE VORTAC.

TAKEOFF NOTES CONT.

TAKE-OFF OBSTACLES

NOTE: Rwy 7L, building 1332′ from departure end of runway, 798′ left of centerline, 67′ AGL/1176′ MSL.

NOTE: Rwy 7R, rod 716′ from departure end of runway, 184′ right of centerline, 87′ AGL/1196′ MSL.

NOTE: Rwy 8, light standard 3530′ from departure end of runway, 1207′ left of centerline, 123′ AGL/1232′ MSL.
Rwy 8, light standard 3479′ from departure end of runway, 1003′ left of centerline, 118′ AGL/1227′ MSL.

NOTE: Rwy 25L, light standard 1129′ from departure end of runway, 774′ left of centerline, 91′ AGL/1200′ MSL.

NOTE: Rwy 26, light 59′ from departure end of runway, 63′ right of centerline, 16′ AGL/1125′ MSL.
Rwy 26, pole 58′ from departure end of runway, 90′ right of centerline, 25′ AGL/1125′ MSL.
Rwy 26, light 78′ from departure end of runway, 64′ right of centerline, 18′ AGL/1127′ MSL.
Rwy 26, light 38′ from departure end of runway, 440′ left of centerline, 24′ AGL/1135′ MSL.
Rwy 26, building, 2.32 NM from departure end of runway, 3309′ right of centerline, 406′ AGL/1496′ MSL.
Rwy 26, building 2.28 NM from departure end of runway, 3612′ right of centerline, 663′ AGL/1750′ MSL.
Rwy 26, tree 234′ from departure end of runway, 214′ right of centerline, 24′ AGL/1133′ MSL
Rwy 26, light standard 77′ from departure end of runway, 453′ left of centerline, 27′ AGL/1136′ MSL.
Rwy 26, light standard 74′ from departure end of runway, 456′ right of centerline, 33′ AGL/1142′ MSL.
Rwy 26, light standard 77′ from departure end of runway, 434′ right of centerline, 31′ AGL/1140′ MSL.
Rwy 26, light standard 64′ from departure end of runway, 68′ left of centerline, 1125′ MSL.
Rwy 26, tree 113′ from departure end of runway, 294′ right of centerline, 24′ AGL/1133′ MSL.

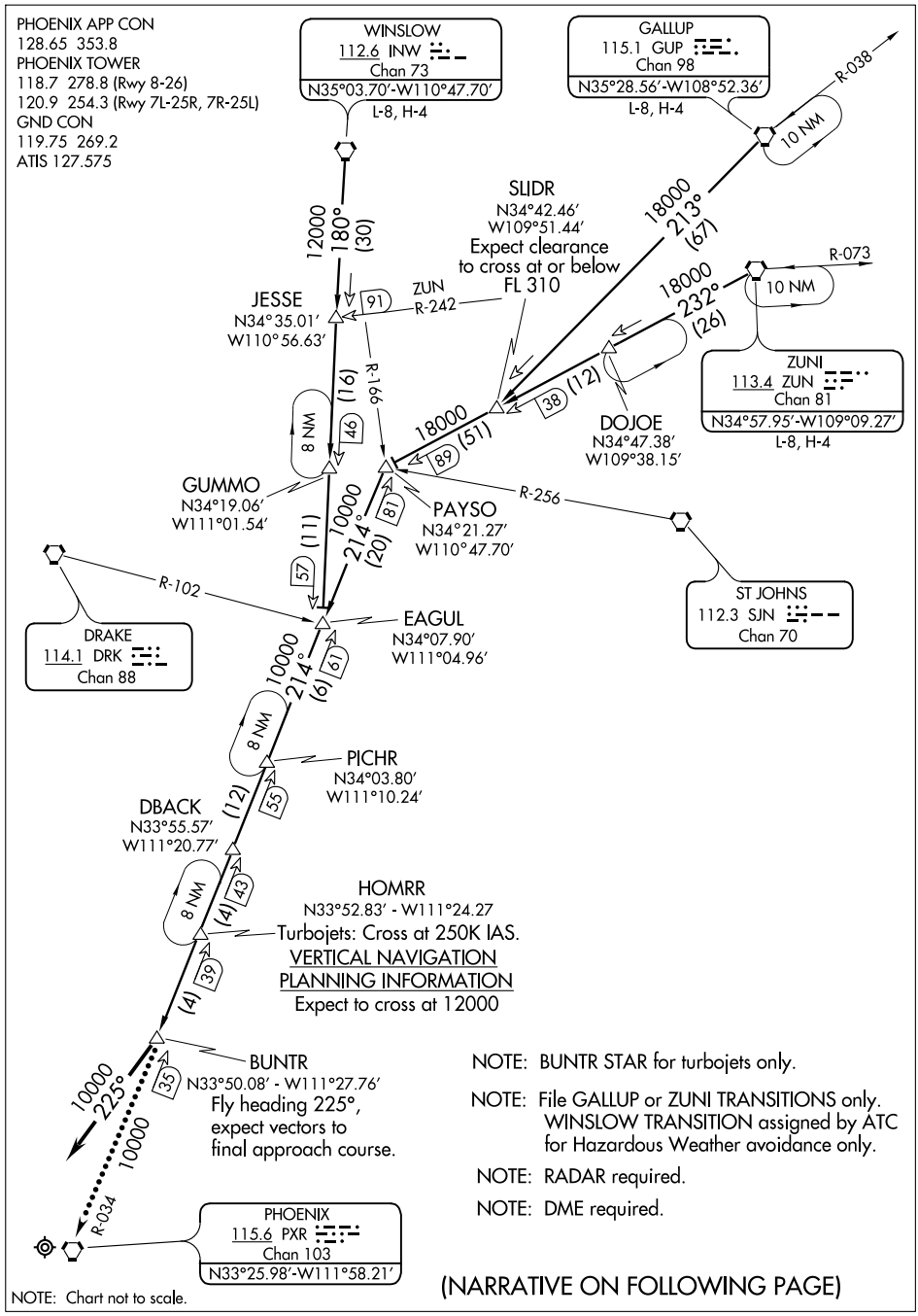
SW-4, 22 OCT 2009 to 19 NOV 2009

(BUNTR.BUNTR2) 09127

BUNTR TWO ARRIVAL

ST-322 (FAA)

PHOENIX SKY HARBOR INTL
PHOENIX, ARIZONA



SW-4, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

GALLUP TRANSITION (GUP.BUNTR2): From over GUP VORTAC via GUP R-213 and ZUN R-232 to PAYSO INT, then via PXR R-034 to BUNTR INT. Thence. . . .

WINSLOW TRANSITION (INW.BUNTR2): From over INW VORTAC via INW R-180 to EAGUL INT, then via PXR R-034 to BUNTR INT. Thence. . . .

ZUNI TRANSITION (ZUN.BUNTR2): From over ZUN VORTAC via ZUN R-232 to PAYSO INT, then via PXR R-034 to BUNTR INT. Thence. . . .

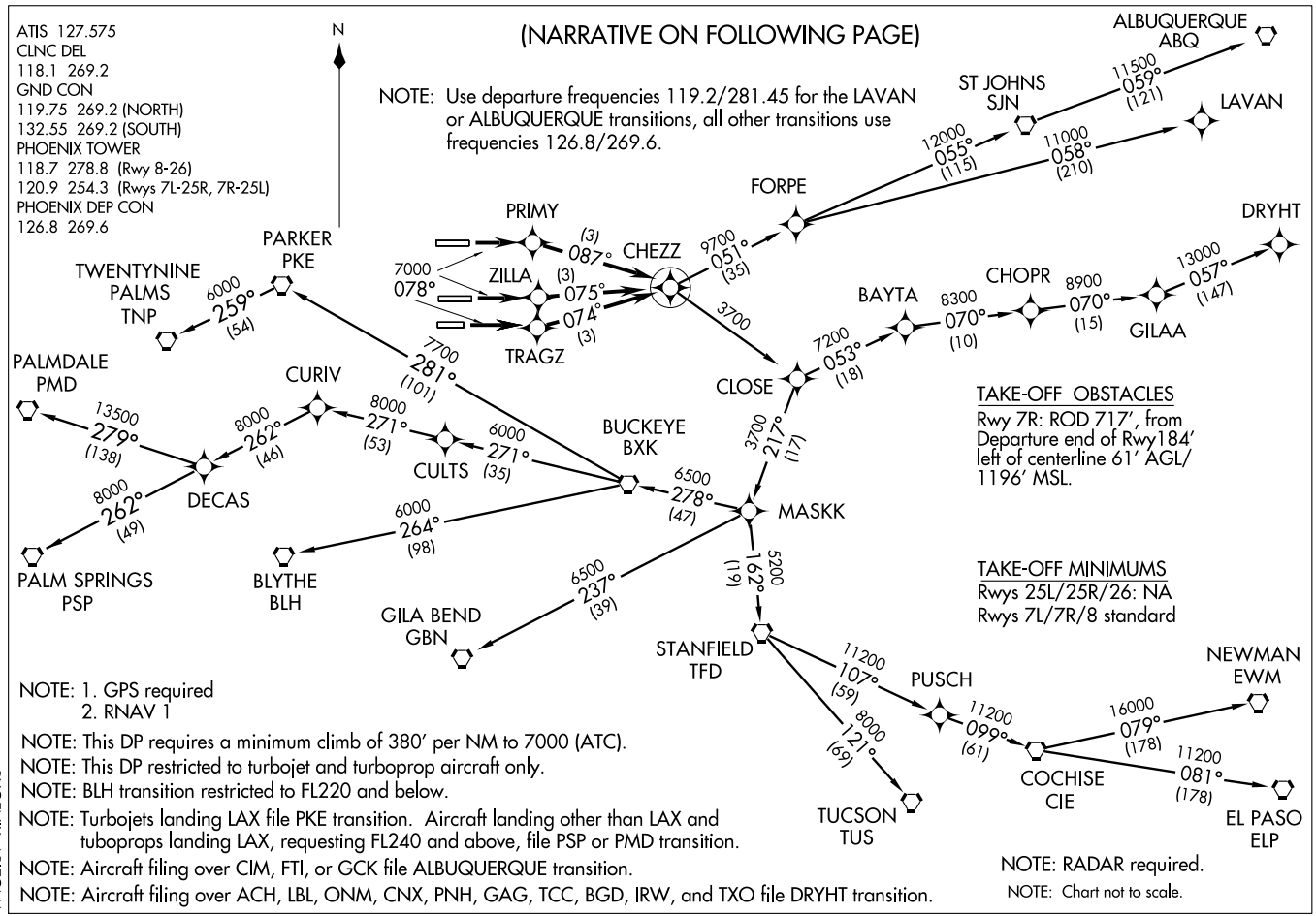
. . . . From over BUNTR INT, fly heading 225°. Expect vectors to Final Approach Course.

LOST COMMUNICATIONS:

After BUNTR INT, proceed direct PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

CHEZZ TWO DEPARTURE (RNAV)



CHEZZ TWO DEPARTURE (RNAV)

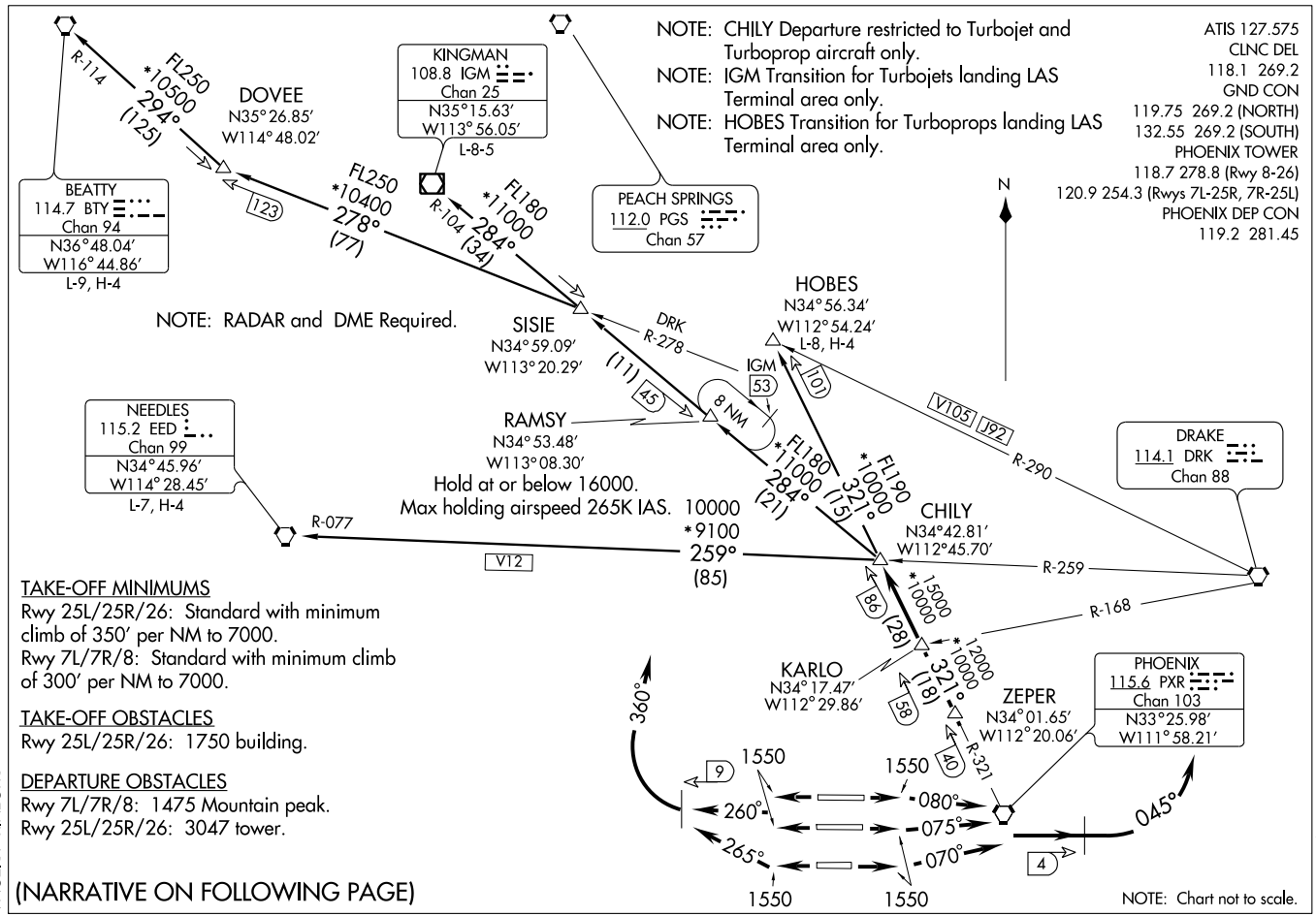
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7L: Climb via 078° course to ZILLA WP, then via 075° track to CHEZZ WP, Thence . . . .
TAKE-OFF RUNWAY 7R: Climb via 078° course to TRAGZ WP, then via 074° track to CHEZZ WP, Thence . . . .
TAKE-OFF RUNWAY 8: Climb via 078° course to PRIMY WP, then via 087° track to CHEZZ WP, Thence . . . .

. . . . then via (transition) maintain 7000, expect filed altitude within 3 minutes after departure.
LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure.

ALBUQUERQUE TRANSITION (CHEZZ2.ABQ)
BLYTHE TRANSITION (CHEZZ2.BLH): (Restricted to FL220 and below).
COCHISE TRANSITION (CHEZZ2.CIE)
DRYHT TRANSITION (CHEZZ2.DRYHT)
EL PASO TRANSITION (CHEZZ2.ELP)
GILA BEND TRANSITION (CHEZZ2.GBN)
LAVAN TRANSITION (CHEZZ2.LAVAN)
NEWMAN TRANSITION (CHEZZ2.EWM)
PALM SPRINGS TRANSITION (CHEZZ2.PSP)
PALMDALE TRANSITION (CHEZZ2.PMD)
PARKER TRANSITION (CHEZZ2.PKE)
STANFIELD TRANSITION (CHEZZ2.TFD)
TUCSON TRANSITION (CHEZZ2.TUS)
TWENTYNINE PALMS TRANSITION (CHEZZ2.TNP)

SW-4, 22 OCT 2009 to 19 NOV 2009


NOTE: CHILY Departure restricted to Turbojet and Turboprop aircraft only.
NOTE: IGM Transition for Turbojets landing LAS Terminal area only.
NOTE: HOBES Transition for Turboprops landing LAS Terminal area only.
ATIS 127.575
CLNC DEL 118.1 269.2
GND CON 119.75 269.2 (NORTH) 132.55 269.2 (SOUTH)
PHOENIX TOWER 118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON 119.2 281.45
CHILY ONE DEPARTURE
(CHILY1.CHILY) 09127
SL-322 (FAA)
PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA
N
R-114
FL250 *10500 294° (125)
DOVEE N35°26.85′ W114°48.02′
KINGMAN 108.8 IGM Chan 25 N35°15.63′ W113°56.05′ L-8-5
PEACH SPRINGS 112.0 PGS Chan 57
BEATTY 114.7 BTY Chan 94 N36°48.04′ W116°44.86′ L-9, H-4
123
FL250 *10400 278° (77)
R-104
FL180 *11000 284° (34)
NOTE: RADAR and DME Required.
SISIE N34°59.09′ W113°20.29′
DRK R-278 (11) 45
HOBES N34°56.34′ W112°54.24′ L-8, H-4
IGM 53 101
8 NM
RAMSY N34°53.48′ W113°08.30′
Hold at or below 16000. Max holding airspeed 265K IAS.
FL180 *11000 284° (21)
FL190 *10000 321° (15)
V105 J92
R-290
DRAKE 114.1 DRK Chan 88
NEEDLES 115.2 EED Chan 99 N34°45.96′ W114°28.45′ L-7, H-4
R-077
10000 *9100 259° (85)
V12
CHILY N34°42.81′ W112°45.70′
R-259
R-168
*15000 10000 86 (28)
*12000 10000 321° (18) 58
KARLO N34°17.47′ W112°29.86′
ZEPER N34°01.65′ W112°20.06′
R-321 40
PHOENIX 115.6 PXR Chan 103 N33°25.98′ W111°58.21′
360°
9
1550
260°
265°
1550
1550
080°
075°
070°
1550
4
045°
TAKE-OFF MINIMUMS
Rwy 25L/25R/26: Standard with minimum climb of 350′ per NM to 7000.
Rwy 7L/7R/8: Standard with minimum climb of 300′ per NM to 7000.
TAKE-OFF OBSTACLES
Rwy 25L/25R/26: 1750 building.
DEPARTURE OBSTACLES
Rwy 7L/7R/8: 1475 Mountain peak.
Rwy 25L/25R/26: 3047 tower.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7L: Climb runway heading to 1550, then climbing left turn heading 075°, at 4 DME east of PXR VORTAC, climbing left turn heading 045°. Thence....
TAKE-OFF RUNWAY 7R: Climb runway heading to 1550, then climbing left turn heading 070°, at 4 DME east of PXR VORTAC, climbing left turn heading 045°. Thence....
TAKE-OFF RUNWAY 8: Climb runway heading to 1550, then climbing right turn heading 080°, at 4 DME east of PXR VORTAC, climbing left turn heading 045°. Thence....
TAKE-OFF RUNWAY 25L: Climb runway heading to 1550, then climbing right turn heading 265°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°. Thence....
TAKE-OFF RUNWAY 25R: Climb runway heading to 1550, then climbing right turn heading 260°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°. Thence....
TAKE-OFF RUNWAY 26: Climb runway heading to 1550, then climbing right turn heading 260°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°. Thence....

....maintain 7000. Expect radar vectors to PXR R-321 to ZEPER INT then CHILY INT. Then via (transition). Expect filed altitude 3 minutes after departure.

BEATTY TRANSITION (CHILY1.BTY): From over CHILY INT via IGM R-104 to SISIE INT, then via DRK R-278 to DOVEE INT, then via BTY R-114 to BTY VORTAC.

HOBES TRANSITION (CHILY1.HOBES): From over CHILY INT via PXR R-321 to HOBES INT.

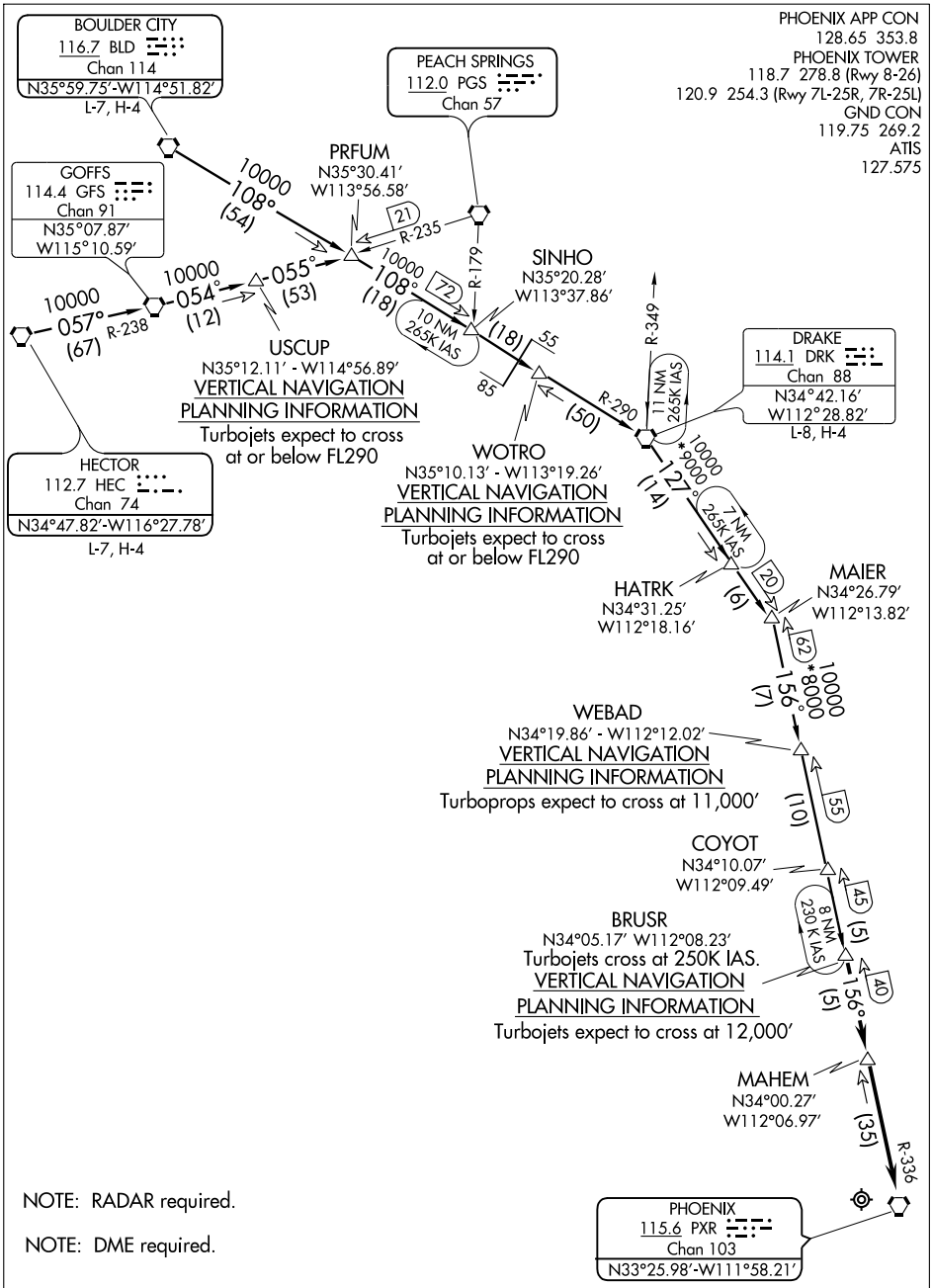
KINGMAN TRANSITION (CHILY1.IGM): From over CHILY INT via IGM R-104 to IGM VOR/DME.

NEEDLES TRANSITION (CHILY1.EED): From over CHILY INT via DRK R-259 and EED R-077 to EED VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

COYOT TWO ARRIVAL

PHOENIX SKY HARBOR INTL
PHOENIX, ARIZONA



NOTE: RADAR required.

NOTE: DME required.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

ARRIVAL DESCRIPTION

BOULDER CITY TRANSITION (BLD.COYOT2): From over BLD VORTAC via BLD R-108 and DRK R-290 to DRK VORTAC, then via DRK R-127 to MAIER INT, then via PXR R-336 to BRUSR INT. Thence....

DRAKE TRANSITION (DRK.COYOT2): From over DRK VORTAC via DRK R-127 to MAIER INT, then via PXR R-336 to BRUSR INT. Thence....

HECTOR TRANSITION (HEC.COYOT2): From over HEC VORTAC via HEC R-057 and GFS R-238 to GFS VORTAC, then via GFS R-054 and PGS R-235 to PRFUM INT, then via BLD R-108 and DRK R-290 to DRK VORTAC, then via DRK R-127 to MAIER INT, then via PXR R-336 to BRUSR INT. Thence....

.... From over BRUSR INT via PXR R-336 to PXR VORTAC. After BRUSR INT, expect radar vectors to final approach course.

LOST COMMUNICATIONS: After DRK VORTAC proceed direct to MAIER INT direct PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

DSERT ONE DEPARTURE (RNAV)

PHOENIX SKY HARBOR INTL (PHX)

PHOENIX, ARIZONA

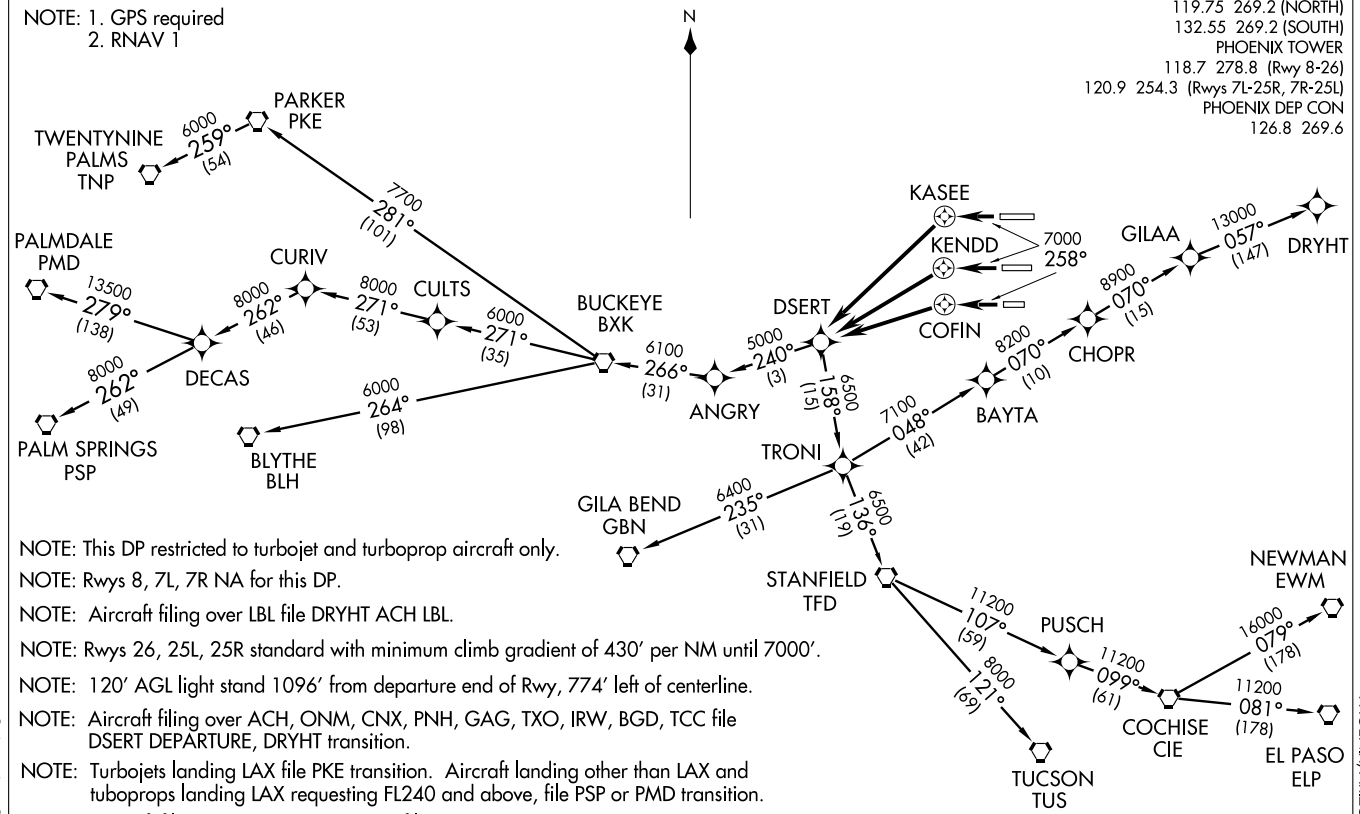
NOTE: RADAR required.

NOTE: Chart not to scale.

NOTE: 1. GPS required
2. RNAV 1

(NARRATIVE ON FOLLOWING PAGE)

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
126.8 269.6



NOTE: This DP restricted to turbojet and turboprop aircraft only.

NOTE: Rwys 8, 7L, 7R NA for this DP.

NOTE: Aircraft filing over LBL file DRYHT ACH LBL.

NOTE: Rwys 26, 25L, 25R standard with minimum climb gradient of 430' per NM until 7000'.

NOTE: 120' AGL light stand 1096' from departure end of Rwy, 774' left of centerline.

NOTE: Aircraft filing over ACH, ONM, CNX, PNH, GAG, TXO, IRW, BGD, TCC file DSERT DEPARTURE, DRYHT transition.

NOTE: Turbojets landing LAX file PKE transition. Aircraft landing other than LAX and tuboprops landing LAX requesting FL240 and above, file PSP or PMD transition.

NOTE: Aircraft filing over CIM, FTI, or GCK file ST. JOHNS DEPARTURE.

DSERT ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 26: Climb to 7000 via 258° course to KASEE WP, then direct DSERT WP, Thence . . . .
TAKE-OFF RUNWAY 25R: Climb to 7000 via 258° course to KENDD WP, then direct DSERT WP, Thence . . . .
TAKE-OFF RUNWAY 25L: Climb to 7000 via 258° course to COFIN WP, then direct DSERT WP, Thence . . . .
. . . . then via assigned transition/altitude.

LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure

BLYTHE TRANSITION (DSERT1.BLH): (Restricted to FL220 and below).
COCHISE TRANSITION (DSERT1.CIE)
DRYHT TRANSITION (DSERT1.DRYHT)
EL PASO TRANSITION (DSERT1.ELP)
GILA BEND TRANSITION (DSERT1.GBN)
NEWMAN TRANSITION (DSERT1.EWM)
PALM SPRINGS TRANSITION (DSERT1.PSP)
PALMDALE TRANSITION (DSERT1.PMD)
PARKER TRANSITION (DSERT1.PKE)
STANFIELD TRANSITION (DSERT1.TFD)
TUCSON TRANSITION (DSERT1.TUS)
TWENTYNINE PALMS TRANSITION (DSERT1.TNP)

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX APP CON
128.65 353.8
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
GND CON
119.75 269.2
ATIS
127.575

NOTE: GUP and ZUN TRANSITIONS: For non-GPS equipped aircraft PXR, INW, ZUN, and IWA must be operational.
INW TRANSITION: For non-GPS equipped aircraft DRK, PXR, and IWA must be operational.

NOTE: File GALLUP or ZUNI TRANSITIONS only. WINSLOW TRANSITION assigned by ATC for hazardous weather avoidance only.

NOTE: All runways expect radar vectors to final approach course.

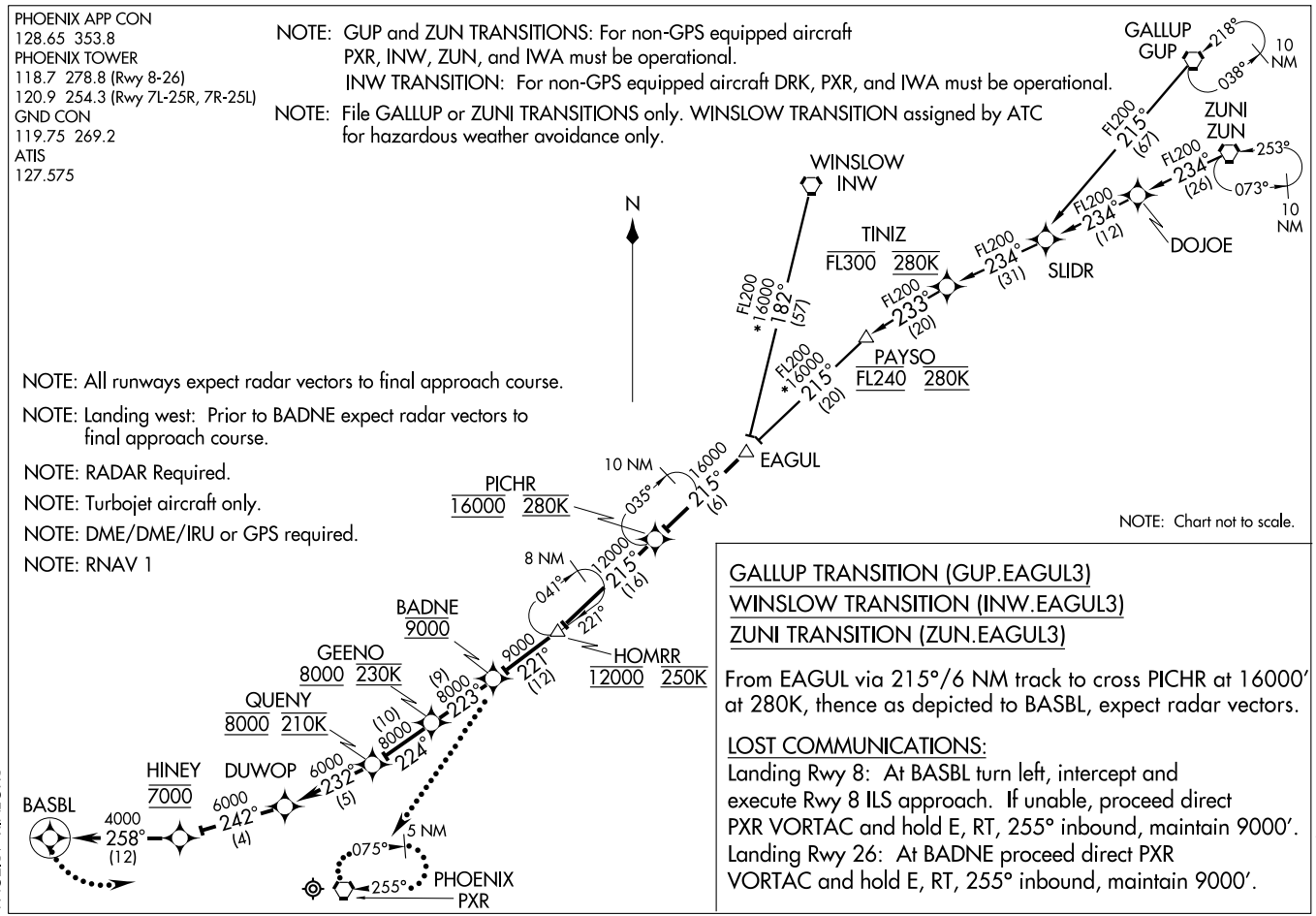
NOTE: Landing west: Prior to BADNE expect radar vectors to final approach course.

NOTE: RADAR Required.

NOTE: Turbojet aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1



NOTE: Chart not to scale.

GALLUP TRANSITION (GUP.EAGUL3)
WINSLOW TRANSITION (INW.EAGUL3)
ZUNI TRANSITION (ZUN.EAGUL3)

From EAGUL via 215°/6 NM track to cross PICHR at 16000′ at 280K, thence as depicted to BASBL, expect radar vectors.

LOST COMMUNICATIONS:
Landing Rwy 8: At BASBL turn left, intercept and execute Rwy 8 ILS approach. If unable, proceed direct PXR VORTAC and hold E, RT, 255° inbound, maintain 9000′.
Landing Rwy 26: At BADNE proceed direct PXR VORTAC and hold E, RT, 255° inbound, maintain 9000′.

EAGUL THREE ARRIVAL (RNAV)

(EAGUL.EAGUL3) 09183

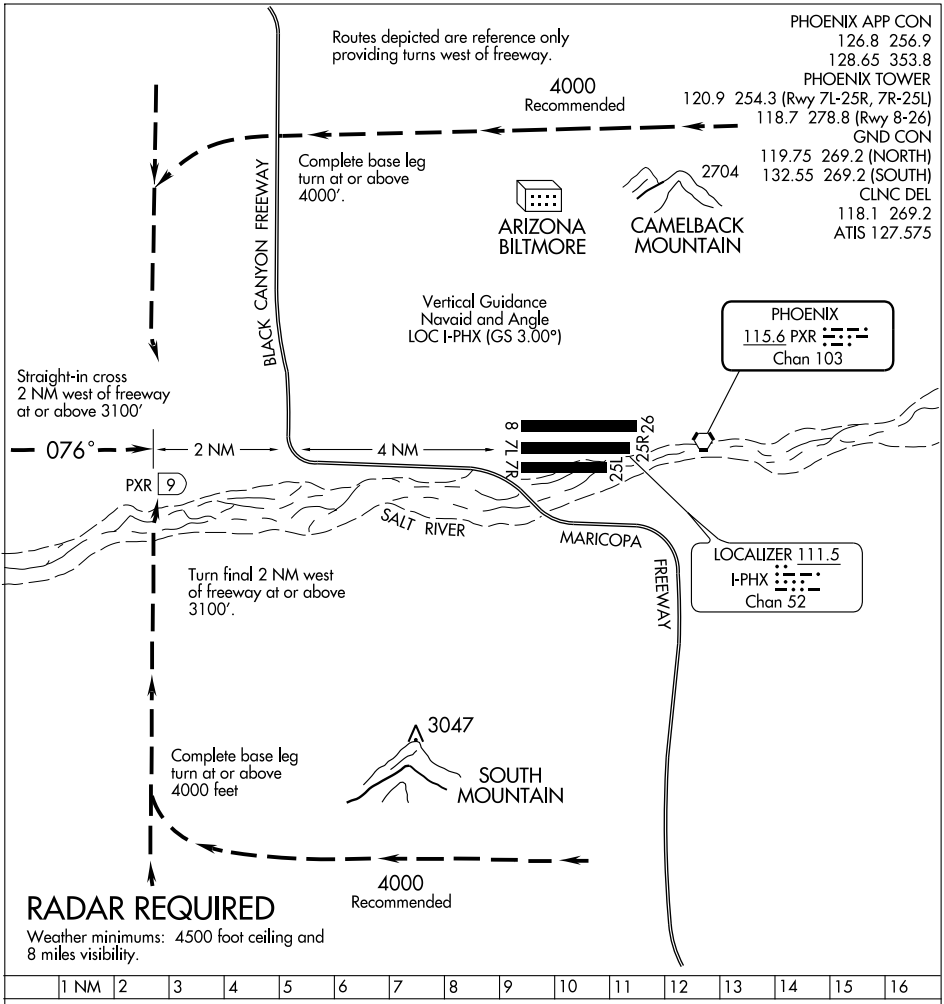
ST-322 (FAA)

PHOENIX SKY HARBOR INTL
PHOENIX, ARIZONA

FREEWAY VISUAL RWY 7L

AL-322 (FAA)

PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA



FREEWAY VISUAL RWY 7L

When visual approaches to Runway 7L are in progress, clearances will be given utilizing in part the following phraseology:

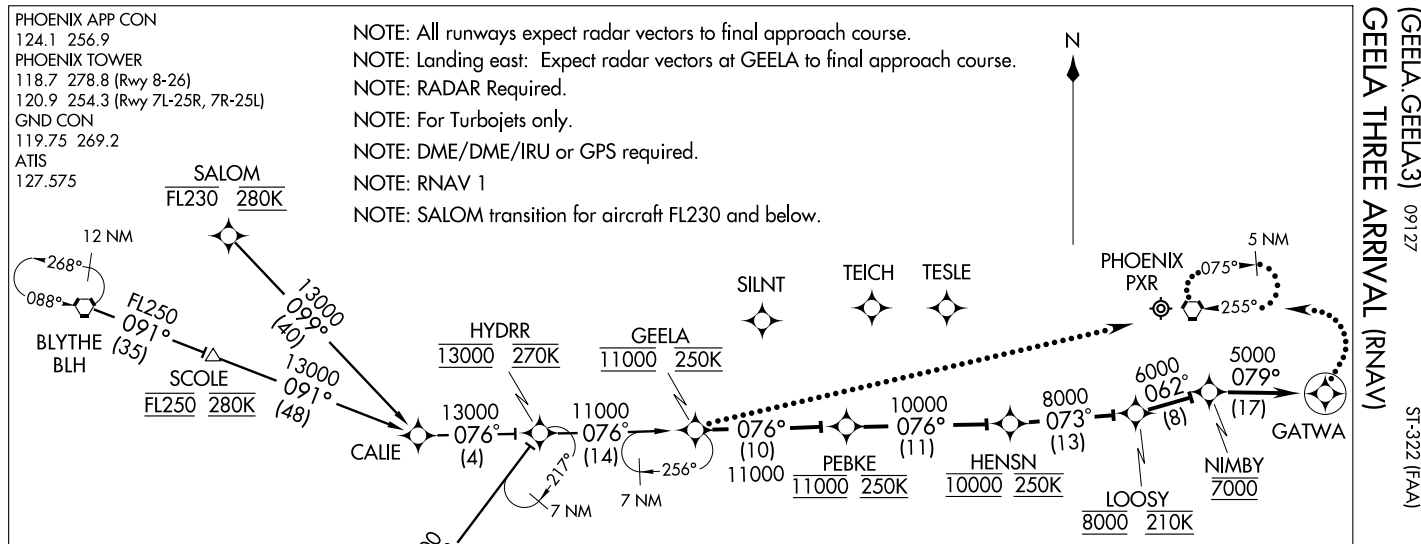
"(IDENT) CLEARED FOR A FREEWAY VISUAL RUNWAY 7L APPROACH."

GEELA THREE ARRIVAL (RNAV)

PHOENIX SKY HARBOR INTL
PHOENIX, ARIZONA

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
GND CON
119.75 269.2
ATIS
127.575

NOTE: All runways expect radar vectors to final approach course.
NOTE: Landing east: Expect radar vectors at GEELA to final approach course.
NOTE: RADAR Required.
NOTE: For Turbojets only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1
NOTE: SALOM transition for aircraft FL230 and below.



NOTE: BLH and MOHAK Transitions, For Non-GPS equipped aircraft GBN and BXK DMEs must be operational.

NOTE: Chart not to scale.

BLYTHE TRANSITION (BLH.GEELA3)
MOHAK TRANSITION (MOHAK.GEELA3)
SALOM TRANSITION (SALOM.GEELA3)

From GEELA via 076°/10 NM track to PEBKE, thence as depicted to GATWA. Then via 079° heading expect radar vectors.

LOST COMMUNICATIONS:
Landing Rwy 7R: At GEELA proceed direct PXR VORTAC and hold E, RT, 255° inbound, maintain 9000'.
Landing Rwy 25L: At GATWA turn left, intercept and execute Rwy 25L ILS approach. If unable, proceed direct PXR VORTAC and hold E, RT, 255° inbound, maintain 9000'.

LOC/DME I-PHX	APP CRS	Rwy Idg	10300
111.5	078°	TDZE	1116
Chan 52		Apt Elev	1135

ILS or LOC RWY 7L

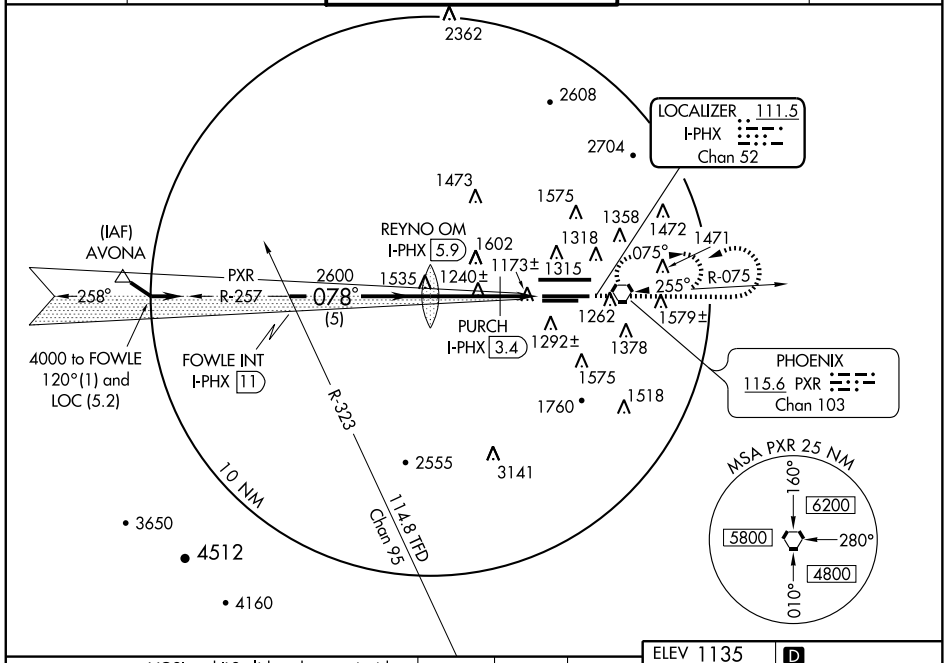
PHOENIX SKY HARBOR INTL (PHX)

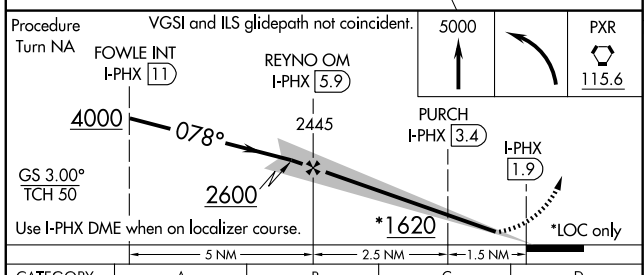
Inoperative table does not apply to S-ILS 7L.
For inoperative MALSR, increase S-LOC 7L Cat A/B visibilities to RVR 5000.

MALSR

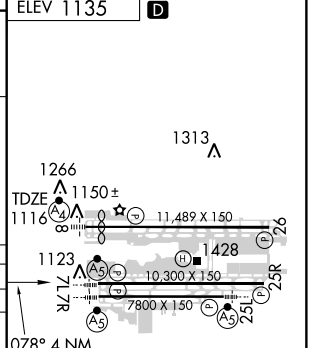
MISSED APPROACH: Climb to 5000 then left turn direct PXR VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2





CATEGORY	A	B	C	D
S-ILS 7L	1321/40 205 (200-¾)			
S-LOC 7L	1620/40 504 (500-¾)		1620/50 504 (500-1)	
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)
PURCH DME MINIMUMS				
S-LOC 7L	1520/40 404 (400-¾)			
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)



HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-322 (FAA)

ILS or LOC RWY 7R

PHOENIX SKY HARBOR INTL (PHX)

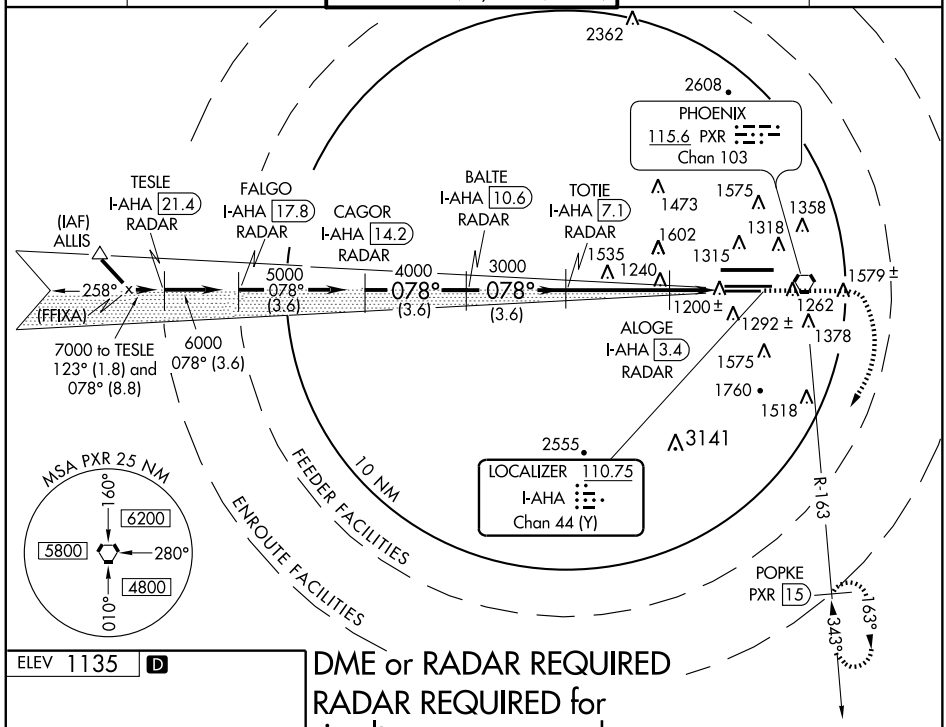
LOC/DME I-AHA	APP CRS	Rwy Idg	7800
110.75	078°	TDZE	1116
Chan 44 (Y)		Apt Elev	1135

Inoperative table does not apply to S-ILS 7R.
For inoperative MALSR, increase S-LOC 7R Cat A/B visibility to 1 mile.
Visibility reduction by helicopters NA.

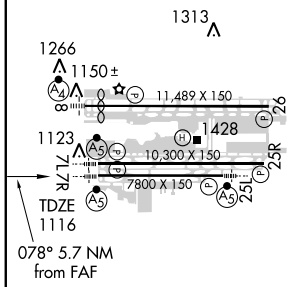
MALSR

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 via heading 250° and PXR R-163 to POPKE/15 DME and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

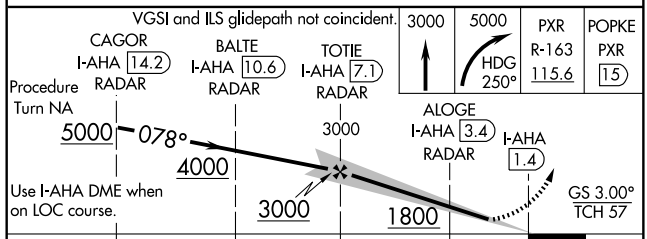


ELEV 1135 D



HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

DME or RADAR REQUIRED
RADAR REQUIRED for simultaneous approaches.



CATEGORY	A	B	C	D
S-ILS 7R	1363-¾ 247 (300-¾)			
S-LOC 7R	1520-¾ 404 (400-¾)			
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SYQ	APP CRS	Rwy Idg	10591
111.75	078°	TDZE	1118
Chan 54 (Y)		Apt Elev	1135

ILS or LOC RWY 8

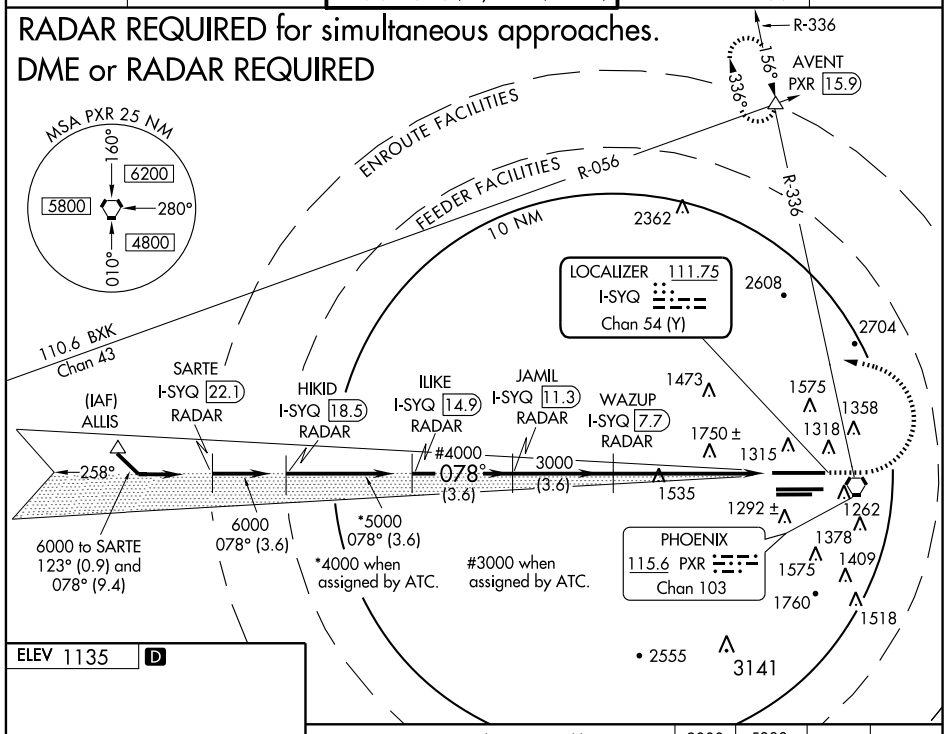
PHOENIX SKY HARBOR INTL (PHX)

MALSF

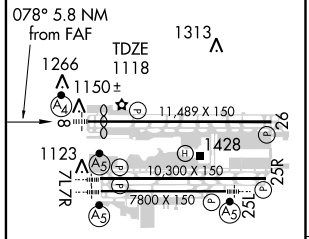
MISSED APPROACH: Climb to 3000, then climbing left turn to 5000 via heading 280° and PXR R-336 to AVENT/INT 15.9 DME and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

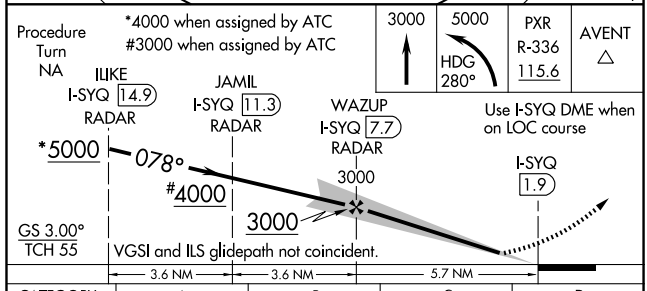
RADAR REQUIRED for simultaneous approaches.
DME or RADAR REQUIRED



ELEV 1135 D



HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26



CATEGORY	A	B	C	D
S-ILS 8	1368-1 250 (300-1)			
S-LOC 8	1860-1 742 (800-1)	1860-1¼ 742 (800-1¼)	1860-2¼ 742 (800-2¼)	1860-2½ 742 (800-2½)
CIRCLING	1860-1 725 (800-1)	1860-1¼ 725 (800-1¼)	1860-2¼ 725 (800-2¼)	1920-2½ 785 (800-2½)

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-322 (FAA)

ILS or LOC RWY 25L

PHOENIX SKY HARBOR INTL (PHX)

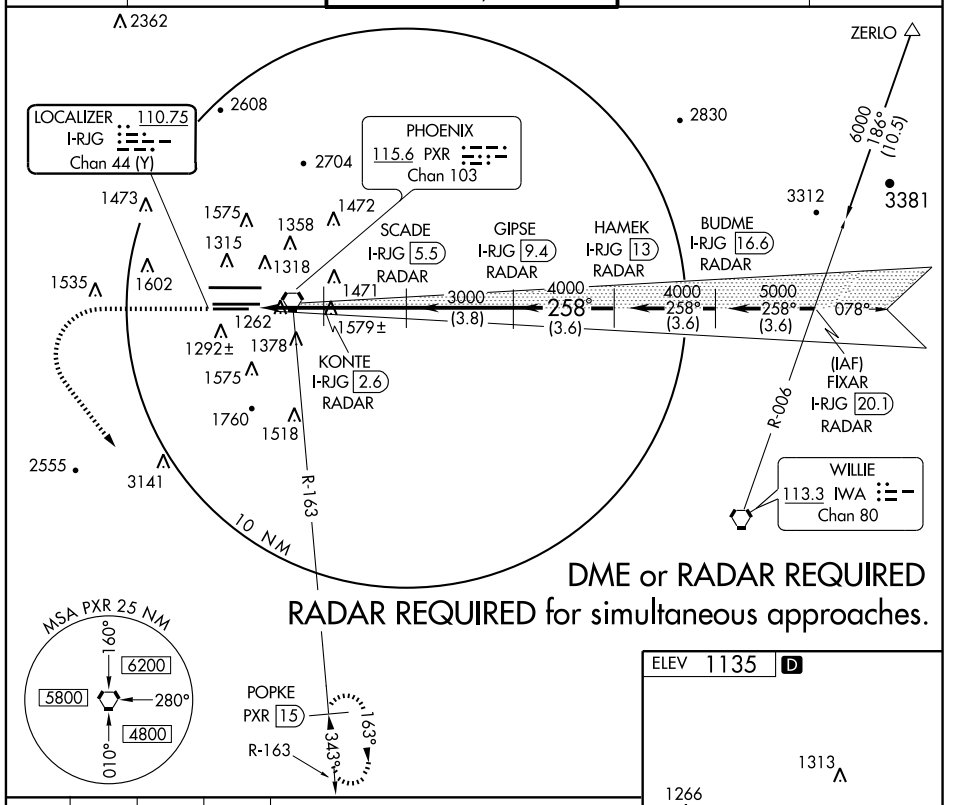
LOC/DME I-RJG	APP CRS	Rwy Idg	7800
110.75	258°	TDZE	1124
Chan 44 (Y)		Apt Elev	1135

Autopilot coupled approach NA below 1925 feet.

MALSR

MISSED APPROACH: Climb to 3000, then climbing left turn to 5000 via heading 130° and PXR R-163 to POPKE/15 DME and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2



3000	5000	PXR	POPKE
	HDG 130°	R-163 115.6	PXR 15

Use I-RJG DME when on LOC course.

I-RJG 0.1

KONTE I-RJG 2.6 RADAR

SCADE I-RJG 5.5 RADAR

GIPSE I-RJG 9.4 RADAR

HAMEK I-RJG 13 RADAR

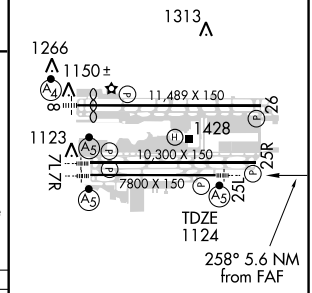
3000 258° 4000 4000

2040 3000

GS 3.00° TCH 49

Procedure Turn NA

2.7 NM 2.9 NM 3.8 NM 3.6 NM



CATEGORY	A	B	C	D
S-ILS 25L	1324-½ 200 (200-½)			
S-LOC 25L	1520-½ 396 (400-½)			1520-¾ 396 (400-¾)
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-CWJ	APP CRS	Rwy Idg	11489
111.75	258°	TDZE	1135
Chan 54 (Y)		Apt Elev	1135

ILS or LOC RWY 26

PHOENIX SKY HARBOR INTL (PHX)

MISSED APPROACH: Climb to 2500, then climbing right turn to 5000 via heading 030° and PXR R-336 to AVENT INT/15.9 DME and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

DME or RADAR REQUIRED

RADAR REQUIRED for simultaneous approaches

AVENT PXR 15.9

110.6 BXK Chan 43 R-056 336° 156° R-336

MSA PXR 25 NM: 160° 6200; 280° 5800; 010° 4800

ZERLO 7000 186° (9.8)

10 NM

LOCALIZER 111.75 I-CWJ Chan 54 (Y)

DELSE I-CWJ 3.8 RADAR

JAGAL I-CWJ 11.1 RADAR

ABOSE I-CWJ 18.3 RADAR

PRUNN I-CWJ 7.7 RADAR

TODRE I-CWJ 14.7 RADAR

CERUN I-CWJ 22.1 RADAR

PHOENIX 115.6 PXR Chan 103

WILLIE 113.3 IWA Chan 80

3000 4000 5000 6000 258° 258° 258° 258° 078° (IAF)

(3.4) (3.6) (3.6) (3.8)

R-006

ELEV 1135 D

1313 258° 5.6 NM from FAF

TDZE 1135

11,489 X 150

10,300 X 150

7800 X 150

1428

1266 1150± 1123

8 26 7L 25R 7R 25L

2500 | 5000 HDG 030° | PXR R-336 115.6 | AVENT

VGSI and ILS glidepath not coincident.

Use I-CWJ DME when on LOC course.

I-CWJ 2.1 DELSE I-CWJ 3.8 RADAR PRUNN I-CWJ 7.7 RADAR JAGAL I-CWJ 11.1 RADAR TODRE I-CWJ 14.7 RADAR

3000 258° 4000 5000

Procedure Turn NA

GS 3.00° TCH 51

1740 3000

1.7 NM 3.9 NM 3.4 NM 3.6 NM

HIRL Rwys 8-26, 7L-25R and 7R-25L

REIL Rwy 26

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

CATEGORY	A	B	C	D
S-ILS 26	1386-¾ 251 (300-¾)			
S-LOC 26	1580-1 445 (500-1)		1580-1¼ 445 (500-1¼)	1580-1½ 445 (500-1½)
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)

SW-4, 22 OCT 2009 to 19 NOV 2009

JESSE ONE ARRIVAL

PHOENIX APP CON
128.65 353.8
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
GND CON
119.75 269.2
ATIS 127.575

GALLUP
115.1 GUP
Chan 98
N35°28.56′-W108°52.36′
L-8, H-4

WINSLOW
112.6 INW
Chan 73
N35°03.70′-W110°47.70′
L-8, H-4

R-061
10 NM
210K IAS
R-038
10 NM
210K IAS
12000
180°
(30)
18000
222°
(77)
NEPTN
N34°45.09′
W110°10.50′
18000
242°
(52)
R-073
10 NM
210K IAS
DRAKE
114.1 DRK
Chan 88
JESSE
N34°35.01′
W110°56.63′
18000
(39)
91
ZUNI
113.4 ZUN
Chan 81
N34°57.95′-W109°09.27′
L-8, H-4
210K IAS
8 NM
180°
(16)
46
R-102
GUMMO
N34°19.06′
W111°01.54′
(11)
HOMRR
N33°52.83′
W111°24.27′
214°
(18)
61
EAGUL
N34°07.90′
W111°04.96′
(4)
7 NM
210K IAS
43
DBACK
N33°55.57′
W111°20.77′
39
(4)
225°
214°
(35)
BUNTR
N33°50.08′
W111°27.76′
Fly heading 225°, expect vectors
to Final Approach Course.
R-034
PHOENIX
115.6 PXR
Chan 103
N33°25.98′-W111°58.21′

NOTE: JESSE STAR is for turboprop aircraft only.
NOTE: Chart not to scale.
NOTE: RADAR required.
NOTE: DME required.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

ARRIVAL ROUTE DESCRIPTION

GALLUP TRANSITION (GUP.JESSE1): From over GUP VORTAC via GUP R-222 and ZUN R-242 to JESSE INT. Thence. . . .

WINSLOW TRANSITION (INW.JESSE1): From over INW VORTAC via INW R-180 to JESSE INT. Thence. . . .

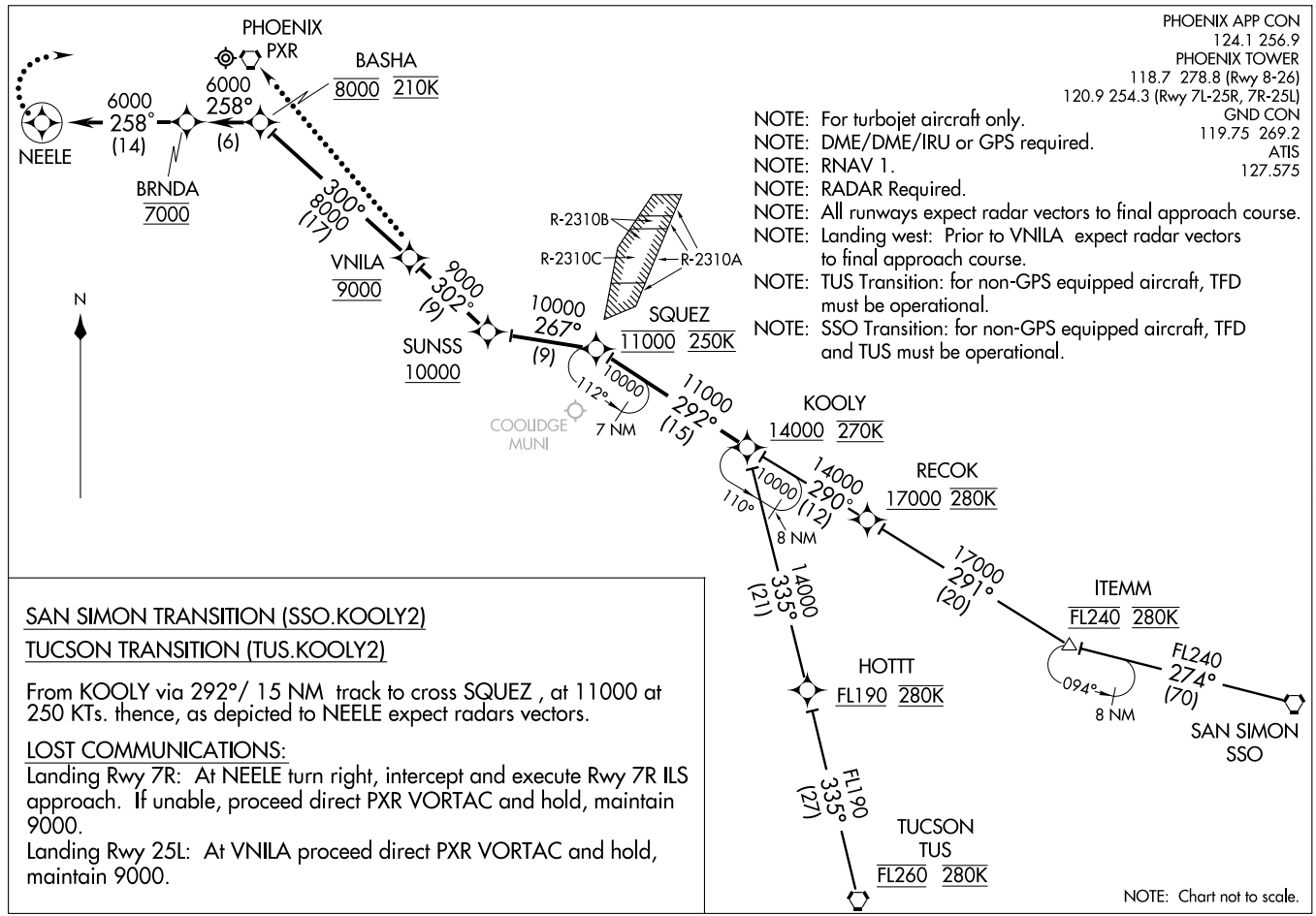
ZUNI TRANSITION (ZUN.JESSE1): From over ZUN VORTAC via ZUN R-242 to JESSE INT. Thence. . . .

. . . .From over JESSE INT via INW R-180 to EAGUL INT, then via PXR R-034 to PXR VORTAC.

LOST COMMUNICATIONS:

After DBACK INT, proceed direct to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009



PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
GND CON
119.75 269.2
ATIS
127.575

NOTE: For turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR Required.
NOTE: All runways expect radar vectors to final approach course.
NOTE: Landing west: Prior to VNILA expect radar vectors to final approach course.
NOTE: TUS Transition: for non-GPS equipped aircraft, TFD must be operational.
NOTE: SSO Transition: for non-GPS equipped aircraft, TFD and TUS must be operational.

SAN SIMON TRANSITION (SSO.KOOLY2)

TUCSON TRANSITION (TUS.KOOLY2)

From KOOLY via 292°/ 15 NM track to cross SQUEZ , at 11000 at 250 KTs. thence, as depicted to NEELE expect radars vectors.

LOST COMMUNICATIONS:

Landing Rwy 7R: At NEELE turn right, intercept and execute Rwy 7R ILS approach. If unable, proceed direct PXR VORTAC and hold, maintain 9000.

Landing Rwy 25L: At VNILA proceed direct PXR VORTAC and hold, maintain 9000.

KOOLY TWO ARRIVAL (RNAV) (KOOLY.KOOLY2) 09127

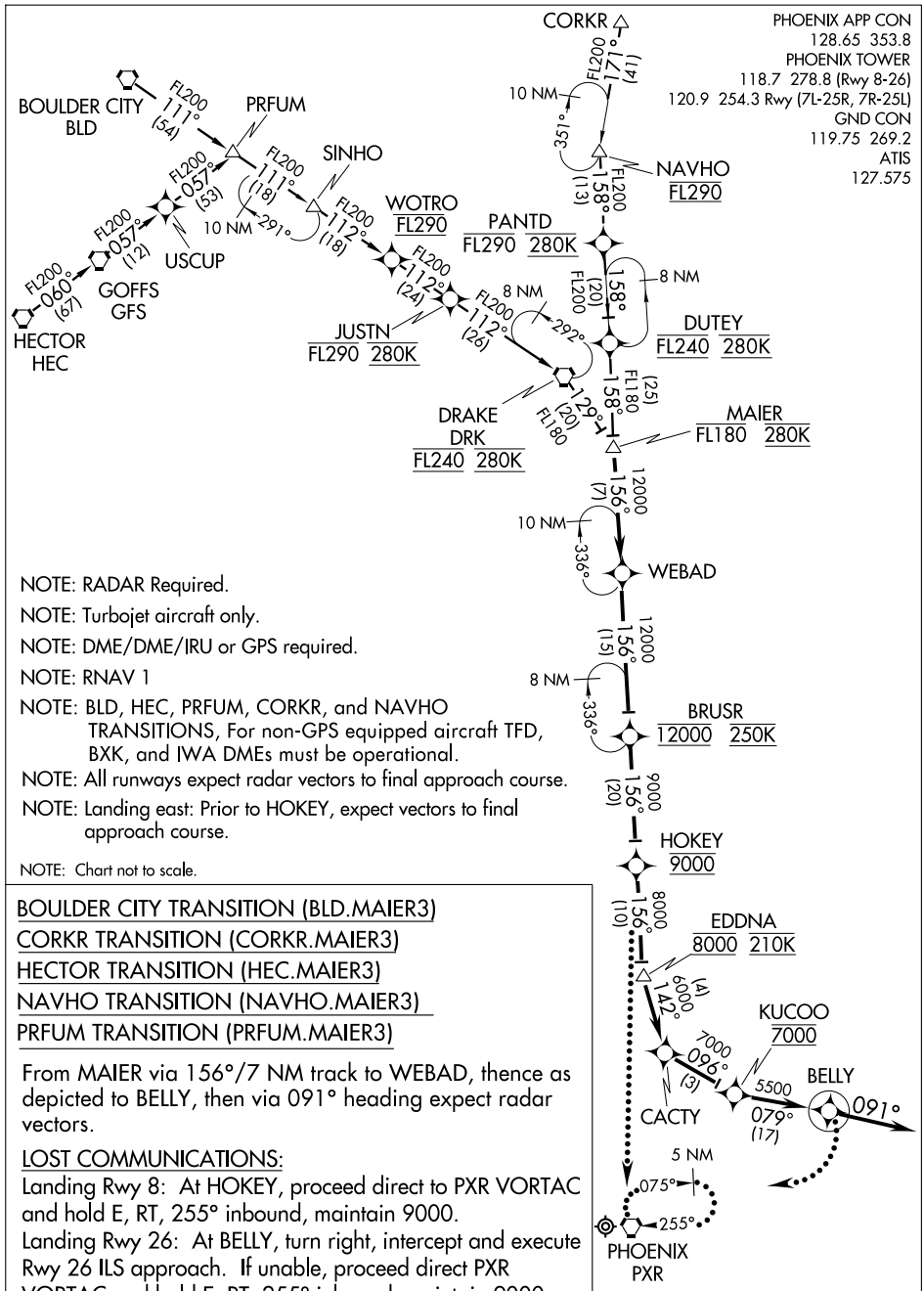
ST-322 (FAA)

PHOENIX SKY HARBOR INTL
PHOENIX, ARIZONA

MAIER THREE ARRIVAL (RNAV)

PHOENIX SKY HARBOR INTL
PHOENIX, ARIZONA

PHOENIX APP CON
128.65 353.8
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 Rwy (7L-25R, 7R-25L)
GND CON
119.75 269.2
ATIS
127.575



NOTE: RADAR Required.

NOTE: Turbojet aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1

NOTE: BLD, HEC, PRFUM, CORKR, and NAVHO TRANSITIONS, For non-GPS equipped aircraft TFD, BXK, and IWA DMEs must be operational.

NOTE: All runways expect radar vectors to final approach course.

NOTE: Landing east: Prior to HOKEY, expect vectors to final approach course.

NOTE: Chart not to scale.

BOULDER CITY TRANSITION (BLD.MAIER3)
CORKR TRANSITION (CORKR.MAIER3)
HECTOR TRANSITION (HEC.MAIER3)
NAVHO TRANSITION (NAVHO.MAIER3)
PRFUM TRANSITION (PRFUM.MAIER3)

From MAIER via 156°/7 NM track to WEBAD, thence as depicted to BELLY, then via 091° heading expect radar vectors.

LOST COMMUNICATIONS:

Landing Rwy 8: At HOKEY, proceed direct to PXR VORTAC and hold E, RT, 255° inbound, maintain 9000.

Landing Rwy 26: At BELLY, turn right, intercept and execute Rwy 26 ILS approach. If unable, proceed direct PXR VORTAC and hold E, RT, 255° inbound, maintain 9000.

SW-4, 22 OCT 2009 to 19 NOV 2009

MAXXO ONE DEPARTURE

PHOENIX SKY HARBOR INTL (PHX)

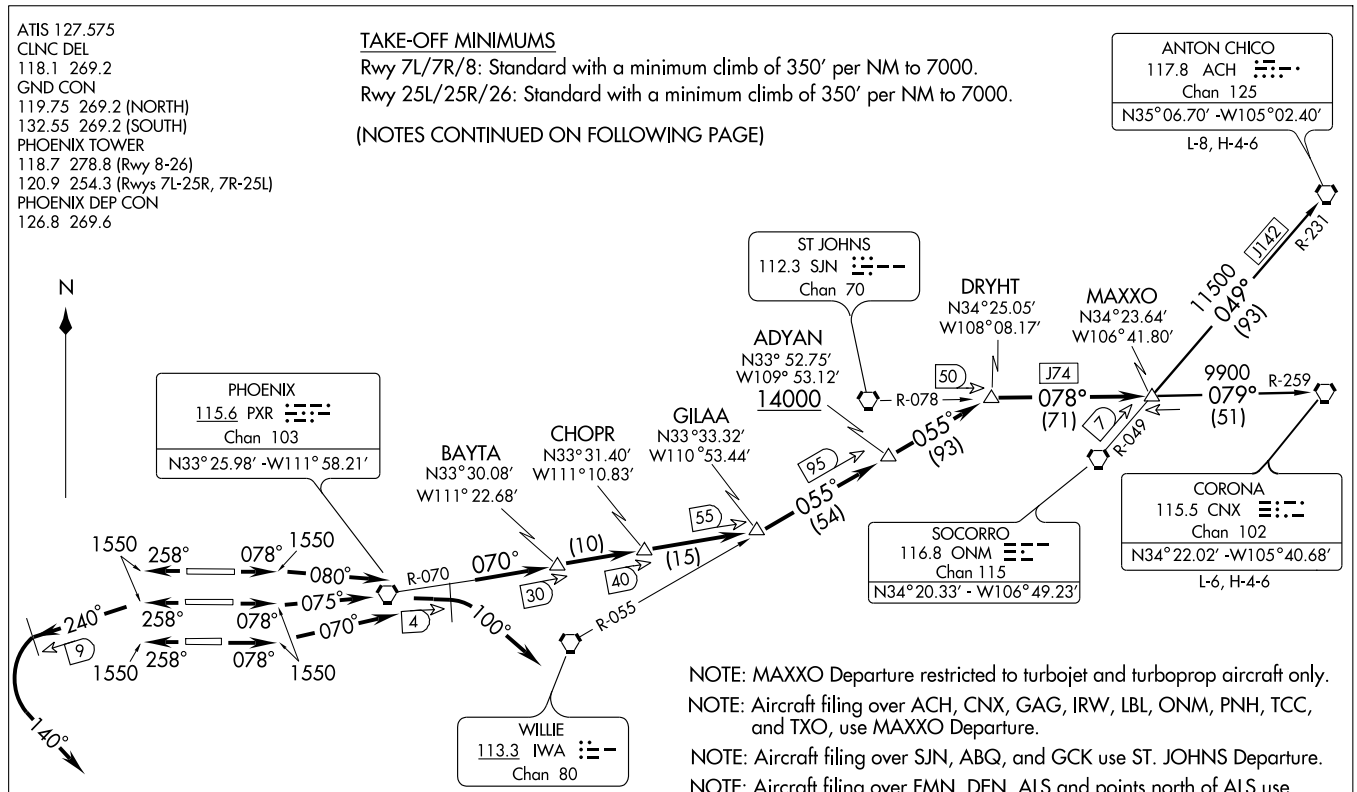
PHOENIX, ARIZONA

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
126.8 269.6

TAKE-OFF MINIMUMS

Rwy 7L/7R/8: Standard with a minimum climb of 350′ per NM to 7000.
Rwy 25L/25R/26: Standard with a minimum climb of 350′ per NM to 7000.

(NOTES CONTINUED ON FOLLOWING PAGE)



NOTE: MAXXO Departure restricted to turbojet and turboprop aircraft only.

NOTE: Aircraft filing over ACH, CNX, GAG, IRW, LBL, ONM, PNH, TCC, and TXO, use MAXXO Departure.

NOTE: Aircraft filing over SJN, ABQ, and GCK use ST. JOHNS Departure.

NOTE: Aircraft filing over FMN, DEN, ALS and points north of ALS use SILOW Departure.

NOTE: RADAR and DME required.

NOTE: MRA CHOPR/PXR 40 DME 9100 to receive PXR.

NOTE: MRA GILAA/PXR 55 DME 14000 to receive PXR and IWA.

NOTE: MRA ADYAN/IWA 95 DME FL240 to receive IWA.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7L: Climb via 078° heading to 1550 then climbing left turn heading 075°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 7R: Climb via 078° heading to 1550 then climbing left turn heading 070°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 8: Climb via 078° heading to 1550 then climbing right turn heading 080°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 25L/25R/26: Climb via 258° heading to 1550 then climbing left turn heading 240°, at 9 DME west of PXR VORTAC, climbing left turn heading 140°. Thence. . . .

. . . .maintain 7000, expect radar vectors to PXR R-070 to GILAA/PXR 55 DME, then pilot nav via IWA R-055 to ADYAN/95 DME, cross ADYAN at or above 14000 and proceed via radar vector 055° to join SJN R-078/CNX R-259 to MAXXO/CNX 51 DME; then via (transition). Expect filed altitude 3 minutes after departure.

ANTON CHICO TRANSITION (MAXXO1.ACH): From over MAXXO INT via ONM R-049 and ACH R-231 to ACH VORTAC.

CORONA TRANSITION (MAXXO1.CNX): From over MAXXO INT via CNX R-259 to CNX VORTAC.

TAKEOFF NOTES CONT.

TAKE-OFF OBSTACLES

NOTE: Rwy 7L, building 1298′ from departure end of runway, 798′ left of centerline, 67′ AGL/1176′ MSL.

NOTE: Rwy 7R, rod 717′ from departure end of runway, 184′ right of centerline, 87′ AGL/1196′ MSL.

NOTE: Rwy 8, light standard 3460′ from departure end of runway, 1207′ left of centerline, 123′ AGL/1232′ MSL.
Rwy 8, light standard 3444′ from departure end of runway, 1003′ left of centerline, 118′ AGL/1227′ MSL.

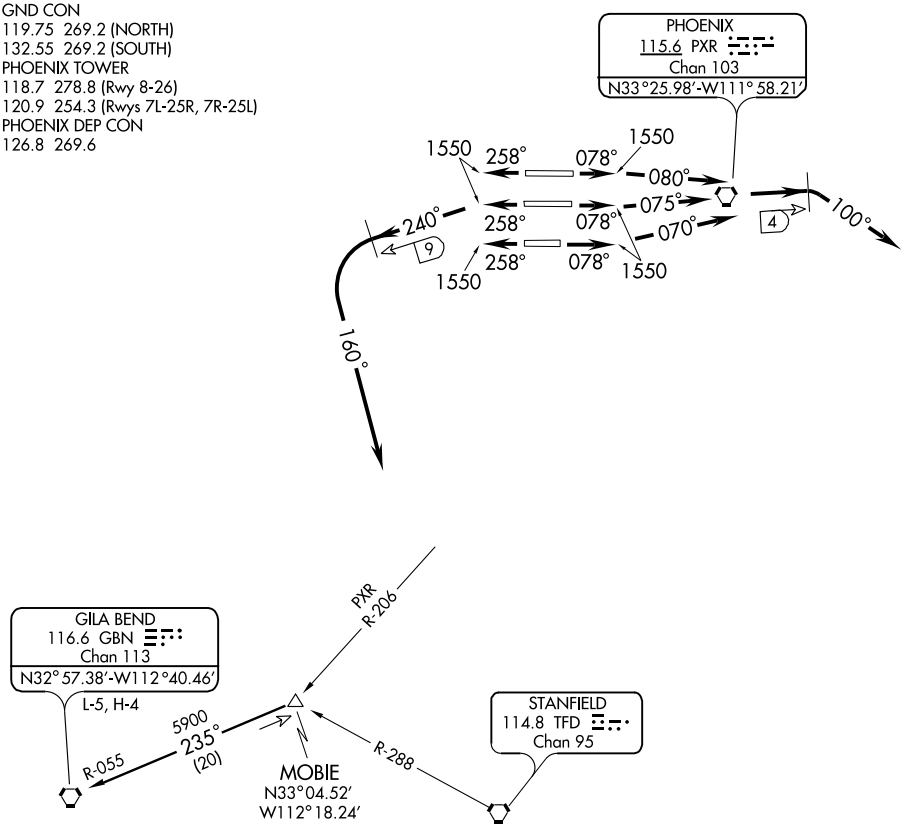
NOTE: Rwy 25L, light standard 271′ from departure end of runway, 5140′ left of centerline, 91′ AGL/1200′ MSL.

NOTE: Rwy 26, light 59′ from departure end of runway, 63′ right of centerline, 16′ AGL/1125′ MSL.
Rwy 26, pole 58′ from departure end of runway, 90′ right of centerline, 25′ AGL/1125′ MSL.
Rwy 26, light 78′ from departure end of runway, 64′ right of centerline, 18′ AGL/1127′ MSL.
Rwy 26, tree 38′ from departure end of runway, 440′ right of centerline, 24′ AGL/1133′ MSL.
Rwy 26, light standard 77′ from departure end of runway, 453′ right of centerline, 27′ AGL/1136′ MSL.
Rwy 26, light standard 74′ from departure end of runway, 453′ right of centerline, 33′ AGL/1142′ MSL.
Rwy 26, light standard 77′ from departure end of runway, 434′ right of centerline, 31′ AGL/1140′ MSL.
Rwy 26, light 38′ from departure end of runway, 440′ right of centerline, 26′ AGL/1135′ MSL.
Rwy 26, tree 113′ from departure end of runway, 294′ left of centerline, 24′ AGL/1133′ MSL.
Rwy 26, building, 2.27 NM from departure end of runway, 3309′ right of centerline, 406′ AGL/1496′ MSL.
Rwy 26, building 2.23 NM from departure end of runway, 3631′ right of centerline, 663′ AGL/1750′ MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

MOBIE TWO DEPARTURE

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
126.8 269.6



TAKE-OFF MINIMUMS

Rwy 7L/7R/8: Standard with minimum climb of 300' per NM to 7000.

Rwy 25L/25R/26: Standard with minimum climb of 350' per NM to 7000.

NOTE: MOBIE DEPARTURE restricted to turbojet and turboprop aircraft only.

NOTE: DME and RADAR required.

(NOTES CONTINUED ON FOLLOWING PAGE)

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

MOBIE TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb via 078° heading to 1550 then climbing right turn heading 080°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 7L: Climb via 078° heading to 1550 then climbing left turn heading 075°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 7R: Climb via 078° heading to 1550 then climbing left turn heading 070°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 25L/25R/26: Climb via 258° heading to 1550 then climbing left turn heading 240°, at 9 DME west of PXR VORTAC, climbing left turn heading 160°. Thence. . . .

.... maintain 7000, expect radar vectors to MOBIE INTERSECTION thence via (transition). Expect further clearance to filed altitude 3 minutes after departure.

LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure.

GILA BEND TRANSITION (MOBIE2.GBN): From over MOBIE INT via GBN R-055 to GBN VORTAC.

TAKEOFF NOTES CONT.

TAKE-OFF OBSTACLES

NOTE: Rwy 7L, building 1332′ from departure end of runway, 798′ left of centerline, 67′ AGL/1176′ MSL.

NOTE: Rwy 7R, rod 716′ from departure end of runway, 184′ right of centerline, 87′ AGL/1196′ MSL.

NOTE: Rwy 8, light standard 3530′ from departure end of runway, 1207′ left of centerline, 123′ AGL/1232′ MSL.
Rwy 8, light standard 3479′ from departure end of runway, 1003′ left of centerline, 118′ AGL/1227′ MSL.

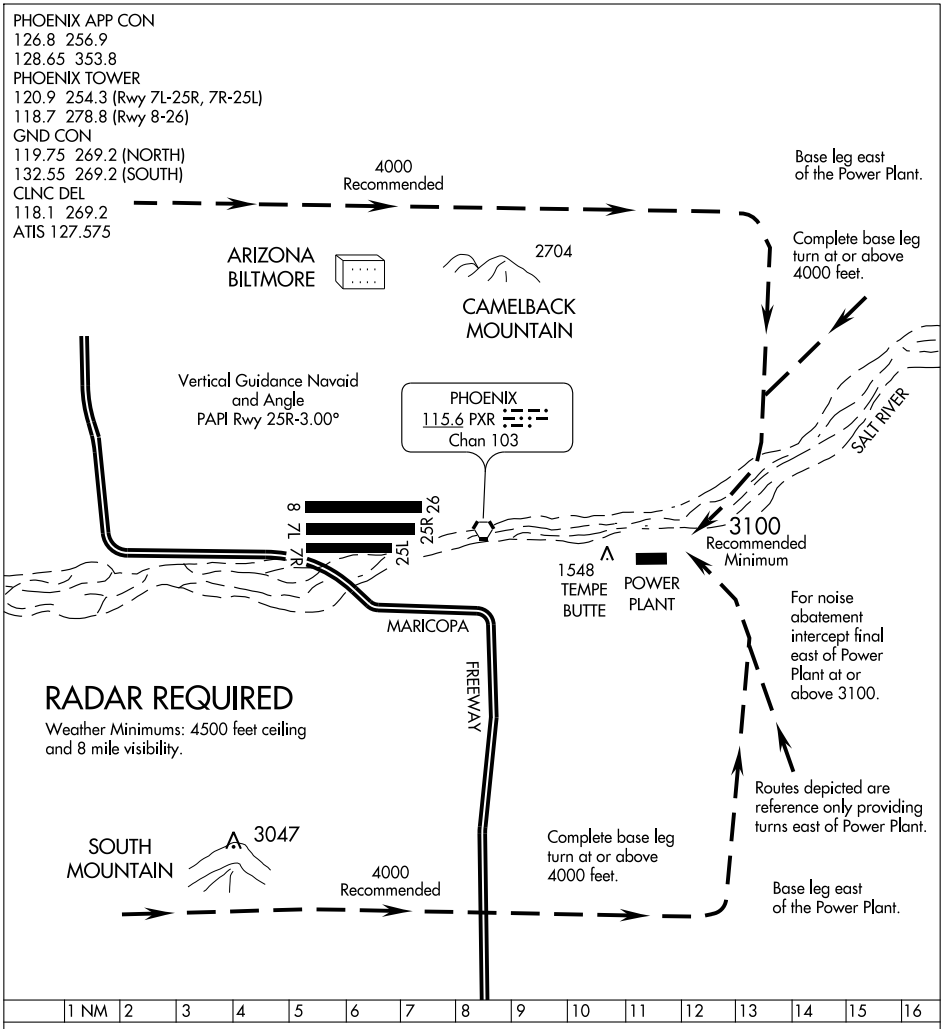
NOTE: Rwy 25L, light standard 1129′ from departure end of runway, 774′ left of centerline, 120′ AGL/1200′ MSL.

NOTE: Rwy 26, light 59′ from departure end of runway, 63′ right of centerline, 16′ AGL/1125′ MSL.
Rwy 26, pole 58′ from departure end of runway, 90′ right of centerline, 25′ AGL/1125′ MSL.
Rwy 26, light 78′ from departure end of runway, 64′ right of centerline, 18′ AGL/1127′ MSL.
Rwy 26, light 38′ from departure end of runway, 440′ left of centerline, 24′ AGL/1133′ MSL.
Rwy 26, light standard 77′ from departure end of runway, 453′ left of centerline, 27′ AGL/1136′ MSL.
Rwy 26, light standard 74′ from departure end of runway, 456′ right of centerline, 33′ AGL/1142′ MSL.
Rwy 26, light standard 77′ from departure end of runway, 434′ right of centerline, 31′ AGL/1140′ MSL.
Rwy 26, light standard 64′ from departure end of runway, 68′ left of centerline, 1125′ MSL.
Rwy 26, tree 113′ from departure end of runway, 294′ left of centerline, 24′ AGL/1133′ MSL.
Rwy 26, building, 2.32 NM from departure end of runway, 3309′ right of centerline, 406′ AGL/1496′ MSL.
Rwy 26, building 2.28 NM from departure end of runway, 3612′ right of centerline, 663′ AGL/1750′ MSL.
Rwy 26, tree 234′ from departure end of runway, 214′ right of centerline, 24′ AGL/1133′ MSL

SW-4, 22 OCT 2009 to 19 NOV 2009

POWER PLANT VISUAL RWY 25R

PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA



POWER PLANT VISUAL RWY 25R

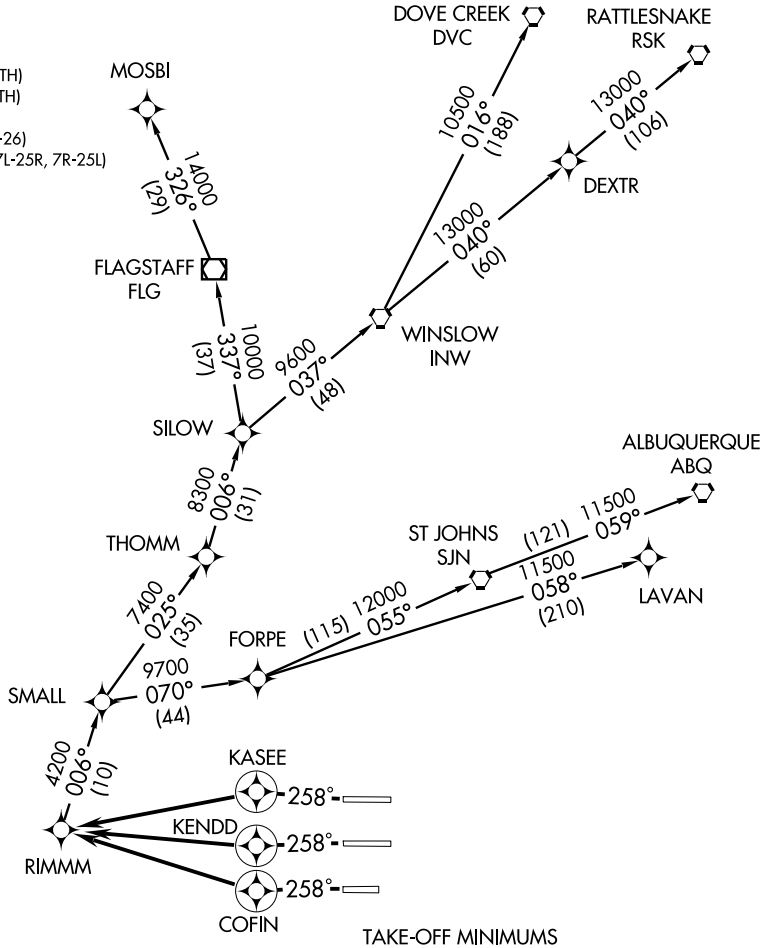
When visual approaches to Runway 25R are in progress, clearances will be given utilizing in part the following phaseology:

"(IDENT) CLEARED FOR A POWER PLANT VISUAL RUNWAY 25R APPROACH"

RIMMM ONE DEPARTURE (RNAV)

PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
126.8 269.6



TAKE-OFF MINIMUMS
Rwys 7L/7R/8: NA
Rwys 25L/25R/26: Standard with mininium climb of 380' per NM to 7000 (ATC).

NOTE: 1. GPS required
2. RNAV 1

NOTE: RIMMM Departure restricted to turbojet and turboprop aircraft only.

NOTE: Aircraft filing over CIM, FTI, or GCK file ABQ Transition.

NOTE: Aircraft filing over ACH, LBL, ONM, CNX, PNG, GAG, TCC, BGD, IRW, TXO file DSERT or CHEZZ DP, DRYHT TRANSITION.

NOTE: LAVAN TRANSITION for ABQ arrivals only.

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

RIMMM ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 25L: Climb via 258° course to COFIN WP, then turn right direct RIMMM WP. Thence....

TAKE-OFF RUNWAY 25R: Climb via 258° course to KENDD WP, then turn right direct RIMMM WP. Thence....

TAKE-OFF RUNWAY 26: Climb via 258° course to KASEE WP, then turn left direct RIMMM WP. Thence....

....then via (transition). Maintain 7000, expect filed altitude within three minutes after departure.

ALBUQUERQUE TRANSITION (RIMMM1.ABQ)

DOVE CREEK TRANSITION (RIMMM1.DVC)

FLAGSTAFF TRANSITION (RIMMM1.FLG)

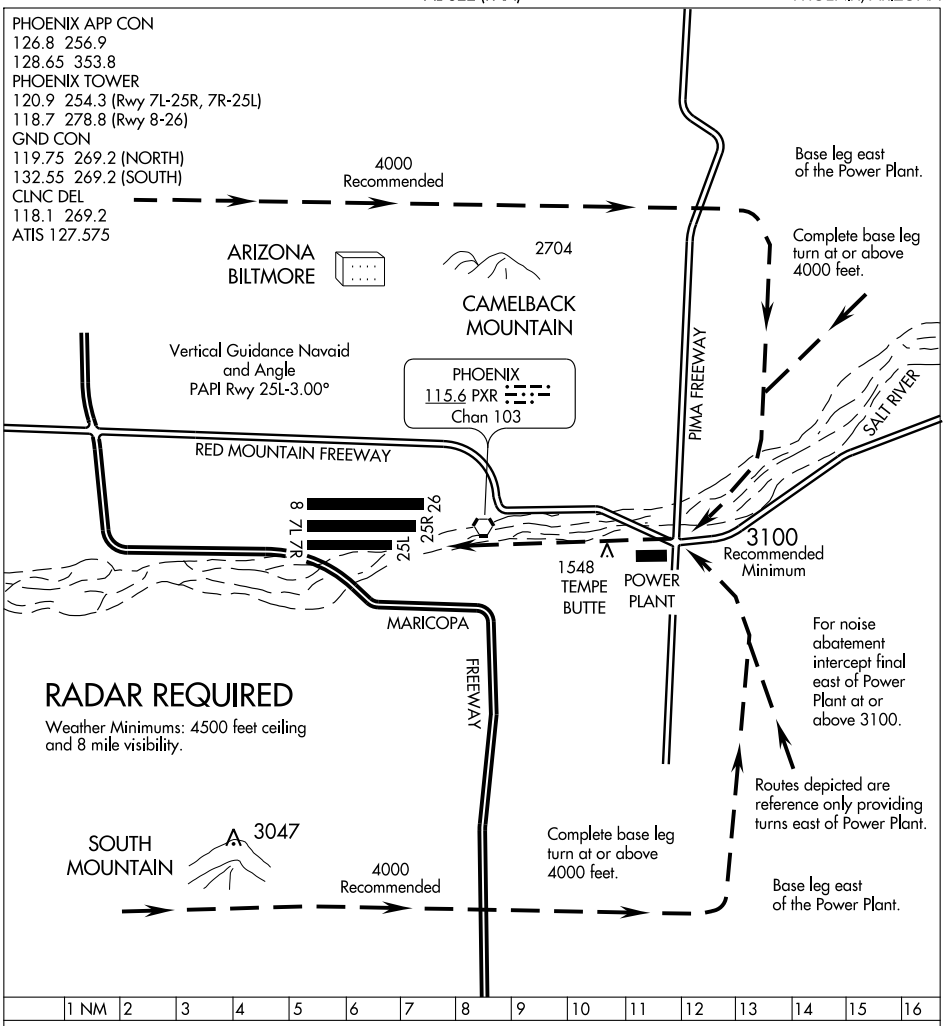
LAVAN TRANSITION (RIMMM1.LAVAN)

MOSBI TRANSITION (RIMMM1.MOSBI)

RATTLESNAKE TRANSITION (RIMMM1.RSK)

SW-4, 22 OCT 2009 to 19 NOV 2009

RIVER VISUAL RWY 25L



RIVER VISUAL RWY 25L

When visual approaches to Runway 25L are in progress, clearances will be given utilizing in part the following phaseology:

"(IDENT) CLEARED FOR A RIVER VISUAL RUNWAY 25L APPROACH"

WAAS	APP CRS	Rwy Idg	10300
CH 65811	078°	TDZE	1116
W07A		Apt Elev	1135

RNAV (GPS) Y RWY 7L

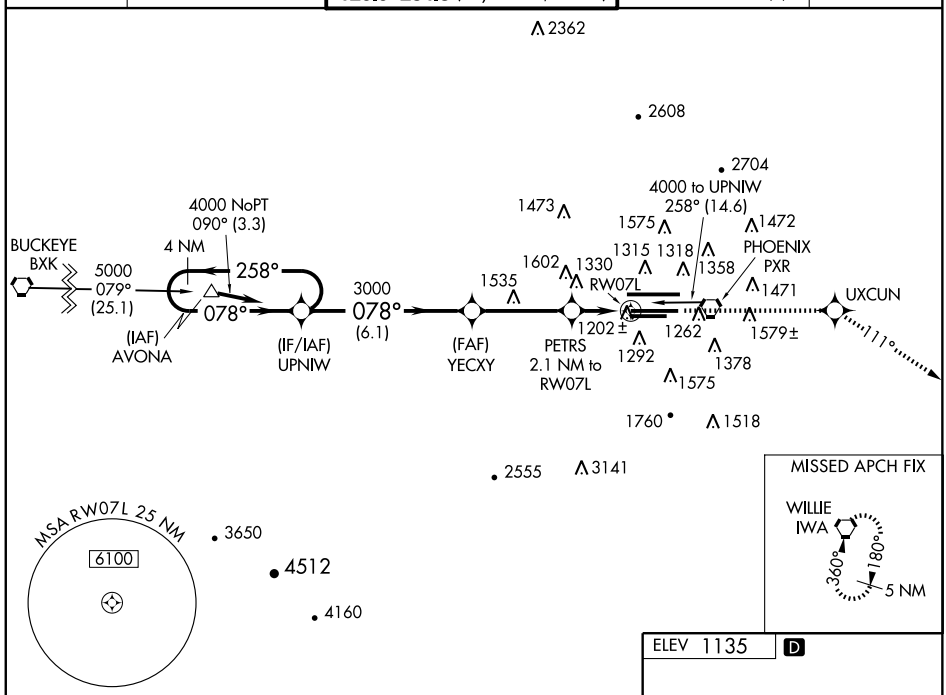
PHOENIX SKY HARBOR INTL (PHX)

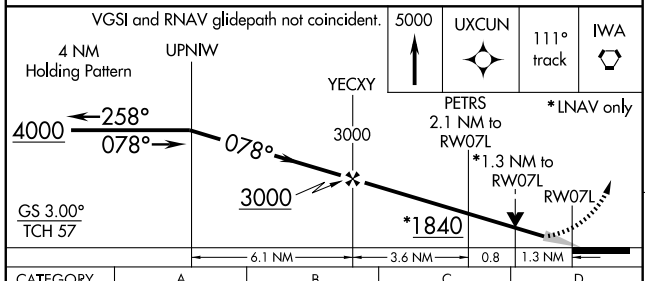
For inoperative MALSR, increase LPV all Cats visibility to RVR 5000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
DME/DME RNP- 0.3 NA.

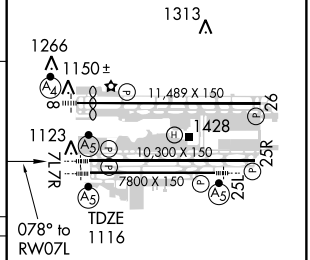
MALSR

MISSED APPROACH: Climb to 5000 direct UXCUN and via 111° track to IWA VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2







CATEGORY	A	B	C	D
LPV DA	1389/24 273 (300-½)			
LNAV/VNAV DA	1519/50 403 (400-1)			
LNAV MDA	1580/24 464 (500-½)		1580/40 464 (500-¾)	1580/50 464 (500-1)
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	7800
CH 73011	078°	TDZE	1116
W07B		Apt Elev	1135

RNAV (GPS) Y RWY 7R

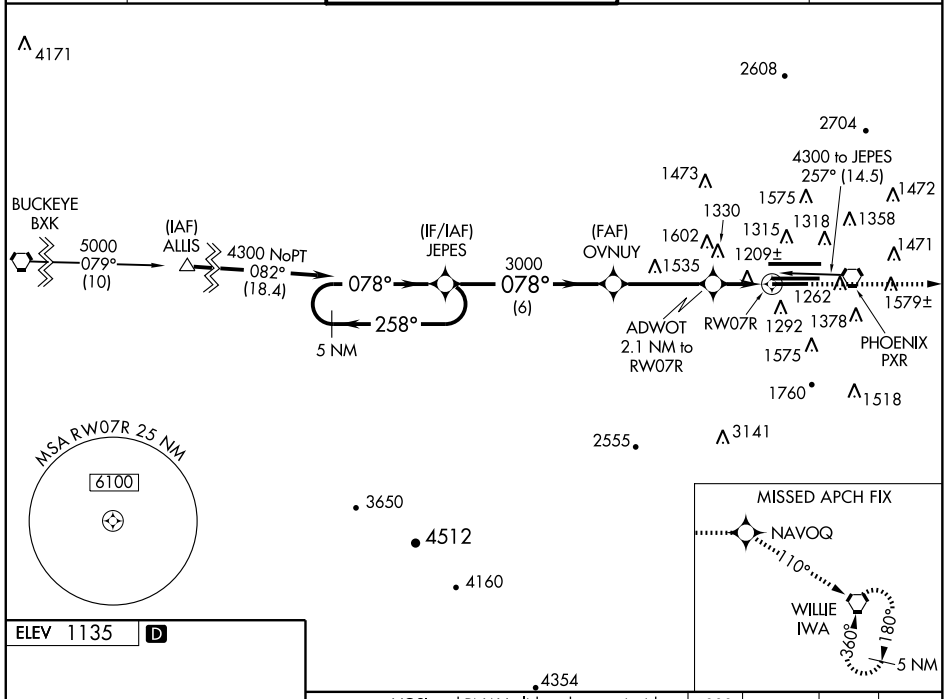
PHOENIX SKY HARBOR INTL (PHX)

For inoperative MALSR, increase LNAV Cat A/B visibility to 1 mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.

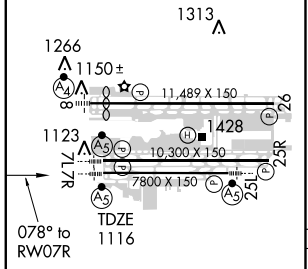
MALSR

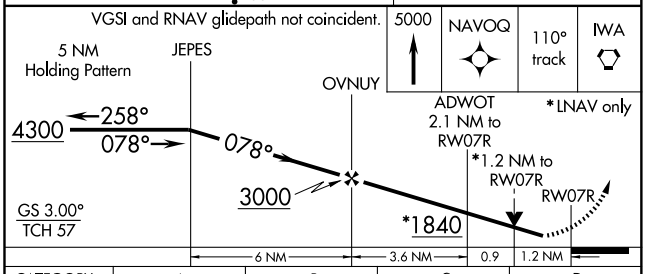
MISSED APPROACH: Climb to 5000 direct NAVOQ and via 110° track to IWA VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2



ELEV 1135 D





CATEGORY	A	B	C	D
LPV DA	1390-¾ 274 (300-¾)			
LNAV/VNAV DA	1520-1 404 (400-1)			
LNAV MDA	1580-¾ 464 (500-¾)			1580-1 464 (500-1)
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-322 (FAA)

WAAS	APP CRS	Rwy Idg	10591
CH 86611	078°	TDZE	1118
W08A		Apt Elev	1135

RNAV (GPS) Y RWY 8

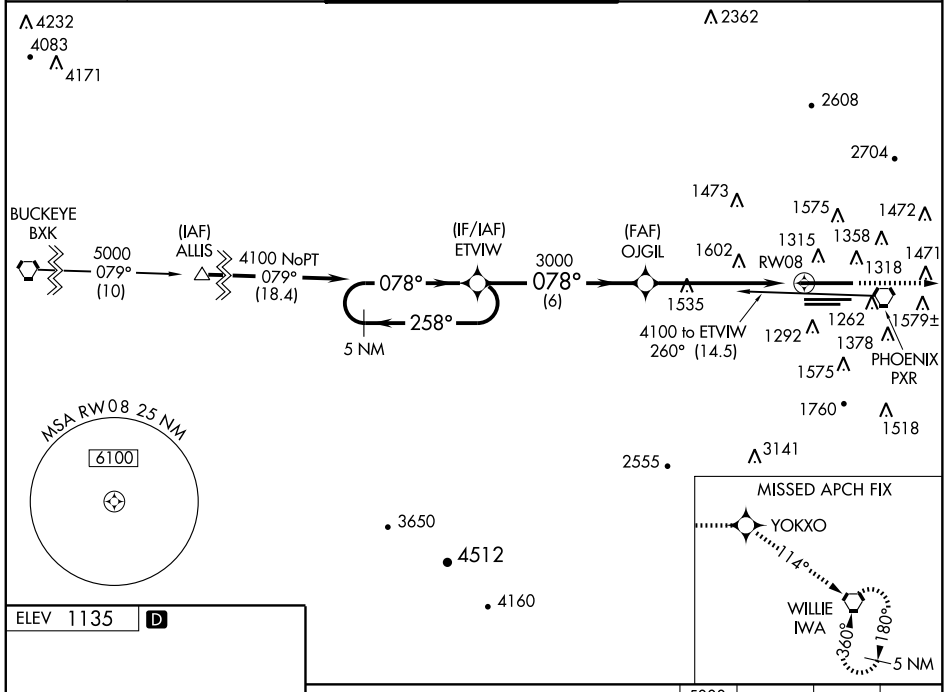
PHOENIX SKY HARBOR INTL (PHX)

Inoperative table does not apply.
DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA.

MALSF

MISSED APPROACH: Climb to 5000 direct YOKXO and via 114° track to IWA VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2



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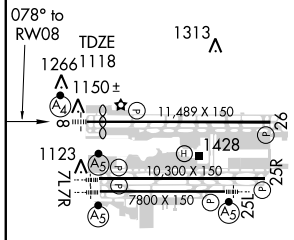
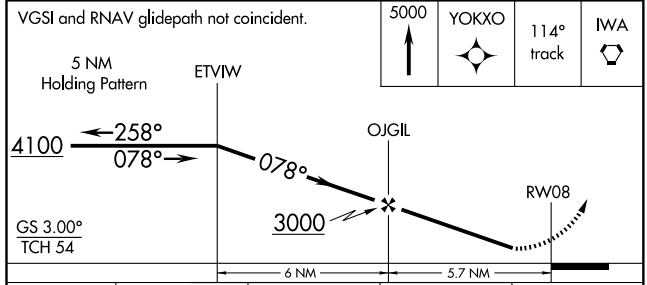


HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26



CATEGORY	A	B	C	D
LPV DA	1394-1 276 (300-1)			
LNAV MDA	1860-1 742 (800-1)	1860-1¼ 742 (800-1¼)	1860-2¼ 742 (800-2¼)	1860-2½ 742 (800-2½)
CIRCLING	1860-1 725 (800-1)	1860-1¼ 725 (800-1¼)	1860-2¼ 725 (800-2¼)	1920-2½ 785 (800-2½)

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 82211 W25B	APP CRS 258°	Rwy Idg 7800 TDZE 1126 Apt Elev 1135

RNAV (GPS) Y RWY 25L

PHOENIX SKY HARBOR INTL (PHX)

For inoperative MALSR, increase LPV all Cats visibility to 1¼.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
DME/DME RNP- 0.3 NA.

MALSR

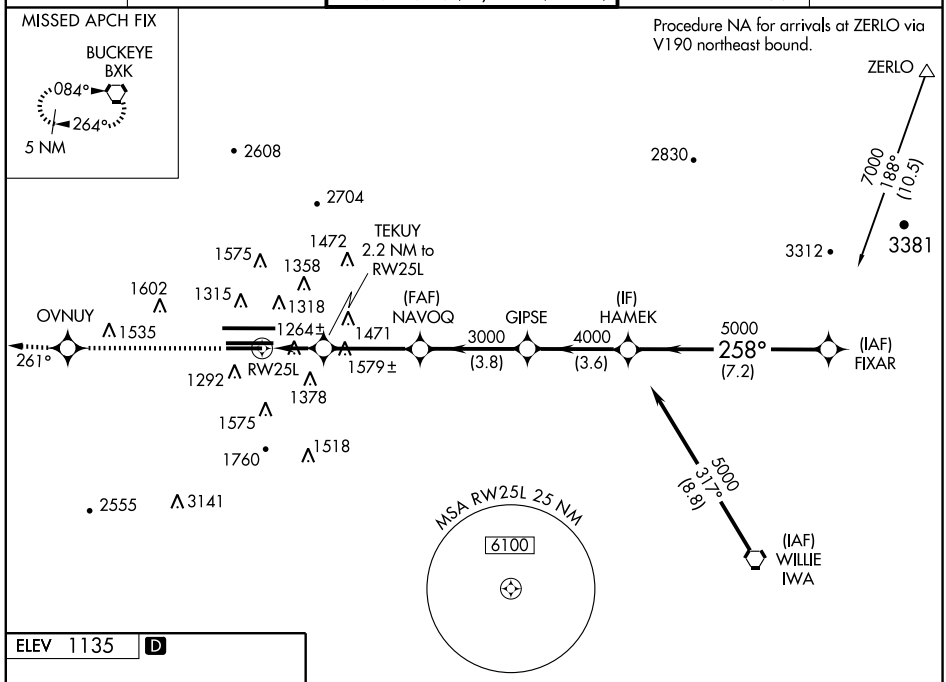
MISSED APPROACH: Climb to 5000 direct OVNUY and via 261° track to BXK VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

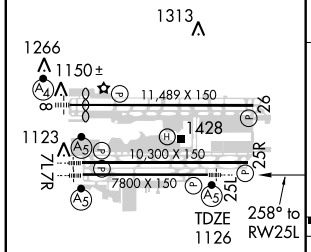
MISSED APCH FIX

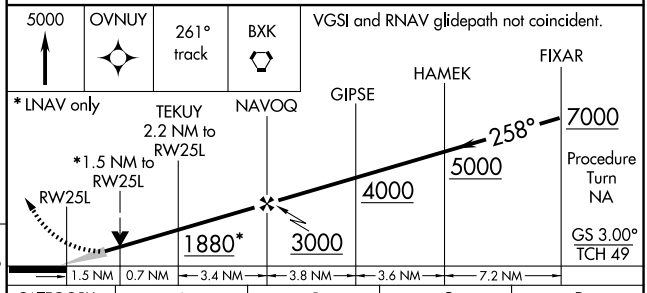
BUCKEYE BXK
084°
264°
5 NM

Procedure NA for arrivals at ZERLO via V190 northeast bound.



ELEV 1135 D





CATEGORY	A	B	C	D
LPV DA	1482-¾ 356 (400-¾)			
LNAV/VNAV DA	1613-1¼ 487 (500-1¼)			
LNAV MDA	1680-½ 554 (600-½)		1680-1 554 (600-1)	1680-1¼ 554 (600-1¼)
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-322 (FAA)

WAAS	APP CRS	Rwy Idg	10300
CH 40022	258°	TDZE	1134
W25A		Apt Elev	1135

RNAV (GPS) Y RWY 25R

PHOENIX SKY HARBOR INTL (PHX)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 5000 direct YECXY and via 260° track to BXK VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

MISSED APCH FIX

BUCKEYE BXK

084°

264°

5 NM

Procedure NA for arrivals at ZERLO via V190 northeast bound.

ZERLO

7000 187° (10.3)

3381

3312

2830

2608

2704

1473

1575

1472

1358

YASCU 2.1 NM to RW25R

1602

1315

1318

(FAF) UXCUN

ZAMEX

(IF) TEYYI

YECXY

1535

1264±

1471

3000 (3.5)

4000 (3.6)

5000 258° (7.4)

UVIYO

260°

1292

RW25R

1579±

1378

1575

1760

1518

3141

2555

MSA RW25R 25 NM

6100

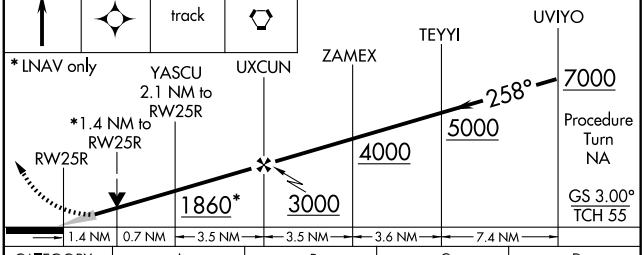
5000 317° (8.9)

(IAF) WILLIE IWA

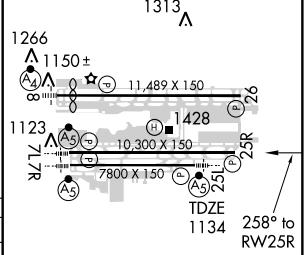
SW-4, 22 OCT 2009 to 19 NOV 2009

5000 | YECXY | 260° track | BXK

VGSI and RNAV glidepath not coincident.



ELEV 1135 D



CATEGORY	A	B	C	D
LPV DA	1439-1 305 (400-1)			
LNAV/VNAV DA	1580-1½ 446 (500-1½)			
LNAV MDA	1640-1 506 (600-1)		1640-1½ 506 (600-1½)	
CIRCLING	1740-1 605 (700-1)		1740-1¾ 605 (700-1¾)	1920-2½ 785 (800-2½)

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

PHOENIX, ARIZONA

AL-322 (FAA)

WAAS	APP CRS	Rwy Idg	11489
CH 70321	258°	TDZE	1135
W26A		Apt Elev	1135

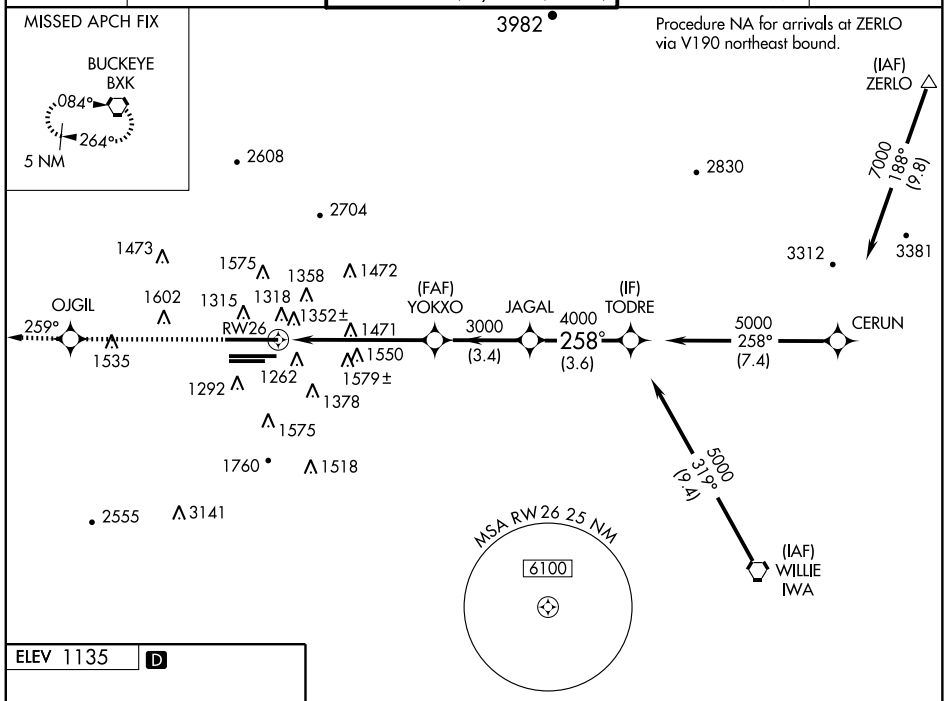
RNAV (GPS) Y RWY 26

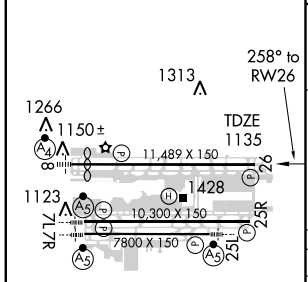
PHOENIX SKY HARBOR INTL (PHX)

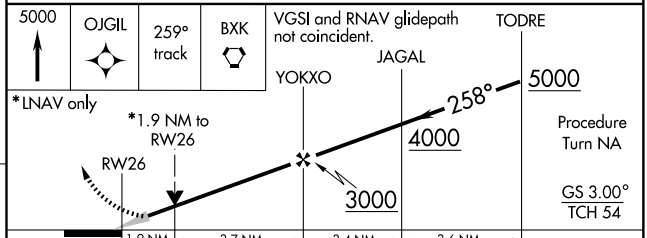
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 5000 direct OJGIL and via 259° track to BXK VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2







CATEGORY	A	B	C	D
LPV DA	1436-1 301 (400-1)			
LNAV/VNAV DA	1659-1¾ 524 (600-1¾)			
LNAV MDA	1800-1 665 (700-1)		1800-1¾ 665 (700-1¾)	1800-2 665 (700-2)
CIRCLING	1800-1 665 (700-1)		1800-1¾ 665 (700-1¾)	1920-2½ 785 (800-2½)

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10300
078°	TDZE	1116
	Apt Elev	1135

RNAV (RNP) Z RWY 7L

PHOENIX SKY HARBOR INTL (PHX)

GPS required. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 46°C (116°F). For inoperative MALSR, increase RNP 0.30 all Cats visibility to 1½ mile.

MALSR

MISSED APPROACH: Climb to 5000 via track 078° to UXCUN and via track 111° to IWA VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

Procedure NA for arrivals at BXK VORTAC via V16 westbound.

BUCKEYE BXK 5000 079° (25.1)

(IAF) AVONA 4000 090° (3.3)

(IF) UPNIW 3000 078° (6.1)

(FAF) YECXY 1535 078° (5.7) RW07L

1180±

UXCUN 078° 111° (13.9)

2362 2608 2704 1473 1575 1472 1358 1602 1315 1318 1471 1262 1579± (7.3) 1292 1378 1575 1760 1518 2555 3141 3650 4512 4160 4354

MSA RW07L 25 NM 6100

MISSED APCH FIX WILLIE IWA 360° 180° 5 NM

ELEV 1135 D

1313 1266 1150± 1123 1428 1116 TDZE

11,489 X 150 10,300 X 150 7800 X 150

7L 7R 8 26 25R 25L

078° to RW07L

Procedure Turn NA

VGSI and RNAV glidepath not coincident.

UPNIW 4000 078° YECXY 3000 RW07L 3000

GP 3.00° TCH 57

6.1 NM 5.7 NM

5000 trk 078° UXCUN trk 111° IWA

CATEGORY	A	B	C	D
RNP 0.30 DA	1523/50	407 (400-1)		

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7800
078°	TDZE	1116
	Apt Elev	1135

RNAV (RNP) Z RWY 7R

PHOENIX SKY HARBOR INTL (PHX)

GPS required.
For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 46°C (116°F).
For inoperative MALSR, increase RNP 0.30 all Cats visibility to 1½.

MALSR

MISSED APPROACH: Climb to 5000 via track 078° to NAVOQ and via track 110° to IWA VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

Procedure NA for arrivals at BUCKEYE (BXK) VORTAC via V461 westbound.

BUCKEYE BXK 5000 079° (10)

(IAF) ALLIS 4300 082° (18.4)

(IF) JEPES 3000 078° (6)

(FAF) OVNUY 1535 078° (5.7) RW07R

MISSED APCH FIX: NAVOQ 110° (14.1) WILLIE IWA 360° 180° 5 NM

MSA RW07R 25 NM 6200

ELEV 1135 D

078° to RW07R

11,489 X 150

10,300 X 150

7800 X 150

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

JEPES VGSI and RNAV glidepath not coincident. OVNUY

4300 078° 3000

Procedure Turn NA

GP 3.00° TCH 57

3000

RW07R

6 NM 5.7 NM

5000 trk 078° NAVOQ trk 110° IWA

CATEGORY	A	B	C	D
RNP 0.30 DA	1523-1 407 (400-1)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-322 (FAA)

09295

RNAV (RNP) Z RWY 8

PHOENIX SKY HARBOR INTL (PHX)

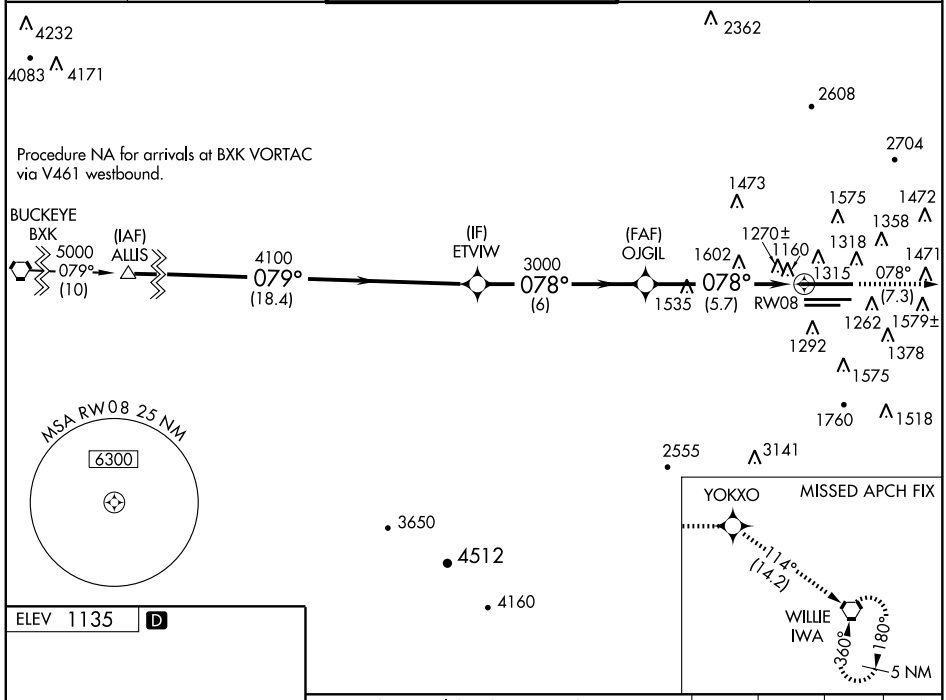
APP CRS	Rwy Idg	10591
078°	TDZE	1118
	Apt Elev	1135

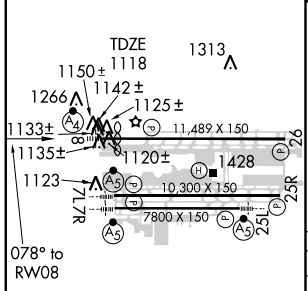
T GPS required. Visibility reduction by helicopters NA.
For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 46°C (116°F).
For inoperative MALSF, increase RNP 0.13 all Cats visibility to 1¼, and RNP 0.30 all Cats visibility to 1¾.

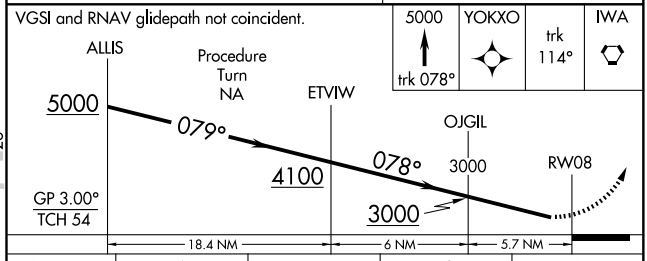
MALSF

MISSED APPROACH: Climb to 5000 via track 078° to YOKXO and via track 114° to IWA VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2







CATEGORY	A	B	C	D
RNP 0.13 DA	1478-1 360 (400-1)			
RNP 0.30 DA	1603-1½ 485 (500-1½)			

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

RNAV (RNP) Z RWY 25L

PHOENIX SKY HARBOR INTL (PHX)

APP CRS	Rwy Idg	7800
258°	TDZE	1126
	Apt Elev	1135

T For inoperative MALSR, increase RNP 0.11 all Cats visibility to 1¾, RNP 0.30 all Cats visiibility to 2.
Visibility reduction by helicopters NA. GPS required.
For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 46°C (116°F).

MALSR

MISSED APPROACH: Climb to 5000 via track 258° to OVNUY and via track 261° to BXK VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

MISSED APCH FIX

BUCKEYE BXK

084°

264°

5 NM

Procedure NA for arrivals at ZERLO via V190 northeast bound.

(IAF) ZERLO

7000 188° (10.5)

2608 2830 2704 1473 1575 1472 1358 3312 3381 1602 1315 1318 1471 1535 1262 1292 1241± 1579± (5.6) 1378 1575 1760 1518 2555 3141

OVNUY 261° (34.4) 258° (7) RW25L

(FAF) NAVOQ 3000 (3.8) GIPSE 4000 (3.6) (IF) HAMEK 5000 258° (7.2) FIXAR

MSA RW25L 25 NM 6300

ELEV 1135 D

1313 1266 1150± 1123 11,489 X 150 10,300 X 150 7800 X 150 1428 TDZE 1126 258° to RW25L

5000 trk 258° OVNUY trk 261° BXK

VGSI and RNAV glidepath not coincident.

FIXAR HAMEK GIPSE NAVOQ RW25L 3000 4000 5000 7000 258° Procedure Turn NA GP 3.00° TCH 49

5.6 NM 3.8 NM 3.6 NM 7.2 NM

CATEGORY	A	B	C	D
RNP 0.11 DA	1617-1¼ 491 (500-1¼)			
RNP 0.30 DA	1664-1½ 538 (600-1½)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SW-4, 22 OCT 2009 to 19 NOV 2009

PHOENIX, ARIZONA

AL-322 (FAA)

09295

RNAV (RNP) Z RWY 25R

PHOENIX SKY HARBOR INTL (PHX)

APP CRS	Rwy Idg	10300
258°	TDZE	1134
	Apt Elev	1135

Visibility reduction by helicopters NA. GPS required. For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 46°C (116°F).

MISSED APPROACH: Climb to 5000 via track 258° to YECXY and via track 260° to BXK VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

MISSED APCH FIX

BUCKEYE BXK

084°

264°

5 NM

Procedure NA for arrivals at ZERLO via V190 northeastbound.

(IAF) ZERLO

7000 187° (10.3)

2608 2704 2830 3312 3381

1473 1575 1472 1358

1602 1315 1318 1241± 1471

YECXY 1535 1262

(FAF) UXCUN

ZAMEX

(IF) TEYYI

UVIYO

260° (34.4)

258° (7.4)

RW25R

1579± (5.6)

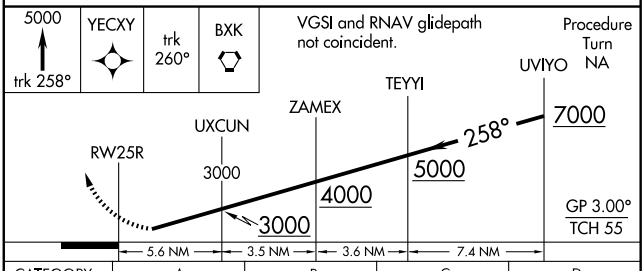
258° 3000 (3.5) 4000 (3.6) 5000 258° (7.4)

1292 1378 1575 1760 1518 2555 3141

MSA RW25R 25 NM

6300

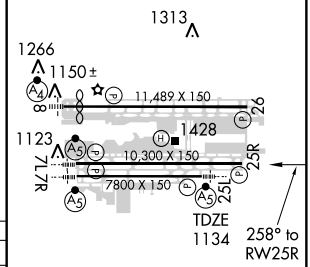
SW-4, 22 OCT 2009 to 19 NOV 2009



CATEGORY	A	B	C	D
RNP 0.20 DA	1597-1½ 463 (500-1½)			
RNP 0.30 DA	1622-1¾ 488 (500-1¾)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

ELEV 1135 D



HIRL Rwys 8-26, 7L-25R and 7R-25L

REIL Rwy 26

PHOENIX, ARIZONA

AL-322 (FAA)

09295

RNAV (RNP) Z RWY 26

PHOENIX SKY HARBOR INTL (PHX)

APP CRS	Rwy Idg	11489
258°	TDZE	1135
	Apt Elev	1135

GPS required.
For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 46°C (116°F).

MISSED APPROACH: Climb to 5000 via track 258° to OJGIL and via track 259° to BXK VORTAC and hold.

ATIS	PHOENIX APP CON	PHOENIX TOWER	GND CON	CLNC DEL
127.575	128.65 353.8	118.7 278.8 (Rwy 8-26) 120.9 254.3 (Rwy 7L-25R, 7R-25L)	119.75 269.2 (N) 132.55 269.2 (S)	118.1 269.2

MISSED APCH FIX

BUCKEYE BXK

084°

264°

5 NM

Procedure NA for arrivals at ZERLO via V190 eastbound.

(IAF) ZERLO Max 240 KIAS

7000 188° (9.8)

OJGIL 259° (34.4) 1535

258° (7.4) RW26

(FAF) YOKXO 3000 258° (5.6)

JAGAL 4000 258° (3.4)

(IF) TODRE 4000 258° (3.6)

5000 258° (7.4) CERUN

3982 2608 2704 2830 3312 3381 1473 1575 1358 1352± 1472 1602 1315 1318 1262± 1471 1210± 1262 1579± 1292 1378 1575 1760 1518 3141 2555

MSA RW 26 25 NM

6100

ELEV 1135 D

1313 258° to RW26

1266 1150± TDZE 1135

11,489 X 150

1123 1428

10,300 X 150

7800 X 150

7L 7R 25L 25R 26

5000 trk 258°

OJGIL

trk 259°

BXK

VGSI and RNAV glidepath not coincident.

Procedure Turn NA

TODRE 5000

JAGAL 4000

YOKXO 3000

RW26 3000

258°

GP 3.00° TCH 54

5.6 NM 3.4 NM 3.6 NM

CATEGORY	A	B	C	D
RNP 0.11 DA	1490-1¼ 355 (400-1¼)			
RNP 0.20 DA	1590-1½ 455 (500-1½)			
RNP 0.30 DA	1654-1¾ 519 (600-1¾)			

HIRL Rwys 8-26, 7L-25R and 7R-25L
REIL Rwy 26

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

(SILOW1.SILOW) 09127

SILOW ONE DEPARTURE

PHOENIX SKY HARBOR INTL (PHX)

SL-322 (FAA)

PHOENIX, ARIZONA

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
119.2 281.45

BRYCE CANYON
112.8 BCE
Chan 75
N37°41.35′
W112°18.23′
L-9, H-3

DOVE CREEK
114.6 DVC
Chan 93
N37°48.53′
W108°55.88′
L-9, H-3

RATTLESNAKE
115.3 RSK
Chan 100
N36°44.90′
W108°05.93′
L-8, H-4

GRAND CANYON
113.1 GCN
Chan 78
N35°57.62′
W112°08.76′

FLAGSTAFF
113.85 FLG
Chan 85 (Y)
N35°08.83′
W111°40.45′

DEXTR
N35°40.75′
W109°49.94′

WINSLOW
112.6 INW
Chan 73
N35°03.70′
W110°47.70′

DRAKE
114.1 DRK
Chan 88

PHOENIX
115.6 PXR
Chan 103
N33°25.98′
W111°58.21′

SILOW
N34°32.63′
W111°32.03′
15000

HAPPN
N34°22.60′
W111°36.01′

THOMM
N34°03.13′
W111°43.71′

R-161 V257 341° (104) *11600 15000

R-139 321° (54) *14600 15000

R-155 335° (37) *10000 11000

R-195 014° (188) FL180 *10100

R-219 (106) V95 J44

R-216 036° (48) *9600 15000

038° (60) *11400 15000

R-100 000° (11) *10000 15000 70

000° (20) *10000 12000 59

R-006 *10000 11000 39

360° 9 1550 260° 265° 1550 080° 075° 070° 1550 045° 4

TAKE-OFF MINIMUMS

Rwy 25L/25R/26: Standard with minimum climb of 350′ per NM to 7000.
Rwy 7L/7R/8: Standard with minimum climb of 300′ per NM to 7000.

TAKE-OFF OBSTACLES

Rwy 25L/25R/26: 1750 building

DEPARTURE OBSTACLES

Rwy 7L/7R/8: 1475 Mountain peak
Rwy 25L/25R/26: 3047 tower

NOTE: SILOW Departure restricted to turbojet and turboprop aircraft only.
NOTE: DVC Transition for turboprops only.
NOTE: Aircraft filing over CIM and GCK file ST JOHNS Departure.
NOTE: Aircraft filing over GCN, expect FL280 or below until GCN.
NOTE: FLG Transition for FLG or PGA arrivals only.

NOTE: DME and RADAR required.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7L: Climb runway heading to 1550, then climbing left turn heading 075°, at 4 DME east of PXR VORTAC, climbing left turn heading 045°, maintain 7000. Thence....
TAKE-OFF RUNWAY 7R: Climb runway heading to 1550, then climbing left turn heading 070°, at 4 DME east of PXR VORTAC, climbing left turn heading 045°, maintain 7000. Thence....
TAKE-OFF RUNWAY 8: Climb runway heading to 1550, then climbing right turn heading 080°, at 4 DME east of PXR VORTAC, climbing left turn heading 045°, maintain 7000. Thence....
TAKE-OFF RUNWAY 25L: Climb runway heading to 1550, then climbing right turn heading 265°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°, maintain 7000. Thence....
TAKE-OFF RUNWAY 25R: Climb runway heading to 1550, then climbing right turn heading 260°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°, maintain 7000. Thence....
TAKE-OFF RUNWAY 26: Climb runway heading to 1550, then climbing right turn heading 260°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°, maintain 7000. Thence....

....Expect radar vectors to PXR R-006 to SILOW INT. Then via (transition). Expect filed altitude 3 minutes after departure.

BRYCE CANYON TRANSITION (SILOW1.BCE): From over SILOW INT via FLG R-155 to FLG VOR/DME, then via FLG R-321 and GCN R-139 to GCN VOR/DME, then via GCN R-341 and BCE R-161 (V257) to BCE VORTAC.

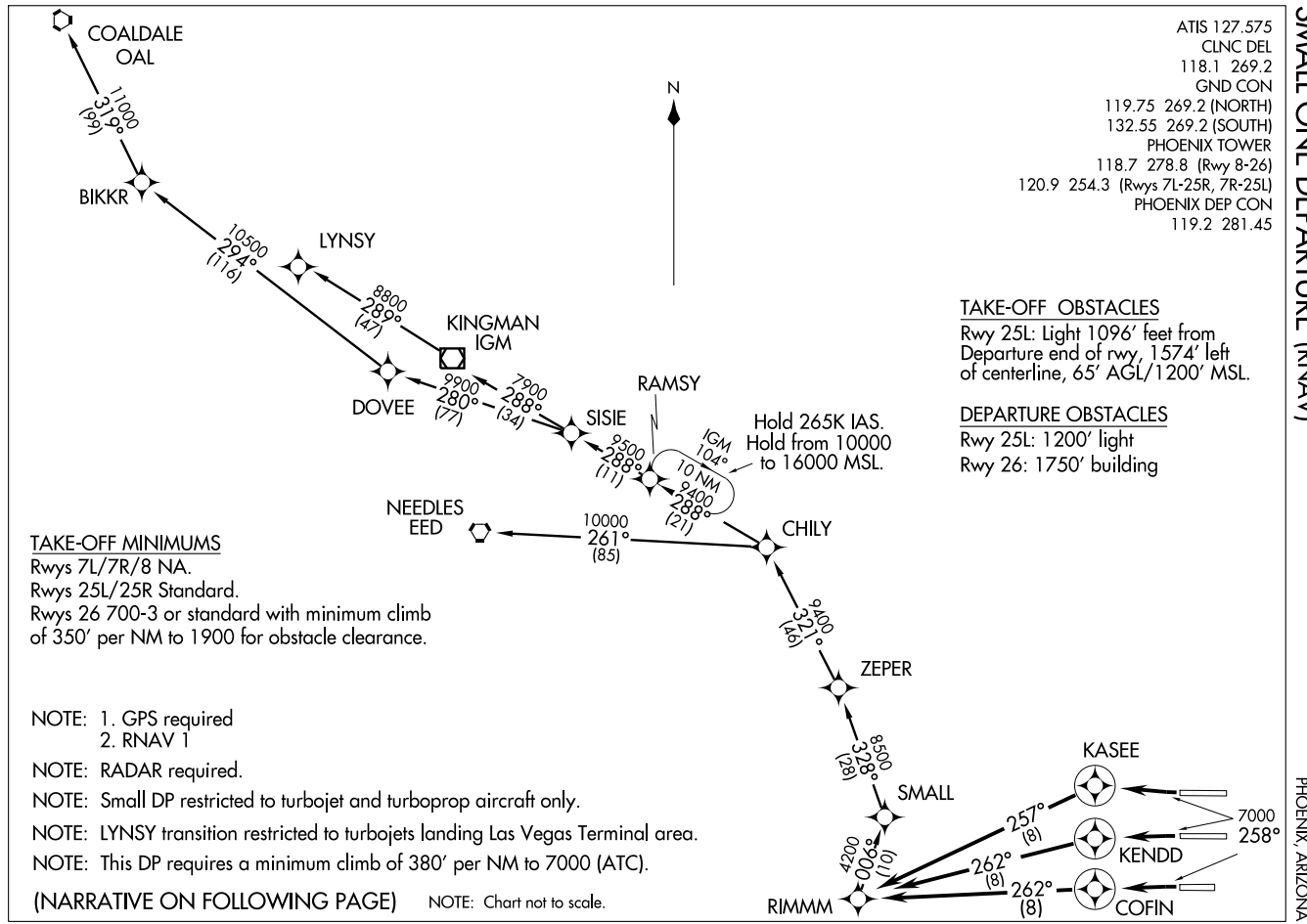
DOVE CREEK TRANSITION (SILOW1.DVC): From over SILOW INT via INW R-216 to INW VORTAC, then via INW R-014 and DVC R-195 to DVC VORTAC.

FLAGSTAFF TRANSITION (SILOW1.FLG): From over SILOW INT via FLG R-155 to FLG VOR/DME.

RATTLESNAKE TRANSITION (SILOW1.RSK): From over SILOW INT via INW R-216 to INW VORTAC, then via INW R-038 and RSK R-219 (V95/J44) to RSK VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

SMALL ONE DEPARTURE (RNAV)



ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
119.2 281.45

TAKE-OFF OBSTACLES

Rwy 25L: Light 1096′ feet from Departure end of rwy, 1574′ left of centerline, 65′ AGL/1200′ MSL.

DEPARTURE OBSTACLES

Rwy 25L: 1200′ light
Rwy 26: 1750′ building

TAKE-OFF MINIMUMS

Rwys 7L/7R/8 NA.
Rwys 25L/25R Standard.
Rwys 26 700-3 or standard with minimum climb of 350′ per NM to 1900 for obstacle clearance.

NOTE: 1. GPS required
2. RNAV 1

NOTE: RADAR required.

NOTE: Small DP restricted to turbojet and turboprop aircraft only.

NOTE: LYNSY transition restricted to turbojets landing Las Vegas Terminal area.

NOTE: This DP requires a minimum climb of 380′ per NM to 7000 (ATC).

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 25L: Climb via 258° course to COFIN WP, then via 262° track to RIMMM, Thence....

TAKE-OFF RUNWAY 25R: Climb via 258° course to KENDD WP, then VIA 262° track to RIMMM, Thence....

TAKE-OFF RUNWAY 26: Climb via 258° course to KASEE WP, then via 257° track to RIMMM, Thence....

....via (transition). Maintain 7000, expect filed altitude within 10 minutes after departure.

LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure.

COALDALE TRANSITION (SMALL1.OAL)

LYNSY TRANSITION (SMALL1.LYNSY)

NEEDLES TRANSITION (SMALL1.EED)

SW-4, 22 OCT 2009 to 19 NOV 2009

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
119.2 281.45

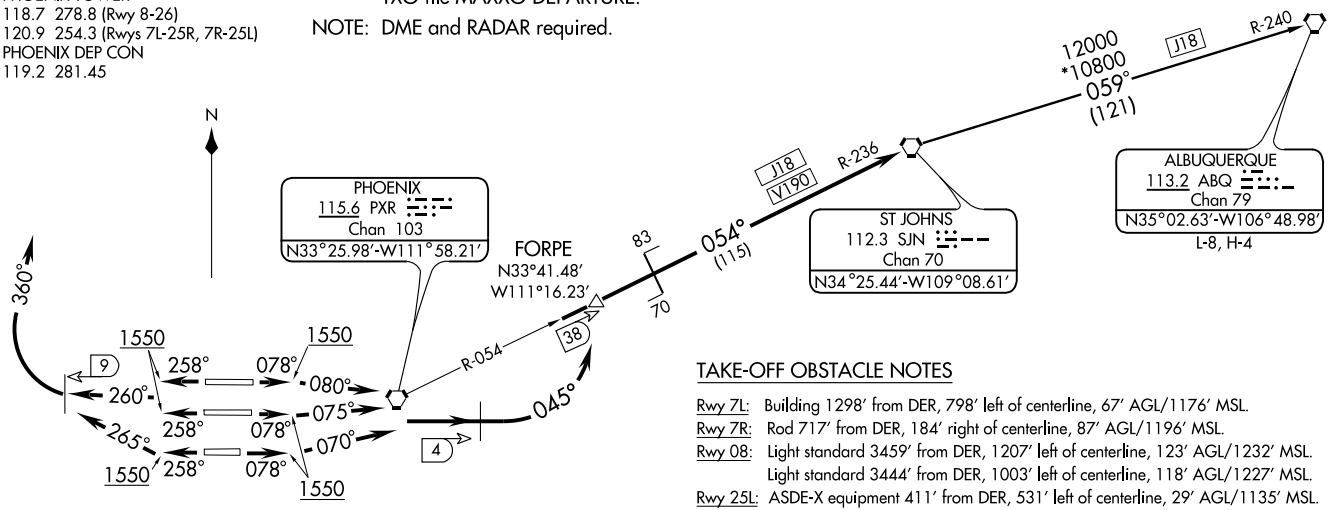
NOTE: ST.JOHNS DEPARTURE restricted to turbojet and turboprop aircraft only.

NOTE: Aircraft filing over ALS, RSK and points north of ALS file SILOW DEPARTURE.

NOTE: Aircraft filing over CIM, LVS and GCK file ST JOHNS DEPARTURE.

NOTE: Aircraft filing over ACH, LBL, ONM, CNX, PNH, GAG, TCC, IRW, and TXO file MAXXO DEPARTURE.

NOTE: DME and RADAR required.



TAKE-OFF MINIMUMS

Rwy 7L/7R/8: Standard with minimum climb of 350′ per NM to 7000.

Rwy 25L/25R/26: Standard with minimum climb of 350′ per NM to 7000.

TAKE-OFF OBSTACLE NOTES

Rwy 7L: Building 1298′ from DER, 798′ left of centerline, 67′ AGL/1176′ MSL.

Rwy 7R: Rod 717′ from DER, 184′ right of centerline, 87′ AGL/1196′ MSL.

Rwy 08: Light standard 3459′ from DER, 1207′ left of centerline, 123′ AGL/1232′ MSL.
Light standard 3444′ from DER, 1003′ left of centerline, 118′ AGL/1227′ MSL.

Rwy 25L: ASDE-X equipment 411′ from DER, 531′ left of centerline, 29′ AGL/1135′ MSL.

Rwy 25R: Light 59′ from DER, 63′ right of centerline, 16′AGL/1125′ MSL.
Light 38′ from DER, 440′ right of centerline, 26′ AGL/1135′ MSL.
Tree 113′ from DER, 294′ left of centerline, 24′ AGL/1133′ MSL.
Light 78′ from DER, 64′ right of centerline, 18′ AGL/1127′ MSL.
Building 2.3 NM from DER, 3309′ right of centerline, 406′ AGL/1496′ MSL.
Building 2.2 NM from DER, 3631′ right of centerline, 663′ AGL/1750′ MSL.

Rwy 26: Light 59′ from DER, 63′ right of centerline, 16′ AGL/1125′ MSL.
Pole 58′ from DER, 90′ right of centerline, 25′ AGL/1125′ MSL.
Light 78′ from DER, 64′ right of centerline, 18′ AGL/1127′ MSL.
Tree 38′ from DER, 440′ right of centerline, 24′ AGL/1133′ MSL.
ASDE-X equipment 897′ from DER, 413′ right of centerline, 35′ AGL/1141′ MSL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

ST. JOHNS FIVE DEPARTURE (SJN5.SJN) 09295

SL-322 (FAA)

PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA

ST. JOHNS FIVE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb heading 078° to 1550, then climbing right turn heading 080°, at 4 DME east of PXR VORTAC, climbing left turn heading 045° to PXR R-054 to SJN VORTAC, maintain 7000. Thence. . . .

TAKE-OFF RUNWAY 7L: Climb heading 078° to 1550, then climbing left turn heading 075°, at 4 DME east of PXR VORTAC, climbing left turn heading 045° to PXR R-054 to SJN VORTAC, maintain 7000. Thence. . . .

TAKE-OFF RUNWAY 7R: Climb heading 078° to 1550, then climbing left turn heading 070°, at 4 DME east of PXR VORTAC, climbing left turn heading 045° to PXR R-054 to SJN VORTAC, maintain 7000. Thence. . . .

TAKE-OFF RUNWAY 25R/26: Climb heading 258° to 1550, then climbing right turn heading 260°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°, maintain 7000. Expect radar vectors to PXR R-054 to SJN VORTAC. Thence. . . .

TAKE-OFF RUNWAY 25L: Climb via 258° heading to 1550, then climbing right turn heading 265°, at 9 DME west of PXR VORTAC, climbing right turn heading 360°, maintain 7000. Expect radar vectors to PXR R-054 to SJN VORTAC. Thence. . . .

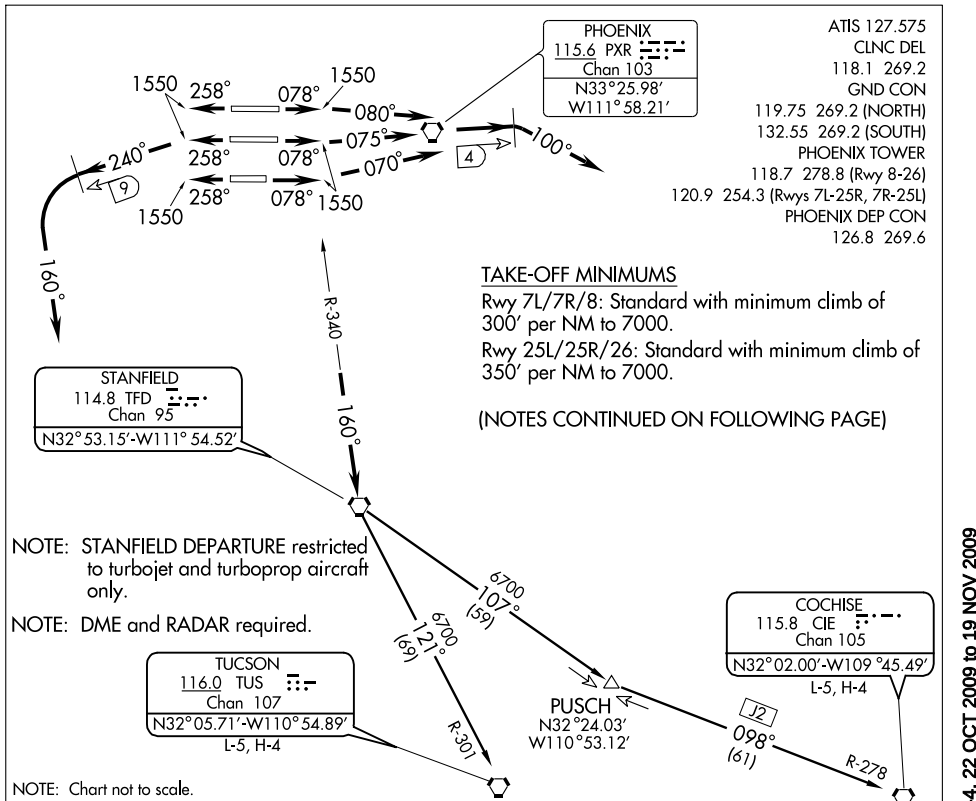
. . . .via assigned transition. Expect filed altitude 3 minutes after departure.

ALBUQUERQUE TRANSITION (SJN5.ABQ): From over SJN VORTAC via SJN R-059 and ABQ R-240 to ABQ VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

STANFIELD TWO DEPARTURE

PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb via 078° heading to 1550 then climbing right turn heading 080°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 7L: Climb via 078° heading to 1550 then climbing left turn heading 075°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 7R: Climb via 078° heading to 1550 then climbing left turn heading 070°, at 4 DME east of PXR VORTAC, climbing right turn heading 100°. Thence. . . .

TAKE-OFF RUNWAY 25L/25R/26: Climb via 258° heading to 1550 then climbing left turn heading 240°, at 9 DME west of PXR VORTAC, climbing left turn heading 160°. Thence. . . .

.... maintain 7000, expect radar vectors to TFD R-340 to TFD VORTAC. Thence via (Transition). Expect further clearance to filed altitude 3 minutes after departure.

LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure.

COCHISE TRANSITION (TFD2.CIE): From over TFD VORTAC via TFD R-107 to PUSCH INT, then via CIE R-278 to CIE VORTAC.

TUCSON TRANSITION (TFD2.TUS): From over TFD VORTAC via TFD R-121 and TUS R-301 to TUS VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

TAKEOFF NOTES CONT.

TAKE-OFF OBSTACLES

NOTE: Rwy 7L, building 1332′ from departure end of runway, 798′ left of centerline, 67′ AGL/1176′ MSL.

NOTE: Rwy 7R, rod 716′ from departure end of runway, 184′ right of centerline, 87′ AGL/1196′ MSL.

NOTE: Rwy 8, light standard 3530′ from departure end of runway, 1207′ left of centerline, 123′ AGL/1232′ MSL.
Rwy 8, light standard 3479′ from departure end of runway, 1003′ left of centerline, 118′ AGL/1227′ MSL.

NOTE: Rwy 25L, light standard 1129′ from departure end of runway, 774′ left of centerline, 120′ AGL/1200′ MSL.

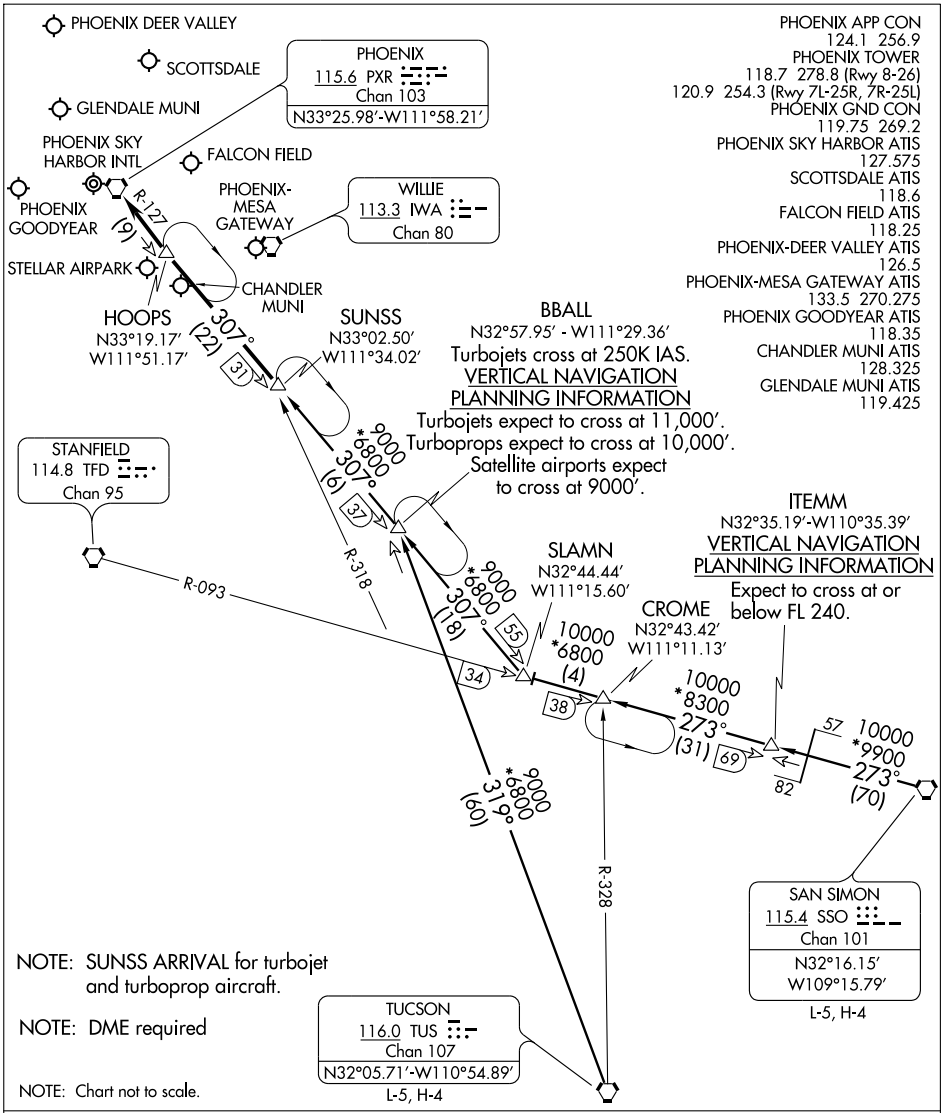
NOTE: Rwy 26, light 59′ from departure end of runway, 63′ right of centerline, 16′ AGL/1125′ MSL.
Rwy 26, pole 58′ from departure end of runway, 90′ right of centerline, 25′ AGL/1125′ MSL.
Rwy 26, light 78′ from departure end of runway, 64′ right of centerline, 18′ AGL/1127′ MSL.
Rwy 26, light 38′ from departure end of runway, 440′ right of centerline, 24′ AGL/1133′ MSL.
Rwy 26, light standard 77′ from departure end of runway, 453′ left of centerline, 27′ AGL/1136′ MSL.
Rwy 26, light standard 74′ from departure end of runway, 453′ right of centerline, 33′ AGL/1142′ MSL.
Rwy 26, light standard 77′ from departure end of runway, 434′ right of centerline, 31′ AGL/1140′ MSL.
Rwy 26, light standard 64′ from departure end of runway, 68′ left of centerline, 1125′ MSL.
Rwy 26, light 38′ from departure end of runway, 440′ right of centerline, 26′ AGL/1135′ MSL.
Rwy 26, tree 113′ from departure end of runway, 294′ left of centerline, 24′ AGL/1133′ MSL.

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

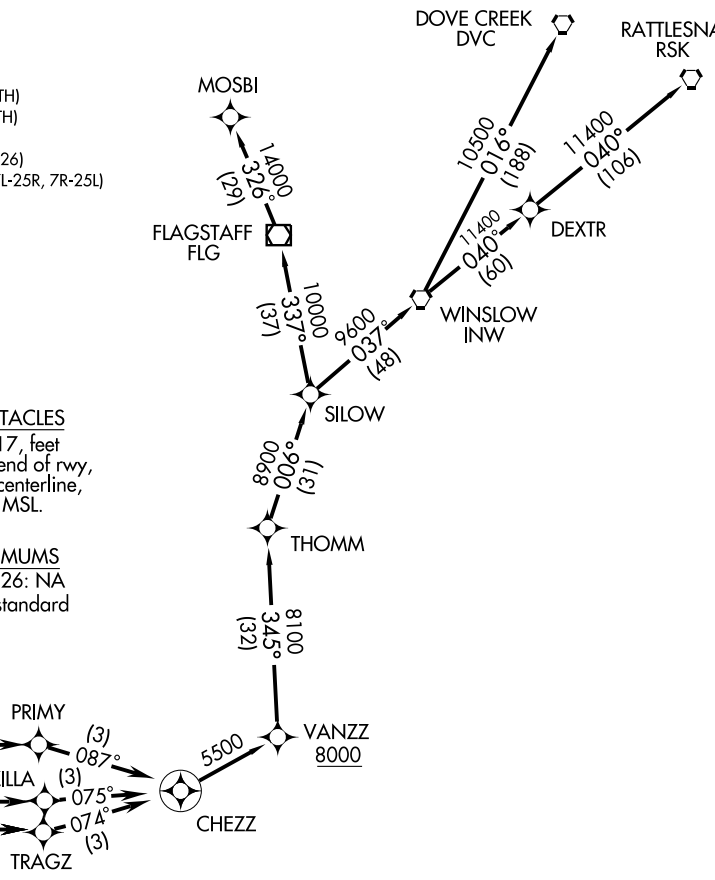
....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

(VANZZ1.VANZZ) 09127 SL-322 (FAA)

VANZZ ONE DEPARTURE (RNAV)

PHOENIX SKY HARBOR INTL (PHX)
PHOENIX, ARIZONA

ATIS 127.575
CLNC DEL
118.1 269.2
GND CON
119.75 269.2 (NORTH)
132.55 269.2 (SOUTH)
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwys 7L-25R, 7R-25L)
PHOENIX DEP CON
119.2 281.45



TAKE-OFF OBSTACLES

Rwy 7R: ROD 717, feet from Departure end of rwy, 184' feet left of centerline, 61' AGL/1196' MSL.

TAKE-OFF MINIMUMS

Rwys 25L/25R/26: NA
Rwys 7L/7R/8 standard

NOTE: 1. GPS required
2. RNAV 1

NOTE: RADAR required.

NOTE: This DP requires a minimum climb of 380' per NM to 7000 (ATC).

NOTE: VANZZ DP restricted to turbojet and turboprop aircraft only.

NOTE: FLG transition for FLG and PGA arrivals only.

NOTE: Aircraft filing over CIM, FTI, or GCK file CHEZZ or RIMM DP, ABQ Transition.

NOTE: Aircraft filing over ACH, LBL, ONM, CNX, PNH, GAG, TCC, BGD, IRW and TXO file CHEZZ or DSERT DP, DRYHT TRANSITION.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7L: Climb via 078° course to ZILLA WP, then via 075° track to CHEZZ WP, Thence....

TAKE-OFF RUNWAY 7R: Climb via 078° course to TRAGZ WP, then VIA 074° track to CHEZZ WP, Thence....

TAKE-OFF RUNWAY 8: Climb via 078° course to PRIMY WP, then via 087° track to CHEZZ WP, Thence....

....via (transition). Maintain 7000, expect filed altitude within 10 minutes after departure.

LOST COMMUNICATIONS: Expect filed altitude 3 minutes after departure.

DOVE CREEK TRANSITION (VANZZ1.DVC)

FLAGSTAFF TRANSITION (VANZZ1.FLG)

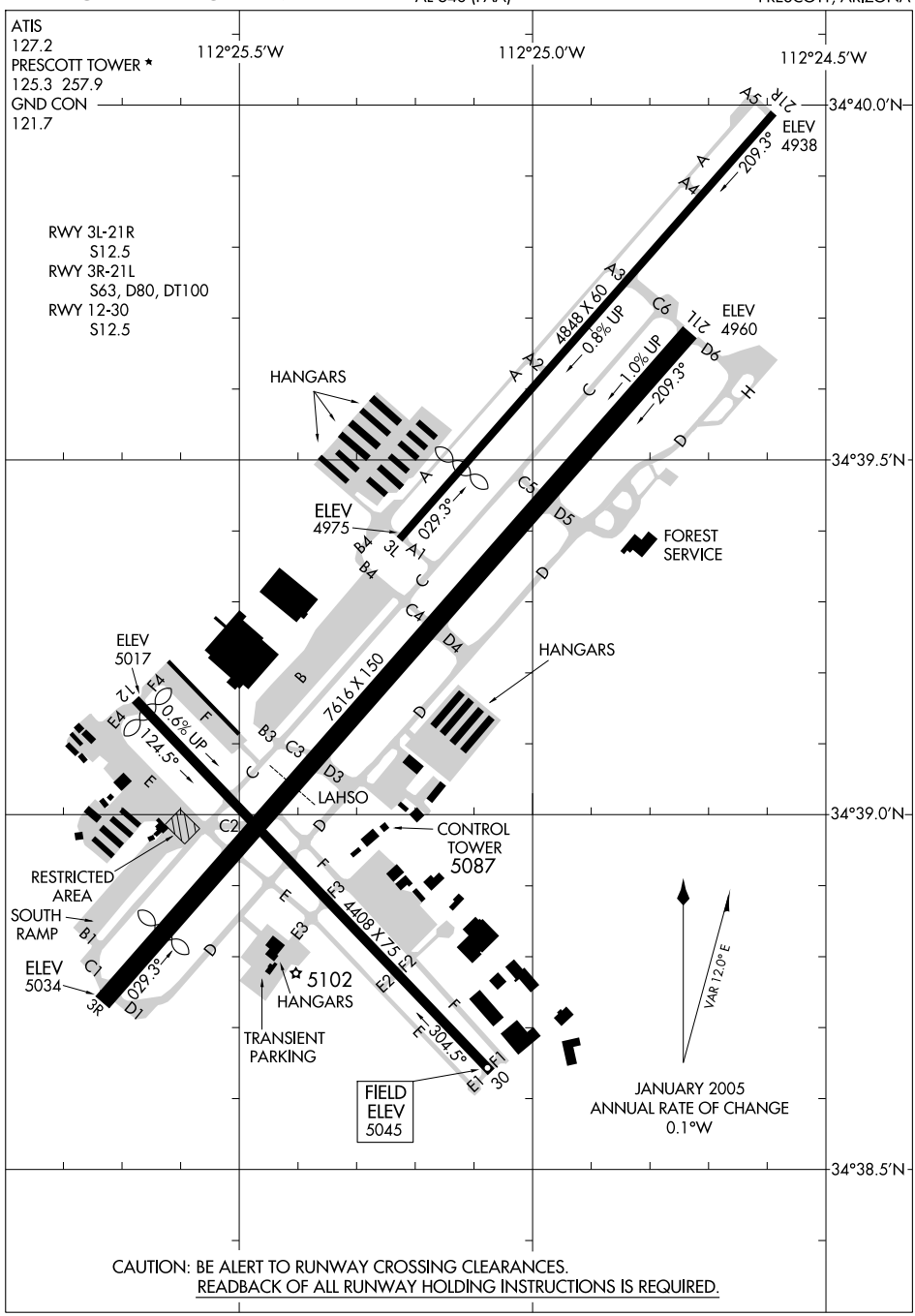
MOSBI TRANSITION (VANZZ1.MOSBI)

RATTLESNAKE TRANSITION (VANZZ1.RSK)

SW-4, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

PRESCOTT/ERNEST A. LOVE FIELD (PRC)
PRESCOTT, ARIZONA
AL-546 (FAA)



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4258
124°	TDZE	5024
	Apt Elev	5045

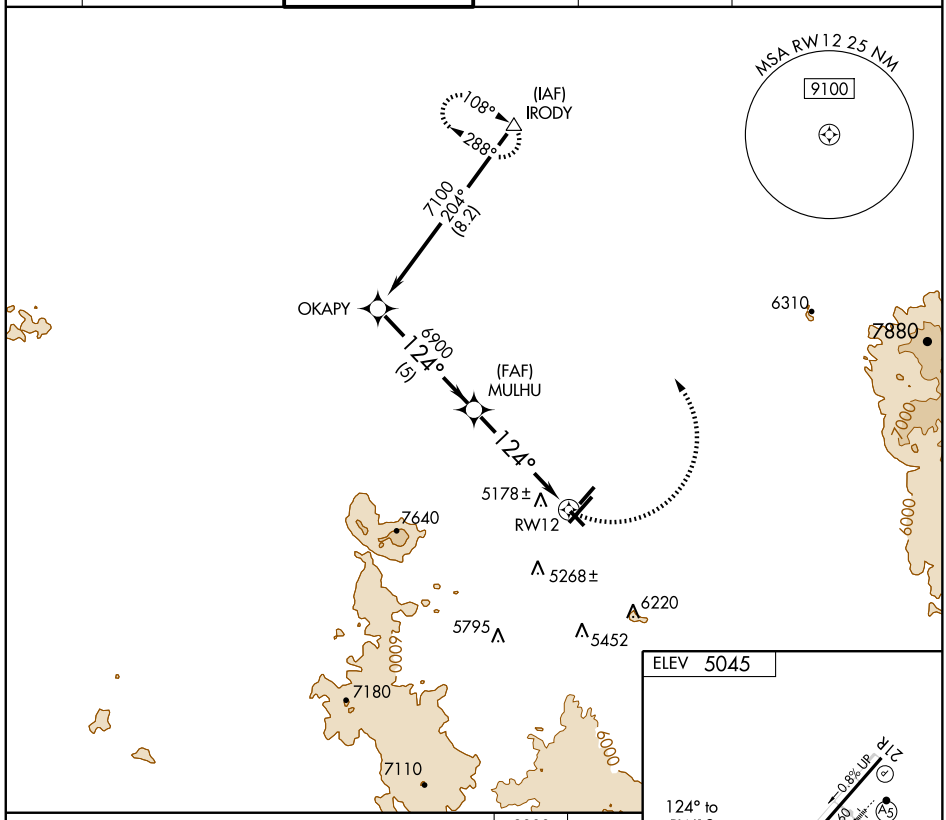
GPS RWY 12

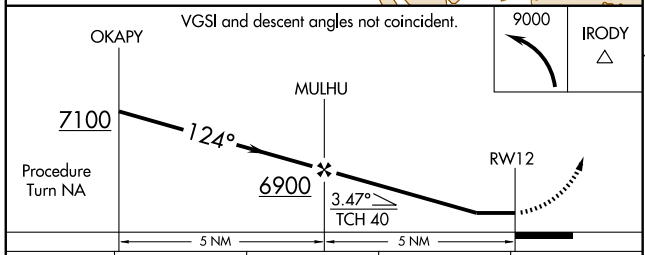
PRESCOTT / ERNEST A. LOVE FIELD (PRC)

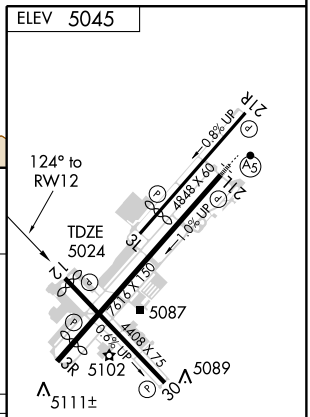
NA

MISSED APPROACH: Climbing left turn to 9000 direct IRODY WP and hold.

ATIS	ALBUQUERQUE CENTER	PRESCOTT TOWER ★	GND CON	PRESCOTT RADIO	
127.2	128.45 298.9	125.3 (CTAF) 257.9	121.7	122.4 255.4	128.75 L (12-30) 125.3 (CTAF) L (3R-21L)







CATEGORY	A	B	C	D
S-12	5440-1 416 (400-1)		5440-1¼ 416 (400-1¼)	
CIRCLING	5540-1 495 (500-1)	5580-1 535 (600-1)	5720-2 675 (700-2)	5940-3 895 (900-3)

MIRL Rwy 3L-21R
MIRL Rwys 3R-21L and 12-30 L
REIL Rwys 3R, 12, 21L and 30

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-PRC	APP CRS	Rwy Idg	7616
108.5	208°	TDZE	4979
Chan 22		Apt Elev	5045

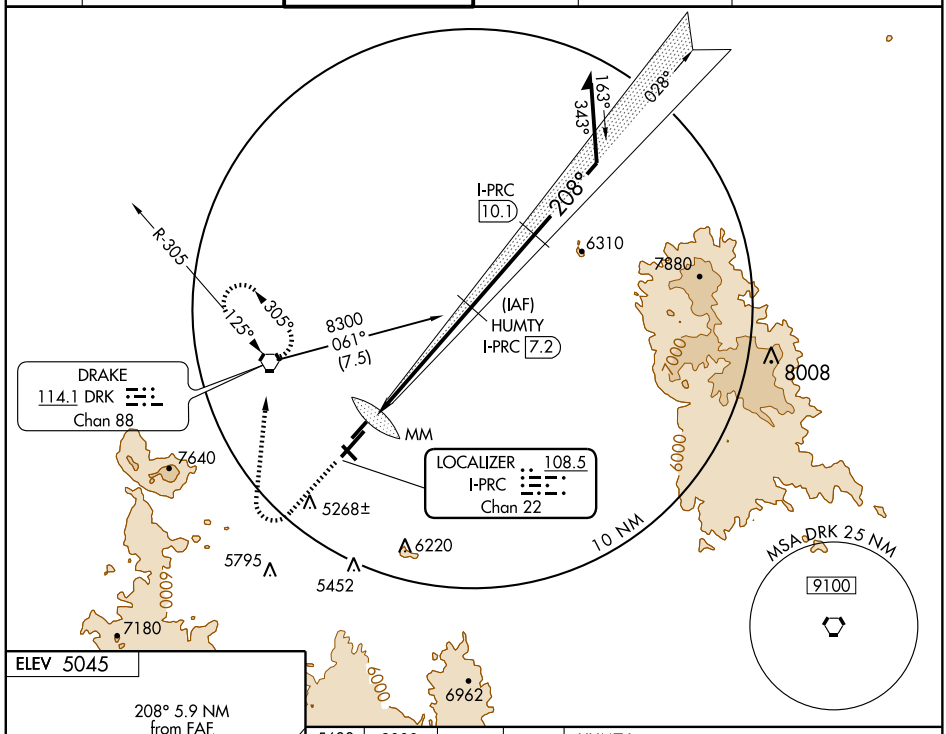
ILS/DME RWY 21L

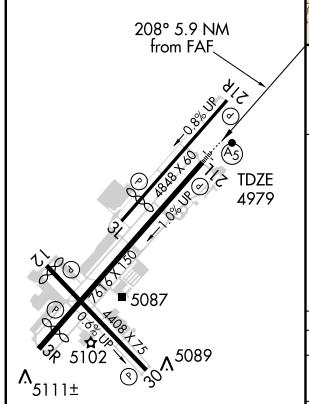
PRESCOTT / ERNEST A. LOVE FIELD (PRC)

MALSR

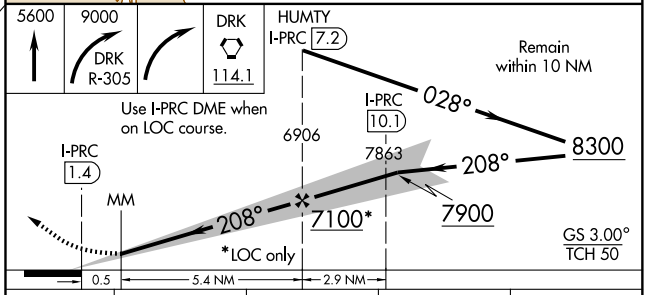
MISSED APPROACH: Climb to 5600, then climbing right turn to 9000 via DRK VORTAC and DRK R-305, then turn right direct DRK VORTAC and hold.

ATIS	ALBUQUERQUE CENTER	PRESCOTT TOWER ★	GND CON	PRESCOTT RADIO	128.75 (L) (12-30)
127.2	128.45 298.9	125.3 (CTAF) 257.9	121.7	122.4 255.4	125.3 (CTAF) (L) (3R-21L)





MIRL Rwy 3L-21R
MIRL Rwys 3R-21L and 12-30 (L)
REIL Rwys 3R, 12, 21L and 30



CATEGORY	A	B	C	D
S-ILS 21L	5179-½ 200 (200-½)			
S-LOC 21L	5380-½ 401 (400-½)		5380-¾ 401 (400-¾)	
CIRCLING	5540-1 495 (500-1)	5580-1 535 (600-1)	5720-2 675 (700-2)	5940-3 895 (900-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 40002 W21A	APP CRS 208°	Rwy Idg 7616 TDZE 4979 Apt Elev 5045

RNAV (GPS) RWY 21L

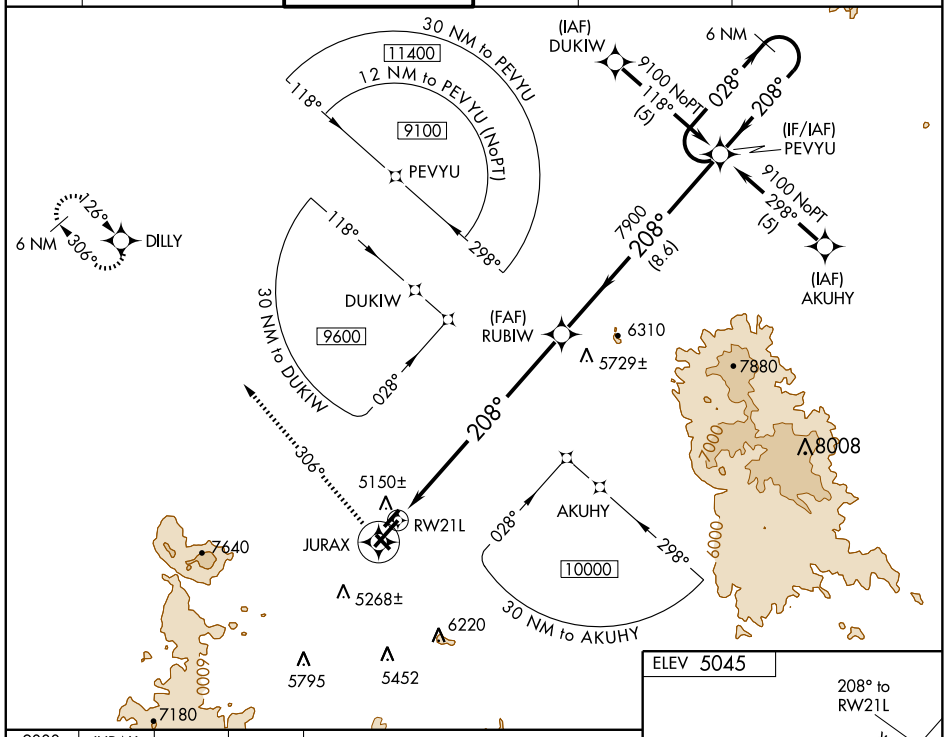
PRESCOTT / ERNEST A. LOVE FIELD (PRC)

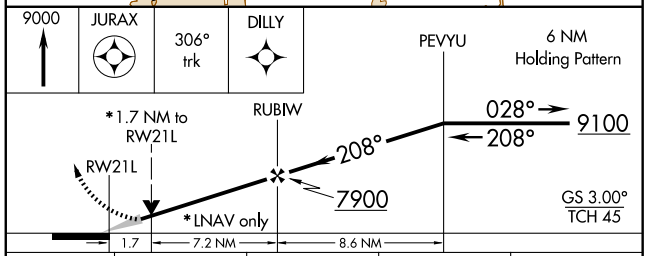
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -25°C (-13°F).

MALSR

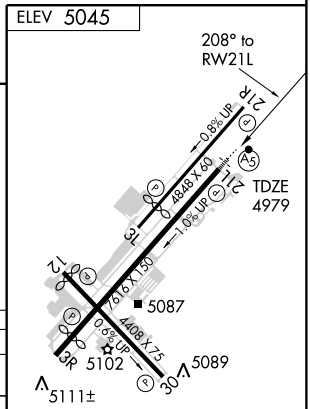
MISSED APPROACH: Climb to 9000 direct JURAX and via 306° track to DILLY and hold.

ATIS	ALBUQUERQUE CENTER	PRESCOTT TOWER ★	GND CON	PRESCOTT RADIO	
127.2	128.45 298.9	125.3 (CTAF) 257.9	121.7	122.4 255.4	128.75 L (12-30) 125.3 (CTAF) L (3R-21L)





CATEGORY	A	B	C	D
LPV DA	5230-½ 251 (200-½)			
LNAV/VNAV DA	5380-1 401 (400-1)			
LNAV MDA	5560-½ 581 (600-½)		5560-1 581 (600-1)	5560-1¼ 581 (600-1¼)
CIRCLING	5560-1½ 515 (600-1½)	5660-1½ 615 (700-1½)	5720-2 675 (700-2)	6000-3 955 (1000-3)



MIRL Rwy 3L-21R
MIRL Rwys 3R-21L and 12-30 L
REIL Rwys 3R, 12, 21L and 30

SW-4, 22 OCT 2009 to 19 NOV 2009

PRESCOTT, ARIZONA

AL-546 (FAA)

APP CRS	Rwy Idg	6828
028°	TDZE	5022
	Apt Elev	5045

RNAV (RNP) RWY 3R

PRESCOTT / ERNEST A. LOVE FIELD (PRC)

T
NA

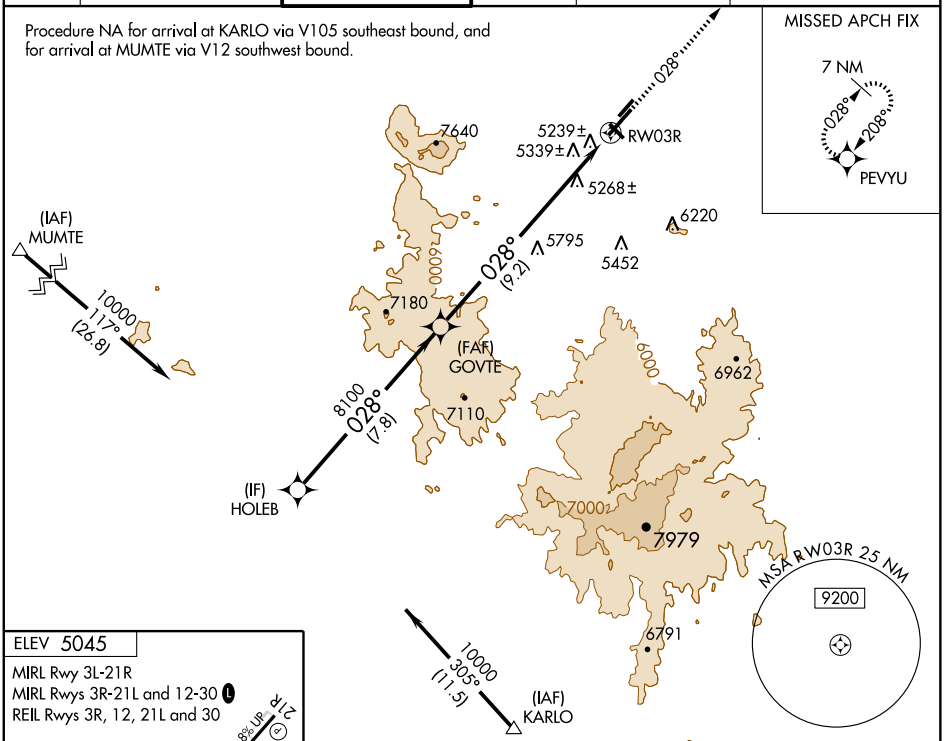
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -11°C (12°F) or above 54°C (130°F). Visibility reduction by helicopters NA. Procedure NA at night.

MISSED APPROACH: Climb to 9100 via track 028° to PEVYU and hold.

ATIS	ALBUQUERQUE CENTER	PRESCOTT TOWER ★	GND CON	PRESCOTT RADIO	
127.2	128.45 298.9	125.3 (CTAF) 257.9	121.7	122.4 255.4	128.75 L (12-30) 125.3 (CTAF) L (3R-21L)

Procedure NA for arrival at KARLO via V105 southeast bound, and for arrival at MUMTE via V12 southwest bound.

MISSED APCH FIX

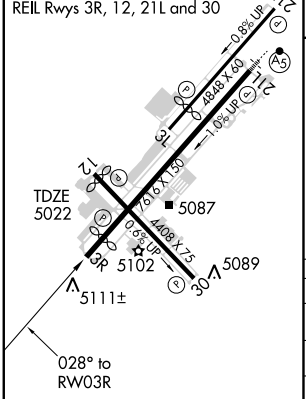


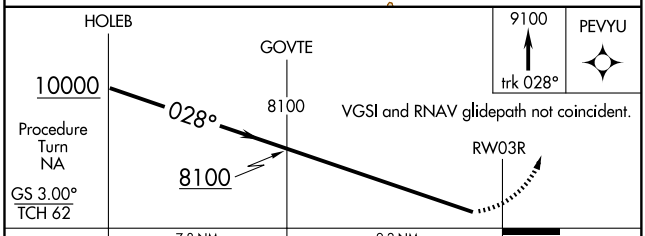
ELEV 5045

MIRL Rwy 3L-21R

MIRL Rwys 3R-21L and 12-30 L

REIL Rwys 3R, 12, 21L and 30





CATEGORY	A	B	C	D
RNP 0.15 DA	5492-1½ 470 (500-1½)			NA
RNP 0.30 DA	5667-2¼ 645 (700-2¼)			NA

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

PRESCOTT, ARIZONA

AL-546 (FAA)

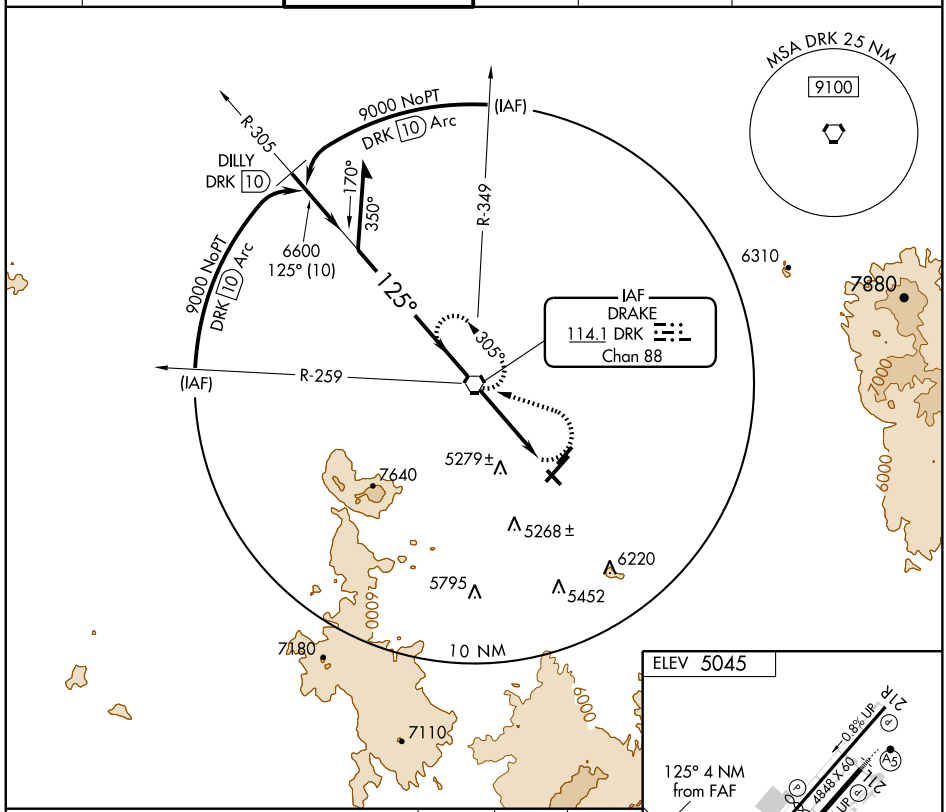
VORTAC DRK	APP CRS	Rwy Idg	4258
114.1	125°	TDZE	5024
Chan 88		Apt Elev	5045

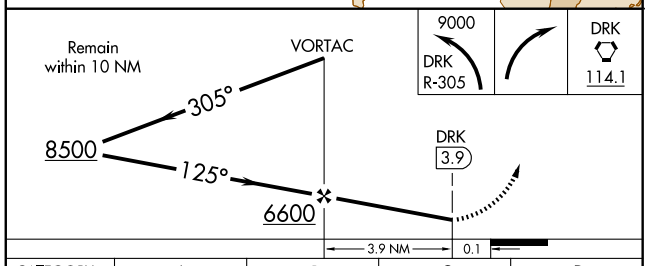
VOR RWY 12

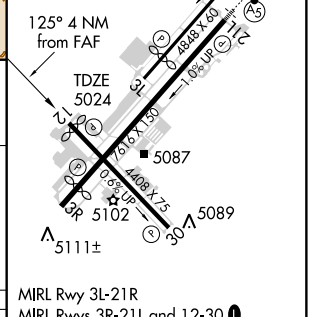
PRESCOTT / ERNEST A. LOVE FIELD (PRC)

MISSED APPROACH: Climbing left turn to 9000 via DRK VORTAC and DRK R-305, then turn right direct DRK VORTAC and hold.

ATIS	ALBUQUERQUE CENTER	PRESCOTT TOWER ★	GND CON	PRESCOTT RADIO	128.75 L (12-30)
127.2	128.45 298.9	125.3 (CTAF) 257.9	121.7	122.4 255.4	125.3 (CTAF) L (3R-21L)







MIRL Rwy 3L-21R
MIRL Rwys 3R-21L and 12-30 L
REIL Rwys 3R, 12, 21L and 30

CATEGORY	A	B	C	D
S-12	5540-1 516 (500-1)		5540-1½ 516 (500-1½)	5540-1¾ 516 (500-1¾)
CIRCLING	5540-1 495 (500-1)	5580-1 535 (600-1)	5720-2 675 (700-2)	5940-3 895 (900-3)

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

SW-4, 22 OCT 2009 to 19 NOV 2009

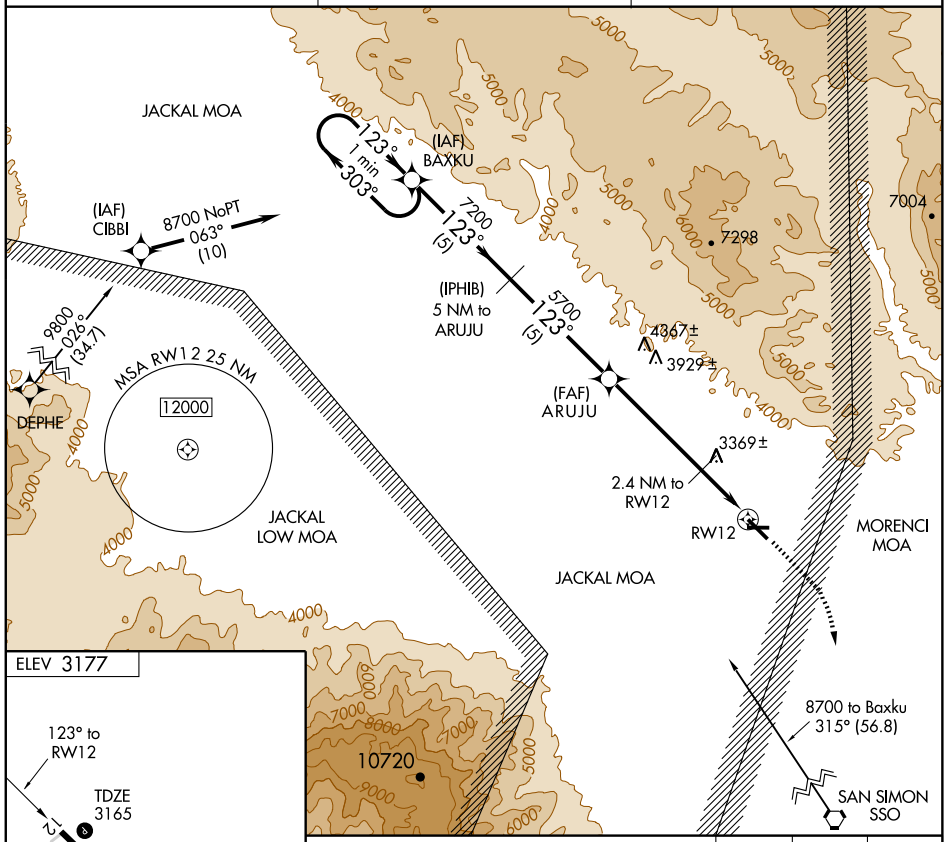
APP CRS	Rwy Idg	6006
123°	TDZE	3165
	Apt Elev	3177

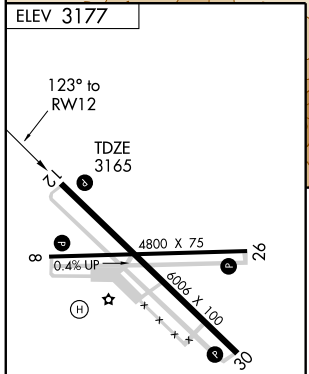
GPS RWY 12
SAFFORD RGNL (SAD)

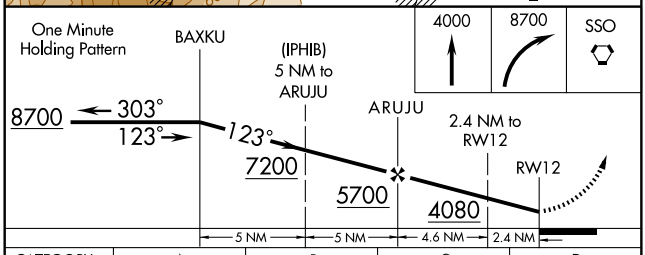
T
NA

MISSED APPROACH: Climb to 4000 then climbing right turn to 8700 direct SSO VORTAC.

ASOS	ALBUQUERQUE CENTER	UNICOM
124.175	134.45 327.15	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-12	3560-1	395 (400-1)	NA	
CIRCLING	3720-1 543 (600-1)	3760-1 583 (600-1)	NA	

MIRL Rwys 8-26 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

SAFFORD, ARIZONA

AL-789 (FAA)

APP CRS	Rwy Idg	6006
303°	TDZE	3167
	Apt Elev	3177

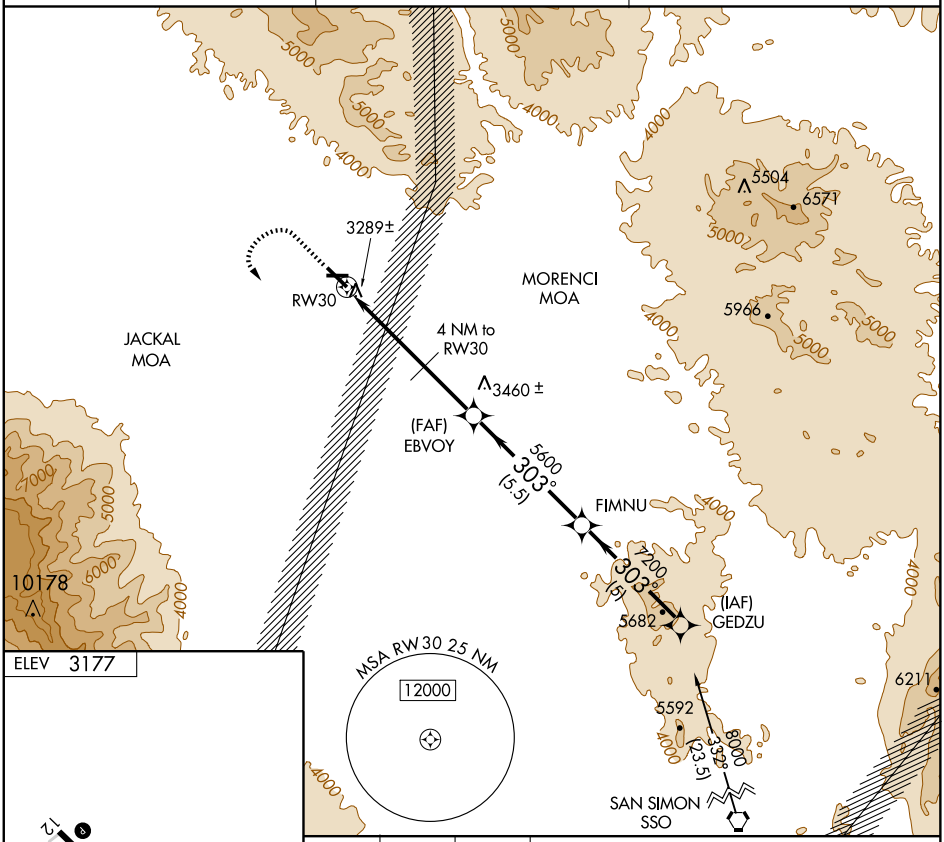
GPS RWY 30

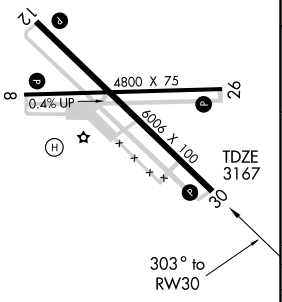
SAFFORD RGNL (SAD)

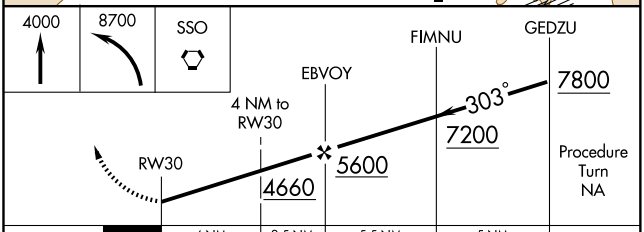
T
NA

MISSED APPROACH: Climb to 4000 then climbing left turn to 8700 direct SSO VORTAC.

ASOS	ALBUQUERQUE CENTER	UNICOM
124.175	134.45 327.15	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-30	3540-1 373 (400-1)		NA	
CIRCLING	3720-1 543 (600-1)	3760-1 583 (600-1)	NA	

MIRL Rwys 8-26 and 12-30 L

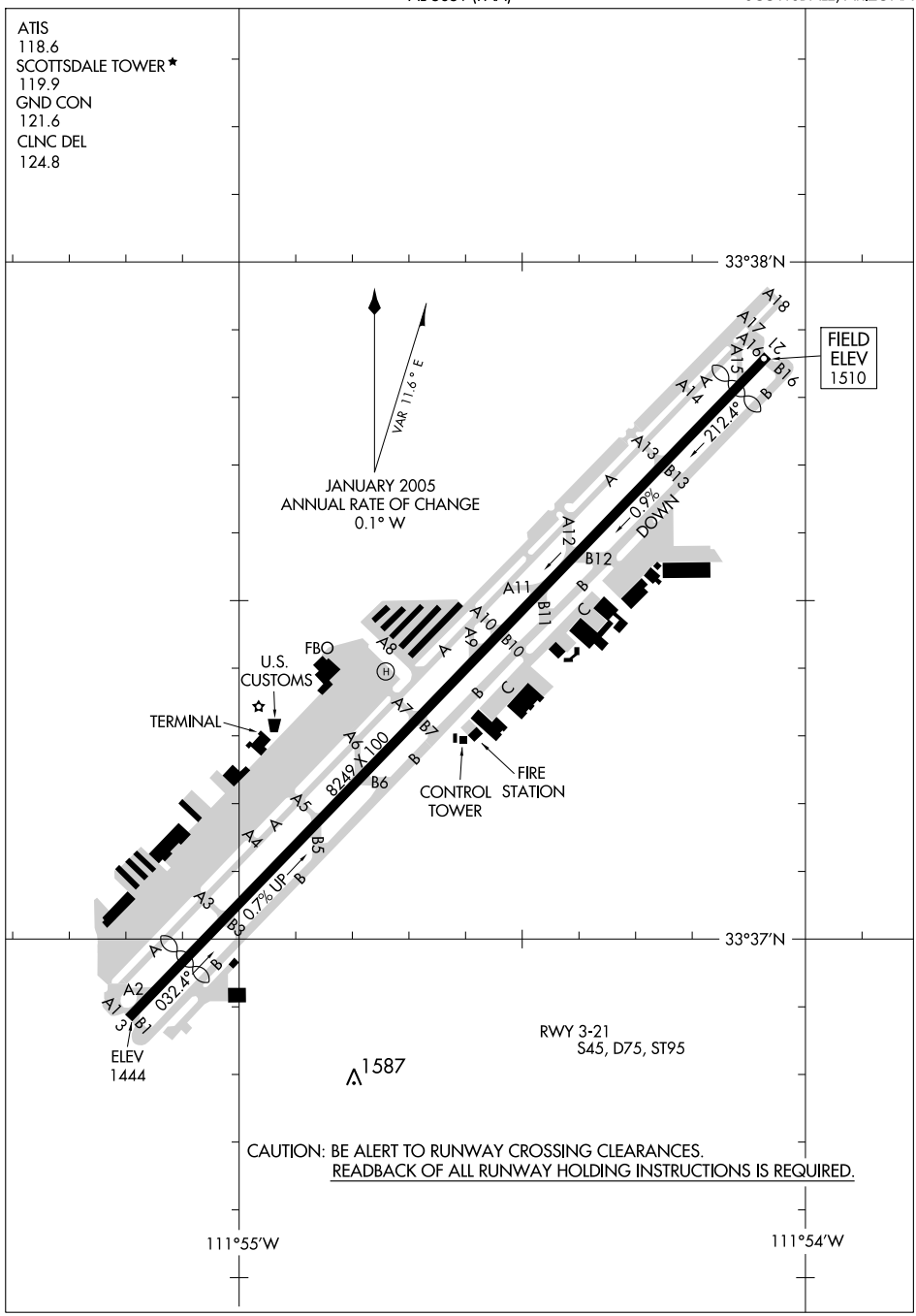
SW-4, 22 OCT 2009 to 19 NOV 2009

09071

AIRPORT DIAGRAM

AL-5651 (FAA)

SCOTTSDALE (SDL)
SCOTTSDALE, ARIZONA



SW-4, 22 OCT 2009 to 19 NOV 2009

BLYTHE TRANSITION (BLH.ARLIN3): From over BLH VORTAC via BLH R-089 and IWA R-256 to ARLIN INT. Thence....

MOHAK TRANSITION (MOHAK.ARLIN3): From over MOHAK INT via GBN R-247 and BXK R-215 to HYDRR INT, then via IWA R-256 to ARLIN INT. Thence....

....From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect vectors after ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT. Expect vectors prior to TUKEE INT to final approach course.

SATELLITE AIRPORTS: Expect vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
PHOENIX SKY HARBOR ATIS
127.575
PHOENIX DEER VALLEY ATIS
126.5
SCOTTSDALE ATIS
118.6
FALCON FIELD ATIS
118.25
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
PHOENIX
115.6 PXR
Chan 103
N33°25.98' W111°58.21'
FALCON FIELD
PHOENIX-SKY HARBOR INTL
BUCKEYE
110.6 BXK
Chan 43
BLYTHE
117.4 BLH
Chan 121
N33°35.76' W114°45.67'
L-4-5, H-4
SCOLE
N33°27.76'-W114°04.91'
VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or below FL 250
HYDRR
N33°16.46'
W113°04.18'
AMBRR
N33°17.46'
W112°20.83'
STELLAR AIRPARK
PHOENIX-MESA GATEWAY
CHANDLER MUNI
FL 180
*5000
089°
(35)
11,000
*6000
089°
(48)
10,000
*4500
076°
(4)
10,000
*4500
(11)
(8)
076°
(17)
(15)
R-215
R-171
R-131
R-194
R-143
R-256
GBN R-025
N
MOHAK
N32°46.55'-W113°58.33'
L-5, H-4
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at or below FL 250
Turboprops expect to cross at or below 15,000
CALIE
N33°16.34'
W113°08.76'
PAYNT
N33°16.80'
W112°50.65'
Cross at 250K IAS
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets expect to cross at 11,000.
Turboprops expect to cross at 10,000.
ARLIN
N33°17.02'
W112°41.11'
ALEYS
N33°17.80'
W112°02.94'
TUKEE
N33°17.96'
W111°53.85'
WILLIE
113.3 IWA
Chan 80
10,000
*6500
035°
(42)
R-344
R-247
116.8 BZA
Chan 115
R-075
10,000
*6500
067°
(15)
JUDTH
N32°48.99'
W113°41.30'
GILA BEND
116.6 GBN
Chan 113

NOTE: BLYTHE TRANSITION for turbojet aircraft FL 240 and above. Turboprop aircraft plan BLYTHE FOUR ARRIVAL at or below FL 230.

NOTE: MOHAK TRANSITION for turbojet and turboprop aircraft.

NOTE: Chart not to scale.

BLYTHE TRANSITION (BLH.BLH4): From over BLH VORTAC via BLH R-082 to SALOM INT, then via GBN R-285 and IWA R-256 to ARLIN INT. Thence . . . .

. . . .From over ARLIN INT:

PHOENIX SKY HARBOR INTL: Rwys 7L/R or 8: Expect radar vectors after passing ARLIN INT to final approach course; Rwys 25L/R or 26: via IWA R-256 to TUKEE INT, expect radar vectors prior to TUKEE INT to final approach course.

ALL SATELLITE AIRPORTS: Expect radar vectors after passing TUKEE INT.

LOST COMMUNICATIONS: After ARLIN INT, via IWA R-256 and PXR R-143 to PXR VORTAC.

PHOENIX APP CON
124.1 256.9
PHOENIX TOWER
118.7 278.8 (Rwy 8-26)
120.9 254.3 (Rwy 7L-25R, 7R-25L)
PHOENIX GND CON
119.75 269.2
FALCON FIELD ATIS
118.25
PHOENIX DEER VALLEY ATIS
126.5
PHOENIX SKY HARBOR ATIS
127.575
SCOTTSDALE ATIS
118.6
CHANDLER MUNI ATIS
128.325
PHOENIX-MESA GATEWAY ATIS
133.5 270.275

PHOENIX-DEER VALLEY
SCOTTSDALE
FALCON FIELD
PHOENIX-SKY HARBOR INTL

BLYTHE
117.4 BLH
Chan 121
N33°35.76′ W114°45.67′
L-4-5, H-4

SALOM
N33°30.97′ - W113°53.33
VERTICAL NAVIGATION PLANNING INFORMATION
Turboprop aircraft expect to cross at or below 17,000′

BUCKEYE
110.6 BXK
Chan 43

PHOENIX
115.6 PXR
Chan 103
N33°25.98′ W111°58.21′

10,000
*5800
082°
(44)

10,000
*5200
105°
(31)

HYDRR
N33°16.46′
W113°04.18′

10,000
*4800
076°
(14)

SADLL
N33°16.01′
W113°20.71

10,000
*4500
(11)

ARLIN
N33°17.02′
W112°41.11′

AMBRR
N33°17.46′
W112°20.83′

076°
(17)

(8)

STELLAR AIRPARK

ALEYS
N33°17.80′
W112°02.94′

PAYNT
N33°16.80′-W112°50.65′

TUKEE
N33°17.96′
W111°53.85′

(15)

(8)

CHANDLER MUNI

PHOENIX-MESA GATEWAY

R-256

R-194
R-143
(19)
R-215
R-171
R-131
R-025
R-285
GBN R-344
GBN R-025

85
71
39
60
52
35
20

Turbojets: Cross at 250K IAS.
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect to cross at 11,000.
Turboprops: Expect to cross at 10,000.

BARD
116.8 BZA
Chan 115

WILLIE
113.3 IWA
Chan 80

GILA BEND
116.6 GBN
Chan 113

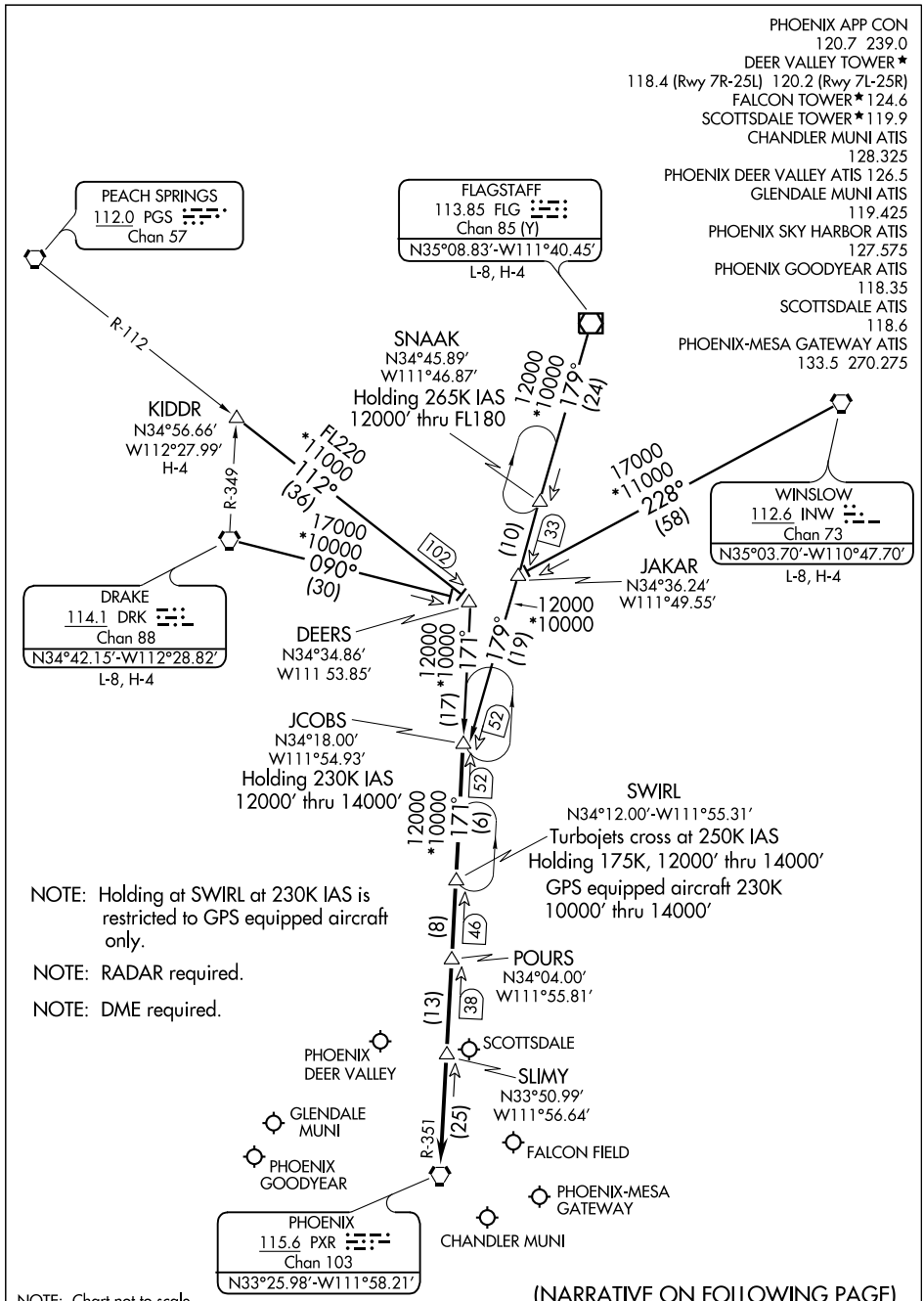
N

NOTE: Blythe Arrival for aircraft FL 230 or below.

NOTE: Chart not to scale.

JCOBS TWO ARRIVAL

SCOTTSDALE, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

JCOBS TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

DRAKE TRANSITION (DRK.JCOBS2): From over DRK VORTAC via DRK R-090 to DEERS INT, then via PXR R-351 to JCOBS INT. Thence....

FLAGSTAFF TRANSITION (FLG.JCOBS2): From over FLG VOR/DME via FLG R-179 to JCOBS INT. Thence....

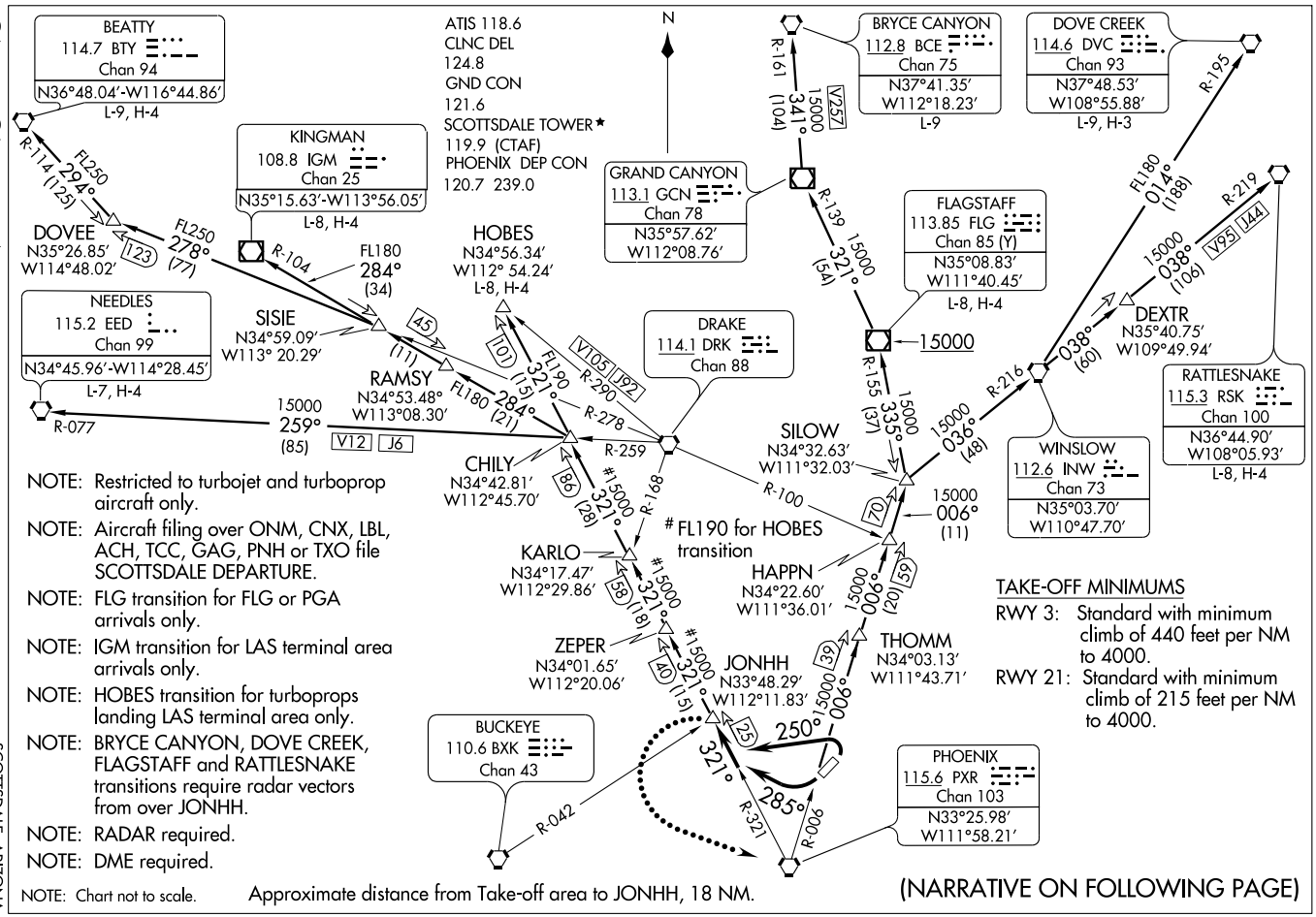
KIDDR TRANSITION (KIDDR.JCOBS2): From over KIDDR INT via PGS R-112 to DEERS INT then via PXR R-351 to JCOBS INT. Thence....

WINSLOW TRANSITION (INW.JCOBS2): From over INW VORTAC via INW R-228 to JAKAR INT, then via FLG R-179 to JCOBS INT. Thence....

... From over JCOBS INT via PXR R-351 to SWIRL DME, then via PXR R-351 to SLIMY DME, then direct PXR VORTAC. After POURS, expect radar vectors to final approach course.

LOST COMMUNICATIONS: From DRK VORTAC via DRK R-090 to intercept PXR R-351at DEERS INT direct PXR VORTAC. From FLG VORTAC, proceed direct to JCOBS INT then direct PXR VORTAC. From KIDDR INT to DEERS INT via PGS R-112 to intercept PXR R-351 to PXR VORTAC. From INW VORTAC to JAKAR INT via INW R-228 to intercept FLG R-179 to JCOBS INT to intercept PXR R-351 to PXR VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009


BEATTY
114.7 BTY
Chan 94
N36°48.04'-W116°44.86'
L-9, H-4
KINGMAN
108.8 IGM
Chan 25
N35°15.63'-W113°56.05'
L-8, H-4
DOVEE
N35°26.85'
W114°48.02'
NEEDLES
115.2 EED
Chan 99
N34°45.96'-W114°28.45'
L-7, H-4
SISIE
N34°59.09'
W113° 20.29'
RAMSY
N34°53.48°
W113°08.30'
CHILY
N34°42.81'
W112°45.70'
KARLO
N34°17.47'
W112°29.86'
ZEPER
N34°01.65'
W112°20.06'
JONHH
N33°48.29'
W112°11.83'
BUCKEYE
110.6 BXK
Chan 43
HOBES
N34°56.34'
W112° 54.24'
L-8, H-4
GRAND CANYON
113.1 GCN
Chan 78
N35°57.62'
W112°08.76'
DRAKE
114.1 DRK
Chan 88
SILOW
N34°32.63'
W111°32.03'
HAPPN
N34°22.60'
W111°36.01'
THOMM
N34°03.13'
W111°43.71'
BRYCE CANYON
112.8 BCE
Chan 75
N37°41.35'
W112°18.23'
L-9
FLAGSTAFF
113.85 FLG
Chan 85 (Y)
N35°08.83'
W111°40.45'
L-8, H-4
WINSLOW
112.6 INW
Chan 73
N35°03.70'
W110°47.70'
DOVE CREEK
114.6 DVC
Chan 93
N37°48.53'
W108°55.88'
L-9, H-3
DEXTR
N35°40.75'
W109°49.94'
RATTLESNAKE
115.3 RSK
Chan 100
N36°44.90'
W108°05.93'
L-8, H-4
PHOENIX
115.6 PXR
Chan 103
N33°25.98'
W111°58.21'
ATIS 118.6
CLNC DEL
124.8
GND CON
121.6
SCOTTSDALE TOWER ★
119.9 (CTAF)
PHOENIX DEP CON
120.7 239.0
N
R-114 (125)
FL250
294°
R-104
FL250
278°
(77)
FL180
284°
(34)
R-077
15000
259°
(85)
V12
J6
45
(11)
101
FL190
321°
(15)
R-290
V105
J92
R-278
FL180
284°
(21)
R-259
86
15000
321°
(28)
R-168
59
321°
(18)
40
15000
321°
(15)
25
250°
321°
285°
R-042
R-321
R-006
39
15000
006°
(20)
59
R-100
70
15000
006°
(11)
R-155
15000
335°
(37)
15000
036°
(48)
R-216
038°
(60)
15000
038°
(106)
V95
J44
R-219
FL180
014°
(188)
R-195
R-161 (104)
V257
15000
341°
(54)
R-139
15000
321°
(54)
15000
NOTE: Restricted to turbojet and turboprop aircraft only.
NOTE: Aircraft filing over ONM, CNX, LBL, ACH, TCC, GAG, PNH or TXO file SCOTTSDALE DEPARTURE.
NOTE: FLG transition for FLG or PGA arrivals only.
NOTE: IGM transition for LAS terminal area arrivals only.
NOTE: HOBES transition for turboprops landing LAS terminal area only.
NOTE: BRYCE CANYON, DOVE CREEK, FLAGSTAFF and RATTLESNAKE transitions require radar vectors from over JONHH.
NOTE: RADAR required.
NOTE: DME required.
NOTE: Chart not to scale.
Approximate distance from Take-off area to JONHH, 18 NM.
FL190 for HOBES transition
TAKE-OFF MINIMUMS
RWY 3: Standard with minimum climb of 440 feet per NM to 4000.
RWY 21: Standard with minimum climb of 215 feet per NM to 4000.
(NARRATIVE ON FOLLOWING PAGE)
(JONHH1.JONHH) 09183
JONHH ONE DEPARTURE
SL-5651 (FAA)
SCOTTSDALE (SDL)
SCOTTSDALE, ARIZONA

JONHH ONE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climbing left turn heading 250° to intercept and proceed via PXR R-321 to JONHH INT. Thence . . . .

TAKE-OFF RUNWAY 21: Climbing right turn heading 285° to intercept and proceed via PXR R-321 to JONHH INT. Thence . . . .

. . . . Via assigned transition.

LOST COMMUNICATIONS: If not in contact with departure control at JONHH INT, turn left direct to PXR VORTAC, thence via assigned transition. Expect filed altitude 3 minutes after departure.

BEATTY TRANSITION (JONHH1.BTY): From over JONHH INT via PXR R-321 to CHILY INT, then via IGM R-104 to SISIE INT, then via DRK R-278 to DOVEE INT, and then via BTY R-114 to BTY VORTAC.

BRYCE CANYON TRANSITION (JONHH1.BCE): From over JONHH INT via radar vectors and PXR R-006 to SILOW INT, then via FLG R-155 to FLG VOR/DME, then via FLG R-321 and GCN R-139 to GCN VOR/DME, and then via GCN R-341 and BCE R-161 to BCE VORTAC.

DOVE CREEK TRANSITION (JONHH1.DVC): From over JONHH INT via radar vectors and PXR R-006 to SILOW INT, then via INW R-216 to INW VORTAC, and then via INW R-014 and DVC R-195 to DVC VORTAC.

FLAGSTAFF TRANSITION (JONHH1.FLG): From over JONHH INT via radar vectors and PXR R-006 to SILOW INT and via FLG R-155 to FLG VOR/DME.

HOBES TRANSITION (JONHH1.HOBES): From over JONHH INT via PXR R-321 to HOBES INT.

KINGMAN TRANSITION (JONHH1.IGM): From over JONHH INT via PXR R-321 to CHILY INT, then via IGM R-104 to IGM VOR/DME.

NEEDLES TRANSITION (JONHH1.EED): From over JONHH INT via PXR R-321 to CHILY INT, then via DRK R-259 and EED R-077 to EED VORTAC.

RATTLESNAKE TRANSITION (JONHH1.RSK): From over JONHH INT via radar vectors and PXR R-006 to SILOW INT, then via INW R-216 to INW VORTAC, and then via INW R-038 and RSK R-219 to RSK VORTAC.

TAKE-OFF OBSTACLE NOTES

Rwy 3: Multiple light standards beginning 63′ from DER, 445′ left of centerline, up to 44′ AGL/1554′ MSL.
Hoist on dike 878′ from DER, 735′ left of centerline, 51′ AGL/1561′MSL.
Dike beginning 1066′ from DER, 316′ left of centerline, 38′ AGL/1548′ MSL.
Day marker on dike, 1230′ from DER, 5′ left of centerline, 39′ AGL/1549′ MSL.
Tree, 765′ from DER, 115′ left of centerline, 22′ AGL/1532′ MSL.
Road beginning 647′ from DER, 296′ left of centerline, 19′ AGL/1529′ MSL.
Fence beginning 5′ from DER, 338′ right of centerline, 6′ AGL/1511′ MSL.
Light standard, 1013′ from DER, 430′ right of centerline, 44′AGL/1552′ MSL.

Rwy 21: Trees 1072′ from DER, 426′ right of centerline, 53′ AGL/1497′ MSL.
Building 316′ from DER, 537′ right of centerline, 23′ AGL/1467′ MSL.
Tree 2087′ from DER, 418′ left of centerline, 61′ AGL/1505′ MSL.
Tree 1432′ from DER, 438′ right of centerline, 38′ AGL/1482′ MSL.
Tree 2234′ from DER, 559′ left of centerline, 58′ AGL/1502′ MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

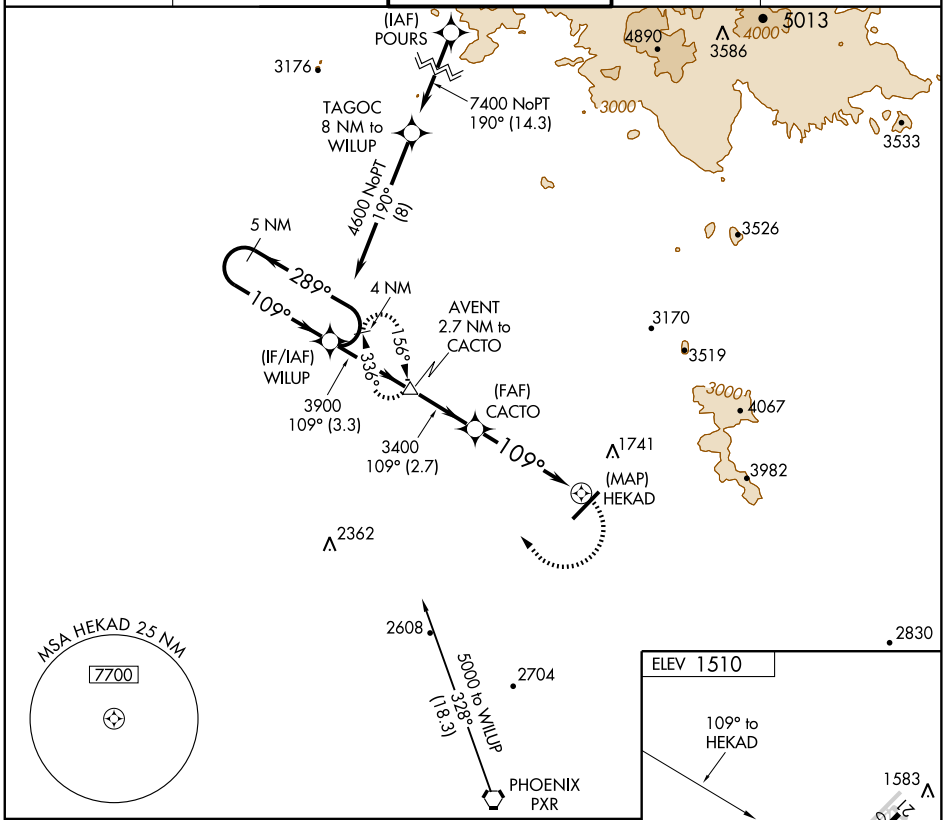
APP CRS	Rwy Idg	N/A
109°	TDZE	N/A
	Apt Elev	1510

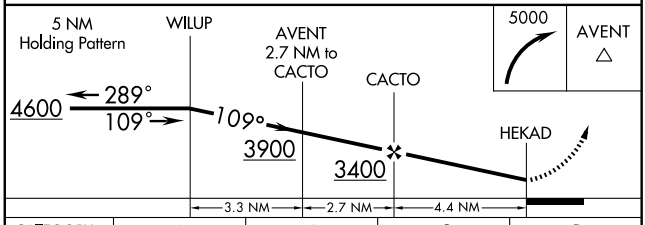
RNAV (GPS)-D
SCOTTSDALE (SDL)

DME/DME RNP- 0.3 NA.
When local altimeter setting not received, use Phoenix Sky Harbor altimeter setting.

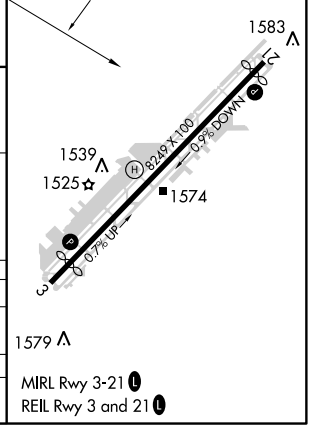
MISSED APPROACH: Climbing right turn to 5000 direct AVENT and hold.

ATIS	PHOENIX APP CON	SCOTTSDALE TOWER ★	GND CON	CLNC DEL
118.6	120.7 239.0	119.9 (CTAF) L	121.6	124.8





CATEGORY	A	B	C	D
CIRCLING	2080-1 570 (600-1)		2080-1½ 570 (600-1½)	NA
PHOENIX SKY HARBOR ALTIMETER SETTING MINIMUMS				
CIRCLING	2160-1 650 (700-1)		2160-1¾ 650 (700-1¾)	NA



SW-4, 22 OCT 2009 to 19 NOV 2009

SCOTTSDALE, ARIZONA AL-5651 (FAA)

APP CRS		
212°	Rwy Idg	7849
	TDZE	1510
	Apt Elev	1510

RNAV (RNP) RWY 21
SCOTTSDALE (SDL)

RF and GPS required. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, procedure NA below 1°C (31°F) or above 44°C (112°F). When local altimeter setting not received procedure NA.

MISSED APPROACH: Climb to 5000 via track 212° to LSLEE, and via right turn to JRRRY, and via track 045° to AVENT and hold.

ATIS	PHOENIX APP CON	SCOTTSDALE TOWER ★	GND CON	CLNC DEL
118.6	120.7 239.0	119.9 (CTAF) L	121.6	124.8

ROUTING TO ONELE (not to scale)

SWIRL (RNP 0.60) 9800 182° (8.5) IBOBE 8200 182° (5.6) (IAF) HAWAI 6700 182° (3) MREEN 6000 182° (4) LTCOL 4800 144° (4.7) ONELE

SEE INSET FOR ROUTING TO ONELE

ONELE 4000 144° (3.1) (IF) WLLMN 3300 112° (5) (FAF) EEDGR (2.8) 212° (1.8) RW21

WLLMN 4000 (9.3) from CLAAS 5 NM 156° 336° AVENT CLAAS 4000 JRRRY 045° (2.9) from JRRRY

EEDGR 1741 1676± 1658± DNAHO

RW21 2362 (13.7) to JRRRY 4000 to CLAAS 334° (11.6) 212° (5.7) 2608 LSLEE 2704

JRRRY FURST 4000

SEE INSET FOR ROUTING TO FURST

3526 MSA RW21 25 NM 8800 3170 3519 3000 4067 3982

ROUTING TO FURST (not to scale)

FURST 4000 4000 340° (13.7) (IAF) FRMAN 5000 5000 317° (14.8) NAAVE 6000 6000 277° (17.1) BBALL (RNP 0.60)

5000 trk 212° LSLEE JRRRY trk 045° AVENT WLLMN

VGSI and RNAV glidepath not coincident.

DNAHO 2227 RW21 212° EEDGR 3300 112° 3300 4000 Procedure Turn NA GP 3.50° TCH 60

1.8 NM 2.8 NM 5 NM

CATEGORY	A	B	C	D
RNP 0.10 DA	1948-1¼ 438 (500-1¼)			NA
RNP 0.16 DA	1987-1½ 477 (500-1½)			NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

ELEV 1510

212° to RW21 1583 TDZE 1510 1539 1525 1574 1579 8249 X 100 0.9% DOWN 0.7% UP

MIRL Rwy 3-21 L
REIL Rwys 3 and 21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

SCOTTSDALE, ARIZONA AL-5651 (FAA)

APP CRS	Rwy Idg	7510
032°	TDZE	1470
	Apt Elev	1510

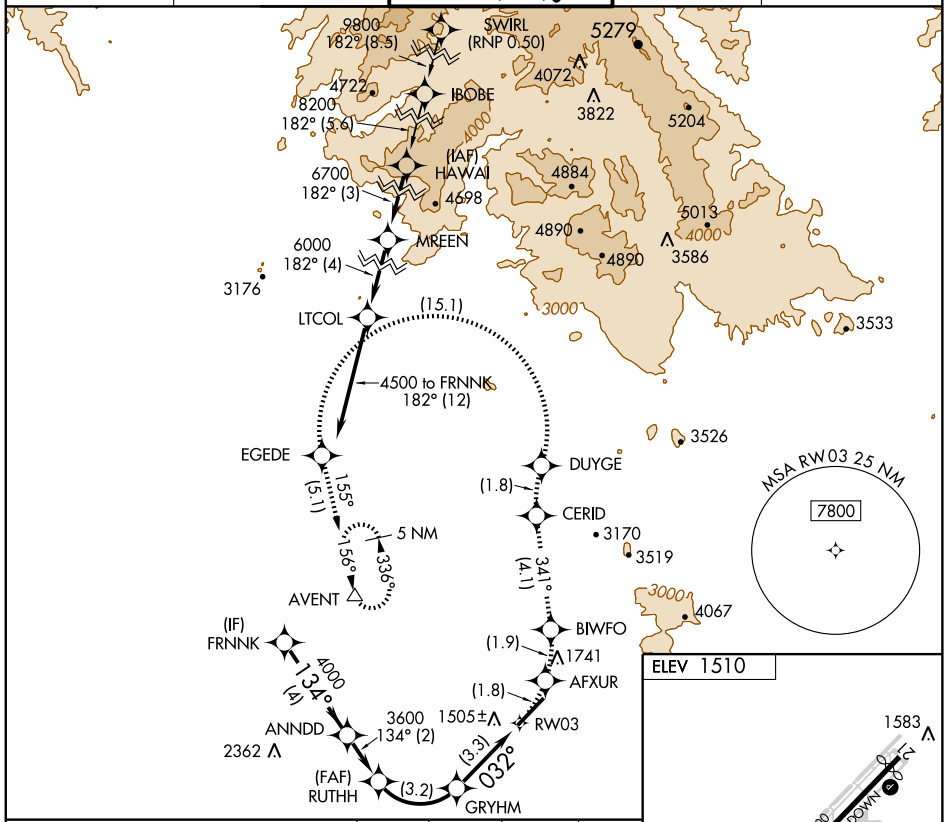
RNAV (RNP) Y RWY 3

SCOTTSDALE (SDL)

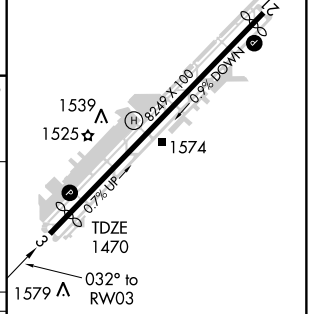
RF and GPS required. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, procedure NA below 1°C (31°F) or above 54°C (130°F). When local altimeter setting not received procedure NA. Missed approach requires RNP less than 1.0.

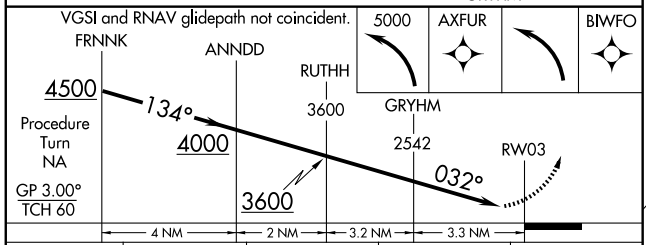
MISSED APPROACH: Climb to 5000 via left turn to AXFUR, and via left turn to BIWFO, and via track 341° to CERID, and via right turn to DUYGE, and via left turn to EGEDE, and via track 155° to AVENT and hold.

ATIS	PHOENIX APP CON	SCOTTSDALE TOWER ★	GND CON	CLNC DEL
118.6	120.7 239.0	119.9 (CTAF) L	121.6	124.8



ELEV 1510





CATEGORY	A	B	C	D
RNP 0.30 DA	1829-1¼	359 (400-1¼)		NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

MIRL Rwy 3-21 L
REIL Rwys 3 and 21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

SCOTTSDALE, ARIZONA AL-5651 (FAA)

APP CRS	Rwy Idg	7510
032°	TDZE	1470
	Apt Elev	1510

RNAV (RNP) Z RWY 3

SCOTTSDALE (SDL)

RF and GPS required. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, procedure NA below 1°C (31°F) or above 54°C (130°F). When local altimeter setting not received procedure NA. Missed approach requires RNP less than 1.0.

MISSED APPROACH: Climb to 5000 via left turn to AFXUR, and via left turn to BIWFO, and via track 341° to CERID, and via right turn to DUYGE, and via left turn to EGEDE, and via track 155° to AVENT and hold.

ATIS	PHOENIX APP CON	SCOTTSDALE TOWER ★	GND CON	CLNC DEL
118.6	120.7 239.0	119.9 (CTAF) L	121.6	124.8

MISSED APPROACH FIX

(15.1)

EGEDE

155° (5.1)

DUYGE

(1.8)

CERID

5 NM

156°

336°

341° (4.1)

AVENT

FROM BIWFO

SEE INSET

BIWFO

(1.9)

1741

AFXUR

(1.8)

1505 ± RW03

4067

3982

032° (5.9)

2608

(FAF)

JIMUN

2830

2704

3400 (4.1)

FURST

4000

4000

340° (13.7)

MSA RW03 25 NM

7800

(IF)

FRMAN

5000

5000

311° (14.8)

(IAF)

NAAVE

6000

6000

277° (17.1)

BBALL

(RNP 0.42)

ELEV 1510

1583

1539

1525

8249 X 100

0.9% DOWN

1574

0.7% UP

TDZE

1470

032° to RW03

1579

MIRL Rwy 3-21 L

REIL Rwys 3 and 21 L

VGSI and RNAV glidepath not coincident.

5000 AFXUR BIWFO

FRMAN

5000

Procedure Turn NA

GP 3.00° TCH 60

FURST

340°

4000

JIMUN

3400

032°

3400

RW03

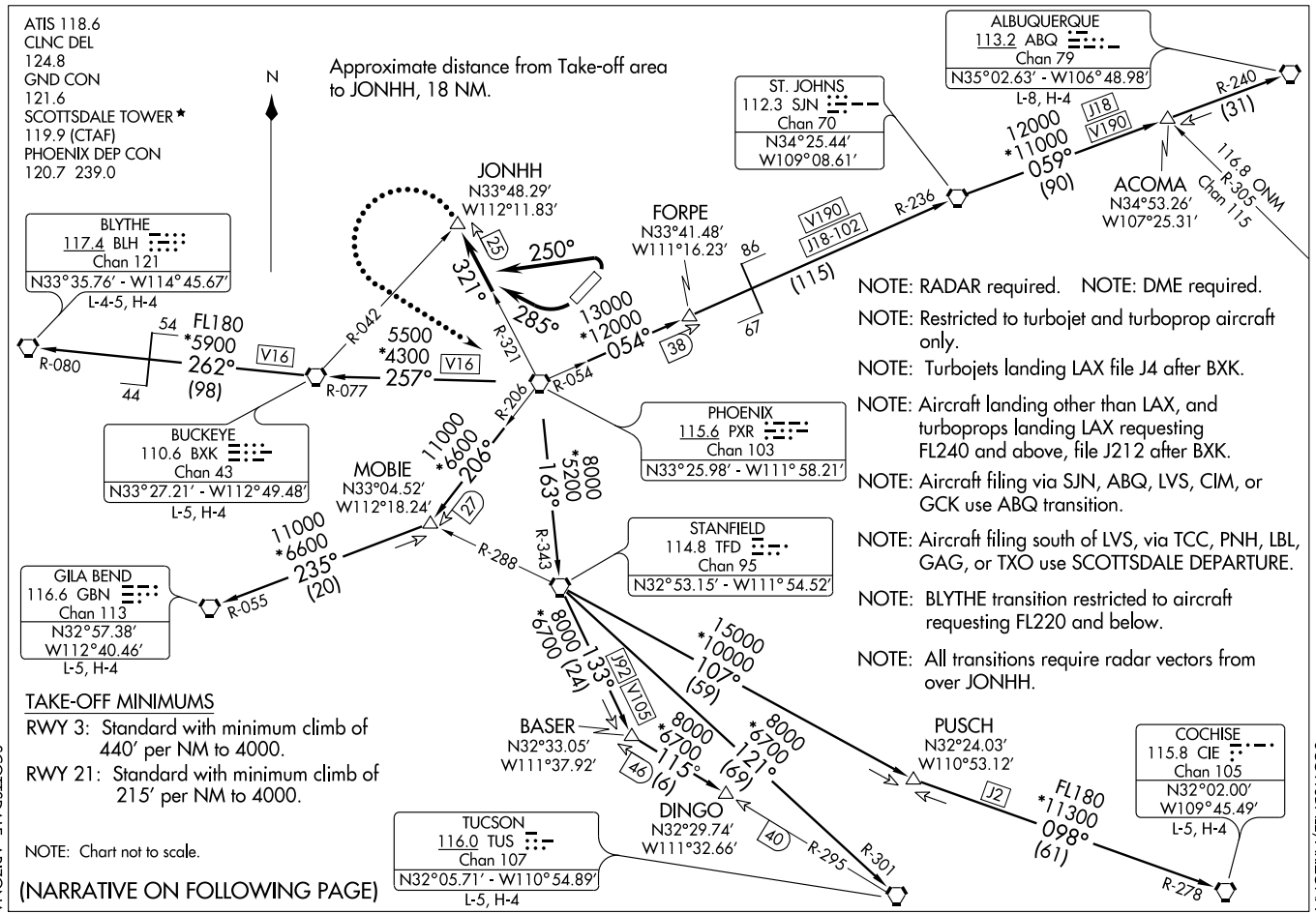
13.7 NM 4.1 NM 5.9 NM

CATEGORY	A	B	C	D
RNP 0.30 DA	1829-1¼ 359 (400-1¼)			NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SCOTTSDALE SIX DEPARTURE



SL-5651 (FAA)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climbing left turn heading 250° to intercept and proceed via PXR R-321 to JONHH INT. Thence . . . .

TAKE-OFF RUNWAY 21: Climbing right turn heading 285° to intercept and proceed via PXR R-321 to JONHH INT. Thence . . . .

. . . . via radar vectors to (assigned route).

LOST COMMUNICATIONS: If not in contact with departure control at JONHH INT, turn left direct to PXR VORTAC, thence via assigned transition . Expect filed altitude 3 minutes after departure.

ALBUQUERQUE TRANSITION (SCOT6.ABQ): From over JONHH INT via radar vectors and PXR R-054 and SJN R-236 to SJN VORTAC, then via SJN R-059 and ABQ R-240 to ABQ VORTAC.

BLYTHE TRANSITION (SCOT6.BLH): From over JONHH INT via radar vectors and BXK R-077 to BXK VORTAC, then via BXK R-262 and BLH R-080 to BLH VORTAC.

BUCKEYE TRANSITION (SCOT6.BXK): From over JONHH INT via radar vectors and BXK R-077 to BXK VORTAC.

COCHISE TRANSITION (SCOT6.CIE): From over JONHH INT via radar vectors and TFD R-343 to TFD VORTAC, then via TFD R-107 to PUSCH INT, and then via CIE R-278 to CIE VORTAC.

DINGO TRANSITION (SCOT6.DINGO): From over JONHH INT via radar vectors and TFD R-343 to TFD VORTAC, then via TFD R-133 to BASER INT, and then via TUS R-295 to DINGO INT.

GILA BEND TRANSITION (SCOT6.GBN): From over JONHH INT via radar vectors and PXR R-206 to MOBIE INT, then via GBN R-055 to GBN VORTAC.

TUCSON TRANSITION (SCOT6.TUS): From over JONHH INT via radar vectors and TFD R-343 to TFD VORTAC, then via TFD R-121 and TUS R-301 to TUS VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 3: Multiple light standards beginning 63′ from DER, 445′ left of centerline, up to 44′ AGL/1554′ MSL.
Hoist on dike 878′ from DER, 735′ left of centerline, 51′ AGL/1561′ MSL.
Dike beginning 1066′ from DER, 316′ left of centerline, 38′ AGL/1548′ MSL.
Day marker on dike, 1230′ from DER, 5′ left of centerline, 39′ AGL/1549′ MSL.
Tree 765′ from DER, 115′ left of centerline, 22′ AGL/1532′ MSL.
Road beginning 647′ from DER, 296′ left of centerline, 19′ AGL/1529′ MSL.
Fence beginning 5′ from DER, 338′ right of centerline, 6′ AGL/1511′ MSL.
Light standard 1013′ from DER, 430′ right of centerline, 44′ AGL/1552′ MSL.

RWY 21: Trees 1072′ from DER, 426′ right of centerline, 53′ AGL/1497′ MSL.
Building 316′ from DER, 537′ right of centerline, 23′ AGL/1467′ MSL.
Tree 2087′ from DER, 418′ left of centerline, 61′ AGL/1505′ MSL.
Tree 1432′ from DER, 438′ right of centerline, 38′ AGL/1482′ MSL.
Tree 2234′ from DER, 559′ left of centerline, 58′ AGL/1502′ MSL.

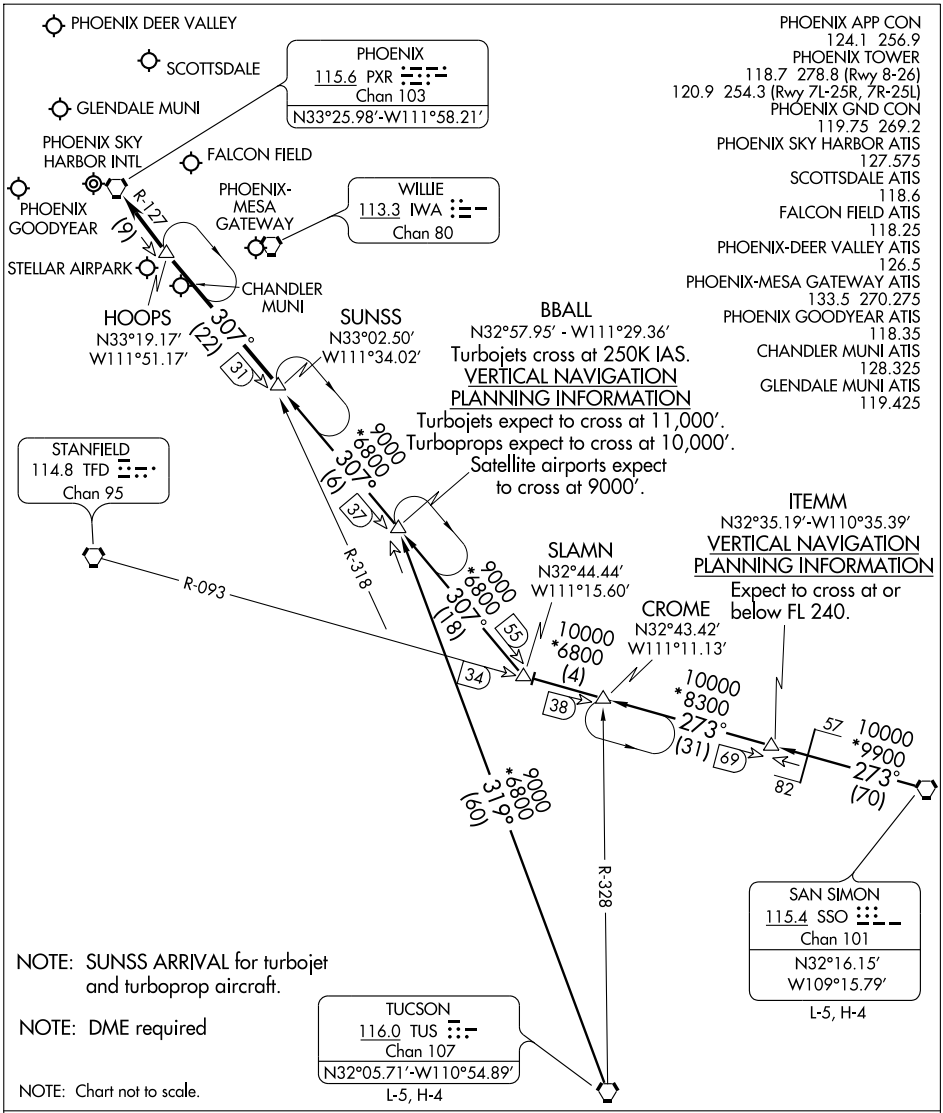
SW-4, 22 OCT 2009 to 19 NOV 2009

(SUNSS.SUNSS6) 09127

SUNSS SIX ARRIVAL

ST-322 (FAA)

PHOENIX, ARIZONA



NOTE: SUNSS ARRIVAL for turbojet and turboprop aircraft.

NOTE: DME required

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SAN SIMON TRANSITION (SSO.SUNSS6): From over SSO VORTAC via SSO R-273 and TFD R-093 to SLAMN, then via PXR R-127 to SUNSS. Thence....

TUCSON TRANSITION (TUS.SUNSS6): From over TUS VORTAC via TUS R-319 to BBALL, then via PXR R-127 to SUNSS. Thence....

....from over SUNSS via PXR R-127 to PXR VORTAC, expect radar vectors after HOOPS.

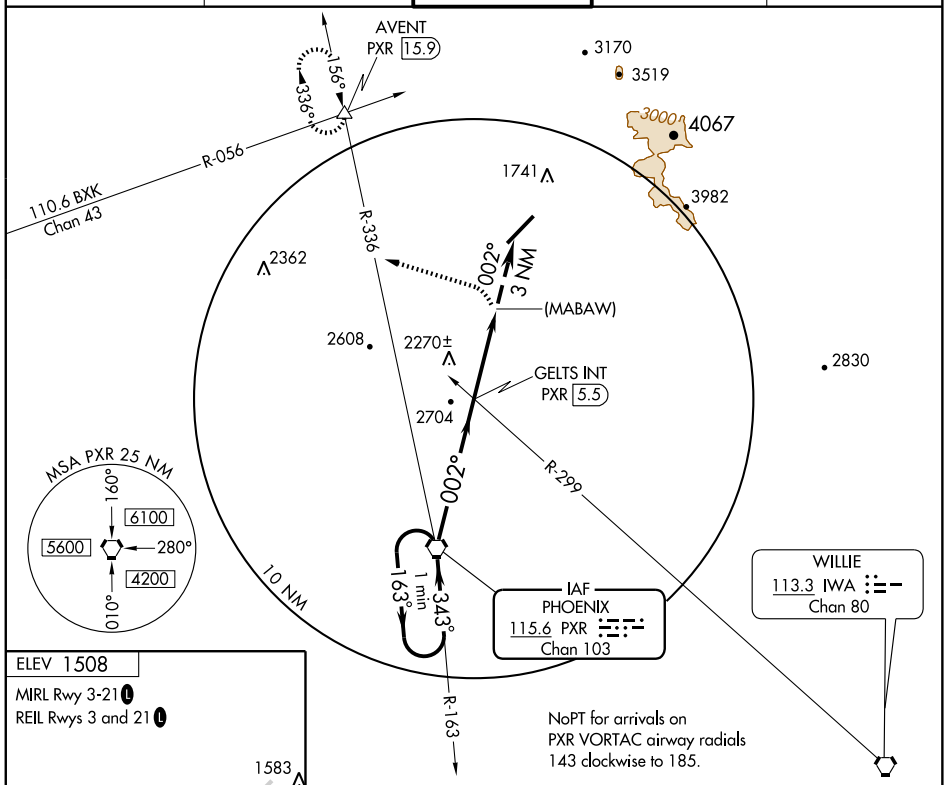
VORTAC PXR 115.6 Chan 103	APP CRS 002°	Rwy Idg N/A TDZE N/A Apt Elev 1508

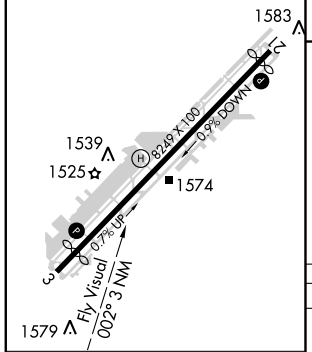
VOR or GPS-A
SCOTTSDALE (SDL)

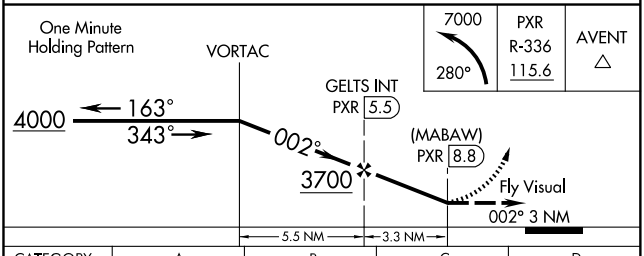
When local altimeter setting not received, use Phoenix Sky Harbor altimeter setting minimums.

MISSED APPROACH: Climbing left turn to 7000 via heading 280° and PXR R-336 Northwest bound; then continue direct AVENT Int/PXR 15.9 DME and hold.

ATIS	PHOENIX APP CON	SCOTTSDALE TOWER★	GND CON	CLNC DEL
118.6	120.7 239.0	119.9 (CTAF) L	121.6	124.8







CATEGORY	A	B	C	D
CIRCLING	2540-2½ 1032 (1100-2½)		2540-3 1032 (1100-3)	NA
PHOENIX SKY HARBOR ALTIMETER SETTING MINIMUMS				
CIRCLING	2620-2½ 1112 (1200-2½)		2620-3 1112 (1200-3)	NA

FAF to MAP 3.3 NM

Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

SW-4, 22 OCT 2009 to 19 NOV 2009

SCOTTSDALE, ARIZONA

AL-5651 (FAA)

VORTAC IWA	APP CRS	Rwy Idg	N/A
113.3	313°	TDZE	N/A
Chan 80		Apt Elev	1508

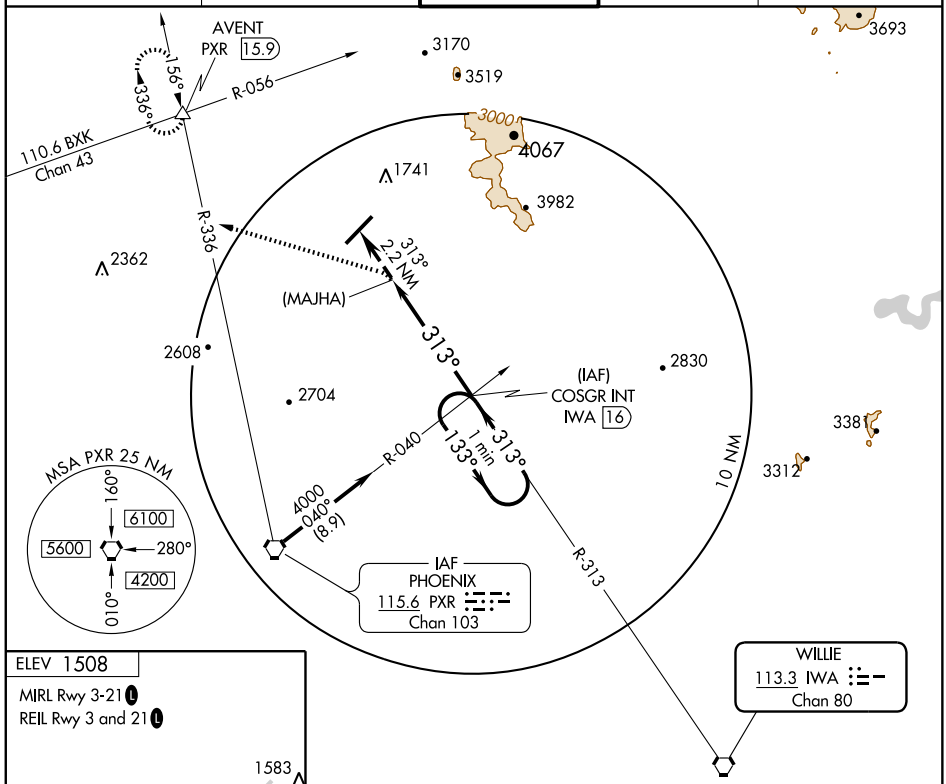
VOR or GPS-C

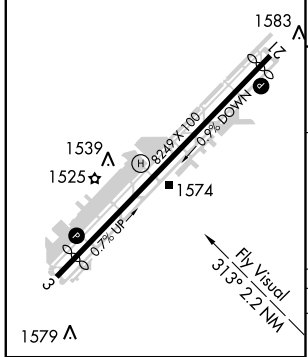
SCOTTSDALE (SDL)

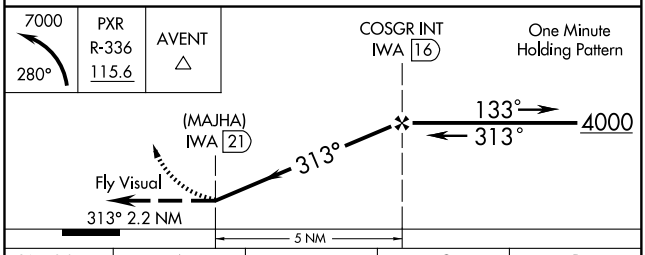
When local altimeter setting not received, use Phoenix Sky Harbor altimeter setting minimums.

MISSED APPROACH: Climbing left turn to 7000 via heading 280° and PXR R-336 outbound, reaching 7000, continue direct AVENT Int/PXR 15.9 DME and hold.

ATIS	PHOENIX APP CON	SCOTTSDALE TOWER★	GND CON	CLNC DEL
118.6	120.7 239.0	119.9 (CTAF) L	121.6	124.8







FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
CIRCLING	2400-2½ 892 (900-2½)		2400-2¾ 892 (900-2¾)	NA
PHOENIX SKY HARBOR ALTIMETER SETTING MINIMUMS				
CIRCLING	2480-2½ 972 (1000-2½)		2480-3 972 (1000-3)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

SEDONA, ARIZONA

AL-6169 (FAA)

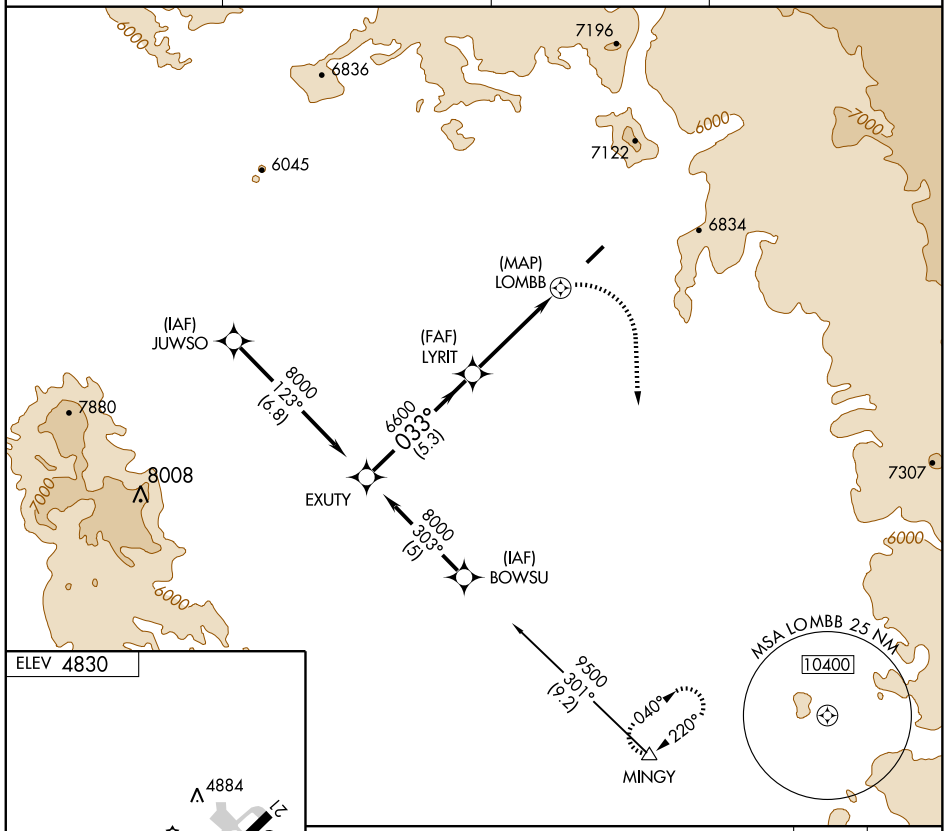
GPS RWY 3
SEDONA (SEZ)

APP CRS	Rwy Idg	5132
033°	TDZE	4792
	Apt Elev	4830

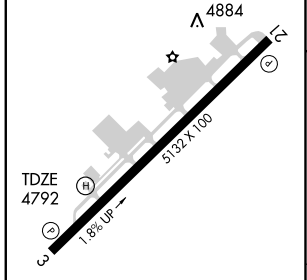
When local altimeter not received, procedure not authorized.
NA Cat D circling not authorized northwest of Rwy 3-21.

MISSED APPROACH: Climbing right turn to 12000 direct MINGY WP and hold.

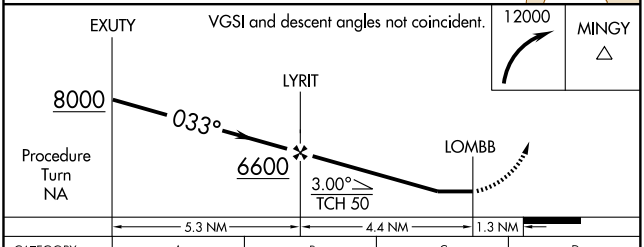
AWOS-2	ALBUQUERQUE CENTER	PRESCOTT RADIO	UNICOM
118.525	124.5 306.2	122.3	123.0 (CTAF) L



ELEV 4830



MIRL Rwy 3-21 L
REIL Rwys 3 and 21 L



CATEGORY	A	B	C	D
S-3	6140-1½ 1348 (1400-1½)	6240-1½ 1448 (1500-1½)	6560-3	1768 (1800-3)
CIRCLING	6140-1½ 1310 (1400-1½)	6240-1½ 1410 (1500-1½)	6560-3	1730 (1800-3)

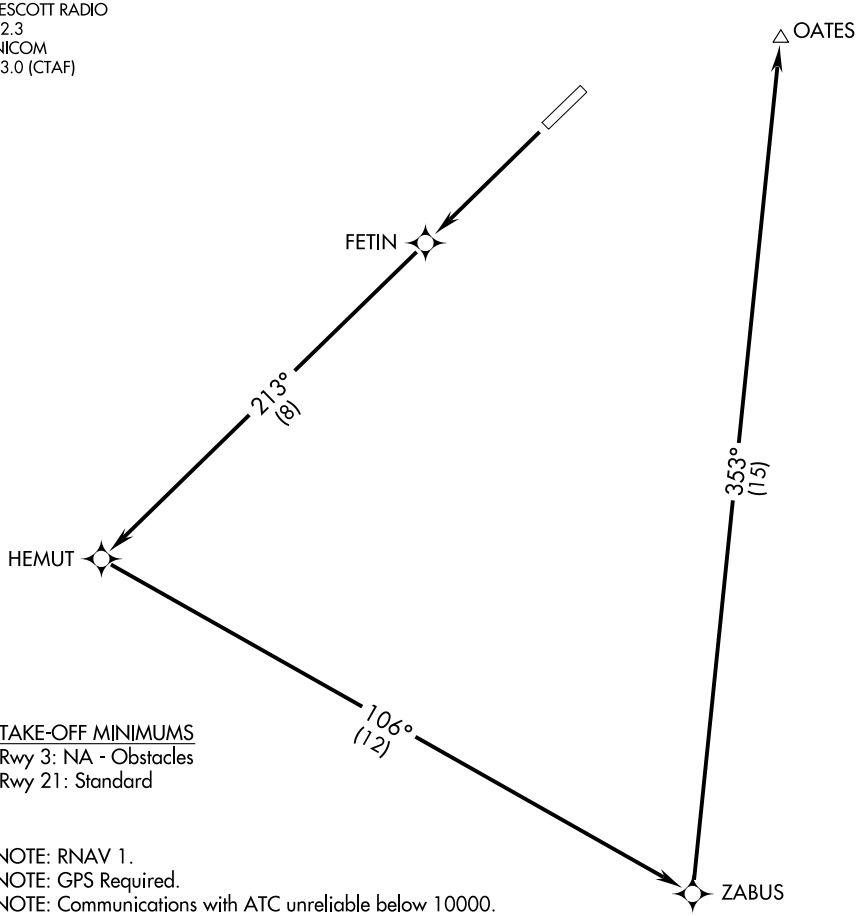
SW-4, 22 OCT 2009 to 19 NOV 2009

OATES ONE DEPARTURE (RNAV) (OBSTACLE)

SL-6169 (FAA)

SEDONA (SEZ)
SEDONA, ARIZONA

ALBUQUERQUE CENTER
124.5 306.2
PRESCOTT RADIO
122.3
UNICOM
123.0 (CTAF)



TAKE-OFF MINIMUMS
Rwy 3: NA - Obstacles
Rwy 21: Standard

NOTE: RNAV 1.
NOTE: GPS Required.
NOTE: Communications with ATC unreliable below 10000.

TAKE-OFF OBSTACLE NOTES:
Rwy 21: Trees beginning 1642' from DER, 240' right of centerline, up to 100' AGL/4786' MSL.
Bush 147' from DER, 202' left of centerline, 5' AGL/4740' MSL.

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 21: Climb direct FETIN then via 213° track/8 NM to HEMUT, then left turn via 106° track/12 NM to ZABUS, then left turn via 353° track/15 NM to OATES. Maintain 10500 or assigned altitude.

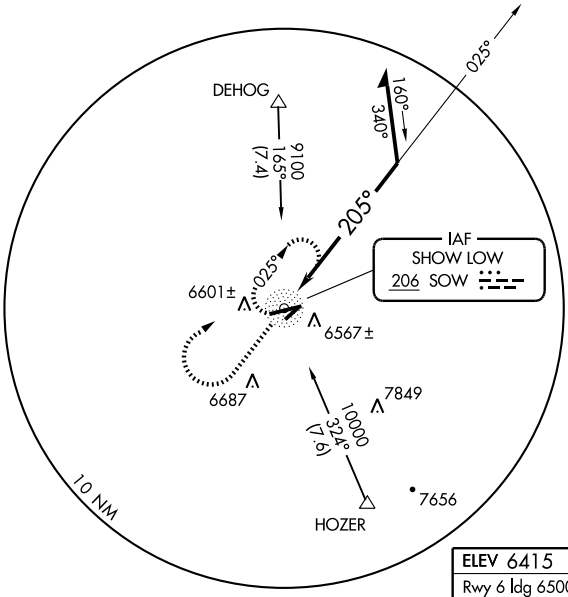
NDB SOW 206	APP CRS 205°	Rwy Idg N/A TDZE N/A Apt Elev 6415

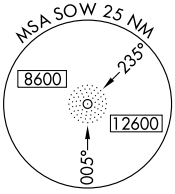
NDB-A
SHOW LOW RGNL (SOW)

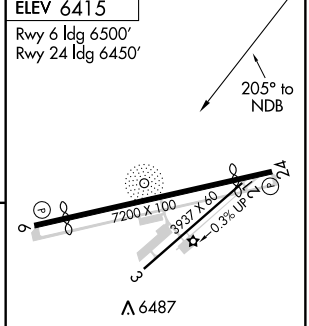
T
NA Obtain local altimeter setting on CTAF; when not received, procedure NA.
Circling NA southeast of Rwys 3 and 24.

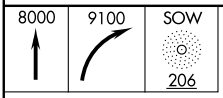
MISSED APPROACH: Climb to 8000 then climbing right turn to 9100 direct SOW NDB and hold.

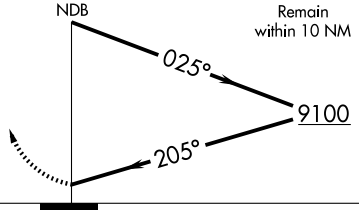
AWOS-3	ALBUQUERQUE CENTER	UNICOM
118.075	132.9 239.05	123.0 (CTAF) L











REIL Rwys 6 and 24
MIRL Rwy 6-24 L

CATEGORY	A	B	C	D
CIRCLING	7600-1¼ 1185 (1200-1¼)	7600-1½ 1185 (1200-1½)	7600-3 1185 (1200-3)	NA

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

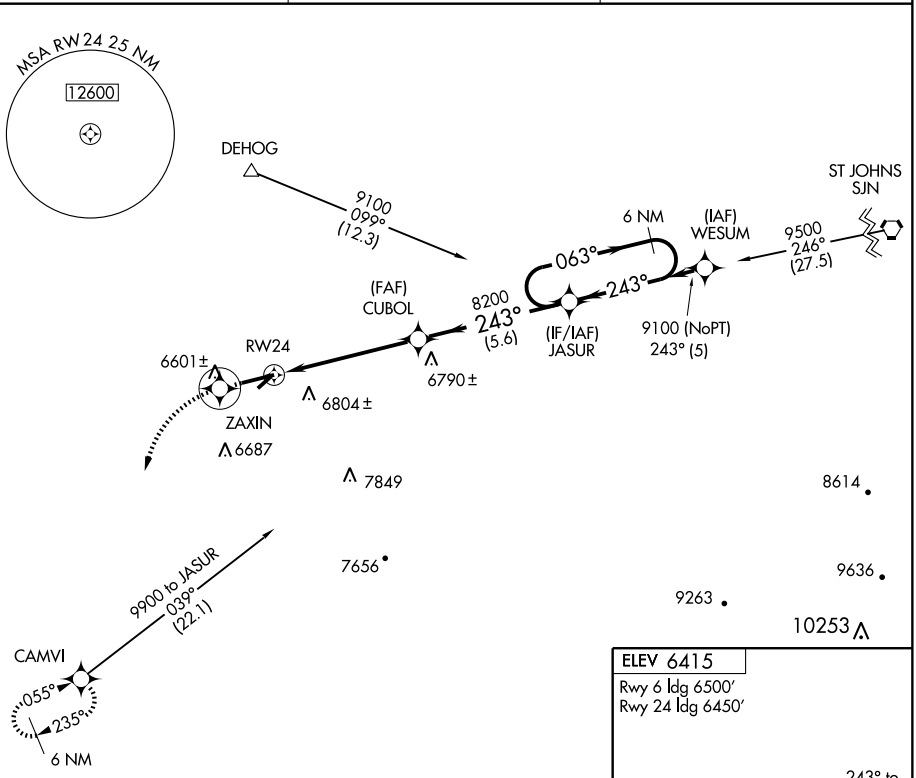
APP CRS	Rwy Idg	TDZE	Apt Elev
243°	6450	6405	6415

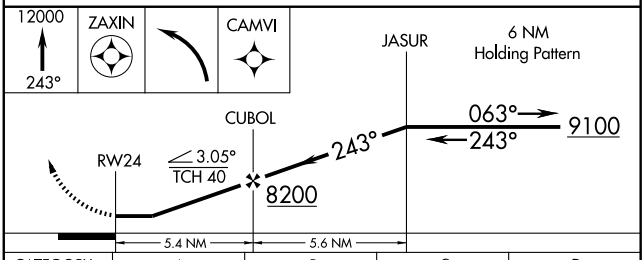
RNAV (GPS) RWY 24
SHOW LOW RGNL (SOW)

T NA — Obtain local altimeter setting on CTAF; when not received, procedure NA. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Circling NA southeast of Rwys 3 and 24.

MISSED APPROACH: Climb to 12000 via 243° course to ZAXIN WP, then left turn direct CAMVI WP and hold.

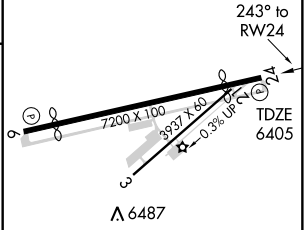
AWOS-3	ALBUQUERQUE CENTER	UNICOM
118.075	132.9 239.05	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	6860-1	455 (500-1)	6860-1¼ 455 (500-1¼)	NA
CIRCLING	6960-1	545 (600-1)	6960-1½ 545 (600-1½)	NA

ELEV 6415
Rwy 6 ldg 6500′
Rwy 24 ldg 6450′



REIL Rwys 6 and 24
MIRL Rwy 6-24 L

SW-4, 22 OCT 2009 to 19 NOV 2009

SPRINGERVILLE, ARIZONA AL-6631 (FAA)

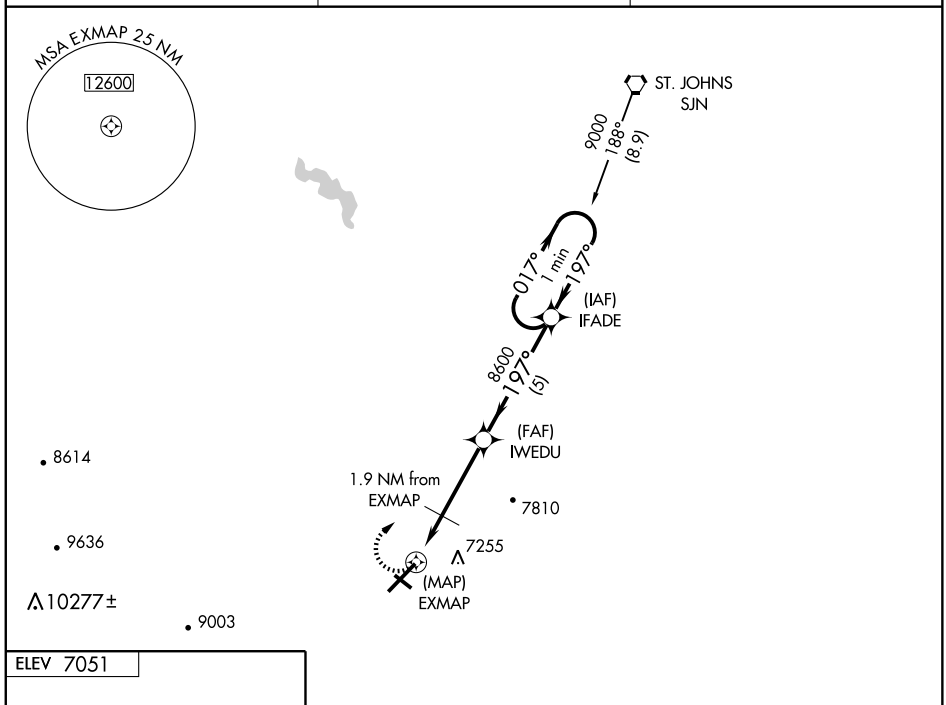
APP CRS	Rwy Idg	8422
197°	TDZE	7039
	Apt Elev	7051

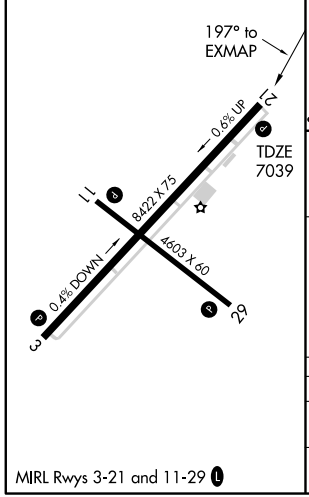
GPS RWY 21
SPRINGERVILLE MUNI (D68)

Procedure not authorized at night.
NA Obtain local altimeter setting on CTAF; when not received, procedure not authorized.

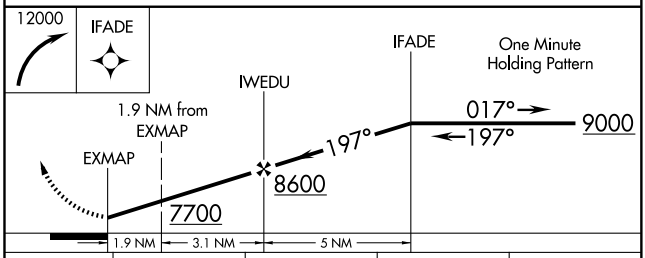
MISSED APPROACH: Climbing right turn to 12000 direct IFADE WP and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
119.65	132.9 239.05	122.8 (CTAF) L





MIRL Rwys 3-21 and 11-29 L



CATEGORY	A	B	C	D
S-21	7360-1 321 (400-1)		NA	
CIRCLING	7560-1 509 (600-1)	7660-1 609 (700-1)	NA	

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS		
136°	Rwy Idg	5322
	TDZE	5736
	Apt Elev	5737

RNAV (GPS) RWY 14

ST. JOHNS INDUSTRIAL AIR PARK (SJN)

DME/DME RNP- 0.3 NA.
When local altimeter setting not received, use Show Low altimeter setting and increase all MDAs 180 feet.
VDP NA when using Show Low altimeter setting.

MISSED APPROACH: Climb to 9000 direct HUGOV and via 098° track to SJN VORTAC and hold, continue climb-in-hold to 9000.

ASOS	ALBUQUERQUE CENTER	UNICOM
134.225	124.325 288.25	122.8 (CTAF)

Holding not required for arrivals at IRECU via V264 southeast bound and from DEHOG.

(IF) CAPEP

(IAF) IRECU

099°

279°

7 NM

8300 067° (10.7)

7300 136° (6)

(FAF) DIGAY

8900 032° (21.5)

DEHOG

Procedure NA for arrivals at DEHOG via V528 westbound.

5899 ± ∧

∧6294

RW14

5963∧

•6129

HUGOV

098°

MSA RW14 25 NM

11400

MISSED APCH FIX

7 NM

059°

239°

SAINT JOHNS SJN

•7502

ELEV 5737

136° to RW14

14

TDZE 5736

5322 X 75

21

3400 X 60

3

5790

32

VGSI and descent angles not coincident.

CAPEP

DIGAY

8300

136°

7300

Procedure Turn NA

3.04° TCH 40

1.2 NM to RW14

RW14

6 NM

3.5 NM

1.2

9000 | HUGOV | 098° track | SJN

CATEGORY	A	B	C	D
LNAV MDA	6160-1	424 (500-1)		NA
CIRCLING	6240-1 503 (600-1)		6280-1 543 (600-1)	NA

REIL Rwys 14 and 32
MIRL Rwys 3-21 and 14-32

SW-4, 22 OCT 2009 to 19 NOV 2009

ST. JOHNS, ARIZONA

AL-6586 (FAA)

APP CRS		
316°	Rwy Idg	5230
	TDZE	5737
	Apt Elev	5737

RNAV (GPS) RWY 32

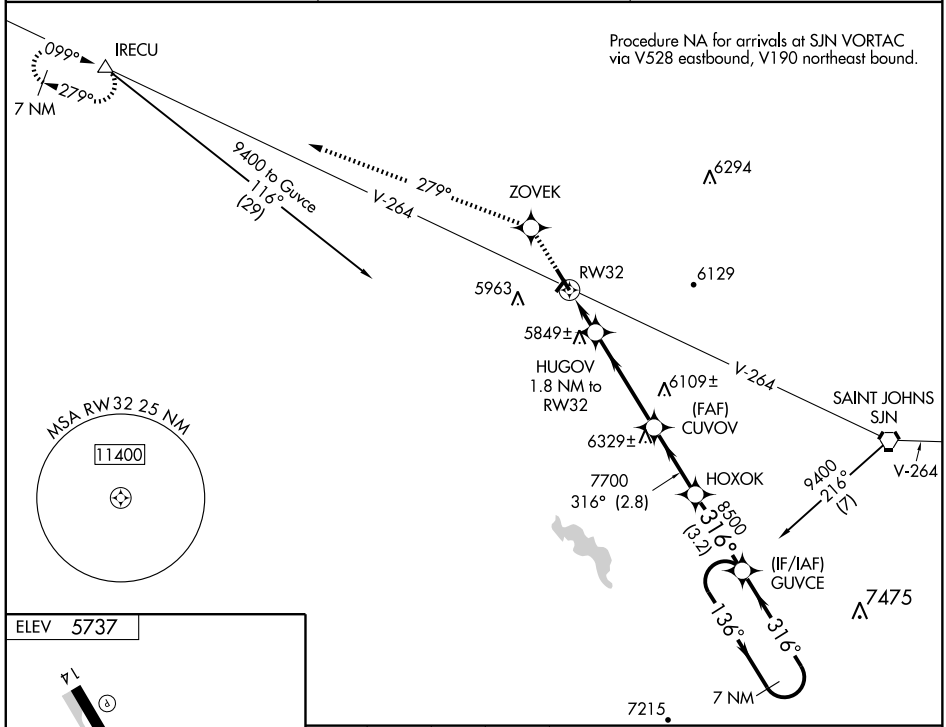
ST. JOHNS INDUSTRIAL AIR PARK (SJN)

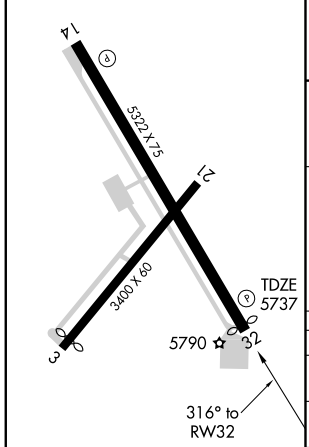
If local altimeter setting not received, use Show Low altimeter setting and increase all DAs/MDAs 180 feet. DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-15°F) or above 30°C (86°F). Visibility reduction by helicopters NA.
Baro-VNAV and straight-in LNAV minimums NA when using Show Low altimeter setting.

MISSED APPROACH: Climb to 9400 direct ZOVEK and via 279° track to IRECU and hold.

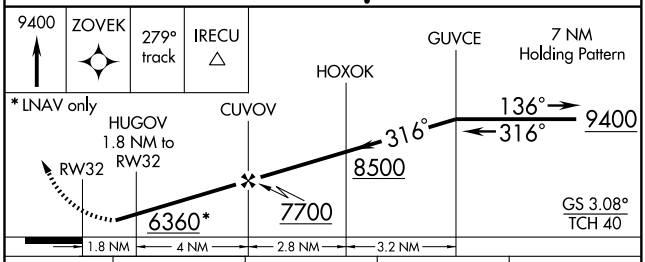
ASOS	ALBUQUERQUE CENTER	UNICOM
134.225	124.325 288.25	122.8 (CTAF)

Procedure NA for arrivals at SJN VORTAC via V528 eastbound, V190 northeast bound.





REIL Rwys 14 and 32
MIRL Rwys 3-21 and 14-32



CATEGORY	A	B	C	D
LNAV/VNAV DA	6167-1½ 430 (500-1½)		NA	
LNAV MDA	6140-1 403 (500-1)		NA	
CIRCLING	6240-1 503 (600-1)	6280-1 543 (600-1)	NA	

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC SJN	APP CRS	Rwy Idg	N/A
112.3	283°	TDZE	N/A
Chan 70		Apt Elev	5737

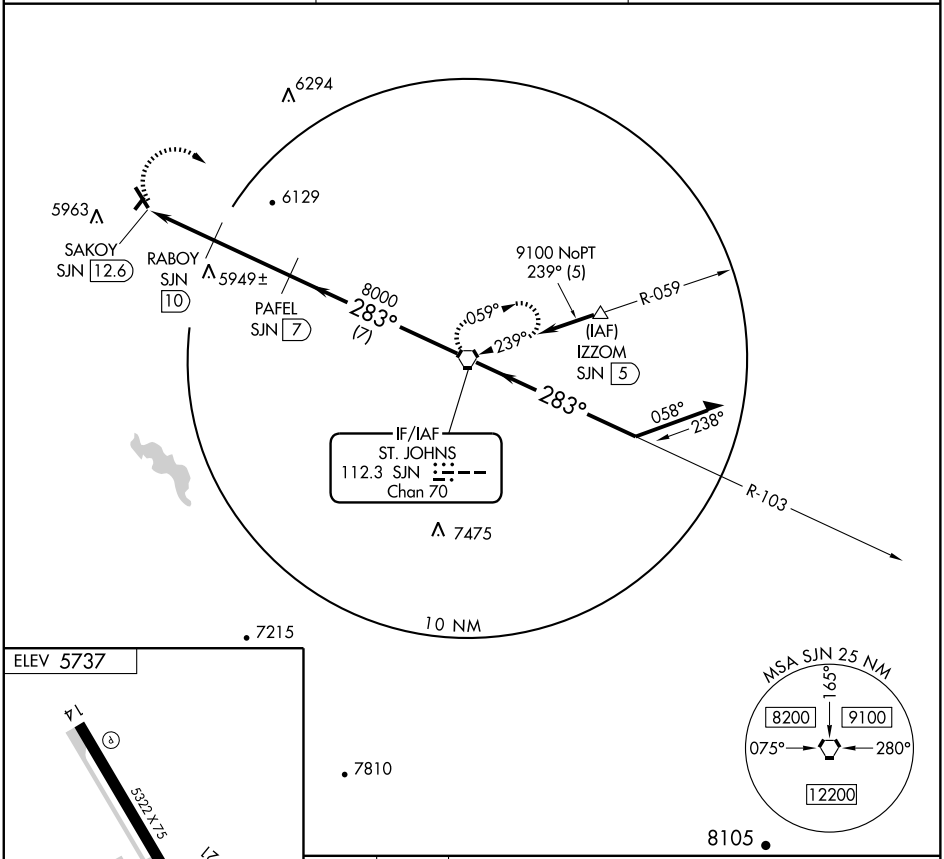
VOR/DME-A

ST. JOHNS INDUSTRIAL AIR PARK (SJN)

When local altimeter setting not received, use Show Low altimeter setting and increase all MDAs 180 feet.

MISSED APPROACH: Climbing right turn to 9100 direct SJN VORTAC and hold, continue climb-in-hold to 9100.

ASOS	ALBUQUERQUE CENTER	UNICOM
134.225	124.325 288.25	122.8 (CTAF)



REIL Rwys 14 and 32
MIRL Rwys 3-21 and 14-32

CATEGORY	A	B	C	D
CIRCLING	6240-1 503 (600-1)	6280-1 543 (600-1)	NA	

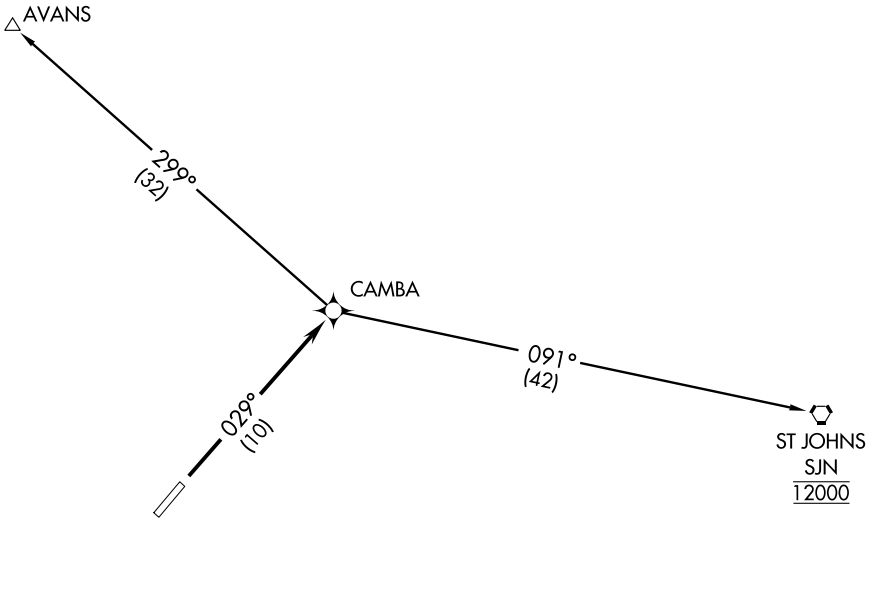
SW-4, 22 OCT 2009 to 19 NOV 2009

CAMBA ONE DEPARTURE (RNAV)

SL-9422 (FAA)

TAYLOR MUNI (TYL)
TAYLOR, ARIZONA

ALBUQUERQUE CENTER
132.9 239.05



NOTE: 1. GPS required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climb to 8900 via course 029° to CAMBA WP, then via assigned transition.

AVANS TRANSITION (CAMBA1.AVANS)

ST JOHNS TRANSITION (CAMBA1.SJN)

SW-4, 22 OCT 2009 to 19 NOV 2009

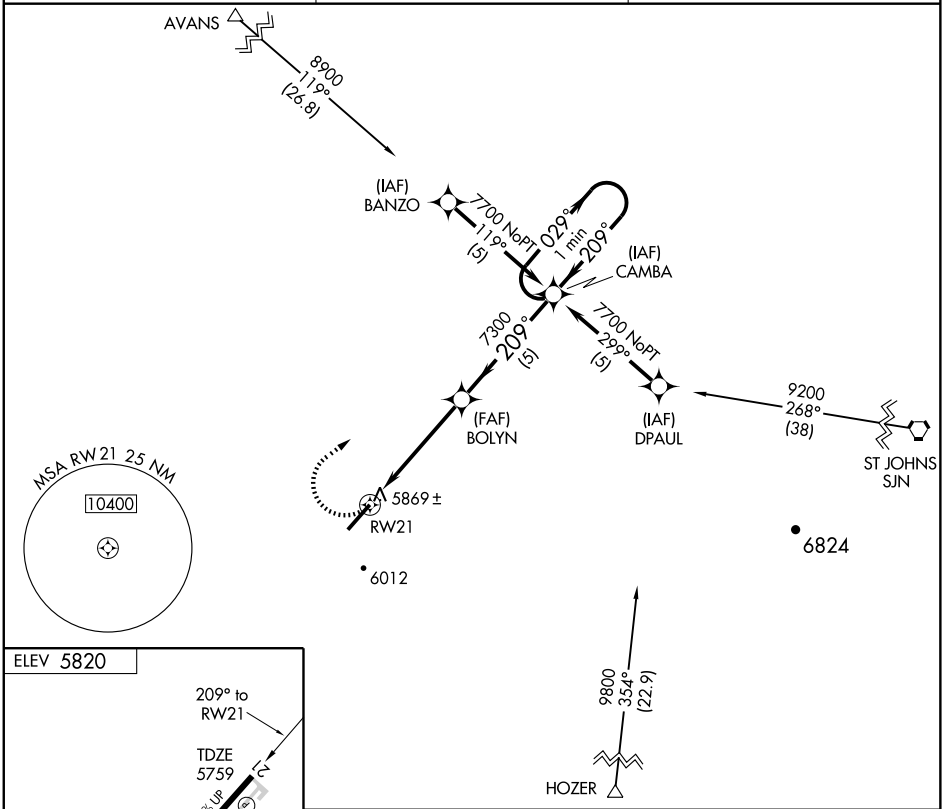
APP CRS	Rwy Idg	7000
209°	TDZE	5759
	Apt Elev	5820

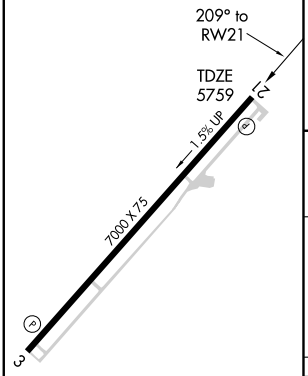
GPS RWY 21
TAYLOR MUNI (TYL)

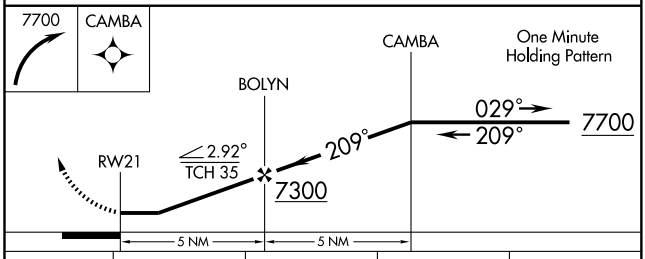
NA

MISSED APPROACH: Climbing right turn to 7700 direct CAMBA WP and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
119.075	132.9 239.05	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-21	6120-1 361 (300-1)			6120-1¼ 361 (300-1¼)
CIRCLING	6320-1 500 (500-1)	6380-1 560 (600-1)	6380-1½ 560 (600-1½)	6480-2 660 (700-2)

REIL Rwys 3 and 21
MIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

NDB AVQ	APP CRS	Rwy Idg	6901
245	111°	TDZE	2022
		Apt Elev	2031

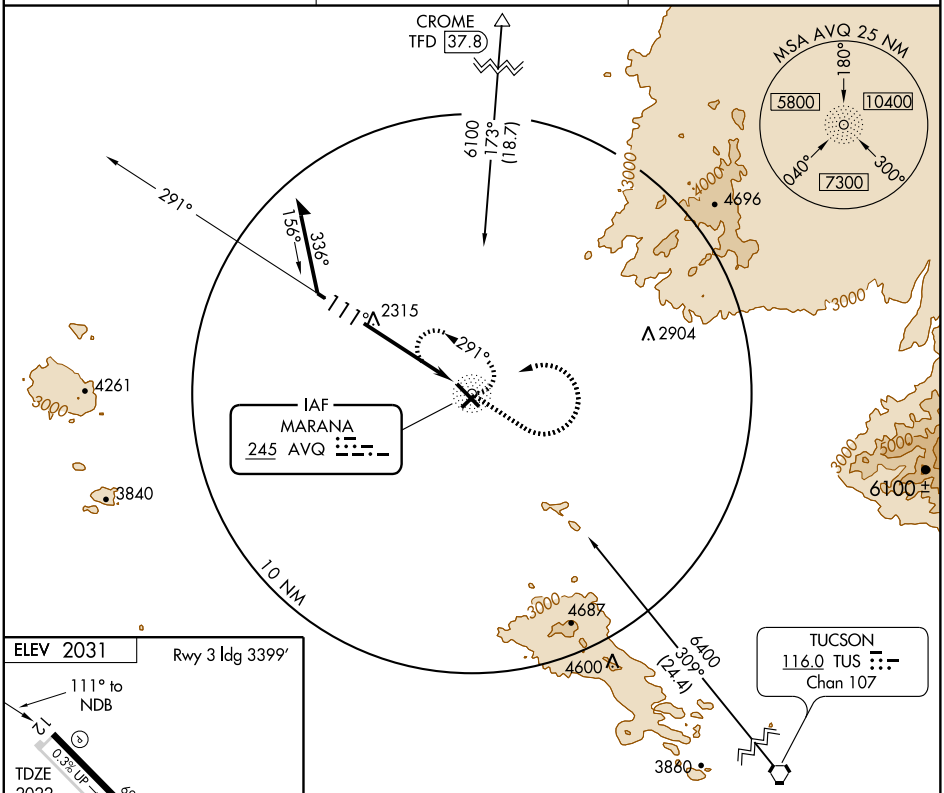
NDB RWY 12

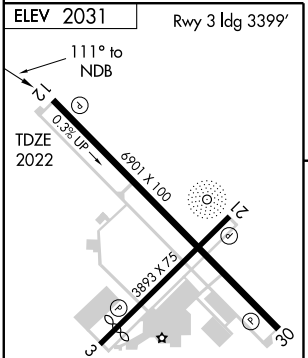
TUCSON/MARANA RGNL (AVQ)

If local altimeter setting not received, use Ryan Field altimeter setting and increase all MDAs 100 feet.

MISSED APPROACH: Climb to 3900 then climbing left turn to 5800 direct AVQ NDB and hold, continue climb-in-hold to 5800.

AWOS-3	TUCSON APP CON	UNICOM
118.375	119.4 318.1	123.0 (CTAF) L

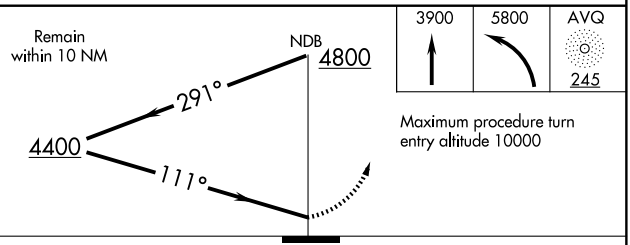




REIL Rwys 12 and 30 L

MIRL Rwys 3-21 and 12-30 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-12	3480-1¼ 1458 (1500-1¼)	3480-1½ 1458 (1500-1½)	3480-3 1458 (1500-3)	NA
CIRCLING	3480-1¼ 1449 (1500-1¼)	3480-1½ 1449 (1500-1½)	3480-3 1449 (1500-3)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
282°	TDZE	N/A
	Apt Elev	2031

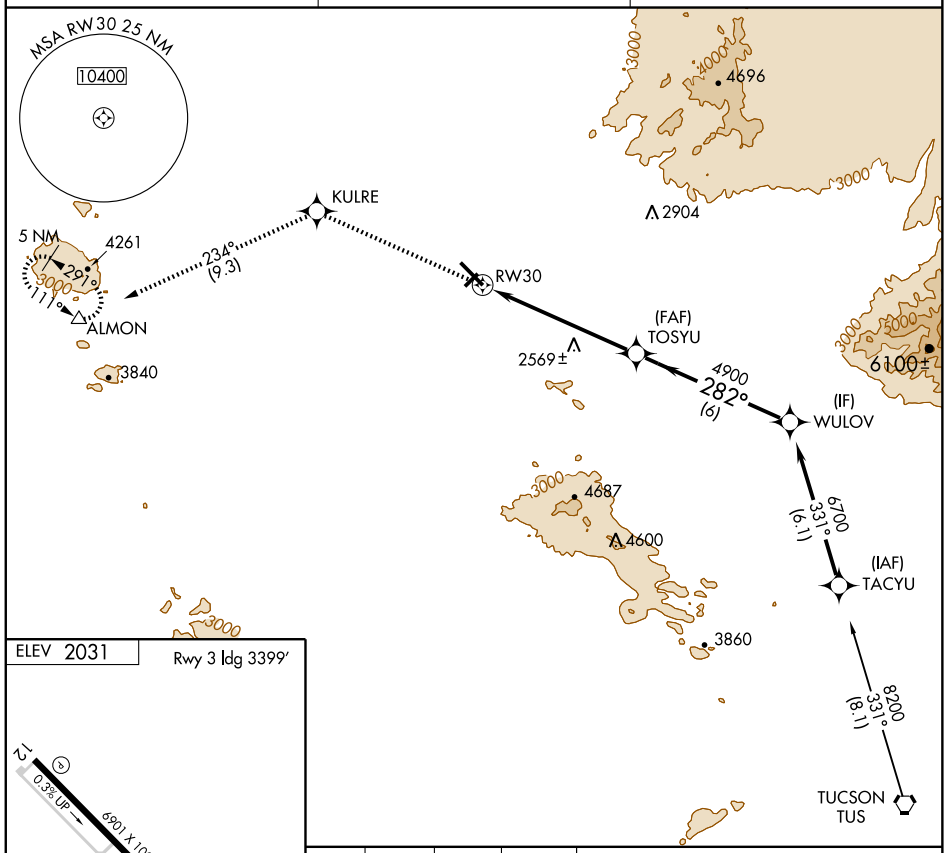
RNAV (GPS)-E

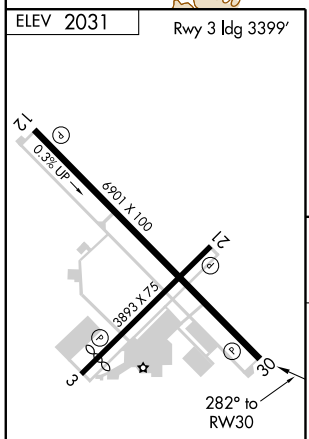
TUCSON/MARANA RGNL (AVQ)

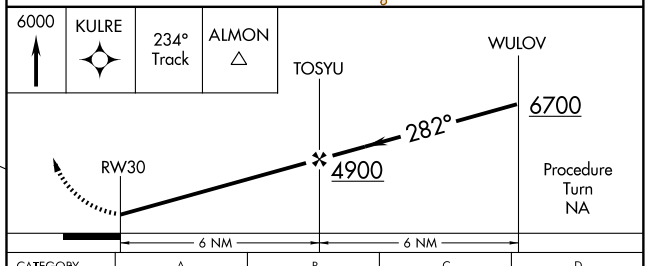
If local altimeter setting not received, use Ryan Field altimeter setting and increase all MDAs 100 feet.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 6000 direct KULRE and 234° track to ALMON and hold, continue climb-in-hold to 6000.

AWOS-3	TUCSON APP CON	UNICOM
118.375	119.4 318.1	123.0 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	2820-1 789 (800-1)	2820-1¼ 789 (800-1¼)	2820-2¼ 789 (800-2¼)	NA

REIL Rwys 12 and 30 L
MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

TUCSON, ARIZONA AL-10213 (FAA)

APP CRS	Rwy ldg	3399
033°	TDZE	2026
	Apt Elev	2031

RNAV (GPS) RWY 3

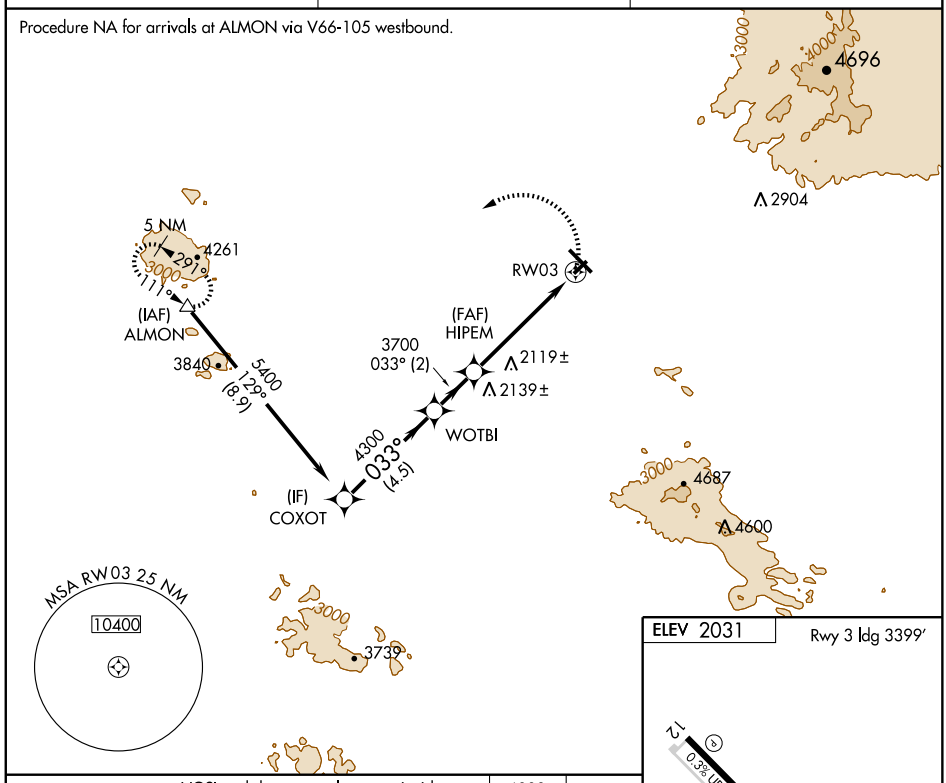
TUCSON/MARANA RGNL (AVQ)

▼ ▲NA If local altimeter setting not received, use Ryan Field altimeter setting and increase all MDAs 100 feet.
DME/DME RNP-0.3 NA.
VDP NA when using Ryan Field altimeter setting.

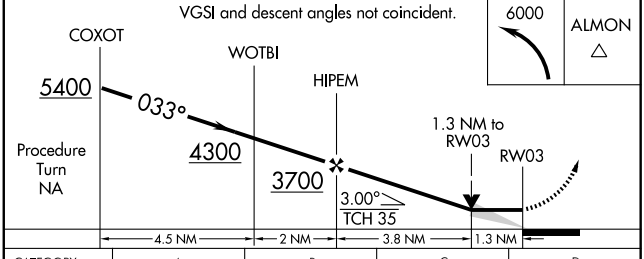
MISSED APPROACH: Climbing left turn to 6000 direct ALMON and hold, continue climb-in-hold to 6000.

AWOS-3	TUCSON APP CON	UNICOM
118.375	119.4 318.1	123.0 (CTAF) L

Procedure NA for arrivals at ALMON via V66-105 westbound.

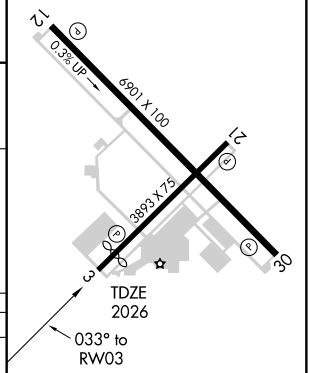


VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
LNAV MDA	2480-1 454 (500-1)		2480-1¼ 454 (500-1¼)	NA
CIRCLING	2480-1 449 (500-1)	2500-1 469 (500-1)	2580-1½ 549 (600-1½)	NA

ELEV 2031 Rwy 3 ldg 3399′



REIL Rwys 12 and 30 L
MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS		
138°	Rwy Idg	6901
	TDZE	2022
	Apt Elev	2031

RNAV (GPS) RWY 12

TUCSON/MARANA RGNL (AVQ)

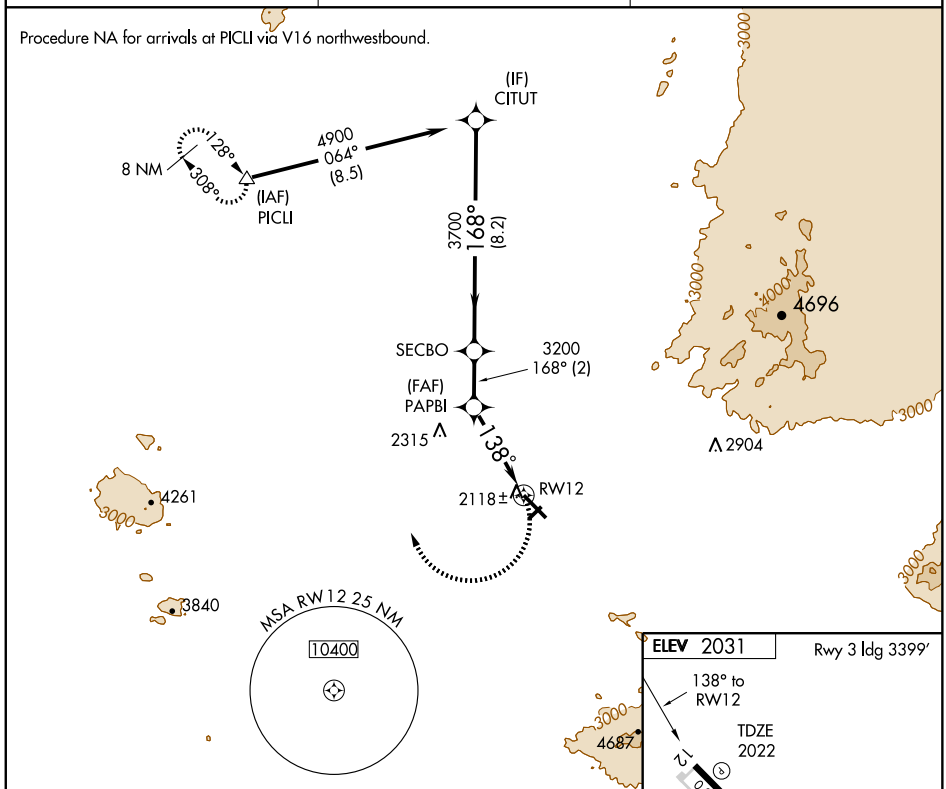
If local altimeter setting not received, use Ryan Field altimeter setting and increase all MDAs 100 feet.
DME/DME RNP-0.3 NA.
VDP NA when using Ryan Field altimeter setting.

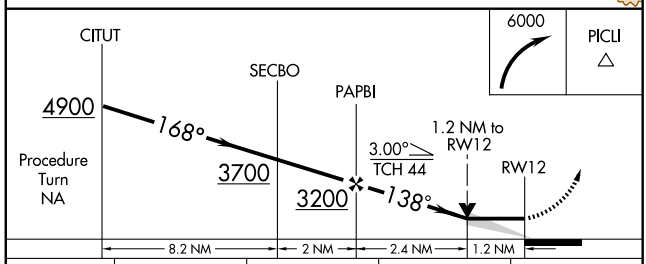
NA

MISSED APPROACH: Climbing right turn to 6000 direct PICLI and hold, continue climb-in-hold to 6000.

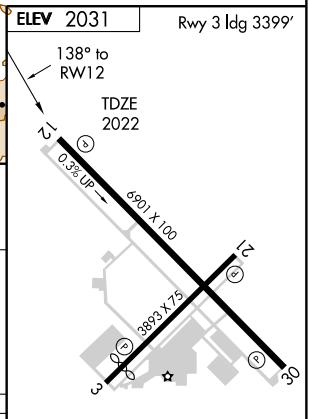
AWOS-3	TUCSON APP CON	UNICOM
118.375	119.4 318.1	123.0 (CTAF) L

Procedure NA for arrivals at PICLI via V16 northwestbound.





CATEGORY	A	B	C	D
LNAV MDA	2440-1 418 (500-1)		2440-1¼ 418 (500-1¼)	NA
CIRCLING	2440-1 409 (500-1)	2500-1 469 (500-1)	2580-1½ 549 (600-1½)	NA



REIL Rwys 12 and 30 L
MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS		
199°	Rwy Idg	3893
	TDZE	2026
	Apt Elev	2031

RNAV (GPS) RWY 21

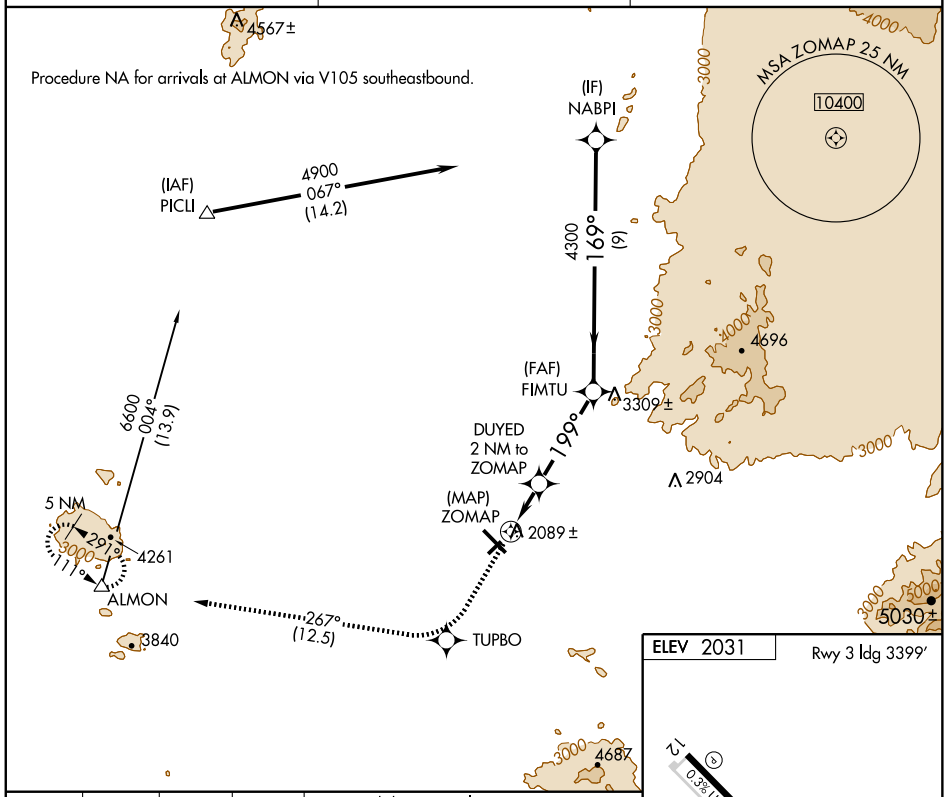
TUCSON/MARANA RGNL (AVQ)

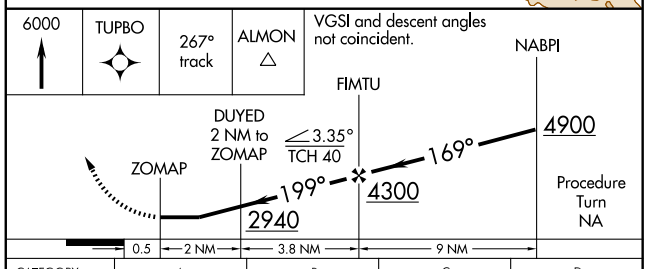
▼ ▲NA — If local altimeter setting not received, use Ryan Field altimeter setting and increase all MDAs 100 feet. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 6000 direct TUPBO and via 267° track to ALMON and hold, continue climb-in-hold to 6000.

AWOS-3	TUCSON APP CON	UNICOM
118.375	119.4 318.1	123.0 (CTAF) L

Procedure NA for arrivals at ALMON via V105 southeastbound.

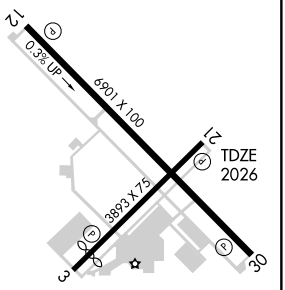




CATEGORY	A	B	C	D
LNAV MDA	2640-1	614 (700-1)	2640-1¾ 614 (700-1¾)	NA
CIRCLING	2640-1	609 (700-1)	2640-1¾ 609 (700-1¾)	NA

ELEV 2031

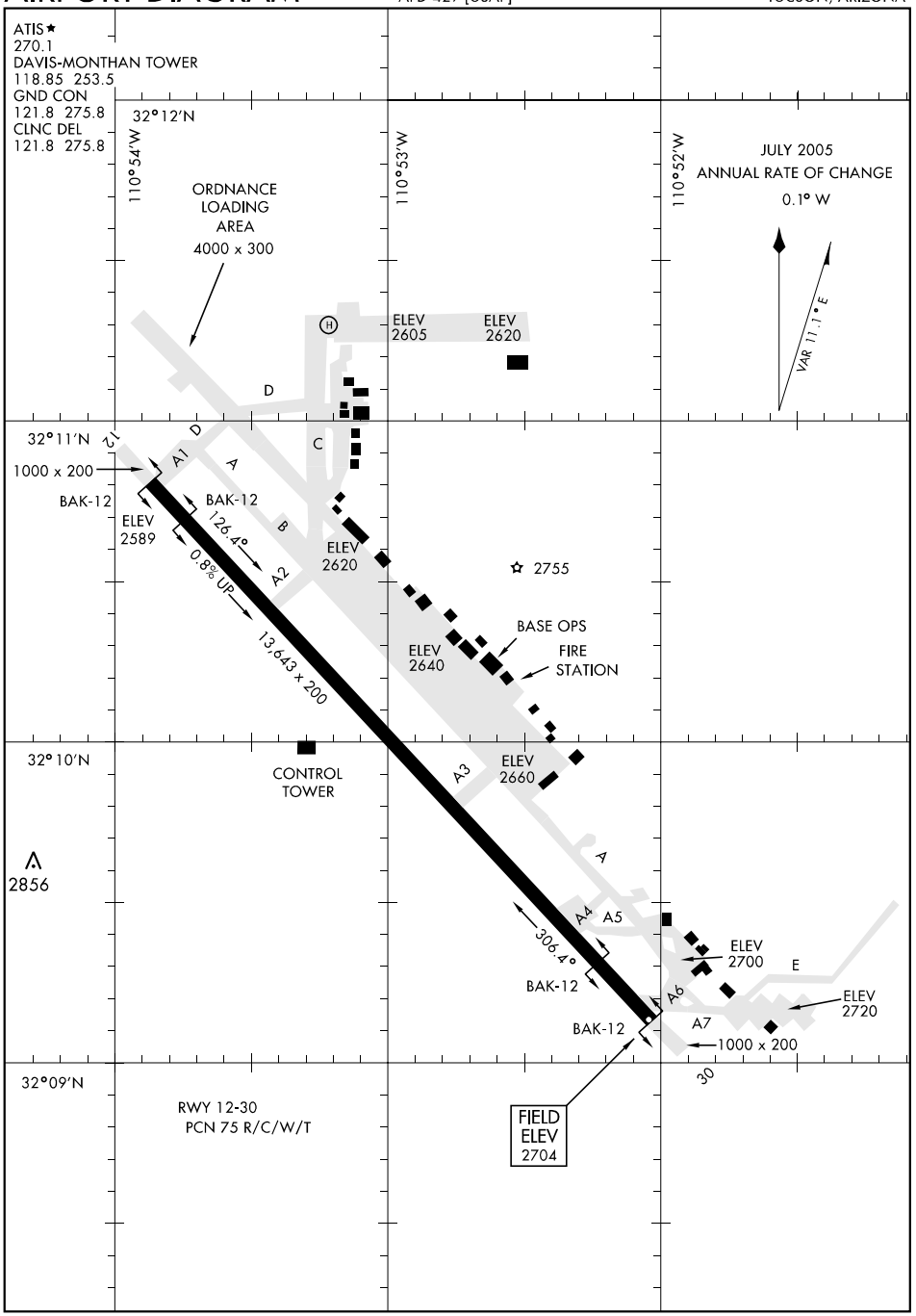
Rwy 3 ldg 3399′



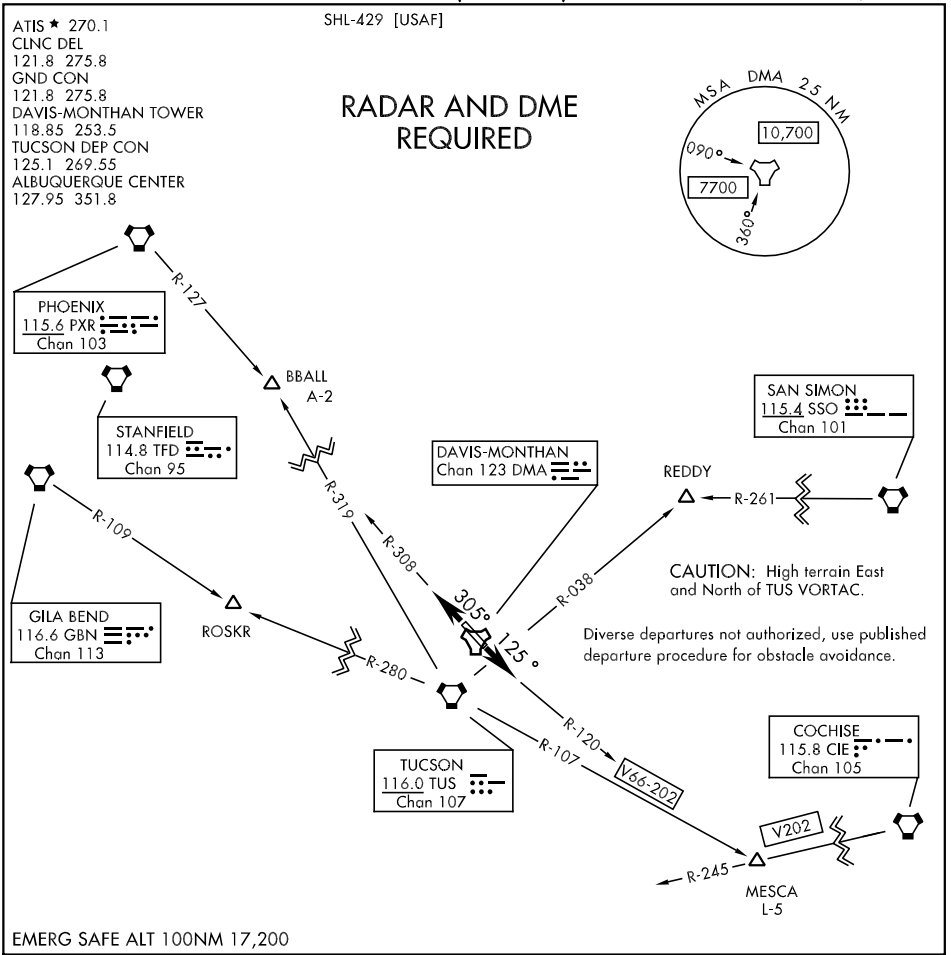
REIL Rwys 12 and 30 L

MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009



SW-4, 22 OCT 2009 to 19 NOV 2009



SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

T

TAKE-OFF RWY 12: Climb on track 125°, intercept DMA R-120 for vectors to assigned fix or route. Maintain 17,000 or assigned lower altitude. Expect clearance to filed altitude 10 minutes after departure.

TAKE-OFF RWY 30: Climb on track 305°, intercept DMA R-308 for vectors to assigned fix or route. Maintain 17,000 or assigned lower altitude. Expect clearance to filed altitude 10 minutes after departure.

LOST COM: Immediately climb to minimum safe altitude or last ATC assigned altitude, whichever is higher. Proceed to next assigned NAVAID or return to appropriate IAF for Davis-Monthan AFB active runway.

HI-ILS RWY 30

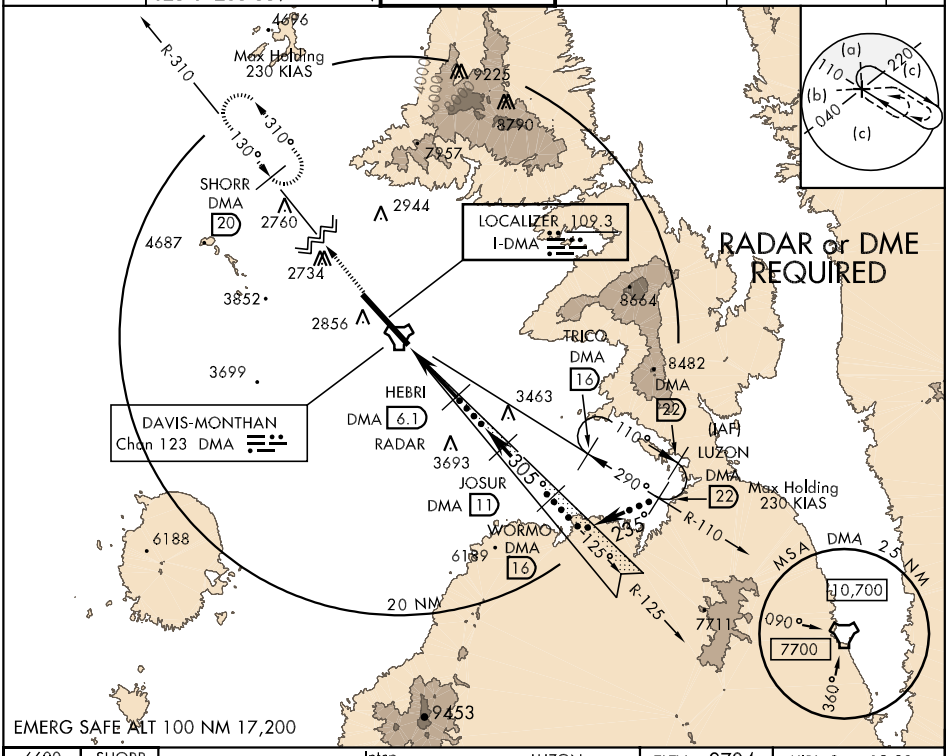
LOC I-DMA	APCH CRS	Rwy ldg 13,643 TDZE 2704 Arpt Elev 2704	JAL-429 [USAF]	DAVIS-MONTHAN AFB (KDMA)
109.3	305°			

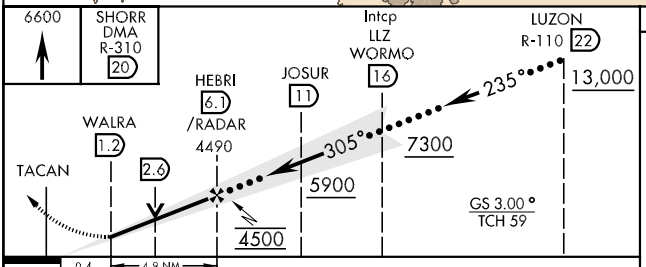
▼ * When ALS inop,increase vis ¼ mile.
** When ALS inop,increase vis ½ mile.
*** Circling not authorized S of Rwy 12-30.

ALSF-1

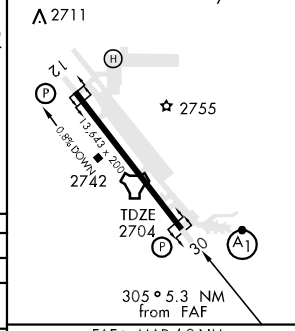
MISSED APPROACH: Climb to 6600 out DMA R-310 to 20 DME and hold.

ATIS*	TUCSON APP CON	DAVIS-MONTHAN TOWER	GND CON	CLNC DEL	PAR
270.1	119.4 318.1 (066°- 274°) 125.1 269.55 (275°- 065°)	118.85 253.5	121.8 275.8	121.8 275.8	





ELEV 2704
HIRL Rwy 12-30
REIL Rwy 12



CATEGORY	C	D	E
S-ILS 30 *	2904-½ 200 (200-½)		
S-LOC 30 **	3340-1¼ 636 (700-1¼)	3340-1½ 636 (700-1½)	3340-1¾ 636 (700-1¾)
CIRCLING***	3340-1¾ 636 (700-1¾)	3340-2 636 (700-2)	3380-2½ 676 (700-2½)
S-PAR 30 *	2904-½ 200 (200-½) GS 3.0°		

FAF to MAP 4.9 NM

Knots	120	140	160	180	200
Min:Sec	2:27	2:06	1:50	1:38	1:28

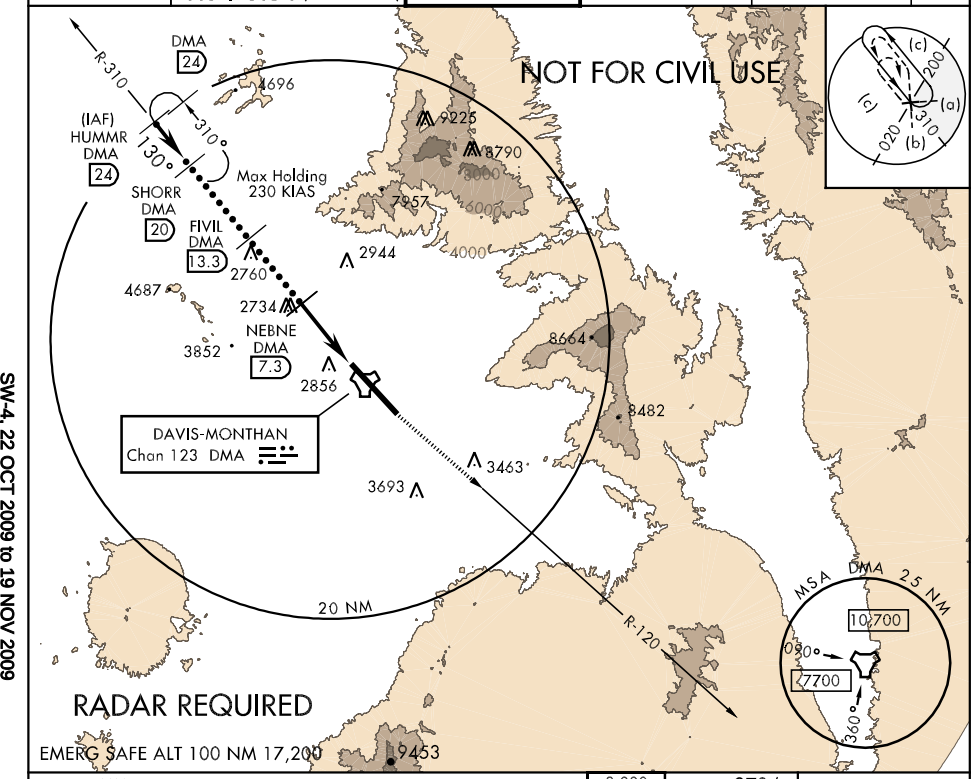
HI-TACAN RWY 12

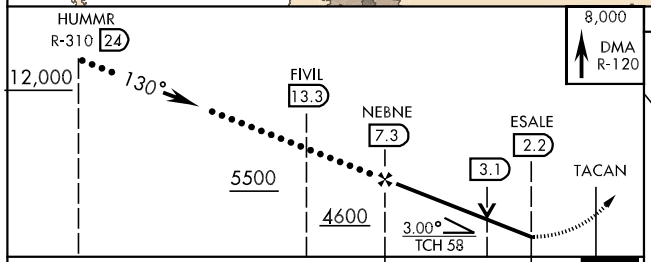
TACAN DMA Chan 123	APCH CRS 130°	Rwy ldg 13,643 TDZE 2615 Arpt Elev 2704	JAL-429 [USAF]	DAVIS-MONTHAN AFB (KDMA)

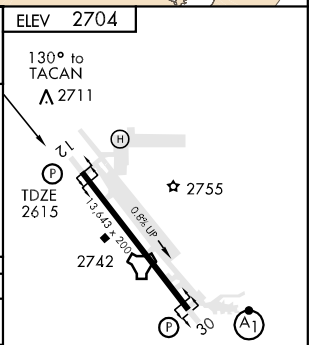
▼ * Circling not authorized S of Rwy 12-30.

MISSED APPROACH: Track outbound on DMA R-120 to 8000 expect RADAR vectors.

ATIS★	TUCSON APP CON	DAVIS-MONTHAN TOWER	GND CON	CLNC DEL	PAR
270.1	125.1 269.55 (090°- 285°) 119.4 318.1 (275°- 089°)	118.85 253.5	121.8 275.8	121.8 275.8	







CATEGORY	C	D	E
S-12	3160-1½ 545 (500-1½)	3160-1¾ 545 (500-1¾)	3160-2 545 (500-2)
CIRCLING *	3240-1½ 536 (600-1½)	3280-2 576 (600-2)	3380-2½ 676 (700-2½)
S-PAR 12	2815-¾ 200 (200-¾) GS 3.0°		

HIRL Rwy 12-30
REIL Rwy 12

SW-4, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 30

TACAN	APCH CRS	Rwy ldg	13,643
DMA Chan 123	299°	TDZE	2704
		Arpt Elev	2704

JAL-429 [USAF]

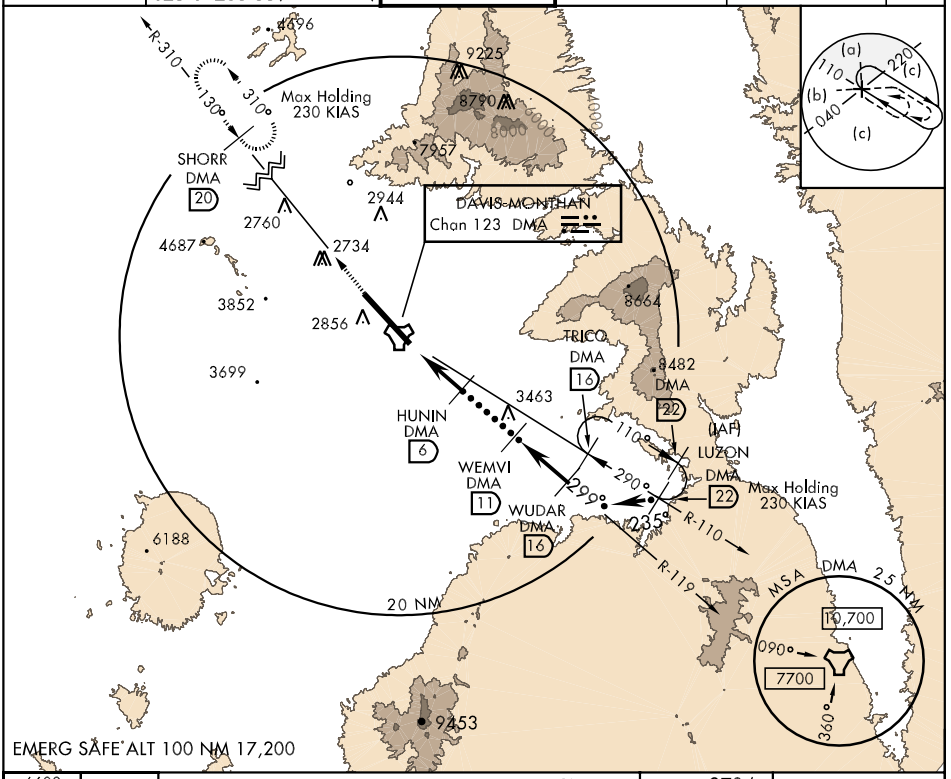
DAVIS-MONTHAN AFB (KDMA)

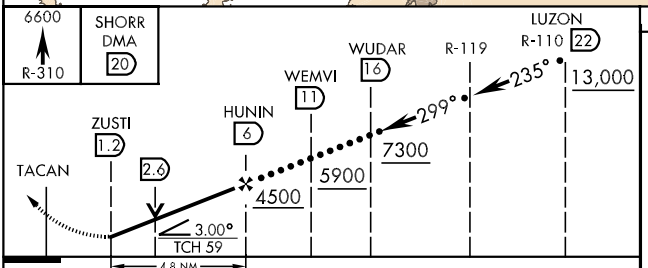
* When ALS inop,increase vis ½ mile.
** Circling not authorized S of Rwy 12-30.
*** When ALS inop,increase vis ¼ mile.

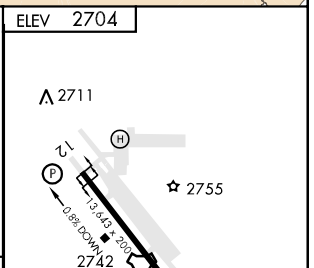
ALSF-1

MISSED APPROACH: Climb to 6600 out DMA R-310 to 20 DME and hold.

ATIS★	TUCSON APP CON	DAVIS-MONTHAN TOWER	GND CON	CLNC DEL	PAR
270.1	119.4 318.1 (066°- 274°) 125.1 269.55 (275°- 065°)	118.85 253.5	121.8 275.8	121.8 275.8	







CATEGORY	C	D	E
S-30 *	3340-1¼ 636 (700-1¼)	3340-1½ 636 (700-1½)	3340-1¾ 636 (700-1¾)
CIRCLING **	3340-1¾ 636 (700-1¾)	3340-2 636 (700-2)	3380-2½ 676 (700-2½)
S-PAR 30 ***	2904-½ 200 (200-½) GS 3.0°		

HIRL Rwy 12-30
REIL Rwy 12

TUCSON, ARIZONA 32°10'N-110°53'W DAVIS-MONTHAN AFB (KDMA)

Orig 07298

HI-TACAN RWY 30

ILS or LOC RWY 30

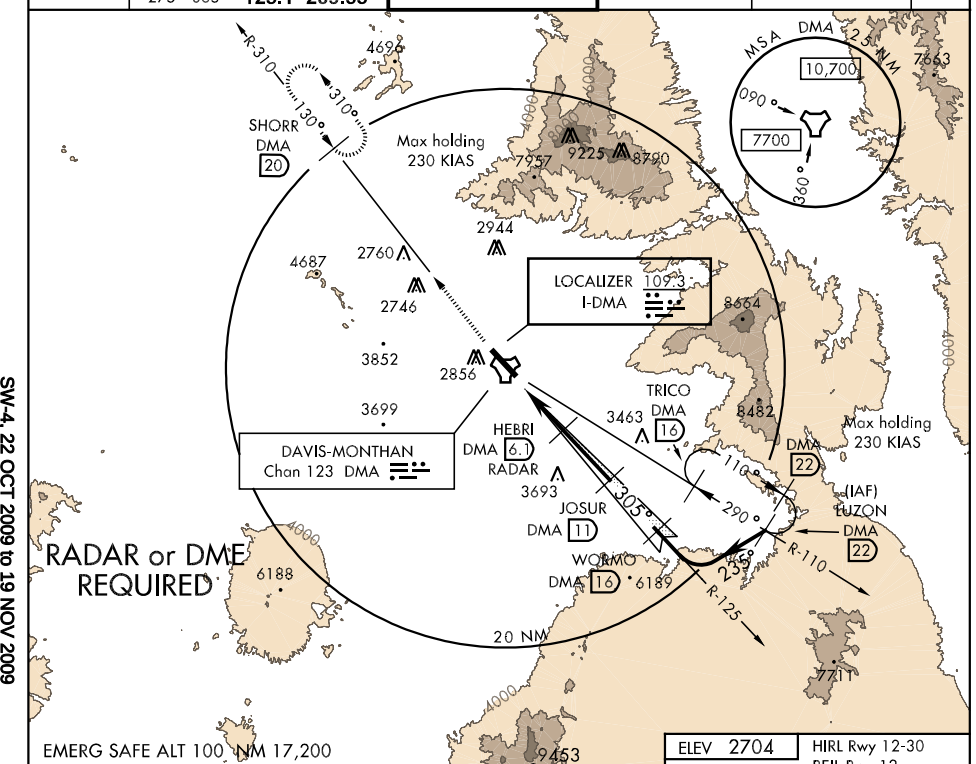
LOC I-DMA	APCH CRS	Rwy ldg / TDZE / Arpt Elev	AL-429 [USAF]	DAVIS-MONTHAN AFB (KDMA)
109.3	305°	13,643 / 2704 / 2704		

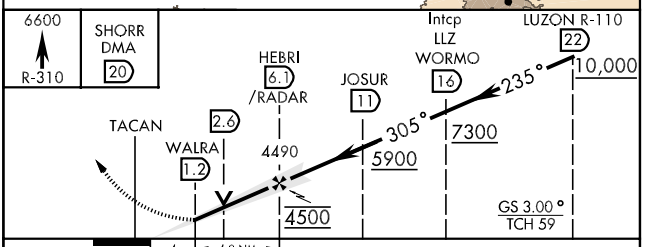
* When ALS inop, increase vis ¼ mile.
** When ALS inop, increase vis ½ mile.
*** Circling not authorized S of Rwy 12-30.

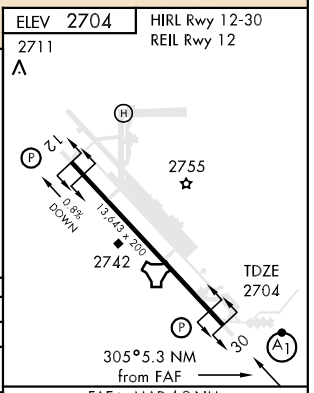
ALSF-1

MISSED APPROACH: Climb to 6600 out DMA R-310 to 20 DME and hold.

ATIS★	TUCSON APP CON	DAVIS-MONTHAN TOWER	GND CON	CLNC DEL	PAR
270.1	066°-274° 119.4 318.1 275°-065° 125.1 269.55	118.85 253.5	121.8 275.8	121.8 275.8	







CATEGORY	A	B	C	D	E
S-ILS 30 *	2904-½ 200 (200-½)				
S-LOC 30 **	3340-½ 636 (700-½)		3340-1¼ 636 (700-1¼)	3340-1½ 636 (700-1½)	3340-1¾ 636 (700-1¾)
CIRCLING ***	3340-1 636 (700-1)		3340-1¾ 636 (700-1¾)	3340-2 636 (700-2)	3380-2½ 676 (700-2½)
S-PAR 30 *	2904-½ 200 (200-½) GS 3.0°				

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

TACAN RWY 12

TACAN DMA	APCH CRS	Rwy ldg 13,643 TDZE 2615 Arpt Elev 2704	AL-429 [USAF]	DAVIS-MONTHAN AFB (KDMA)
Chan 123	130°			

▼ ** Circling not authorized S of Rwy 12-30.

MISSED APPROACH: Track outbound on DMA R-120 to 8000 MSL expect RADAR vectors.

ATIS★	TUCSON APP CON	DAVIS-MONTHAN TOWER	GND CON	CLNC DEL	PAR
270.1	090°-285° 125.1 269.55 286°-089° 119.4 318.1	118.85 253.5	121.8 275.8	121.8 275.8	

NOT FOR CIVIL USE

R-310 DMA 24 (IAF) HUMMR DMA 24

310° 130°

Max holding 230 KIAS

2904

SHORR DMA 20

FIVIL DMA 13.3

2760

4687

4600

NEBNE DMA 7.3

2944

2746

3852

2856

DAVIS-MONTHAN Chan 123 DMA

R-120

10 NM

2225

8790

7957

8000

6000

4000

MSA DMA 25 NM

10,700

090°

7700

360°

RADAR REQUIRED

EMERG SAFE ALT 100 NM 17,200

ELEV 2704

HUMMR R-310 24

8000

FIVIL 13.3

130°

5500

NEBNE 7.3

3.1

TACAN

ESALE 2.2

4600

3.00°

TCH 58

5.1 NM .7

8000

R-120

2711

130° to TACAN

12

2755

TDZE 2615

0.8% up

13,643 x 200

2742

30

HIRL Rwy 12-30

REIL Rwy 12

CATEGORY	A	B	C	D	E
S-12	3160-1 545 (500-1)		3160-1½ 545 (500-1½)	3160-1¾ 545 (500-1¾)	3160-2 545 (500-2)
CIRCLING **	3220-1 516 (600-1)		3240-1½ 536 (600-1½)	3280-2 576 (600-2)	3380-2½ 676 (700-2½)
S-PAR 12	2815-¾ 200 (200-¾) GS 3.0°				

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 30

TACAN DMA	APCH CRS	Rwy ldg 13,643 TDZE 2704 Arpt Elev 2704
Chan 123	299°	

AL-429 [USAF]

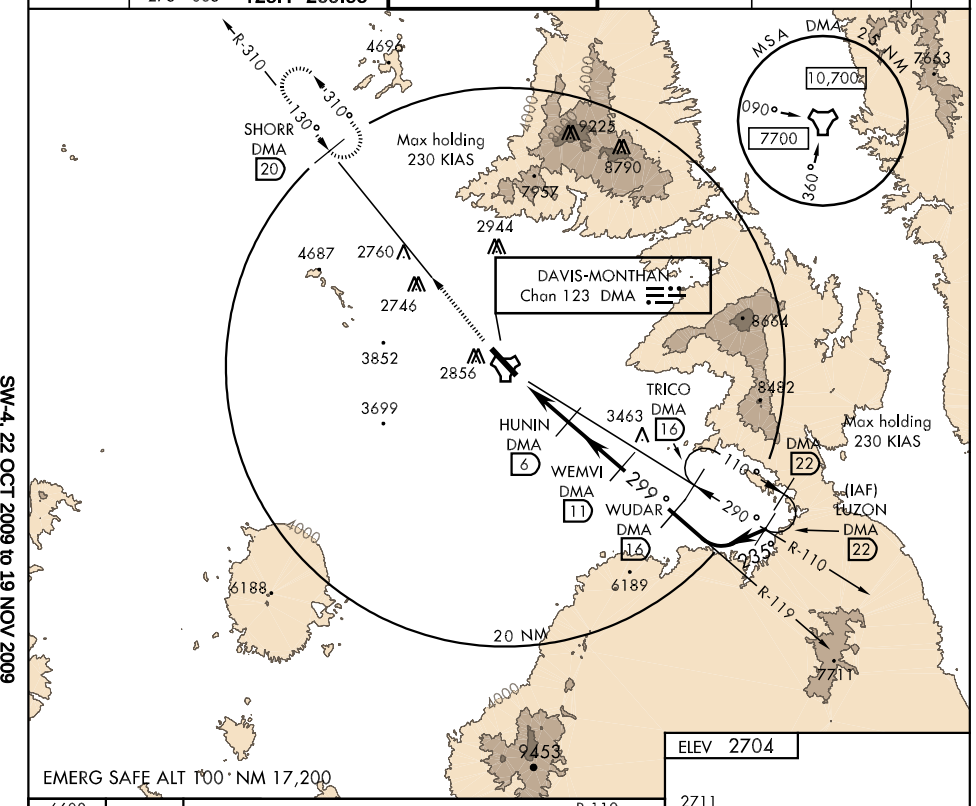
DAVIS-MONTHAN AFB (KDMA)

* When ALS inop, increase vis ½ mile.
** Circling not authorized S of Rwy 12-30.
*** When ALS inop, increase vis ¼ mile.

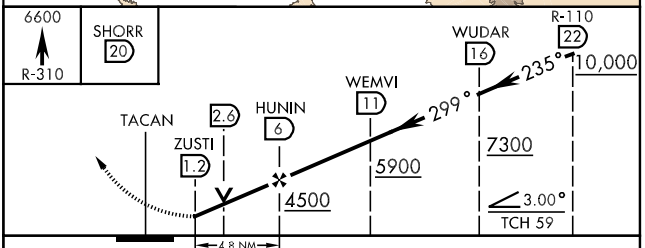
ALSF-1

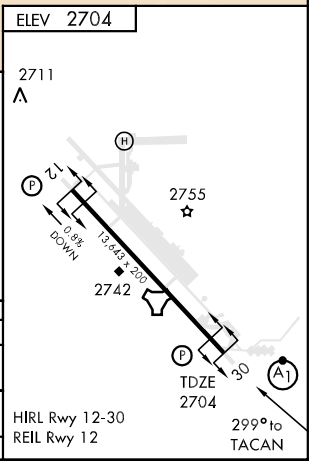
MISSED APROACH: Climb to 6600 out DMA R-310 to 20 DME and hold.

ATIS★	TUCSON APP CON	DAVIS-MONTHAN TOWER	GND CON	CLNC DEL	PAR
270.1	066°-274° 119.4 318.1 275°-065° 125.1 269.55	118.85 253.5	121.8 275.8	121.8 275.8	



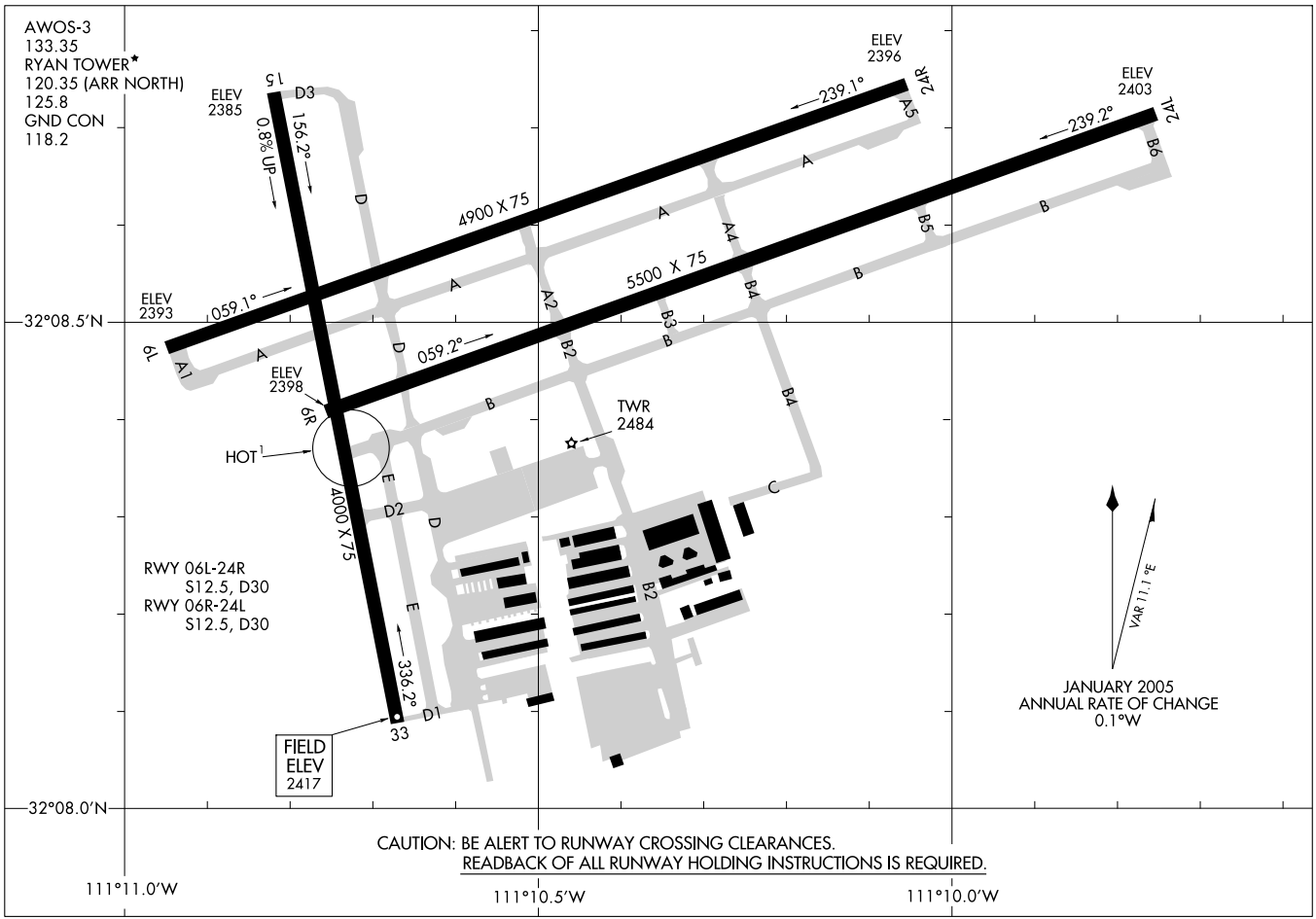
EMERG SAFE ALT 100 NM 17,200





HIRL Rwy 12-30
REIL Rwy 12

CATEGORY	A	B	C	D	E
S-30 *	3340-½ 636 (700-½)		3340-1¼ 636 (700-1¼)	3340-1½ 636 (700-1½)	3340-1¾ 636 (700-1¾)
CIRCLING **	3340-1 636 (700-1)		3340-1¾ 636(700-1¾)	3340-2 636 (700-2)	3380-2½ 676 (700-2½)
S-PAR 30***	2904-½ 200 (200-½) GS 3.0°				



AIRPORT DIAGRAM

AL-6513 (FAA)

TUCSON/RYAN FIELD (RYN)

TUCSON, ARIZONA

LOC I-IVI	APP CRS	Rwy Idg	5500
111.1	058°	TDZE	2402
		Apt Elev	2417

ILS or LOC RWY 6R

TUCSON/RYAN FIELD (RYN)

NA

MISSED APPROACH: Climb to 3000, then climbing right turn to 5000 via direct RBJ NDB and 305° bearing RBJ to DRIBB Int and hold.

AWOS-3	TUCSON APP CON	RYAN TOWER ★	GND CON
133.35	128.5 395.9	120.35 (ARR N) 125.8 (CTAF) L	118.2

ADF REQUIRED

STANFIELD
114.8 TFD
Chan 95

7000
141° (46.1)
R-141
(IAF)
JIPSY INT
TFD 46.1

5000 NoPT
125° (9.7)

LOCALIZER 111.1
I-IVI

R-270
R-256

NIKEE OM

TUS
LR-260

125°
305°
1 min
125°

058° (4.7)
4300

(IAF)
DRIBB INT

238°

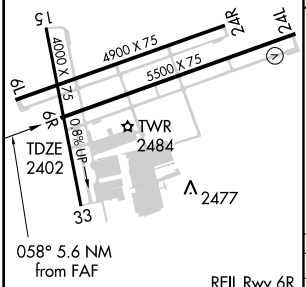
ROBLES
220 RBJ

TUCSON
116.0 TUS
Chan 107

MSA RBJ 25 NM
180°
5300
090°
7500
8800
360°

4687
3000
4567
3860
3739
4042
3699
6000
256° (23.2)
4000
6529
5000
6900
10 NM
4683
3901
6188

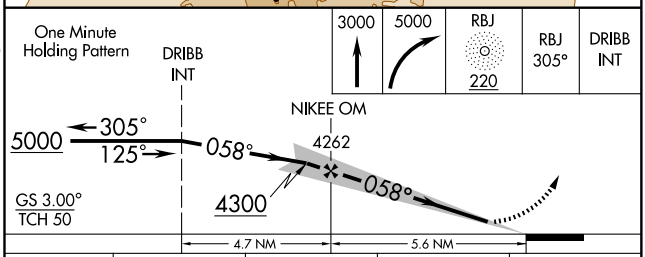
ELEV 2417



058° 5.6 NM from FAF

REIL Rwy 6R
MIRL Rwy 6R-24L L

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42



CATEGORY	A	B	C	D
S-ILS 6R	2652-1 250 (300-1)			
S-LOC 6R	2900-1 498 (500-1)		2900-1¼ 498 (500-1¼)	2900-1½ 498 (500-1½)
CIRCLING	2900-1 483 (500-1)		2900-1½ 483 (500-1½)	2980-2 563 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

NDB RYN 338	APP CRS 074°	Rwy Idg 5500 TDZE 2400 Apt Elev 2415

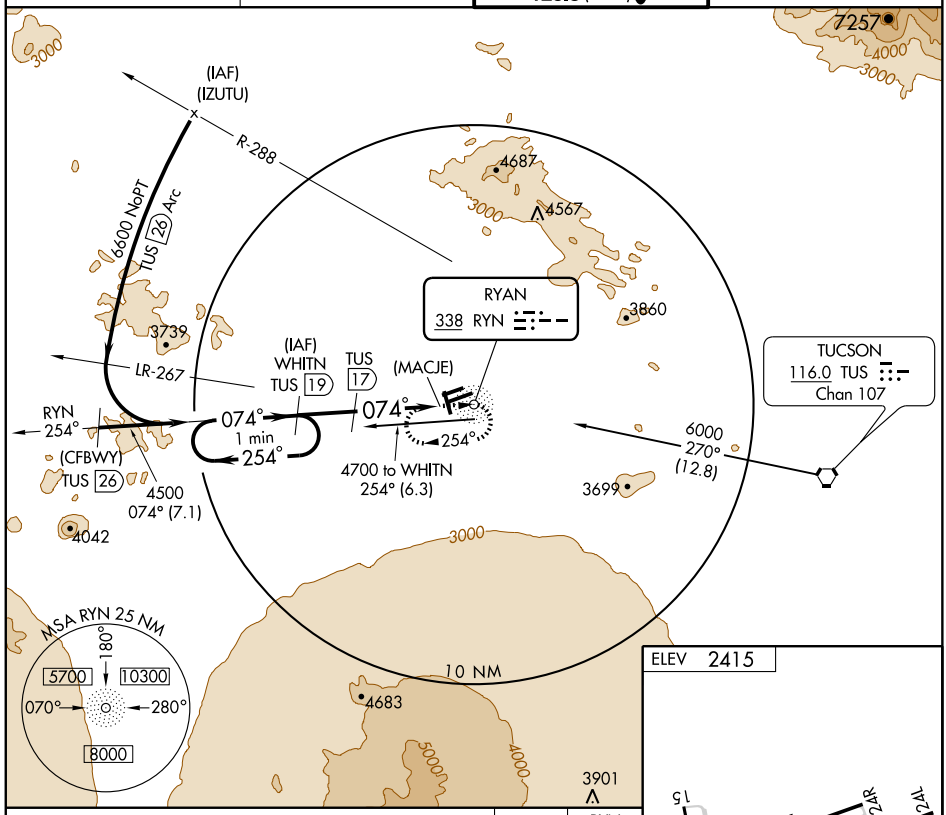
NDB/DME or GPS RWY 6R

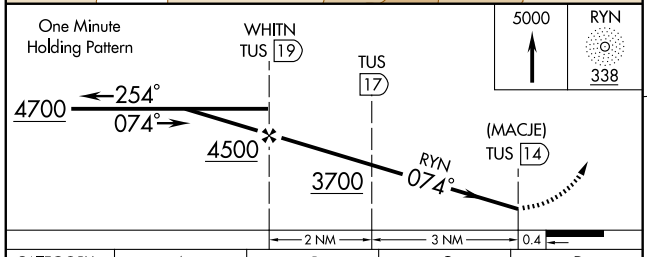
TUCSON/ RYAN FIELD (RYN)

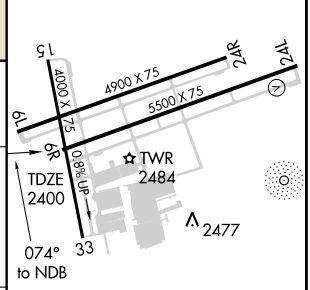
NA DME from TUS VORTAC
Simultaneous reception of RYN NDB and TUS DME required.

MISSED APPROACH: Climb to 5000 direct RYN NDB and hold.

AWOS-3	TUCSON APP CON	RYAN TOWER ★	GND CON
133.35	128.5 395.9	120.35 (ARR N) 125.8 (CTAF) L	118.2







CATEGORY	A	B	C	D
S-6R	3300-1¼ 900 (900-1¼)		3300-2¾ 900 (900-2¾)	3300-3 900 (900-3)
CIRCLING	3300-1¼ 885 (900-1¼)		3300-2¾ 885 (900-2¾)	3300-3 885 (900-3)

REIL Rwy 6R
MIRL Rwy 6R-24L L

SW-4, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-430 (FAA)

TUCSON INTL (TUS)
TUCSON, ARIZONA

ATIS
123.8 279.65
TUCSON TOWER
118.3 257.8
GND CON
124.4 348.6
CLNC DEL
126.65 326.2

110°57′W
110°56′W
32°08′N
32°07′N
32°06′N

GENERAL AVIATION PARKING
RESTRICTED AREA
ELEV 2569
214.0°
7000 X 150
HOT[1]
BAK-12
NWS
GENERAL AVIATION PARKING
WEST RAMP
ELEV 2578
BAK 12-14
TWR
U.S. CUSTOMS
TERMINAL
HOT[2]
ELEV 2574
034.0°
E-5
ELEV 2560
123.9°
0.7% UP
SOUTH RAMP
AIR FREIGHT TERMINAL
FIRE STATION
8408 X 75
10996 X 150
TAXIWAY CHARLIE CLOSED TO FIXED-WING AIRCRAFT
0.5% DOWN
0.6% DOWN
303.9°
HOT[3]
ELEV 2629
BAK 12/14
FIELD ELEV 2643
BAK-12
VAR 11.1°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

RWY 3-21
S105, D137, ST174, DT230, DDT500
RWY 11L-29R
S160, D200, ST175, DT350, DDT585
RWY 11R-29L
S120, D140, ST175, DT220

2783

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

ALL AIRCRAFT USE UPPER ANTENNA UNTIL AIRBORNE

SW-4, 22 OCT 2009 to 19 NOV 2009

BURRO TWO DEPARTURE (RNAV)

(BURRO2.BURRO) 09183

SL-430 (FAA)

TUCSON INTL (TUS)

TUCSON, ARIZONA

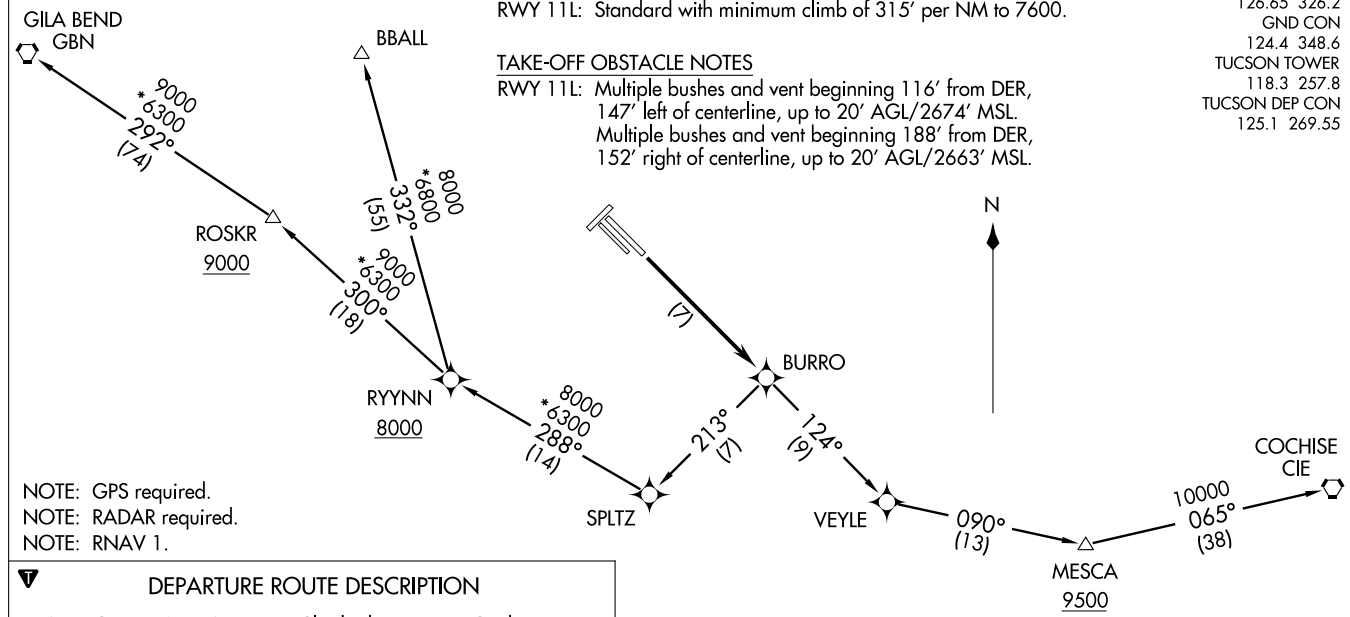
ATIS 123.8 279.65
CLNC DEL 126.65 326.2
GND CON 124.4 348.6
TUCSON TOWER 118.3 257.8
TUCSON DEP CON 125.1 269.55

TAKE-OFF MINIMUMS

RWYS 11R, 21, 29L, 29R, 3: NA-(ATC).
RWY 11L: Standard with minimum climb of 315′ per NM to 7600.

TAKE-OFF OBSTACLE NOTES

RWY 11L: Multiple bushes and vent beginning 116′ from DER, 147′ left of centerline, up to 20′ AGL/2674′ MSL. Multiple bushes and vent beginning 188′ from DER, 152′ right of centerline, up to 20′ AGL/2663′ MSL.



NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11L: Climb direct BURRO, thence....

....via (transition) climb and maintain 17000. Expect filed altitude 10 minutes after departure.

BBALL TRANSITION (BURRO2.BBALL)
COCHISE TRANSITION (BURRO2.CIE)
GILA BEND TRANSITION (BURRO2.GBN)

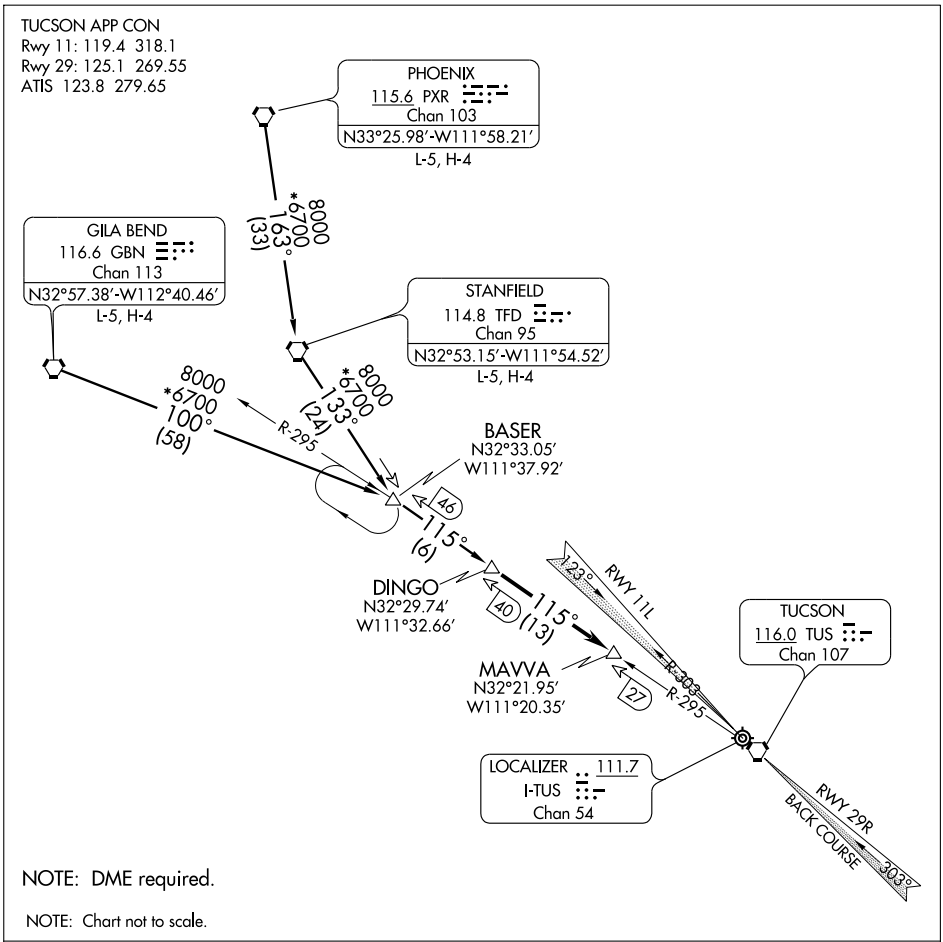
NOTE: Chart not to scale.

(DINGO.DINGO5) 09183

DINGO FIVE ARRIVAL

ST-430 (FAA)

TUCSON INTL
TUCSON, ARIZONA



GILA BEND TRANSITION (GBN.DINGO5): From over GBN VORTAC via GBN R-100 to BASER INT, then via TUS R-295 to DINGO INT. Thence....

PHOENIX TRANSITION (PXR.DINGO5): From over PXR VORTAC via PXR R-163 to TFD VORTAC. Then via TFD R-133 to BASER INT. Then via TUS R-295 to DINGO INT. Thence....

STANFIELD TRANSITION (TFD.DINGO5): From over TFD VORTAC via TFD R-133 to BASER INT. Then via TUS R-295 to DINGO INT. Thence....

....From over DINGO INT via TUS R-295 to MAVVA INT. Thence, for Runway 11L via heading 075° to intercept I-TUS localizer or TUS VORTAC R-303, and expect approach clearance for Rwy 11L. For Runway 29R expect radar vectors to final approach course Runway 29R.

SW-4, 22 OCT 2009 to 19 NOV 2009

TUCSON, ARIZONA

AL-430 (FAA)

ILS or LOC RWY 11L

TUCSON INTL (TUS)

LOC/DME I-TUS	APP CRS	Rwy Idg	10996
111.7	123°	TDZE	2599
Chan 54		Apt Elev	2643

For inoperative MALSR, increase S-ILS 11L Cat E visibility to RVR 5000, S-LOC 11L Cat D and Cat E visibility to RVR 5000. ADF or DME required.

MALSR

MISSED APPROACH: Climb to 4000 then climbing right turn to 6000 via heading 300° and TUS R-270 to RYN NDB/TUS 12.8 DME and hold.

ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2

ADF or DME REQUIRED

Radar or ADF required for arrivals at DINGO

8000 095° (11.9)

DINGO TUS 40 RADAR

(IAF) TACUB INT TUS 29.1

095°

6000 NoPT to LIPTE 123° (11.4)

TUS R-303

303°

MARANA 245 AVQ

(IF/IAF) LIPTE INT I-TUS 17.5

123° 1 min 303°

MSA TUS 25 NM

150° 6600 10700 060°

WASON INT I-TUS 12.5

CALLS INT I-TUS 10.2

5000 (2.3)

4600 (2)

POCIB INT I-TUS 8.2

RYAN 338 RYN TUS 12.8

168°

197° 215° 231°

4060±

PARCS INT I-TUS 4.8

2939±

LOCALIZER 111.7 I-TUS Chan 54

10 NM

2829 2856 2828

SSAND TUS 30

7500 to LIPTE 303° (17.8)

090° 270° 252°

R-270

HUGIK I-TUS 2.5

3699 2783

10700 251° (30)

TUCSON 116.0 TUS Chan 107

9225± 7957

4000 5000 6000 3000

SW-4, 22 OCT 2009 to 19 NOV 2009

One Minute Holding Pattern

LIPTE INT I-TUS 17.5 | WASON INT I-TUS 12.5 | CALLS INT I-TUS 10.2 | POCIB INT I-TUS 8.2 | PARCS INT I-TUS 4.8 | HUGIK I-TUS 2.5

6000 303° 123°

5500 5000 4600 4600 3480

GS 3.00° TCH 55

Use I-TUS DME when on the localizer course.

5 NM | 2.3 NM | 2 NM | 3.4 NM | 2.3 NM | 0.4

4000	6000	TUS	RYN
	300°	R-270 116.0	338

ELEV 2643 D

123° 6.1 NM from FAF

2691

TDZE 2599

TWR 2734

2733

REIL Rwy 21

REIL Rwys 29L and 29R (Daylight hours only)

HIRL Rwy 11L-29R

MIRL Rwys 3-21 and 11R-29L

CATEGORY	A	B	C	D	E
S-ILS 11L	2800/24 201 (200-½)				
S-LOC 11L	3480-1¼ 881 (900-1¼)		3480-2¾ 881 (900-2¾)	3480-3 881 (900-3)	
CIRCLING	3480-1¼ 837 (900-1¼)		3480-2¾ 837 (900-2¾)	3480-3 837 (900-3)	3740-3 1097(1100-3)
PARCS FIX MINIMUMS					
S-LOC 11L	2900/24 301 (300-½)			2900/40 301 (300-¾)	
CIRCLING	3100-1 457 (500-1)	3220-1 577 (600-1)	3220-1½ 577 (600-1½)	3220-2 577 (600-2)	3740-3 1097(1100-3)

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

LOC/DME I-TUS	APP CRS	Rwy Idg	10996
111.7	303°	TDZE	2643
Chan 54		Apt Elev	2643

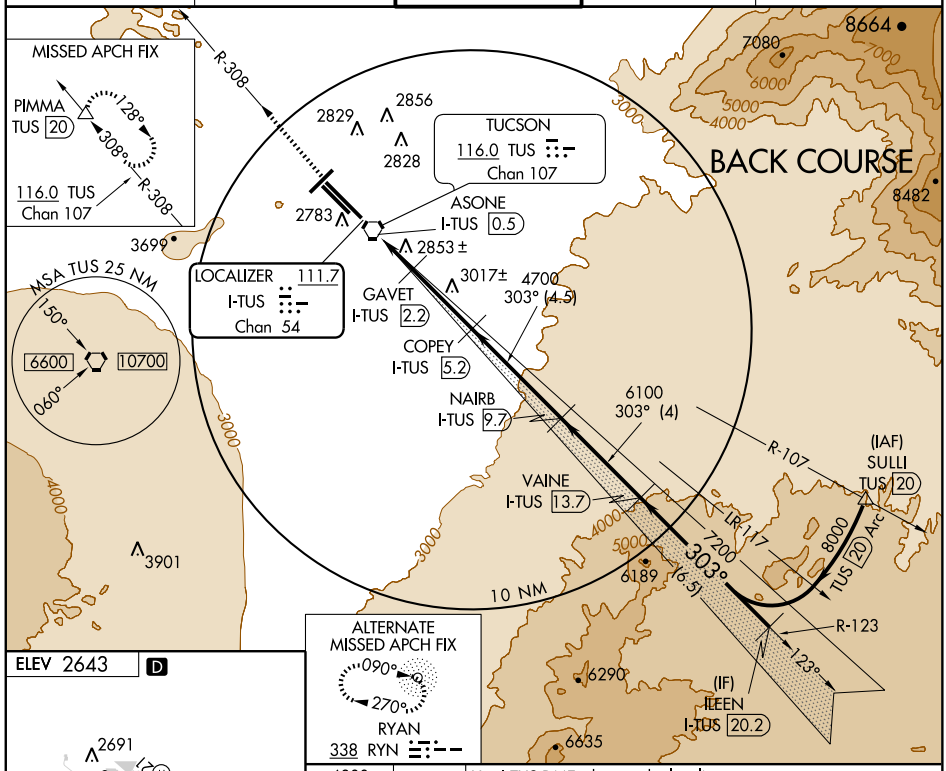
LOC/DME BC RWY 29R

TUCSON INTL (TUS)

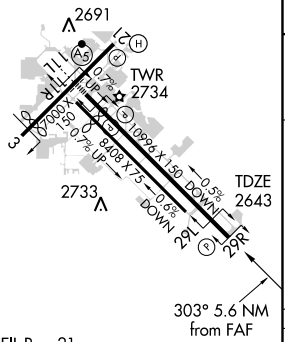
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 6800 via TUS VORTAC R-308 to PIMMA/TUS VORTAC 20 DME and hold.

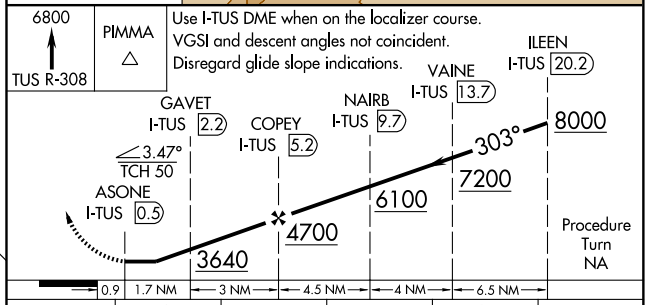
ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2



ELEV 2643 D



REIL Rwy 21
REIL Rwys 29L and 29R
(Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L



CATEGORY	A	B	C	D	E
S-29R	3120-1	477 (500-1)	3120-1¼ 477 (500-1¼)	3120-1½ 477 (500-1½)	3120-1¾ 477 (500-1¾)
CIRCLING	3120-1 477 (500-1)	3220-1 577 (600-1)	3220-1½ 577 (600-1½)	3220-2 577 (600-2)	3740-3 1097 (1100-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

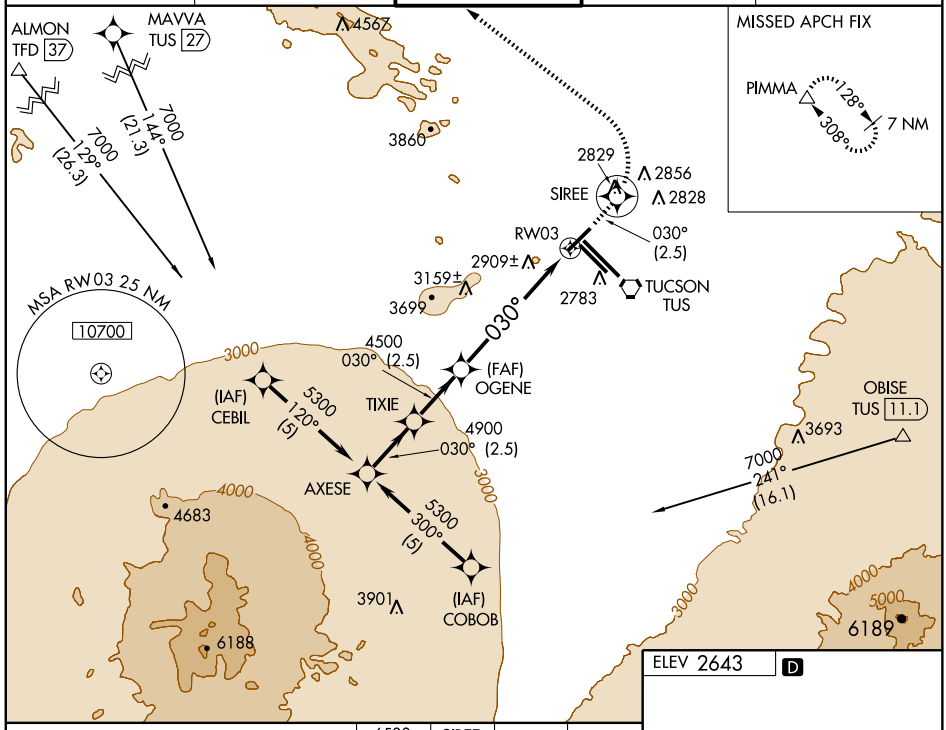
APP CRS	Rwy Idg	6159
030°	TDZE	2572
	Apt Elev	2643

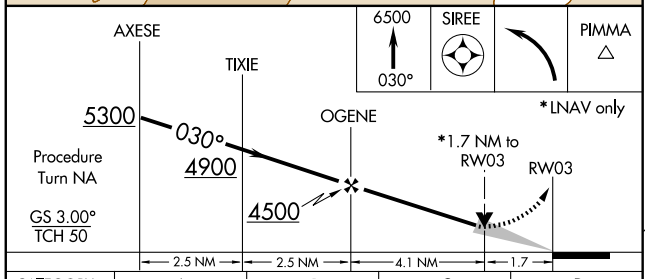
RNAV (GPS) RWY 3
TUCSON INTL (TUS)

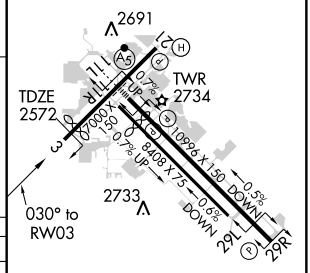
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (111°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 6500 via 030° course to SIREE, and climbing left turn direct PIMMA and hold.

ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	3176-2¼ 604 (600-2¼)			
LNAV MDA	3160-1 588 (600-1)		3160-1½ 588 (600-1½)	3160-2 588 (600-2)
CIRCLING	3160-1 517 (600-1)	3220-1 577 (600-1)	3220-1½ 577 (600-1½)	3220-2 577 (600-2)

REIL Rwy 21
REIL Rwys 29L and 29R
(Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L

SW-4, 22 OCT 2009 to 19 NOV 2009

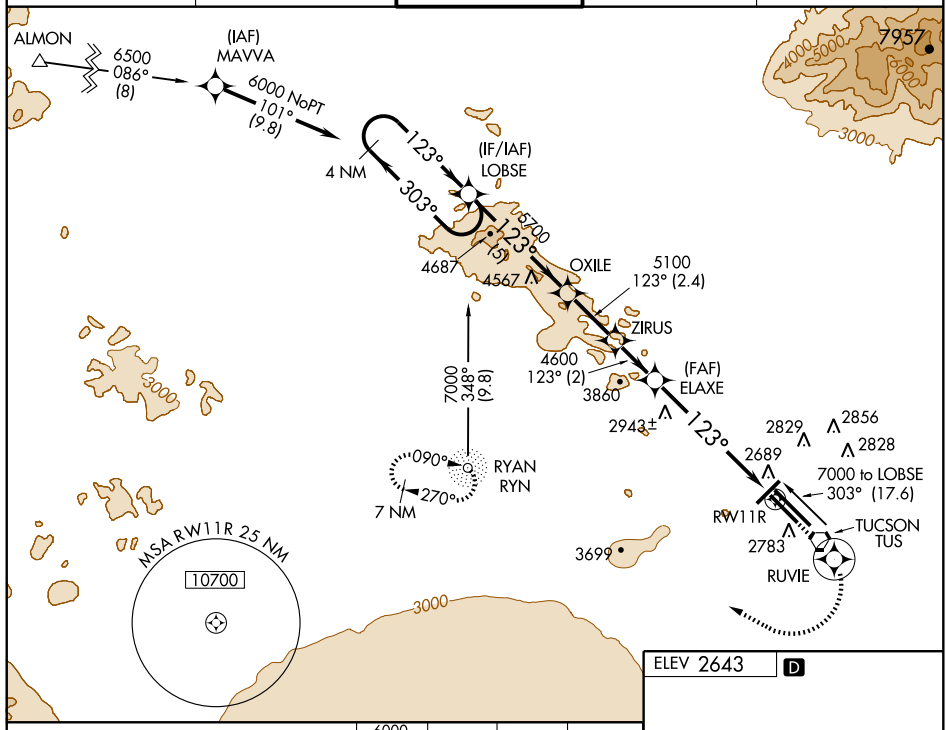
APP CRS	Rwy Idg	6998
123°	TDZE	2605
	Apt Elev	2643

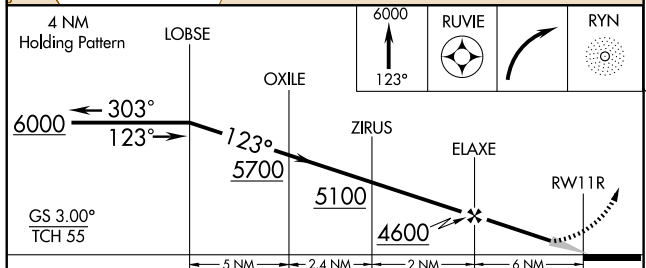
RNAV (GPS) RWY 11R
TUCSON INTL (TUS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (111°F). DME/DME RNP-0.3 NA.

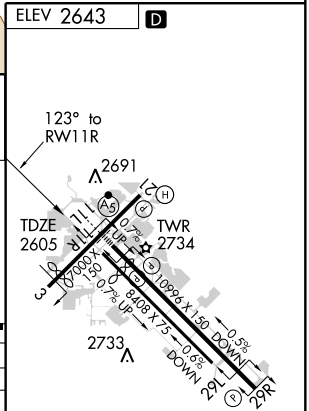
MISSED APPROACH: Climb to 6000 via 123° course to RUVIE WP then climbing right turn direct RYN NDB and hold.

ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2





CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	2965-1¼ 360 (400-1¼)			
LNAV MDA	3200-1 595 (600-1)		3200-1½ 595 (600-1½)	3200-1¾ 595 (600-1¾)
CIRCLING	3200-1 557 (600-1)	3220-1 577 (600-1)	3220-1½ 577 (600-1½)	3220-2 577 (600-2)



REIL Rwy 21
REIL Rwys 29L and 29R
(Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L

SW-4, 22 OCT 2009 to 19 NOV 2009

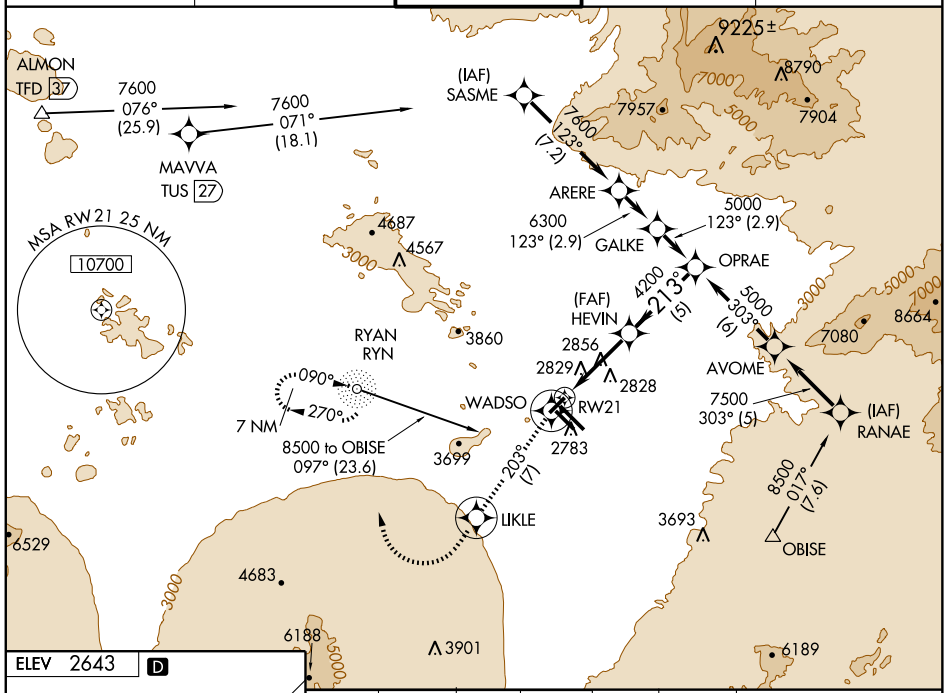
APP CRS	Rwy Idg	6000
213°	TDZE	2573
	Apt Elev	2643

RNAV (GPS) RWY 21
TUCSON INTL (TUS)

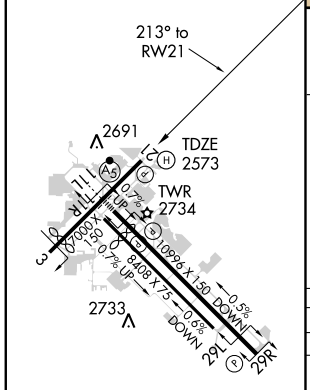
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (111°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 6000 via 213° course to WADSO WP, then via 203° course to LIKLE WP, then climbing right turn direct RYN NDB and hold.

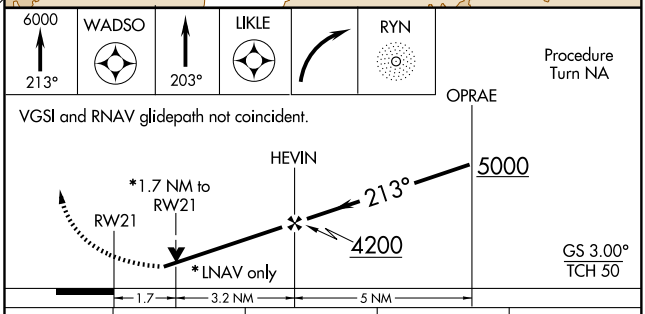
ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2



ELEV 2643 D



REIL Rwy 21
REIL Rwys 29L and 29R
(Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	3141-2 568 (600-2)			
LNAV MDA	3160-1 587 (600-1)		3160-1½ 587 (600-1½)	3160-1¾ 587 (600-1¾)
CIRCLING	3160-1 517 (600-1)	3220-1 577 (600-1)	3220-1½ 577 (600-1½)	3220-2 577 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

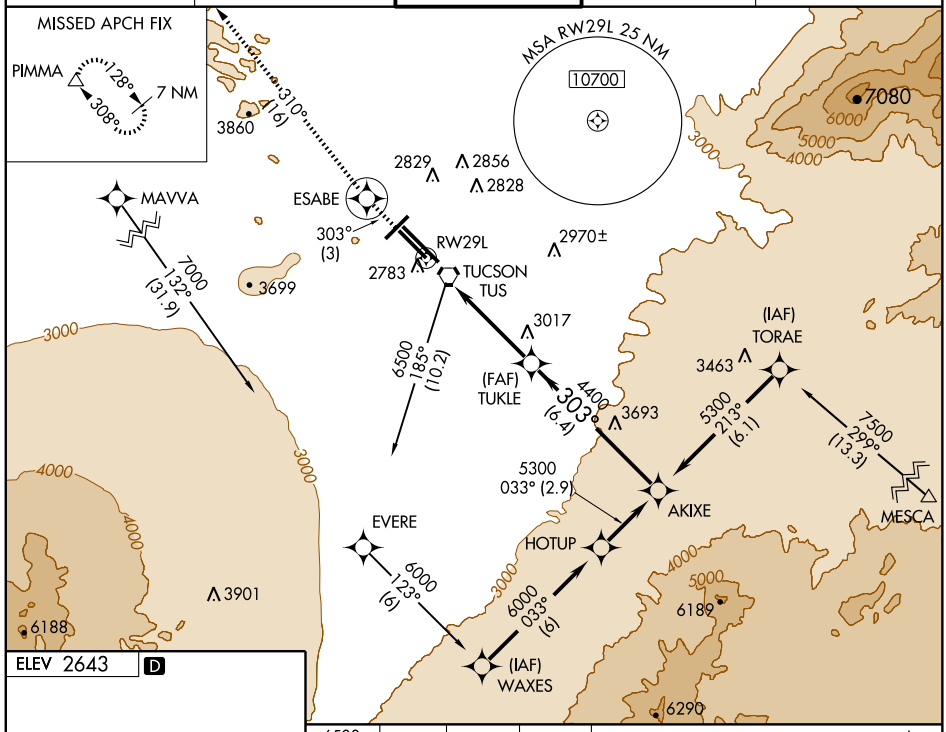
APP CRS	Rwy Idg	8408
303°	TDZE	2629
	Apt Elev	2643

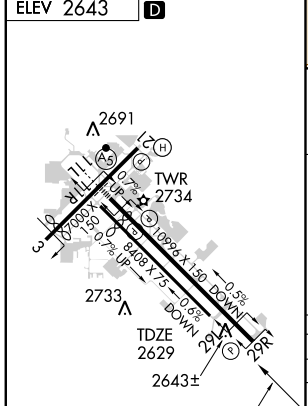
RNAV (GPS) RWY 29L
TUCSON INTL (TUS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (111°F). DME/DME RNP-0.3 NA.

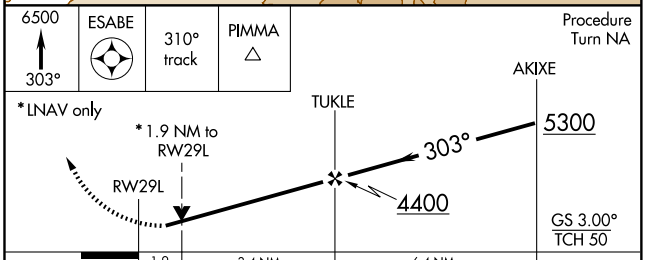
MISSED APPROACH: Climb to 6500 via 303° course to ESABE and via 310° track to PIMMA and hold.

ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2





REIL Rwy 21
REIL Rwys 29L and 29R (Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	3040-1½ 411 (400-1½)			
LNAV MDA	3320-1 691 (700-1)		3320-2 691 (700-2)	3320-2¼ 691 (700-2¼)
CIRCLING	3320-1 677 (700-1)		3320-2 677 (700-2)	3320-2¼ 677 (700-2¼)

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10996
CH 82701	123°	TDZE	2599
W11A		Apt Elev	2643

RNAV (GPS) Z RWY 11L

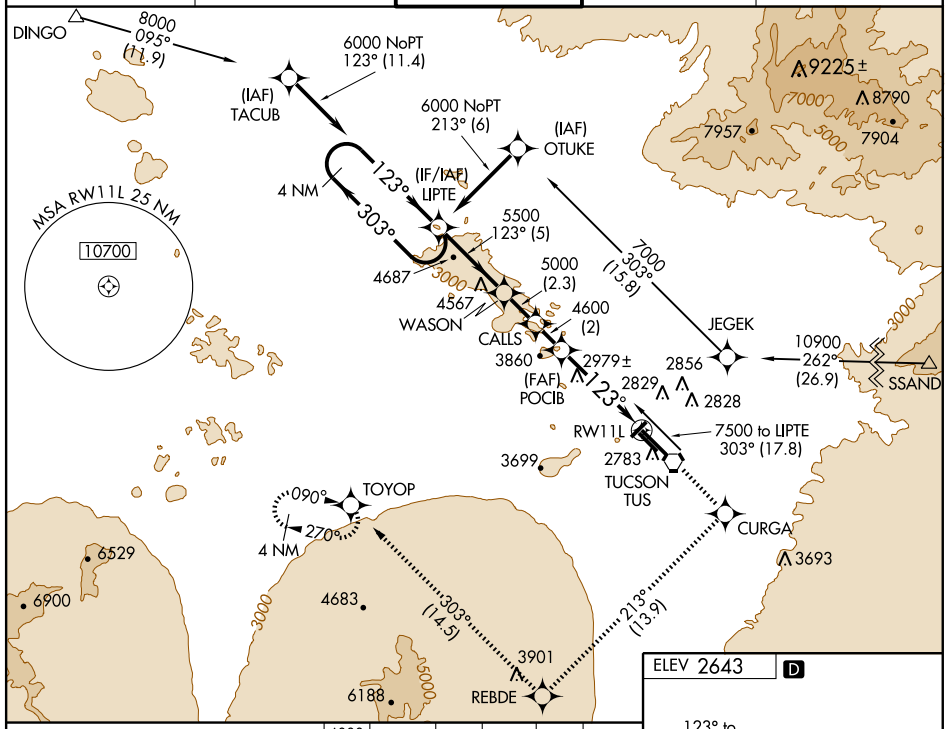
TUCSON INTL (TUS)

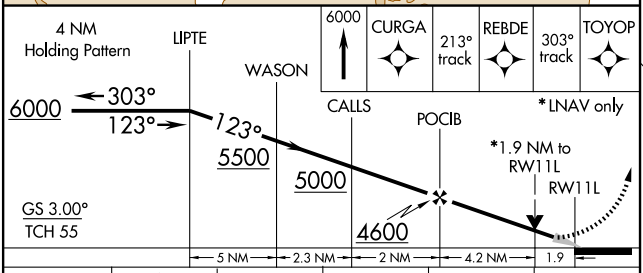
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (111°F). DME/DME RNP- 0.3 NA.
For inoperative MALSR, increase LPV visibility to RVR 5000 all Cats, LNAV/VNAV visibility Cat E to RVR 6000, LNAV visibility Cat E to 2 ¼.

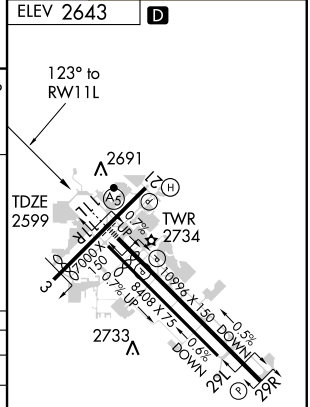
MALSR

MISSED APPROACH: Climb to 6000 (CAT E 8000) via direct CURGA and via 213° track to REBDE and via 303° track to TOYOP and hold.

ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2







CATEGORY	A	B	C	D	E
LPV DA	2849/24 250 (300-½)				
LNAV/VNAV DA	2956/40 357 (400-¾)				
LNAV MDA	3240/24 641 (600-½)		3240/60 641 (600-1¼)	3240-1½ 641 (600-1½)	3240-1¾ 641 (600-1¾)
CIRCLING	3240-1 597 (600-1)		3240-1½ 597 (600-1½)	3240-2 597 (600-2)	3740-3 1097 (1100-3)

REIL Rwy 21
REIL Rwys 29L and 29R (Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 86899 W29A	APP CRS 303°	Rwy Idg 10996 TDZE 2643 Apt Elev 2643

RNAV (GPS) Z RWY 29R

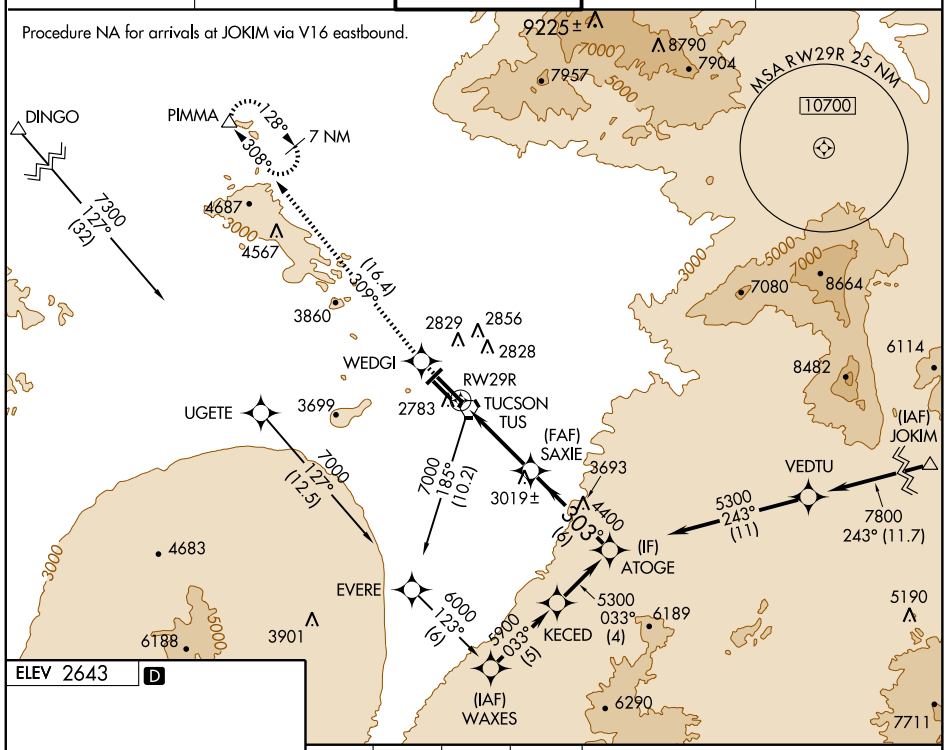
TUCSON INTL (TUS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (111°F). DME/DME RNP-0.3 NA. When VGSI inoperative, procedure NA at night.

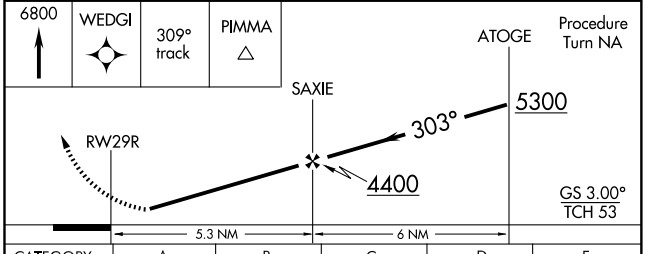
MISSED APPROACH: Climb to 6800 direct WEDGI and 309° track to PIMMA and hold.

ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2

Procedure NA for arrivals at JOKIM via V16 eastbound.



ELEV 2643 D



CATEGORY	A	B	C	D	E
LPV DA	2929-1 286 (300-1)				
LNAV/VNAV DA	3106-1½ 463 (500-1½)				3106-1¾ 463 (500-1¾)
LNAV MDA	3280-1 637 (700-1)		3280-1¾ 637 (700-1¾)	3280-2 637 (700-2)	3280-2¼ 637 (700-2¼)
CIRCLING	3280-1 637 (700-1)		3280-1¾ 637 (700-1¾)	3280-2 637 (700-2)	3740-3 1097 (1100-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10996
123°	TDZE	2599
	Apt Elev	2643

RNAV (RNP) Y RWY 11L

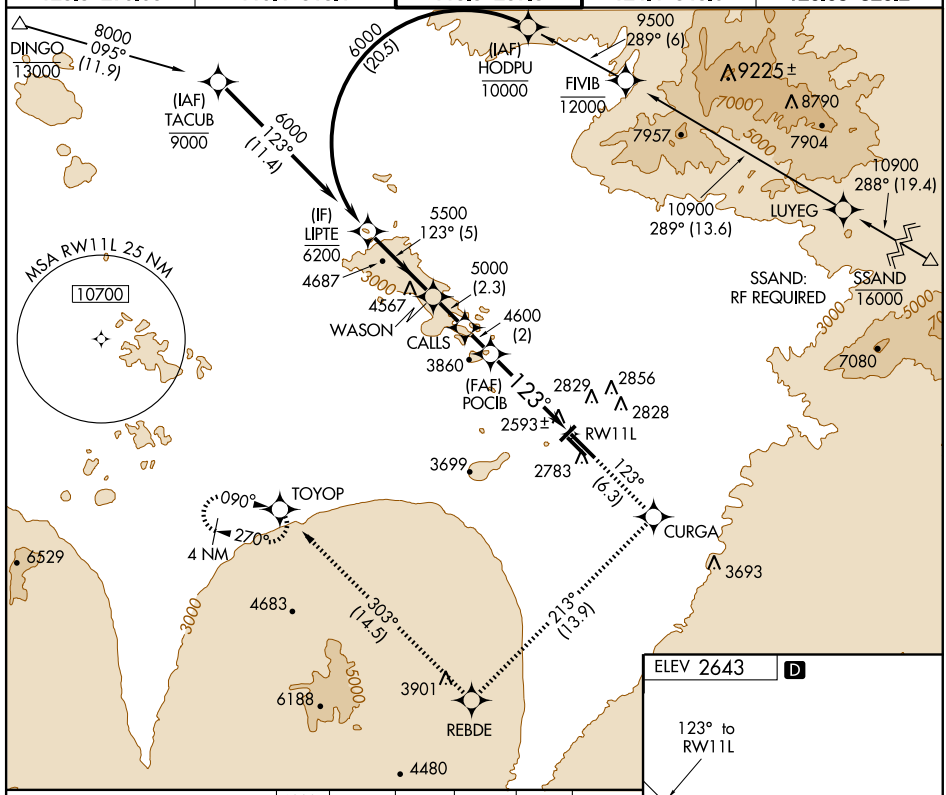
TUCSON INTL (TUS)

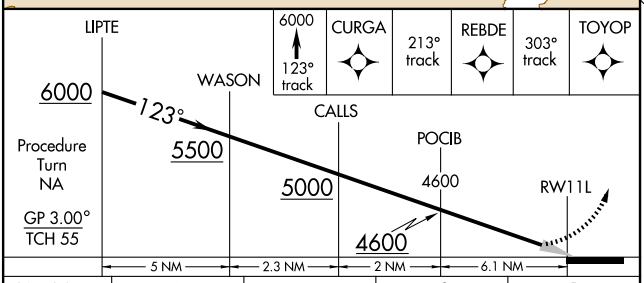
NA — For uncompensated Baro-VNAV systems, procedure NA below -5°C (23°F) or above 43°C (111°F). For inoperative MALSR, increase RNP 0.30 visibility to RVR 6000 all Cats. GPS required.

MALSR

MISSED APPROACH: Climb to 6000 via 123° track to CURGA, 213° track to REBDE, 303° track to TOYOP and hold.

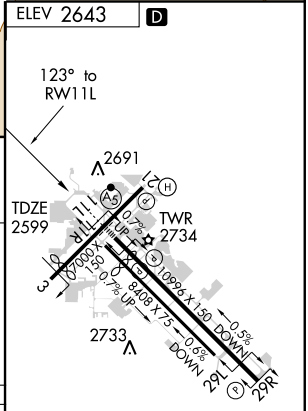
ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2





CATEGORY	A	B	C	D
RNP 0.30 DA	2947/40	348 (400-¾)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



REIL Rwy 21
REIL Rwys 29L and 29R
(Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10996
303°	TDZE	2643
	Apt Elev	2643

RNAV (RNP) Y RWY 29R

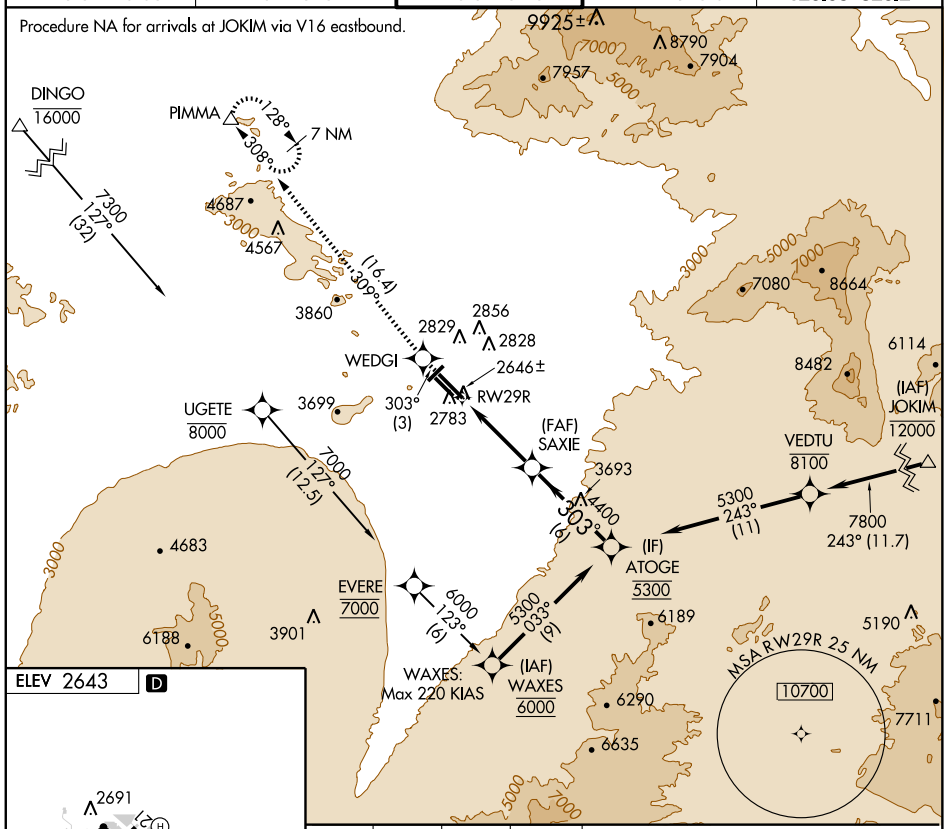
TUCSON INTL (TUS)

When VGSI inoperative, procedure NA at night. GPS required. For uncompensated Baro-VNAV systems, procedure NA below -5°C (23°F) or above 43°C (110°F).

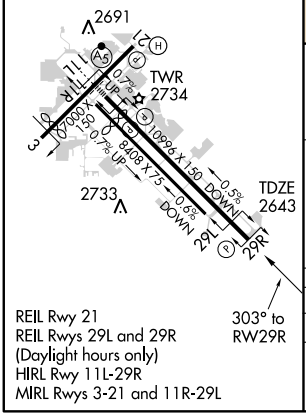
MISSED APPROACH: Climb to 6500 via 303° track to WEDGI, 309° track to PIMMA and hold.

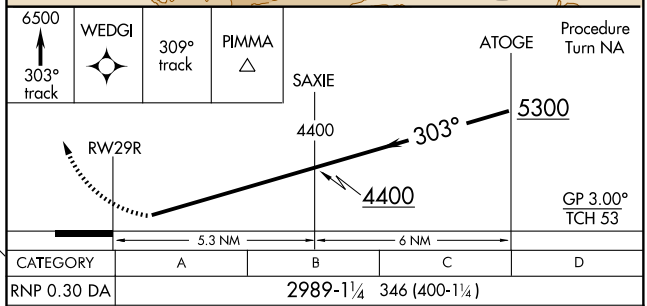
ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2

Procedure NA for arrivals at JOKIM via V16 eastbound.



ELEV 2643 D





CATEGORY	A	B	C	D
RNP 0.30 DA	2989-1¼ 346 (400-1¼)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

TUCSON SEVEN DEPARTURE

SL-430 (FAA)

TUCSON INTL (TUS)
TUCSON, ARIZONA

TAKE-OFF OBSTACLE NOTES

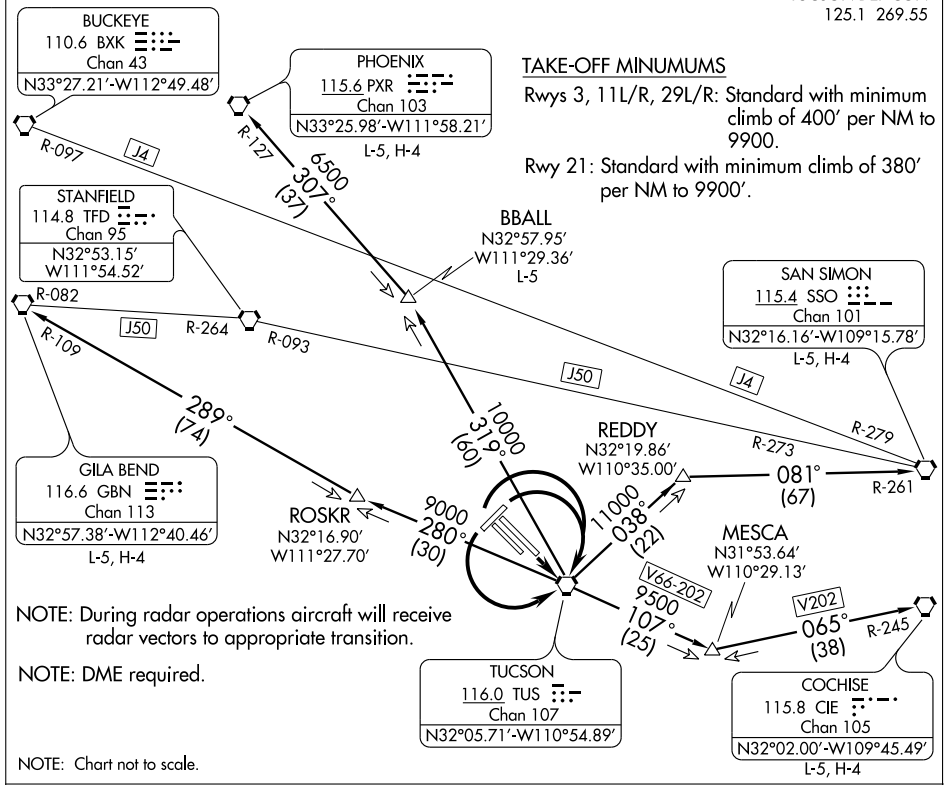
RWY 3: Multiple trees and a sign beginning 1385′ from DER, 322′ left of centerline to 333′ right of centerline, up to 45′ AGL/2626′ MSL.

RWY 11L: Multiple bushes and vents beginning 115′ from DER, 606′ left of centerline to 383′ right of centerline, up to 24′ AGL/2674′ MSL.

RWY 11R: Tree 584′ from DER, 176′ right of centerline, 25′ AGL/2645′ MSL.

RWY 21: Multiple bushes, poles, lights, railroad cars, and trees beginning 104′ from DER, 594′ left of centerline to 330′ right of centerline, up to 48′ AGL/2616′ MSL.

ATIS
123.8 279.65
CLNC DEL
126.65 326.2
GND CON
124.4 348.6
TUCSON TOWER
118.3 257.8
TUCSON DEP CON
125.1 269.55



TAKE-OFF MINUMUMS

Rwys 3, 11L/R, 29L/R: Standard with minimum climb of 400′ per NM to 9900.

Rwy 21: Standard with minimum climb of 380′ per NM to 9900′.

NOTE: During radar operations aircraft will receive radar vectors to appropriate transition.

NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11L/R: Climb direct TUS VORTAC. Thence. . . .

TAKE-OFF RUNWAYS 3, 29L/R: Climbing right turn direct TUS VORTAC. Thence. . . .

TAKE-OFF RUNWAY 21: Climbing left turn direct TUS VORTAC. Thence. . . .

. . . . via assigned transition. Maintain 17000, expect clearance to filed altitude 10 minutes after departure.

BBALL TRANSITION (TUS7.BBALL): From over TUS VORTAC via TUS R-319 to BBALL INT.

COCHISE TRANSITION (TUS7.CIE): From over TUS VORTAC via TUS R-107 and CIE R-245 to CIE VORTAC.

GILA BEND TRANSITION (TUS7.GBN): From over TUS VORTAC via TUS R-280 and GBN R-109 to GBN VORTAC.

PHOENIX TRANSITION (TUS7.PXR): From over TUS VORTAC via TUS R-319 and PXR R-127 to PXR VORTAC.

SAN SIMON TRANSITION (TUS7.SSO): From over TUS VORTAC via TUS R-038 and SSO R-261 to SSO VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

TUCSON, ARIZONA

AL-430 (FAA)

VOR/DME or TACAN RWY 29R

TUCSON INTL (TUS)

VORTAC TUS	APP CRS	Rwy Idg	10996
116.0	303°	TDZE	2641
Chan 107		Apt Elev	2643

MISSED APPROACH: Climb to 6500 to PIMMA/TUS 20 DME via TUS R-308.

ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2

MISSED APCH FIX

PIMMA
TUS 20

116.0 TUS
R-308
Chan 107

R-308

2829 2856 2828

TUCSON
116.0 TUS
Chan 107

2783

3699

MSA TUS 25 NM
150°
5700
10500
060°

GAVET
TUS 2

COPEY
TUS 5

3693

4800
303° (4.5)

NAIRB
TUS 9.5

6100
303° (4)

VAINE
TUS 13.5

R-107

(IAF)
SULLI
TUS 20

8000
TUS 20 Arc

7200
303°
6.5

6189

10 NM

ILEEN
TUS 20

R-123

3901

6290

6635

8664
7080
8482
7000
6000
5000
4000
3000

ELEV 2643 D

2691
21
11L
11R
TWR
2734
10996 X 150
8408 X 75
0.7% UP
0.5% DOWN
0.6% DOWN
2733
TDZE
2641
29L
29R

303° 5.6 NM
from FAF

REIL Rwy 21
REIL Rwys 29L and 29R
(Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L

6500
TUS R-308

PIMMA

VGSI and descent angles not coincident.

VORTAC
TUS
0.3

GAVET
TUS 2

COPEY
TUS 5

3.54°
TCH 50

NAIRB
TUS 9.5

VAINE
TUS 13.5

ILEEN
TUS 20

3600
4800
6100
7200
8000
303°

Procedure Turn NA

0.6 0.3 1.7 NM 3 NM 4.5 NM 4 NM 6.5 NM

CATEGORY	A	B	C	D	E
S-29R	3120-1	479 (500-1)	3120-1¼ 479 (500-1¼)	3120-1½ 479 (500-1½)	3120-1¾ 479 (500-1¾)
CIRCLING	3120-1 479 (500-1)	3220-1 577 (600-1)	3220-1½ 577 (600-1½)	3220-2 577 (600-2)	3740-3 1097(1100-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC TUS	APP CRS	Rwy Idg	10996
116.0	123°	TDZE	2599
Chan 107		Apt Elev	2643

VOR or TACAN RWY 11L

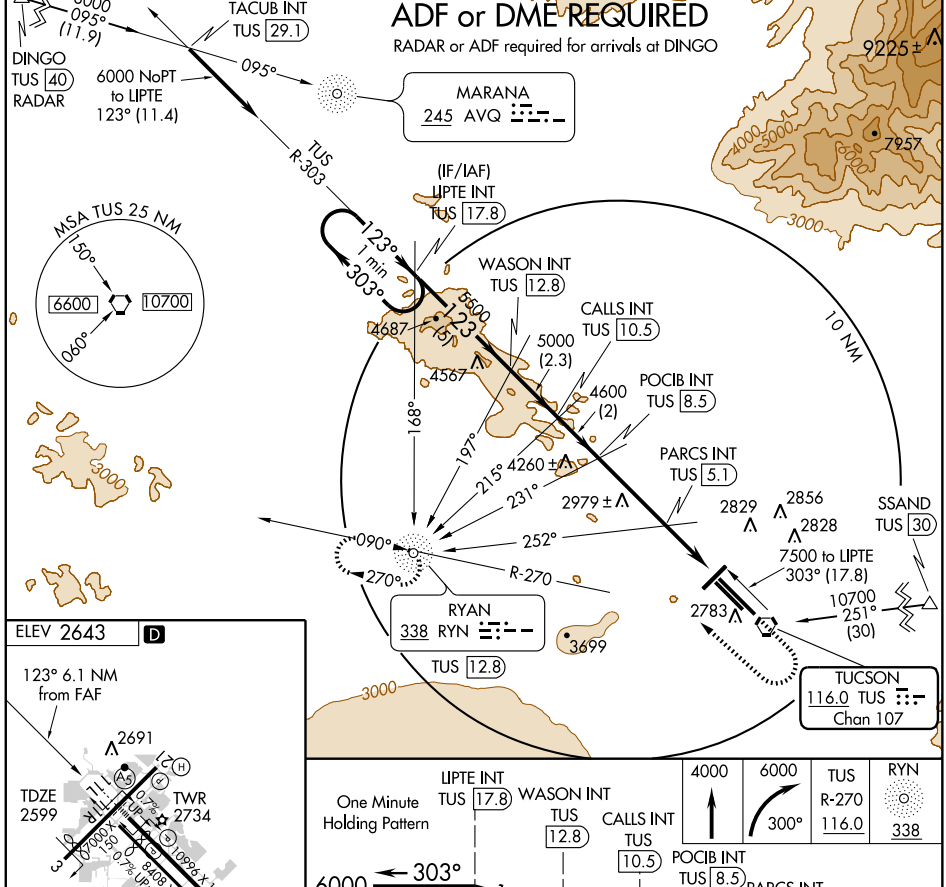
TUCSON INTL (TUS)

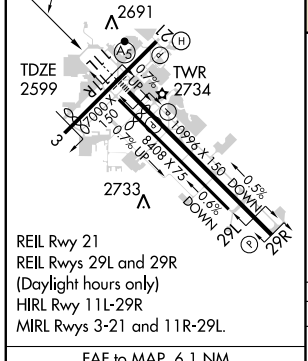
For inoperative MALSR, increase S-11L Cats. D and E visibility to RVR 6000. ADF or DME required.

MALSR

MISSED APPROACH: Climb to 4000 then climbing right turn to 6000 (Cat. E 8000) via heading 300° and TUS R-270 to RYN NDB/TUS 12.8 DME and hold.

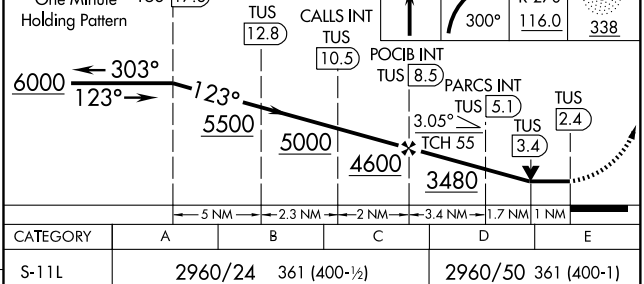
ATIS	TUCSON APP CON	TUCSON TOWER	GND CON	CLNC DEL
123.8 279.65	119.4 318.1	118.3 257.8	124.4 348.6	126.65 326.2





REIL Rwy 21
REIL Rwys 29L and 29R
(Daylight hours only)
HIRL Rwy 11L-29R
MIRL Rwys 3-21 and 11R-29L.

FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02



CATEGORY	A	B	C	D	E
S-11L	2960/24 361 (400-½)			2960/50 361 (400-1)	
CIRCLING	3100-1 457 (500-1)	3220-1 577 (600-1)	3220-1½ 577 (600-1½)	3220-2 577 (600-2)	3740-3 1097 (1100-3)

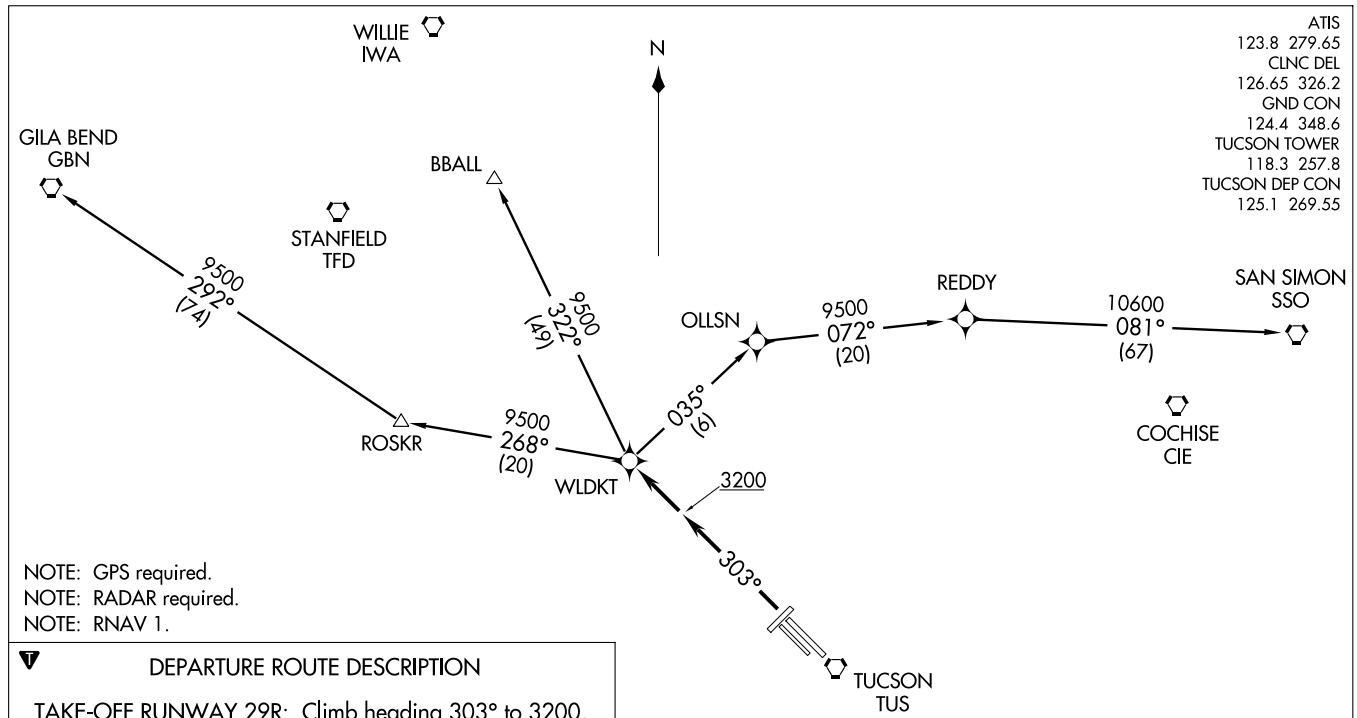
SW-4, 22 OCT 2009 to 19 NOV 2009

WLDKT ONE DEPARTURE (RNAV)

SL-430 (FAA)

TUCSON INTL (TUS)

TUCSON, ARIZONA



NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 29R: Climb heading 303° to 3200, then direct WLDKT, thence....

....via (transition) maintain 17000. Expect filed altitude 10 minutes after departure.

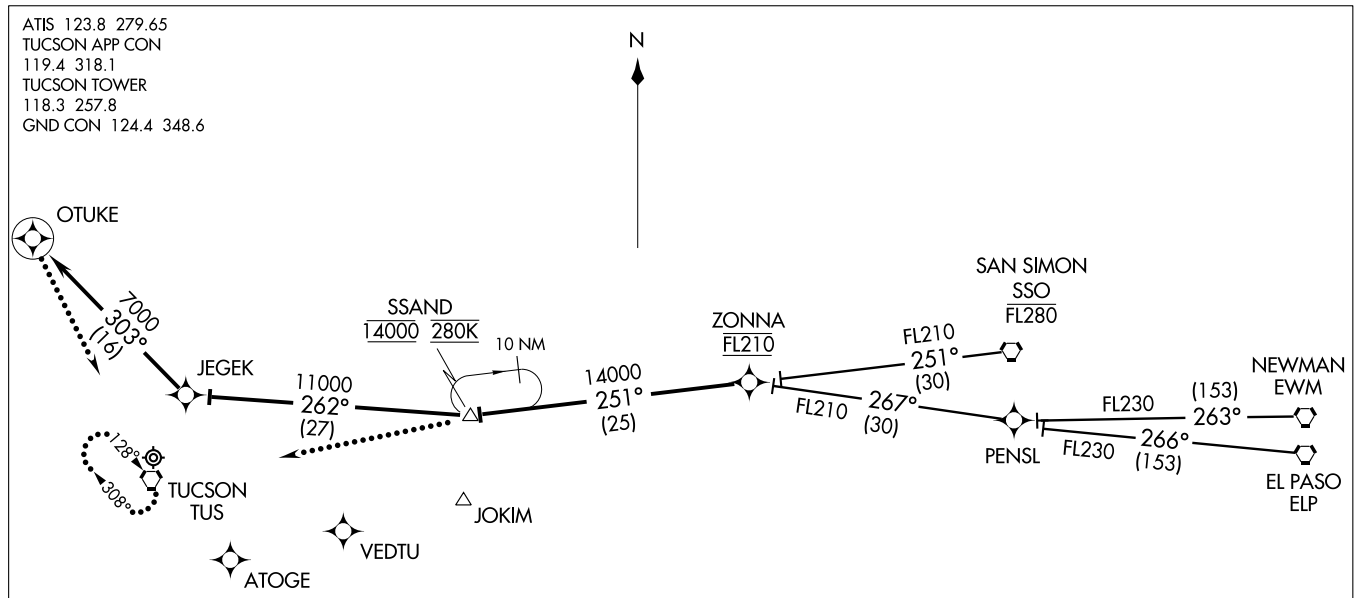
BBALL TRANSITION (WLDKT1.BBALL)
GILA BEND TRANSITION (WLDKT1.GBN)
SAN SIMON TRANSITION (WLDKT1.SSO)

TAKE-OFF MINIMUMS

Rwy 29R: Standard with a minimum climb of 375' per NM to 9500.
Rwys 29L, 11L, 11R, 3, 21: NA by ATC

NOTE: Chart not to scale.

ZONNA ONE ARRIVAL (RNAV)



EL PASO TRANSITION (ELP.ZONNA1)
NEWMAN TRANSITION (EWM.ZONNA1)
SAN SIMON TRANSITION (SSO.ZONNA1)

From ZONNA via 251° track to SSAND, cross SSAND at 14000 and 280K, then via 262° track to JEGEK, then via 303° track to OTUKE. Expect radar vectors to final approach course.

LOST COMMUNICATIONS

RWY 29R: At SSAND proceed direct TUS VORTAC and hold, maintain 14000.
RWY 11L: Execute RNAV (GPS) Z RWY 11L approach. If unable, at OTUKE proceed direct TUS VORTAC and hold, maintain 14000.

NOTE: RADAR required.
NOTE: All Rwys: expect radar vectors to final approach.
NOTE: RNAV 1.
NOTE: DME/DME/IRU, or GPS required.
NOTE: For turbojets only.
NOTE: All transitions: for non-GPS equipped aircraft DUG, TFD, and TUS must be operational.
NOTE: Landing Rwy 29: Expect radar vectors after SSAND to final approach course.

NOTE: Chart not to scale.

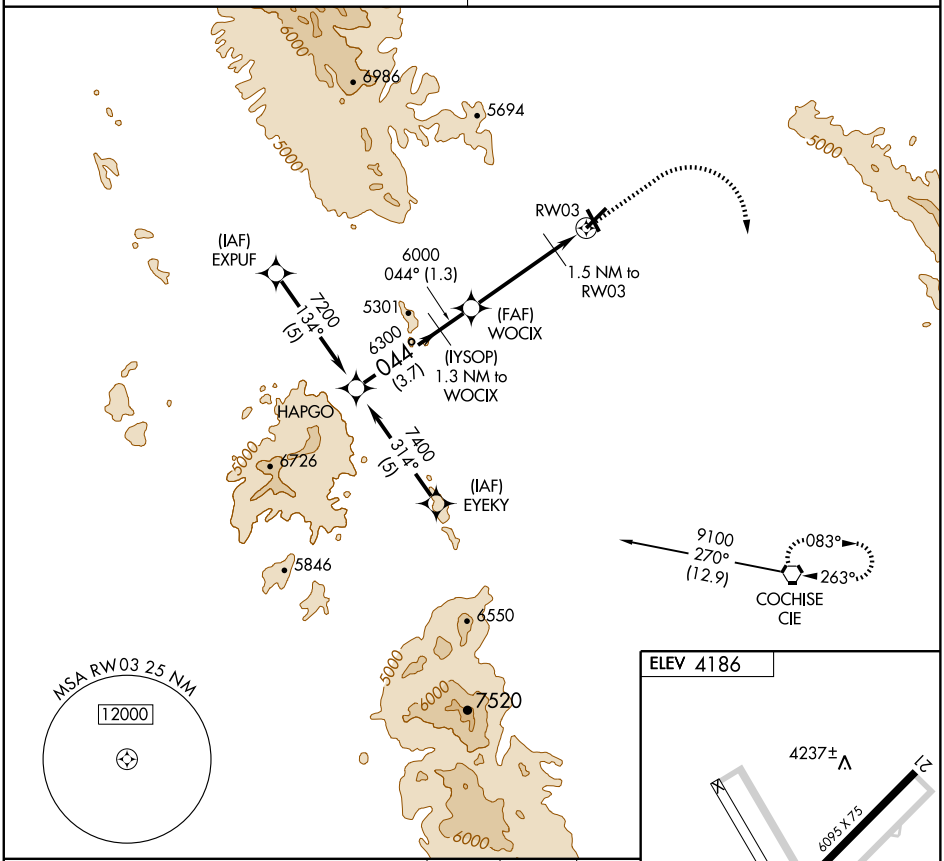
APP CRS	Rwy Idg	N/A
044°	TDZE	N/A
	Apt Elev	4186

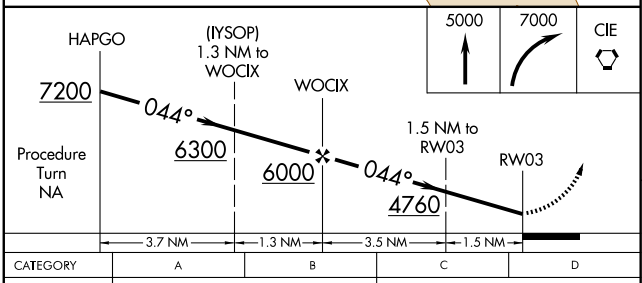
GPS-A
WILLCOX/COCHISE COUNTY (P33)

T
A NA — Obtain local altimeter on CTAF, when not available procedure not authorized.

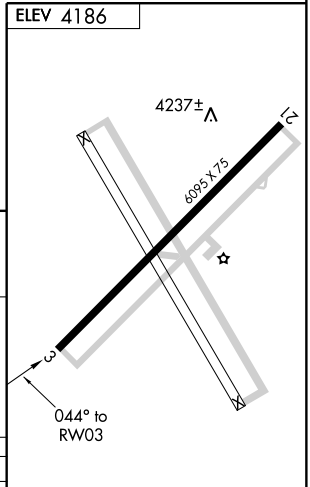
MISSED APPROACH: Climb to 5000 then climbing right turn to 7000 direct CIE VORTAC and hold.

ALBUQUERQUE CENTER	UNICOM
134.45 327.15	**122.8** (CTAF)





CATEGORY	A	B	C	D
CIRCLING	4640-1 454 (500-1)		NA	



SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6095
214°	TDZE	4186
	Apt Elev	4186

GPS RWY 21

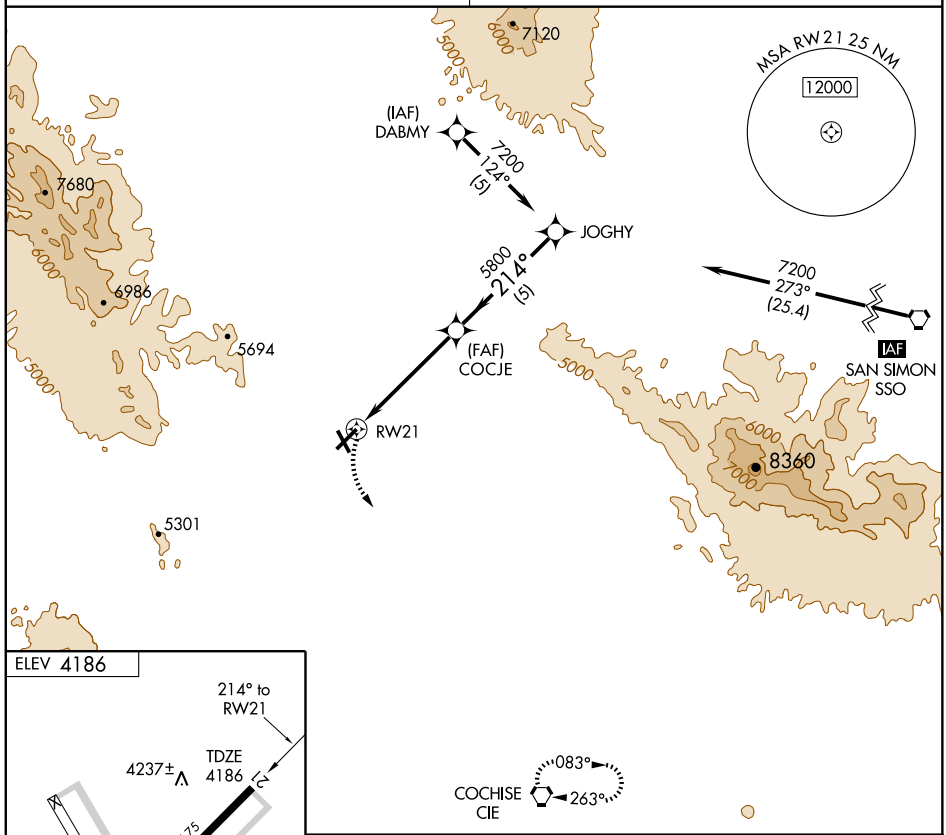
WILLCOX/COCHISE COUNTY (P33)

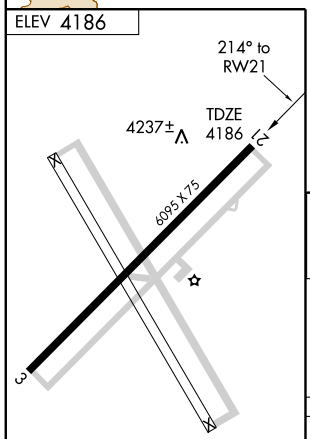
T NA — Obtain local altimeter on CTAF, when not available procedure not authorized.
IAF ARM APPROACH MODE PRIOR TO IAF.

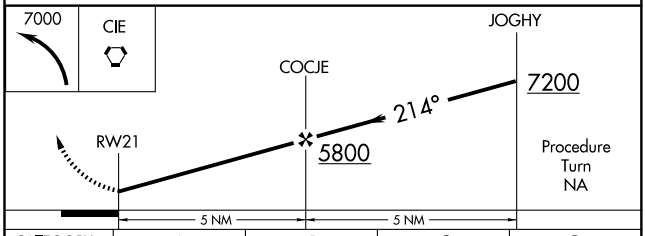
MISSED APPROACH: Climbing left turn to 7000 direct CIE VORTAC and hold.

ALBUQUERQUE CENTER
134.45 327.15

UNICOM
122.8 (CTAF)







CATEGORY	A	B	C	D
S-21	4540-1	354 (400-1)	NA	
CIRCLING	4640-1	454 (500-1)	NA	

MIRL Rwy 3-21

SW-4, 22 OCT 2009 to 19 NOV 2009

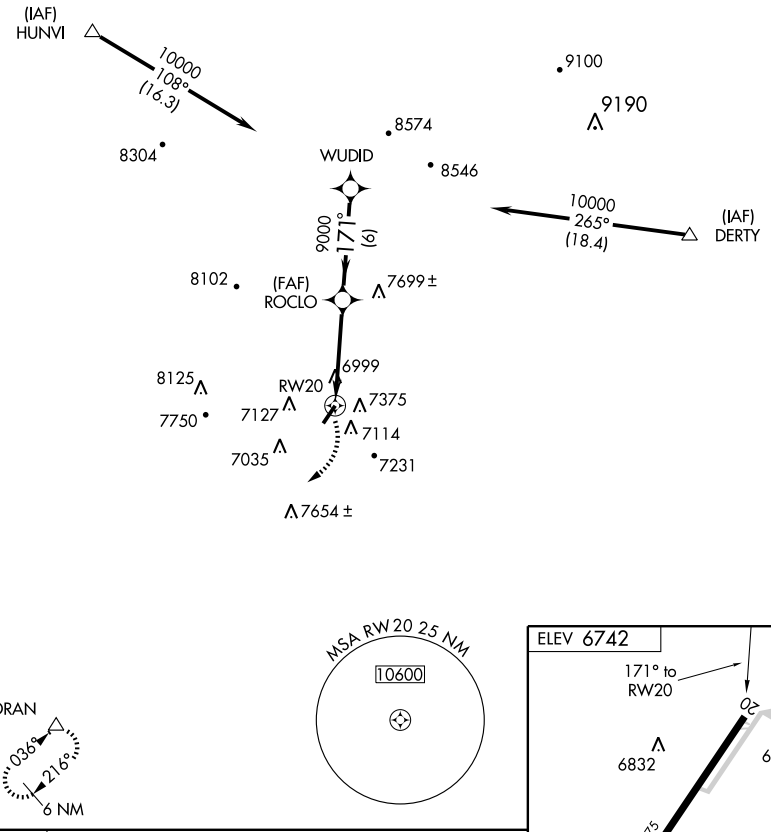
APP CRS	Rwy Idg	N/A
171°	TDZE	N/A
	Apt Elev	6742

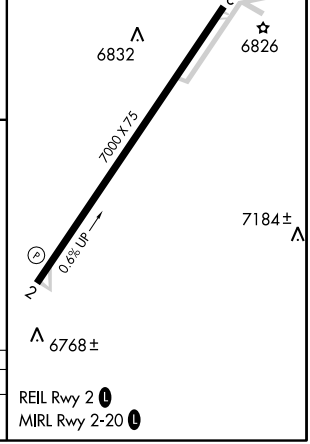
RNAV (GPS)- B
WINDOW ROCK (RQE)

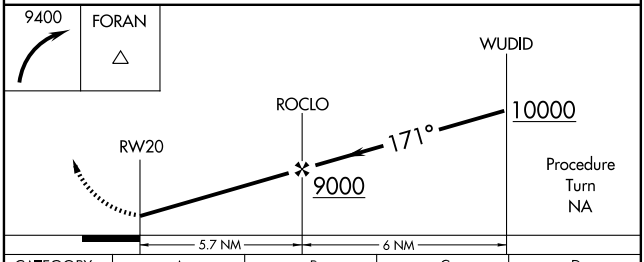
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
NA Procedure not authorized at night.

MISSED APPROACH: Climbing right turn to 9400 direct FORAN WP and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.325	124.325 288.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	7720-1¼ 978 (1000-1¼)	7740-1½ 998 (1000-1½)	7740-3 998 (1000-3)	NA

REIL Rwy 2 L
MIRL Rwy 2-20 L

SW-4, 22 OCT 2009 to 19 NOV 2009

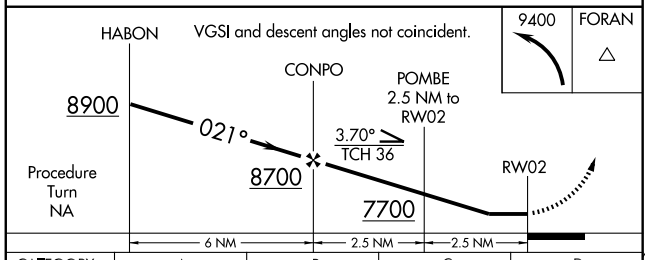
APP CRS	Rwy Idg	7000
021°	TDZE	6719
	Apt Elev	6742

RNAV (GPS) RWY 2
WINDOW ROCK (RQE)

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Procedure not authorized at night. Circling not authorized east of rwy 2-20.

MISSED APPROACH: Climbing left turn to 9400 direct FORAN WP and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.325	124.325 288.25	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	7480-1 761 (800-1)	7480-1¼ 761 (800-1¼)	7480-2¼ 761 (800-2¼)	NA
CIRCLING	7480-1 738 (800-1)	7480-1¼ 738 (800-1¼)	7540-2¼ 798 (800-2¼)	NA

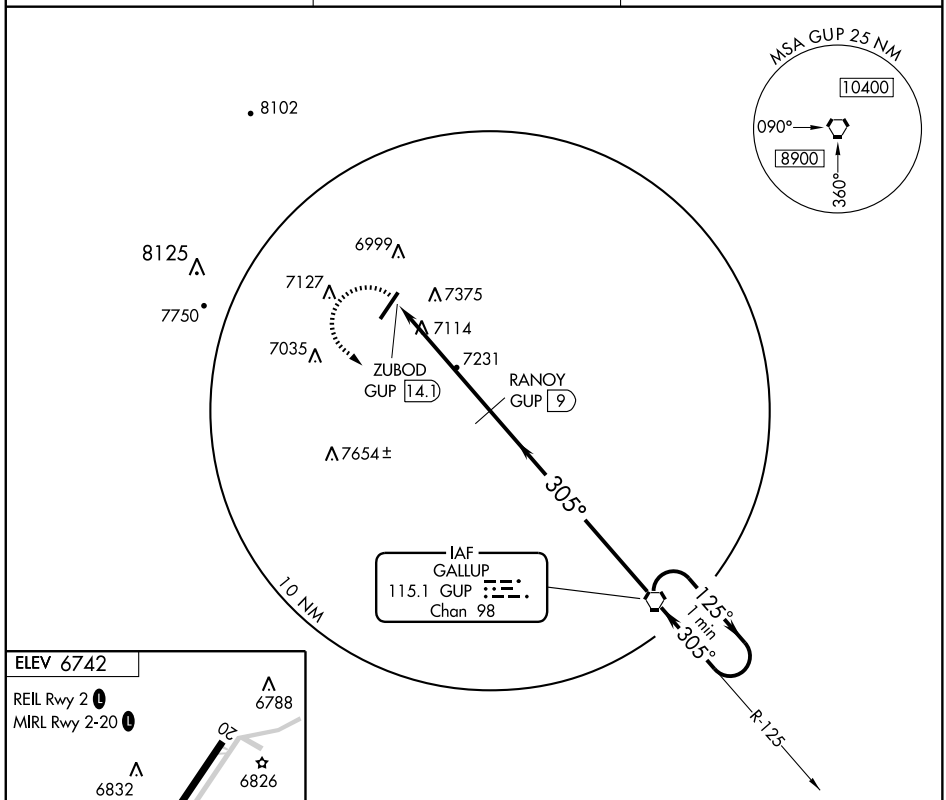
SW-4, 22 OCT 2009 to 19 NOV 2009

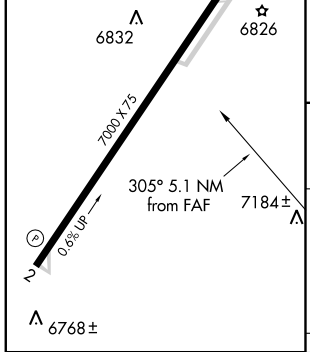
VORTAC GUP 115.1 Chan 98	APP CRS 305°	Rwy Idg N/A TDZE N/A Apt Elev 6742

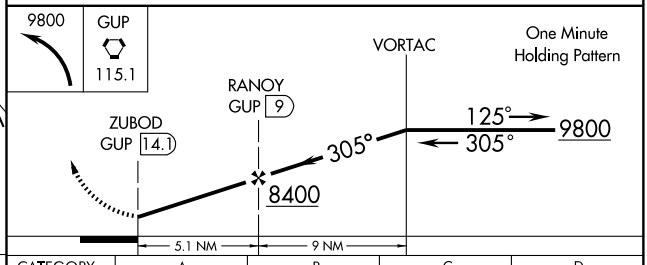
VOR/DME-A
WINDOW ROCK (RQE)

MISSED APPROACH: Climbing left turn to 9800 direct GUP VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.325	124.325 288.25	122.8 (CTAF) L







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	7760-1¼ 1018 (1100-1¼)	7760-1½ 1018 (1100-1½)	7760-3 1018 (1100-3)	

SW-4, 22 OCT 2009 to 19 NOV 2009

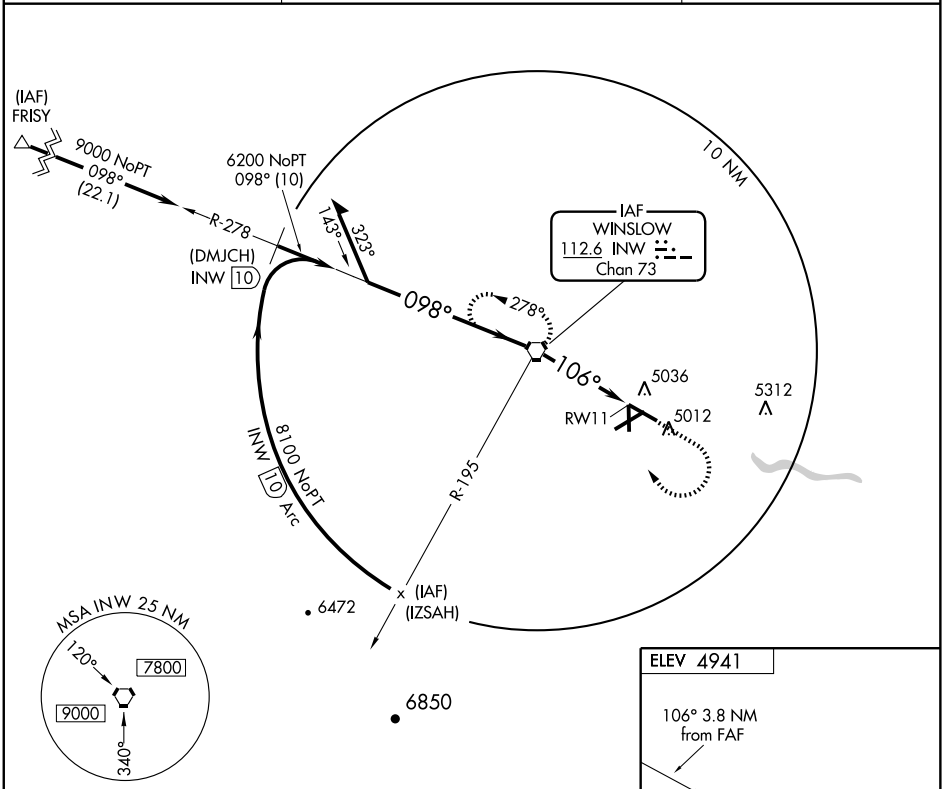
VORTAC INW	APP CRS	Rwy Idg	7100
112.6	106°	TDZE	4899
Chan 73		Apt Elev	4941

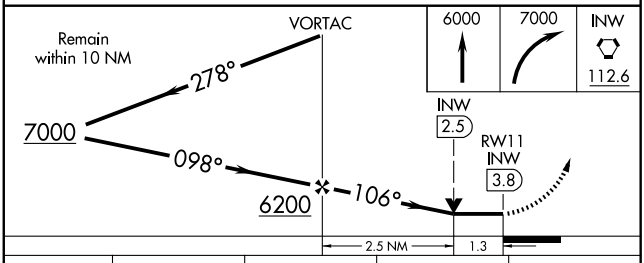
VOR or GPS RWY 11

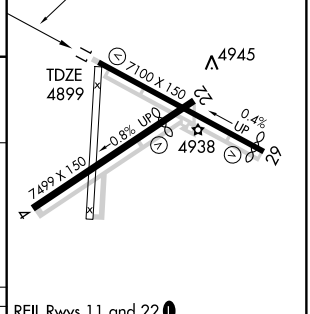
WINSLOW-LINDBERGH RGNL (INW)

MISSED APPROACH: Climb to 6000, then climbing right turn to 7000 direct INW VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.875	124.5 306.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-11	5340-1 441 (500-1)		5340-1¼ 441 (500-1¼)	5340-1½ 441 (500-1½)
CIRCLING	5420-1 479 (500-1)	5440-1 499 (500-1)	5480-1½ 539 (600-1½)	5520-2 579 (600-2)

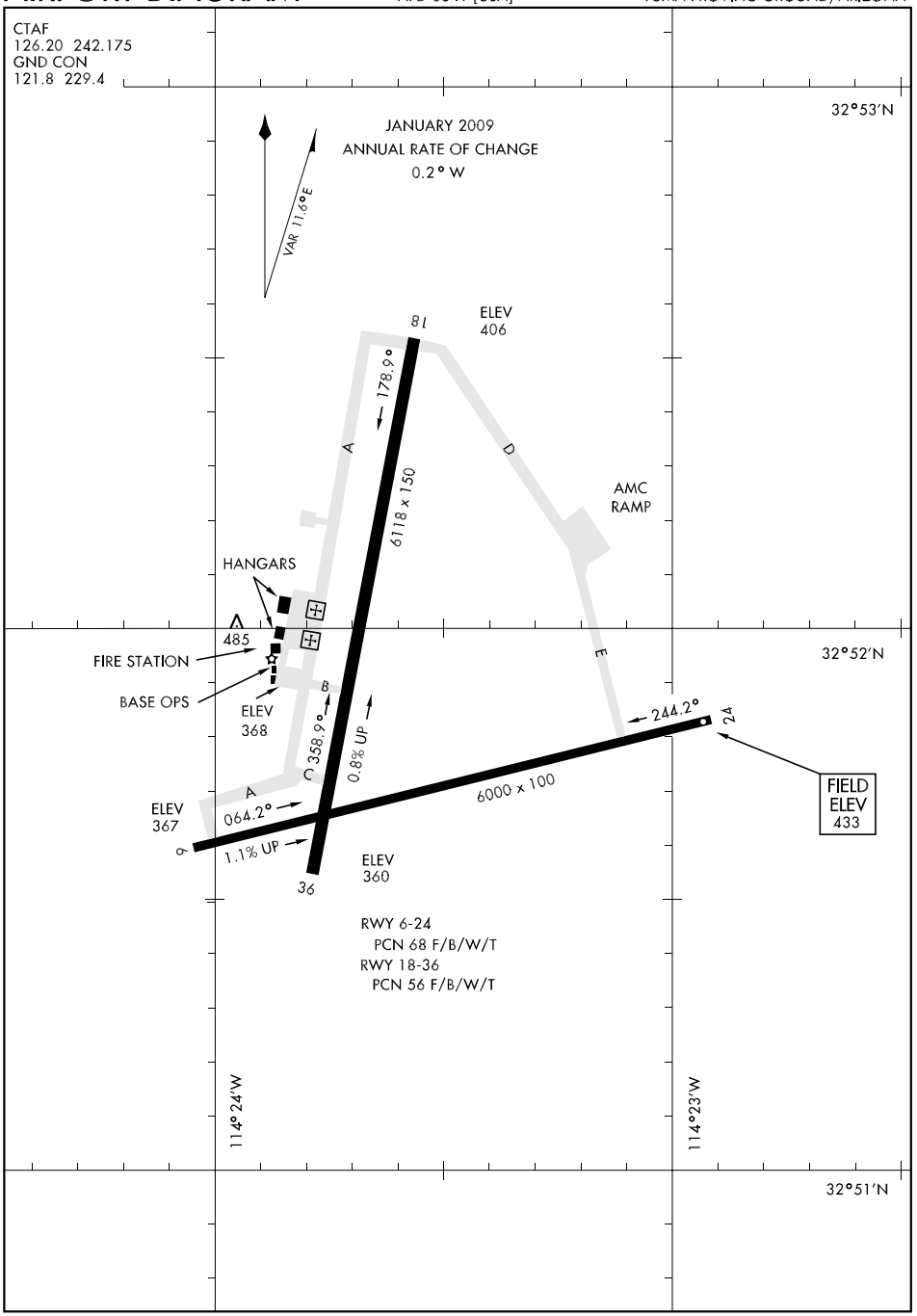
REIL Rwys 11 and 22 L

MIRL Rwys 4-22 and 11-29 L

FAF to MAP 3.8 NM

Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

SW-4, 22 OCT 2009 to 19 NOV 2009



SW-4, 22 OCT 2009 to 19 NOV 2009

YUMA PROVING GROUND, ARIZONA

RNAV (GPS) RWY 6

APCH CRS	Rwy ldg	6000
063°	TDZE	387
	Arpt Elev	433

AL-6341 [USA]

LAGUNA AAF (KLGF)

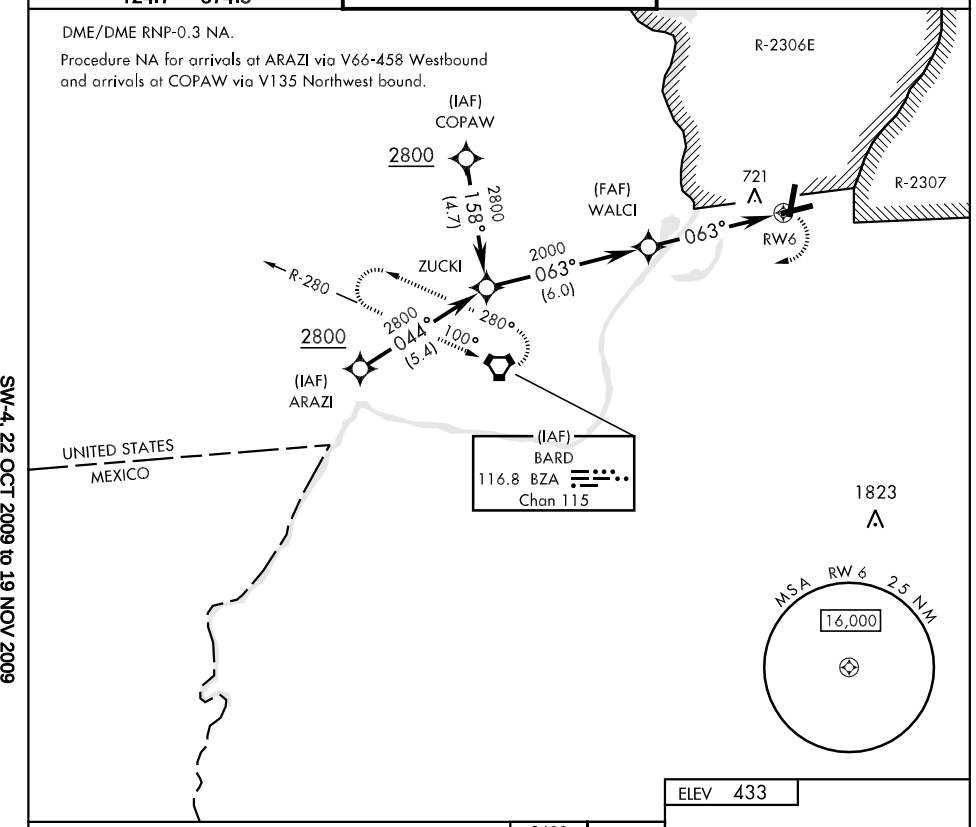
▼ * When local altimeter setting not received, use YUMA MCAS/YUMA Intl altimeter setting and increase all MDAs 80 feet, increase CAT CD vis ¼ mile.
▲ NA Procedure NA when airfield closed.

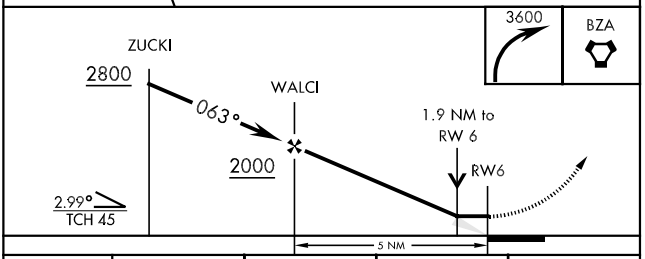
MISSED APPROACH: Climbing right turn to 3600 direct BZA VORTAC and hold.

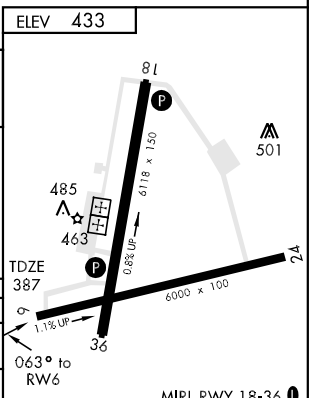
YUMA APP CON	CTAF	GND CON
124.7 374.8	126.20 242.175	121.8 (L) 229.4

DME/DME RNP-0.3 NA.

Procedure NA for arrivals at ARAZI via V66-458 Westbound and arrivals at COPAW via V135 Northwest bound.







CATEGORY	A	B	C	D
LNAV MDA *	1020-1 633 (600-1)		1020-1¾ 633 (600-1¾)	1020-2 633 (600-2)
CIRCLING *	1080-1 647 (700-1)		1080-1¾ 647 (700-1¾)	1080-2 647 (700-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 18

APCH CRS	Rwy ldg	6118
163°	TDZE	410
	Arpt Elev	433

AL-6341 [USA]

LAGUNA AAF (KLGF)

T
NA * When local altimeter setting not received, use YUMA MCAS/ YUMA Intl altimeter setting and increase all MDAs 80 feet and LNAV CAT D and circling CAT CD vis ½ mile.

MISSED APPROACH: Climb to 3600 direct ECATY, via 250° track to BZA VORTAC and hold, continue climb in hold to 3600.

YUMA APP CON	CTAF	GND CON
124.7 374.8	126.20 242.175	121.8 (L) 229.4

Procedure not authorized when airfield closed.

DME/DME RNP-0.3 NA.

R-2306A R-2308A R-2309 R-2306E R-2307

YETDO

3000 055° (11.2)

2100 (6) 148°

(IAF) YOCEP

3000

(FAF) NALKY

163°

RW18

725

ECATY

R-280 280° 100°

BARD 116.8 BZA Chan 115

MEXICO UNITED STATES

1823

MSA RW18 25 NM 16,000

VDP NA when using YUMA MCAS /YUMA INTL altimeter setting.

3600 ECATY tr 250°

YETDO 3000 148° NALKY 2100 163° RW18

1.2 NM to RW18

3.12° TCH 37

5 NM

ELEV 433 MIRL RWY 18-36 (L)

163° to RW18

TDZE 410

8 l

0.68% DOWN

501

485 463

6118 x 150

6000 x 100

1.1% UP

9 36 24

CATEGORY	A	B	C	D
LNAV MDA *	820-1 410 (400-1)		820-1¼ 410 (400-1¼)	
CIRCLING *	1080-1 647 (700-1)		1080-1¾ 647 (700-1¾)	1080-2 647 (700-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR RWY 6

VORTAC BZA 116.8 Chan 115	APCH CRS 048°	Rwy ldg 6000 TDZE 379 Arpt Elev 433

AL-6341 [USA]

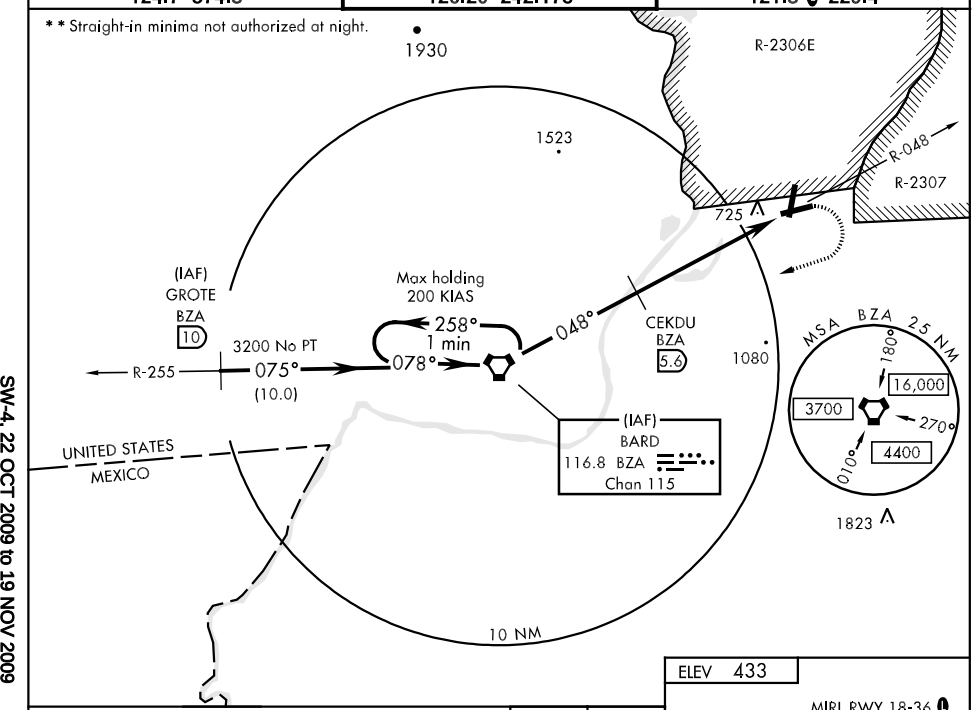
LAGUNA AAF (KLGF)

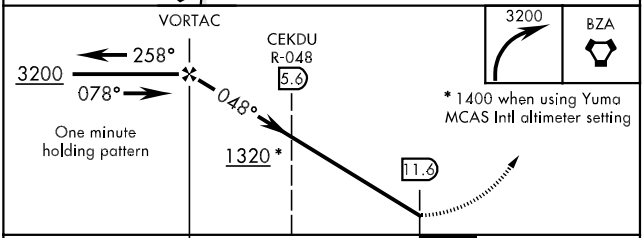
T NA

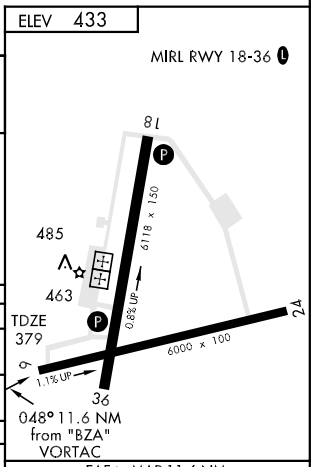
Procedure not authorized when airfield closed.
Obtain local altimeter setting on CTAF. When not received, use Yuma MCAS Intl altimeter setting and increase all MDAs 80 feet, increase visibilities CAT BC ¼ mile, and circling CAT BC ¼ mile; DME minimums: increase CAT B ¼ mile, CAT CD ½ mile and circling CAT CD ¼ mile.

MISSED APPROACH: Climbing right turn to 3200 direct BZA VORTAC and hold.

YUMA APP CON	CTAF	GND CON
124.7 374.8	126.20 242.175	121.8 (L) 229.4



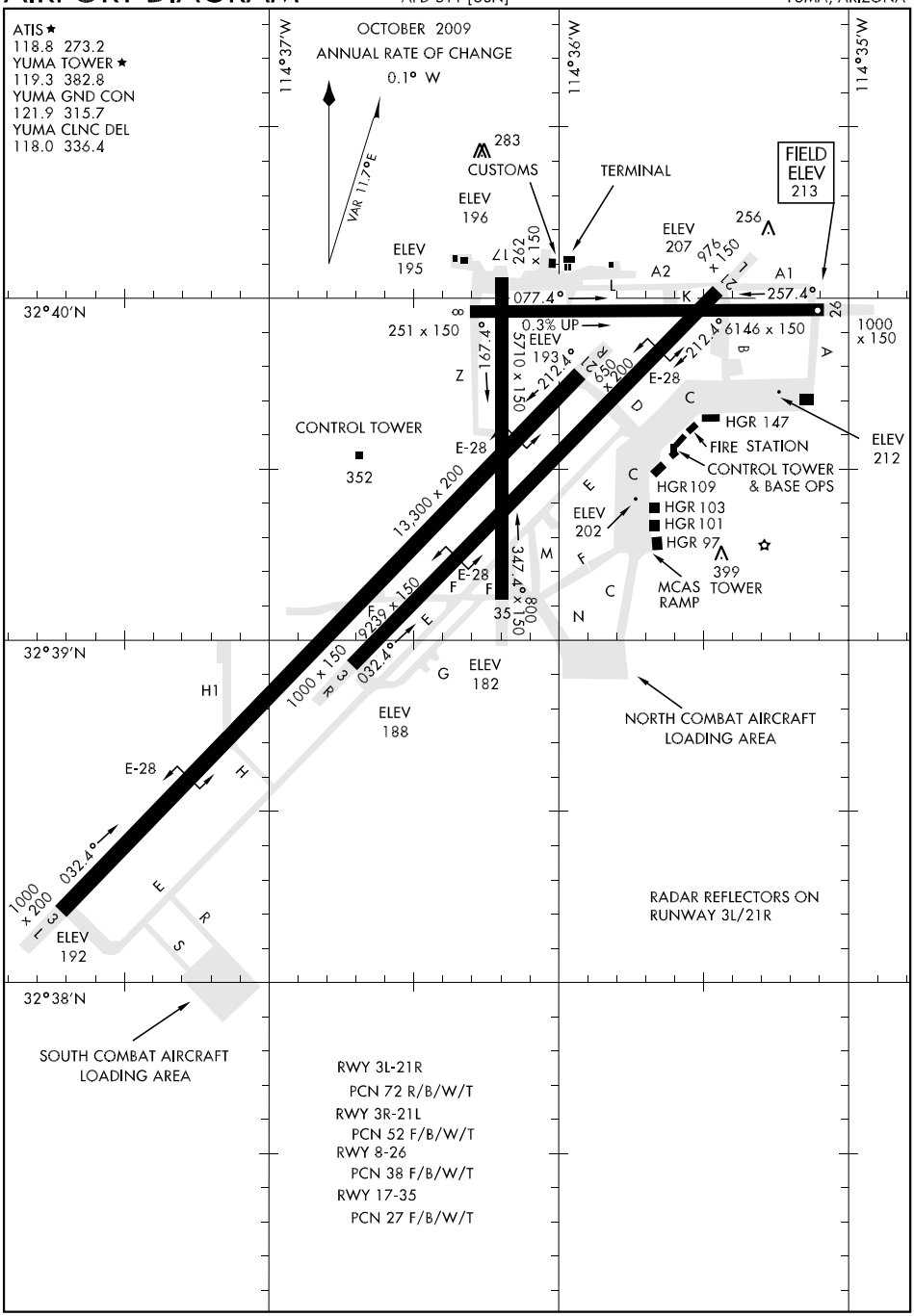




CATEGORY	A	B	C	D
S-6 **	1320-1¼ 941 (1000-1¼)		1320-2¾ 941 (1000-2¾)	1320-3 941 (1000-3)
CIRCLING	1320-1¼ 898 (900-1¼)		1320-2¾ 898 (900-2¾)	1320-3 898 (900-3)
DME MINIMA				
S-6 **	1040-1 661 (700-1)		1040-1¾ 661 (700-1¾)	1040-2 661 (700-2)
CIRCLING	1080-1 658 (700-1)		1080-1¾ 658 (700-1¾)	1080-2 658 (700-2)

FAF to MAP 11.6 NM					
Knots	60	90	120	150	180
Min:Sec	11:36	7:44	5:48	4:38	3:52

SW-4, 22 OCT 2009 to 19 NOV 2009

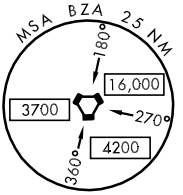


SW-4, 22 OCT 2009 to 19 NOV 2009

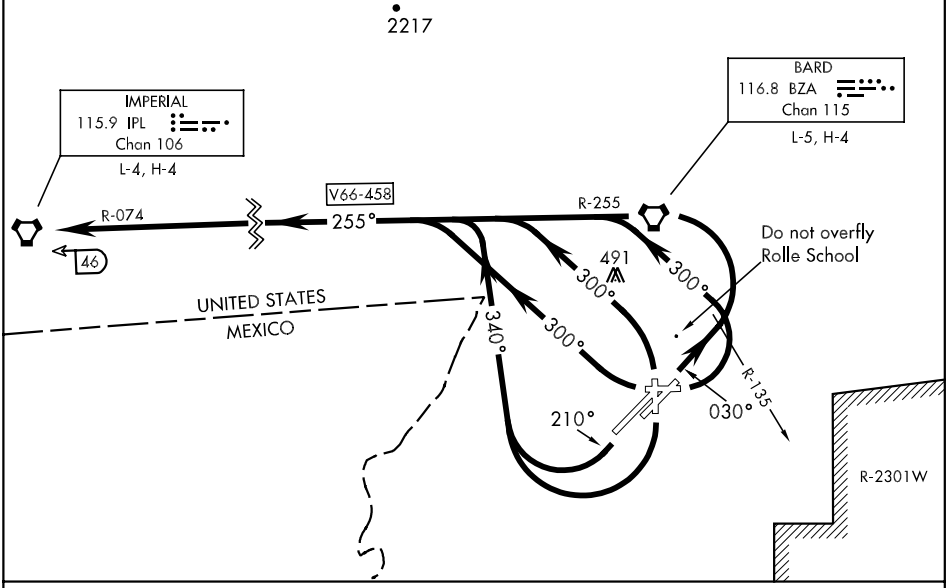
ARGUS-ONE DEPARTURE (ARGUS1 • IPL)

ATIS ★
118.8 273.2
CLNC DEL
118.0 336.4
GND CON
121.9 315.7
YUMA TOWER ★
119.3 (CTAF) L 382.8
YUMA DEP CON
125.55 281.0

SHL-511 [USN]



RADAR REQUIRED



DEPARTURE ROUTE DESCRIPTION

T

ALL RWY: Cross the Departure End of Runway at or above 35' AGL.

TAKE-OFF RWY 3L/R: Fly heading 030° until passing BZA R-135, then turn left direct BZA VORTAC, then .....

TAKE-OFF RWY 8: Turn left heading 300° to join and.....

TAKE-OFF RWY 17: Turn right heading 340° to join and.....

TAKE-OFF RWY 21L/R: Fly heading 210° until passing southwest field boundary; then turn right heading 340° to join and.....

TAKE-OFF RWY 26: Turn right heading 300° to join and.....

TAKEOFF RWY 35: Turn left heading 300° to join and.....

Fly BZA R-255 and IPL R-074 to IPL VORTAC, then via assigned route. Maintain assigned altitude. Expect clearance to filed altitude/flight level 10 minutes after departure.

ARGUS-ONE DEPARTURE (ARGUS1 • IPL)
YUMA, ARIZONA

CARGO-SIX DEPARTURE (CARGO6•CARGO)

YUMA, ARIZONA

ATIS★
118.8 273.2
CLNC DEL
118.0 336.4
GND CON
121.9 315.7
YUMA TOWER★
119.3 (CTAF) Ⓛ 382.8
YUMA DEP CON
125.55 281.0

SHL-511 [USN]

BLYTHE
117.4 BLH
Chan 121
L-4-5, H-4

MSA BZA 25 NM
180°
16,000
3700
270°
4200
360°

R-175 (15)
15
PALVO
R-180
(12)
27

This departure will be filed/assigned for aircraft not carrying external ordance when radar services are not available.

2700
CARGO
5000
QURTT
R-305
355°
(7)
2663
R-050
R-290
(10)
(5)
(3)
20
305°
(9)
CANAT
11
SALUD
3600
8
8
BARD
116.8 BZA
Chan 115
L-5, H-4
26
SAHIL
R-2512
OGILL
17
110°
(17)
(3)
IMPERIAL
115.9 IPL
Chan 106
L-4, H-4
180°
(15)
52
230°
(26)
R-255
(22)
V66-458
HEEDS
8000
Do not overfly Rolle School
491
8
R-135
030°
NACAT
210°
(7)
UNITED STATES
MEXICO
350°
(7)
BZA 14 Arc
R-170
R-2301W

NOTE: Chart not to scale

(Continued on following page)

CARGO-SIX DEPARTURE (CARGO6•CARGO)

YUMA, ARIZONA

SHL-511 [USN]

DEPARTURE ROUTE DESCRIPTION

(Continued)

ALL RWY: Cross the Departure End of Runway at or above 35' AGL.

TAKE-OFF RWY 3L/R: Climb heading 030° until crossing BZA R-135, turn left direct BZA VORTAC, then.....

TAKE-OFF RWY 8: Turn left direct BZA VORTAC, then.....

TAKE-OFF RWY 17, 21L/R: Climb heading 210° to join and arc S on the BZA 14 mile arc to join and fly BZA R-170 to BZA VORTAC, then.....

TAKE-OFF RWY 26: Turn right direct BZA VORTAC, then.....

TAKE-OFF RWY 35: Direct BZA VORTAC, then.....

Fly BZA R-305 to CARGO. Cross SALUD at or above 3600. Cross CARGO at or above 5000.

BARD TRANSITION(CARGO6•BZA): At CARGO, turn left to join and fly BZA R-290 to BZA VORTAC.

BLYTHE TRANSITION(CARGO6•BLH): At CARGO, turn right to join and fly BLH R-175 to BLH VORTAC.

HEEDS TRANSITION(CARGO6•HEEDS): At CARGO, turn left to join and fly BLH R-180 to HEEDS. Cross HEEDS at or above 8000.

IMPERIAL TRANSITION(CARGO6•IPL): At CARGO, turn left to join and fly IPL R-050 to IPL VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

GLAMIS-SIX DEPARTURE (GLAMS6•CARGO)

ATIS ★
118.8 273.2
CLNC DEL
118.0 336.4
GND CON
121.9 315.7
YUMA TOWER ★
119.3 (CTAF) Ⓛ 382.8
YUMA DEP CON
125.55 281.0

This departure will be filed/assigned for aircraft carrying external ordance. Prior to crossing BRYGG DME fix, flight path adjustments to avoid overflight of congested areas are authorized.

This departure will be filed/assigned for aircraft as a preferential departure route when radar services are available.

SHL-511 [USN]

BLYTHE
117.4 BLH
Chan 121
L-4-5, H-4

MSA NYL 25 NM
140° 16,000
230° 3700
4200
050° 1800
320°

R-175 (15) 15 PALVO
R-180 (12) 27 QURTT
2700
R-317
355° (7) 2663
R-050
(10) R-290 (5) (3) CARGO 5000
26 (29) 317° LANAC 2217
SAHIL 110° (17) 18 BRYGG 3600
OGILL 180° (15) 52 V66-458 R-255 (22) PNOBB 13 280°
R-2512
IMPERIAL
115.9 IPL
Chan 106
L-4, H-4
230° (26)
UNITES STATES
MEXICO
HEEDS
8000
BARD
116.8 BZA
Chan 115
L-5, H-4
Do not overfly Rolle School
6 4
R-2301W
YUMA
Chan 84 NYL

(Continued on following page)

SW-4, 22 OCT 2009 to 19 NOV 2009

GLAMIS-SIX DEPARTURE (GLAMS6•CARGO)

SHL-511 [USN]

DEPARTURE ROUTE DESCRIPTION (CONTINUED)

ALL RWY: Cross the Departure End of Runway at or above 35' AGL.

TAKE-OFF RWY 3L/R: Climb heading 030° to NYL 4 DME, turn left heading 280° to BRYGG, then fly NYL R-317 to CARGO. Cross CARGO at or above 5000.

TAKE-OFF RWY 8, 35: Turn left direct BRYGG, then fly NYL R-317 to CARGO. Cross CARGO at or above 5000.

TAKE-OFF RWY 17, 21L/R and 26: Turn right direct PNOBB, then fly NYL R-317 to CARGO. Cross BRYGG at or above 3600. Cross CARGO at or above 5000.

BARD TRANSITION (GLAMS6 • BZA): At CARGO turn left to join and fly BZA R-290 to BZA VORTAC.

BLYTHE TRANSITION (GLAMS6 • BLH): At CARGO turn right to join and fly BLH R-175 to BLH VORTAC.

HEEDS TRANSITION (GLAMS6 • HEEDS): At CARGO turn left to join and fly BLH R-180 to HEEDS. Cross HEEDS at or above 8000.

IMPERIAL TRANSITION (GLAMS6 • IPL): At CARGO turn left to join and fly IPL R-050 to IPL VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 3L

TACAN	APCH CRS	Rwy ldg	13,300
NYL	035°	TDZE	198
Chan 84		Arpt Elev	213

JAL-511 [USN]

YUMA MCAS/YUMA INTL (KNYL)

MISSED APPROACH: Climb to 4000 on NYL TACAN R-020, join and Arc N on the 10 mile Arc to PRSON and hold.

ATIS★	YUMA APP CON	YUMA TOWER★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) 382.8	121.9 315.7	118.0 336.4	

* Prior to IAF verify navigation NYL TACAN Chan 84

Request holding from Los Angeles ARTCC prior to frequency change to MCAS Yuma Approach Control.

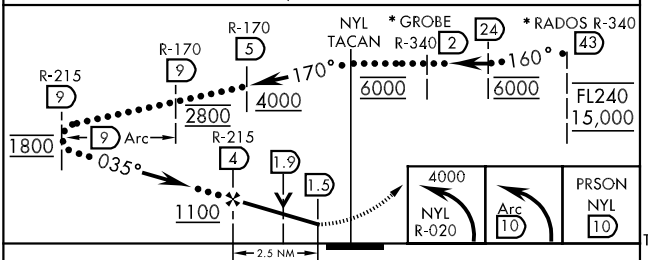
CAUTION:
R-2507 and R-2512 located approximately 28 NM NW of NYL TACAN.

BLYTHE
IMPERIAL
PRSON NYL 10
*(IAF) RADOS NYL 43
*(ALT IAF) GROBE NYL 2
NYL 53
NYL 24
NYL 15
NYL 10 Arc
NYL 7
NYL 4
NYL 9
NYL 5
NYL 9 Arc
NYL 9
R-340
154° (14)
340°
160°
158° (55)
034° (55)
1930
338° (36)
2220
1523
493
273
538
344
479
174° (5)
Hold at 5000 min
R-2306E
R-020
R-2307
BARD 116.8 BZA Chan 115
R-2301W
2744
YUMA Chan 84 NYL
20 NM
HIGH ALTITUDE FACILITIES
UNITED STATES
MEXICO
R-215
LR-202
R-170
035°
170°

MSA NYL 25 NM
140° 16,000
230° 4200
320° 1800
050° 3700

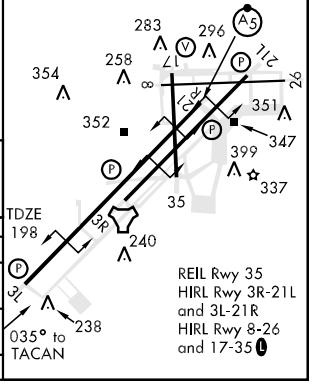
(c) 090 (c)
270
(a) 340 (b)

EMERG SAFE ALT 100 NM 17,000



ELEV 213

3L-21R	13,300 X 200
3R-21L	9239 X 150
8-26	6146 X 150
17-35	5710 X 150



CATEGORY	C	D	E
S-3L	540-1 342 (400-1)	540-1¼ 342 (400-1¼)	
CIRCLING	700-1½ 484 (500-1½)	780-2 564 (600-2)	800-2 584 (600-2)
S-PAR 3L	298-½ 100 (100-½) GS 3.00°		

SW-4, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 21R

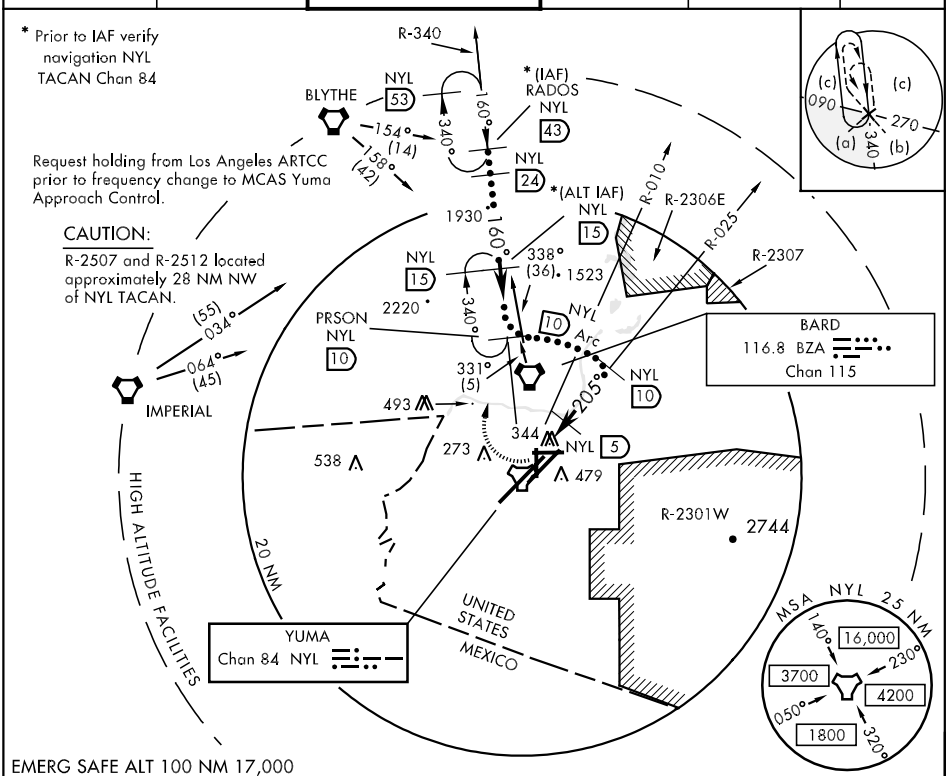
TACAN	APCH CRS	Rwy ldg / TDZE / Arpt Elev	JAL-511 [USN]	YUMA MCAS/YUMA INTL (KNYL)
NYL Chan 84	205°	13,300 / 195 / 213		

** When ALS inop, increase vis ½ mile.

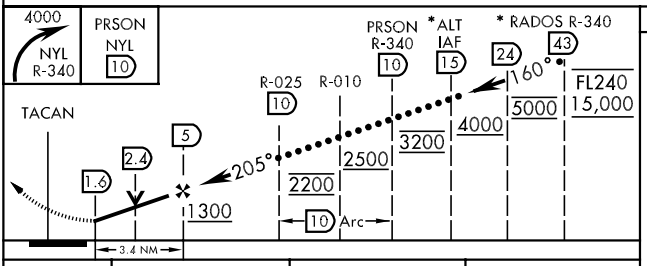
MALSR (A5)

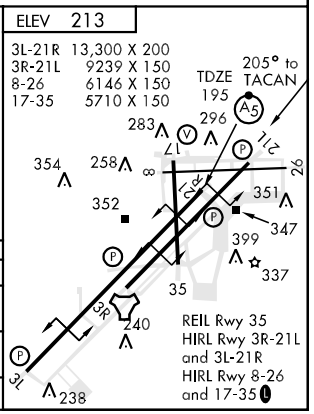
MISSED APPROACH: Climbing right turn to 4000 via NYL TACAN R-340 to PRSON and hold.

ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) L 382.8	121.9 315.7	118.0 336.4	



SW-4, 22 OCT 2009 to 19 NOV 2009





CATEGORY	C	D	E
S-21R **	620-¾ 425 (500-¾)		620-1 425 (500-1)
CIRCLING	700-1½ 484 (500-1½)	780-2 564 (600-2)	800-2 584 (600-2)
S-PAR 21R**	295-½ 100 (100-½)		GS 3.00°

VORTAC BZA 116.8 Chan 115	APCH CRS 167°	Rwy ldg 5710 TDZE 199 Arpt Elev 213

HI-VOR/DME or TACAN RWY 17

JAL-511 [USN]

YUMA MCAS/YUMA INTL (KNYL)

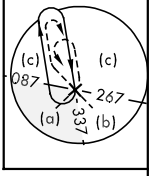
MISSED APPROACH: Climbing right turn to 4000 direct BZA VORTAC, then fly R-337 to BRIDG and hold.

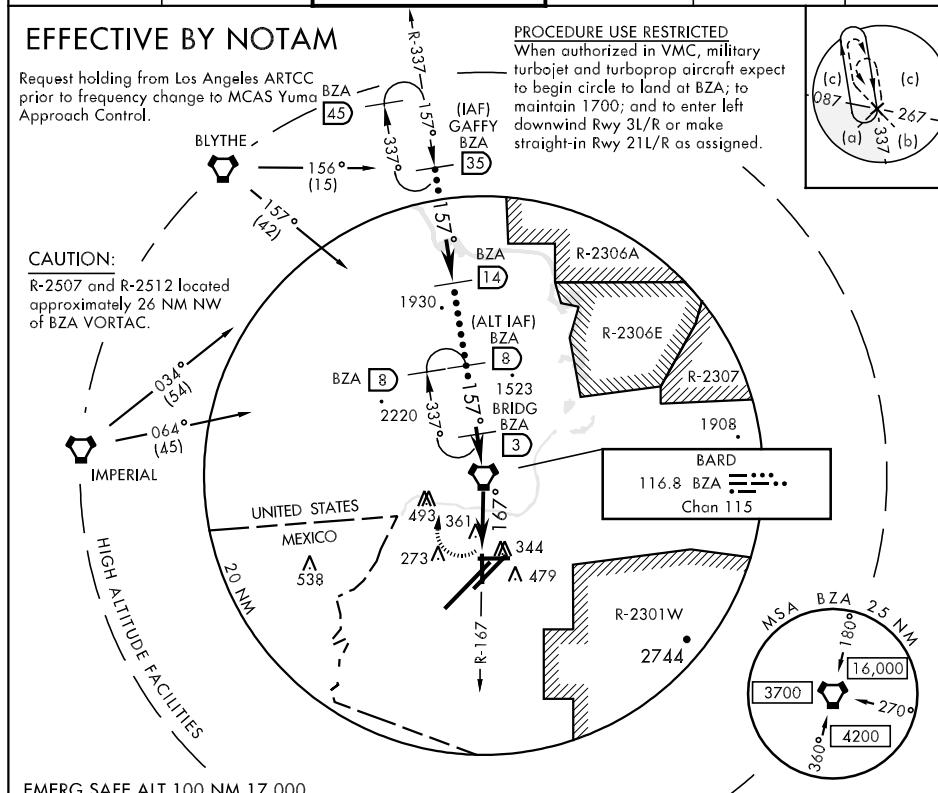
ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) 382.8	121.9 315.7	118.0 336.4	

EFFECTIVE BY NOTAM

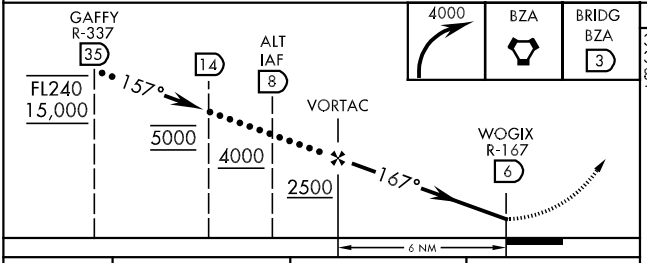
Request holding from Los Angeles ARTCC prior to frequency change to MCAS Yuma Approach Control.

PROCEDURE USE RESTRICTED
When authorized in VMC, military turbojet and turboprop aircraft expect to begin circle to land at BZA; to maintain 1700; and to enter left downwind Rwy 3L/R or make straight-in Rwy 21L/R as assigned.

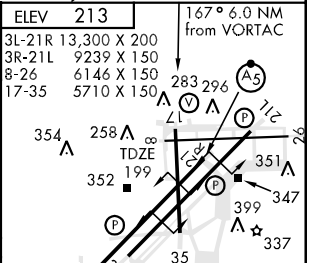




EMERG SAFE ALT 100 NM 17,000



CATEGORY	C	D	E
S-17	680-1¼ 481 (500-1¼)	680-1½ 481 (500-1½)	680-1¾ 481 (500-1¾)
CIRCLING	700-1½ 484 (500-1½)	780-2 564 (600-2)	800-2 584 (600-2)



SW-4, 22 OCT 2009 to 19 NOV 2009

ILS or LOC RWY 21R

YUMA MCAS/YUMA INTL (KNYL)

LOC I-YUM	APCH CRS	Rwy ldg / TDZE / Arpt Elev
108.3	211°	13,300 / 195 / 213

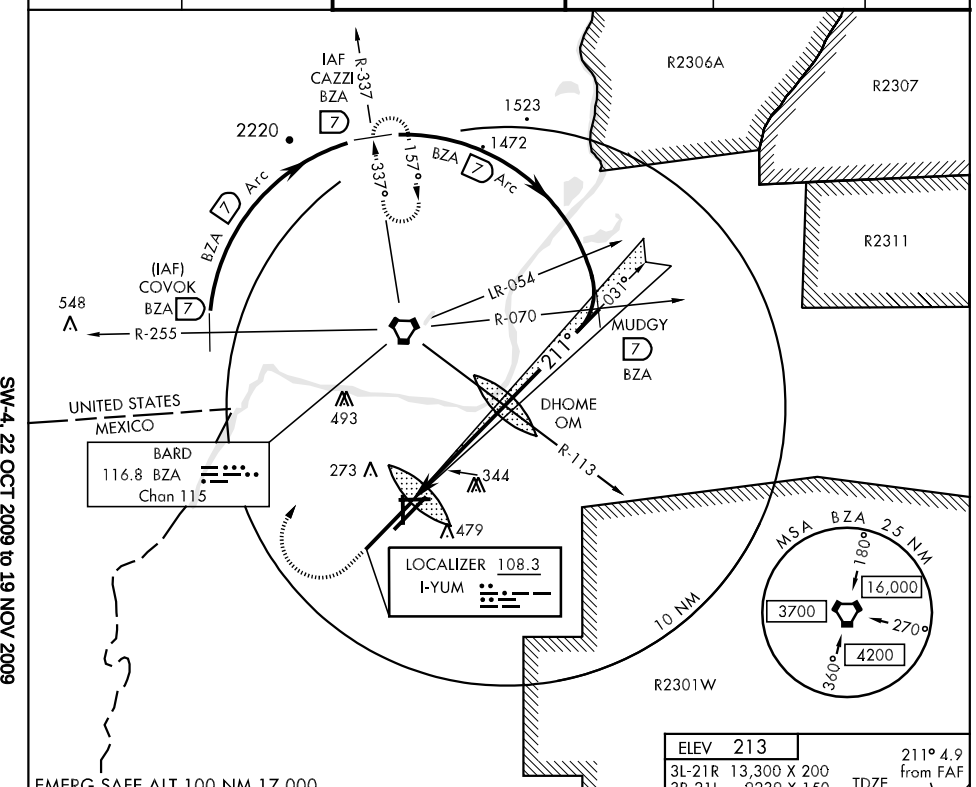
AL-511 [USN]

* When ALS inop, increase vis (ILS) to ¾ mile; (LOC) CAT AB to 1 mile, CAT CD to 1¼ mile.

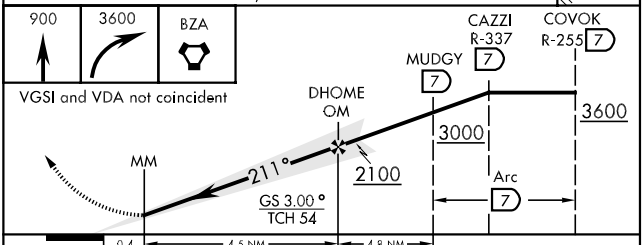
MALSR

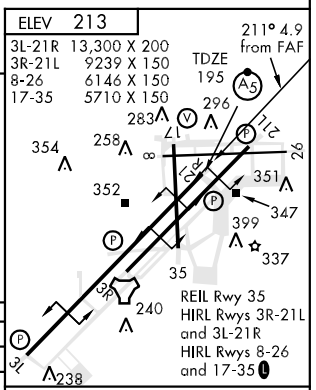
MISSED APPROACH: Climb to 900, then climbing right turn to 3600 direct BZA VORTAC and BZA R-337 to CAZZI/BZA 7 DME and hold.

ATIS *	YUMA APP CON	YUMA TOWER *	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) 382.8	121.9 315.7	118.0 336.4	



EMERG SAFE ALT 100 NM 17,000



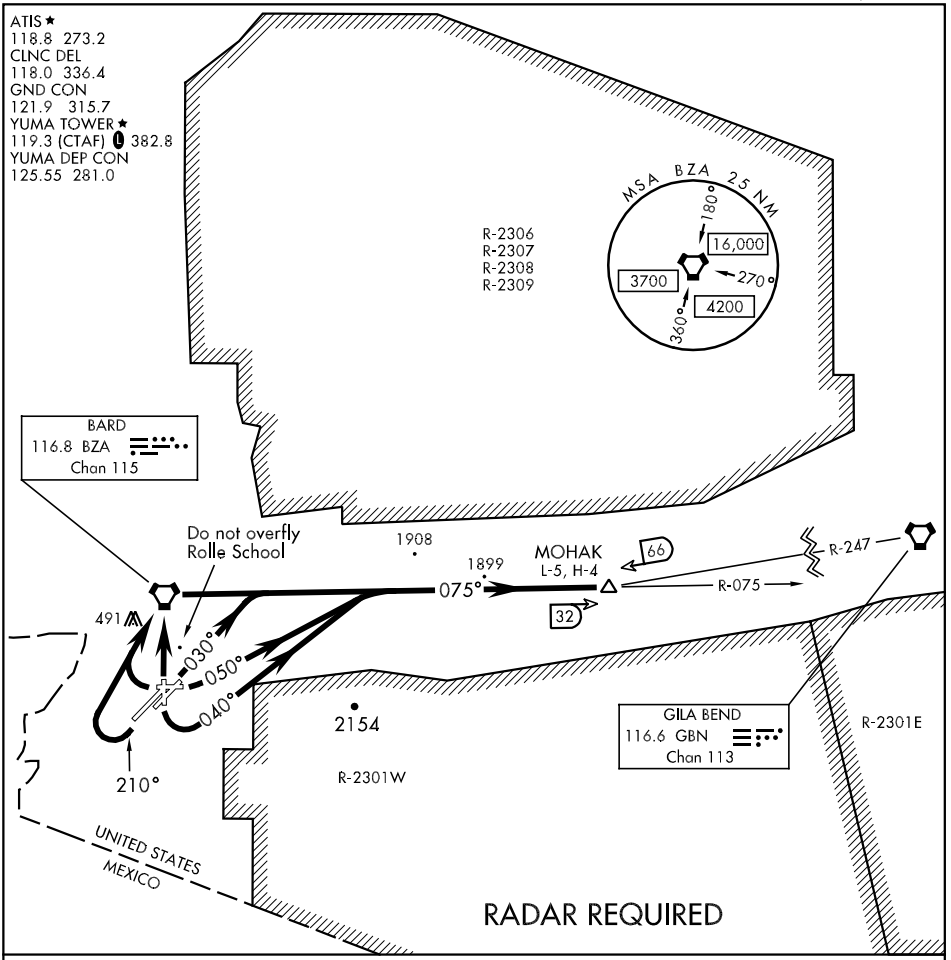


CATEGORY	A	B	C	D
S-ILS 21R *	395-½		200 (200-½)	
S-LOC 21R *	600-½	405 (400-½)	600-¾	405 (400-¾)
CIRCLING	700-1	484 (500-1)	700-1½	484 (500-1½)
			780-2	564 (600-2)
S-PAR 21R	295-½ 100	(100-½) GS 3.0°		

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

SW-4, 22 OCT 2009 to 19 NOV 2009



SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

ALL RWY: Cross the Departure End of Runway at or above 35′ AGL.

TAKE-OFF RWY 3L/R: Fly heading 030° to join and.....

TAKE-OFF RWY 8: Turn left heading 050° to join and.....

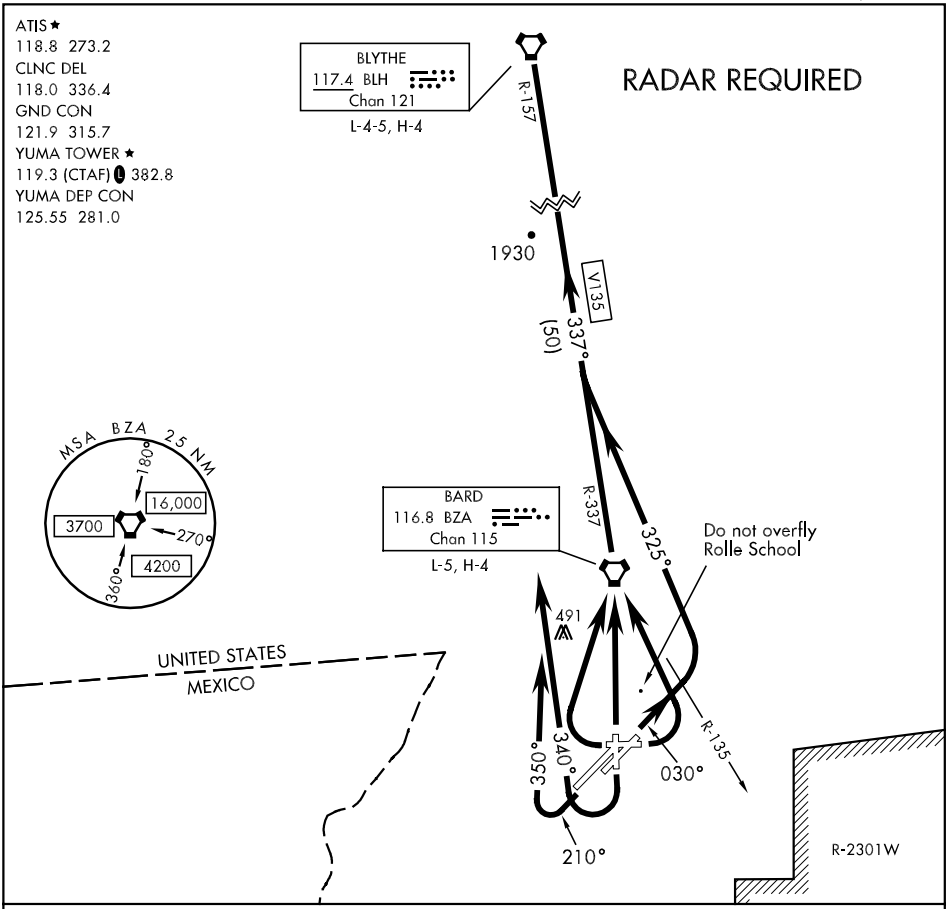
TAKE-OFF RWY 17: Turn left heading 040° to join and.....

TAKE-OFF RWY 21L/R: Fly heading 210° until passing southwest field boundary; then turn right direct BZA VORTAC, then.....

TAKE-OFF RWY 26: Turn right direct BZA VORTAC, then.....

TAKE-OFF RWY 35: Climb BZA VORTAC, then.....

Fly BZA R-075 to MOHAK INT, then via assigned route. Maintain assigned altitude. Expect clearance to filed altitude/flight level 10 minutes after departure.



DEPARTURE ROUTE DESCRIPTION

ALL RWY: Cross the Departure End of Runway at or above 35' AGL.

TAKE-OFF RWY 3L/R: Fly heading 030° until passing BZA R-135; then turn left heading 325° to join and.....

TAKE-OFF RWY 8: Turn left direct BZA VORTAC; then.....

TAKE-OFF RWY 17: Turn right heading 340° to join and.....

TAKE-OFF RWY 21L/R: Fly heading 210° until passing southwest field boundary; then turn right heading 350° to join and.....

TAKE-OFF RWY 26: Turn right direct BZA VORTAC; then.....

TAKE-OFF RWY 35: Direct BZA VORTAC then.....

Fly BZA R-337 and BLH R-157 to BLH VORTAC, then via assigned route. Maintain assigned altitude. Expect clearance to filed altitude/flight level 10 minutes after departure.

APCH CRS	Rwy Idg	TDZE	Arpt Elev
168°	5710	199	213

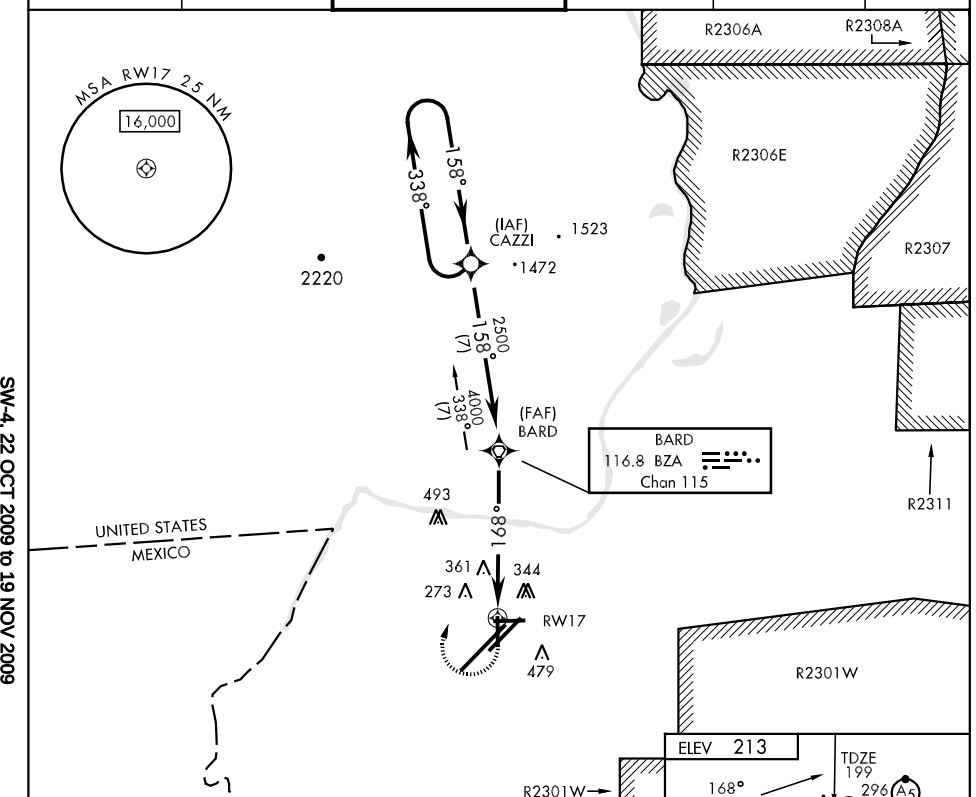
AL-511 [USN]

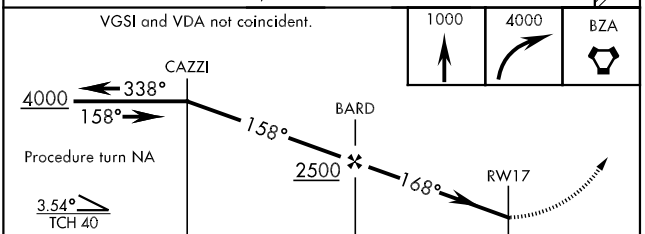
RNAV (GPS) RWY 17

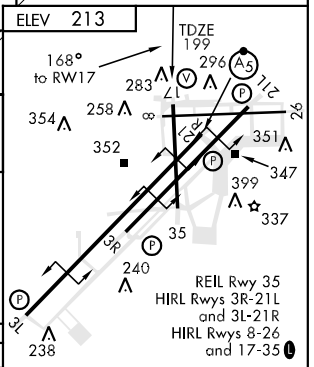
YUMA MCAS/YUMA INTL (KNYL)

MISSED APPROACH: Climb to 1000, then climbing right turn to 4000 direct BZA VORTAC, and crs 338° to CAZZI and hold.

ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) 382.8	121.9 315.7	118.0 336.4	







CATEGORY	A	B	C	D
LNAV MDA	680-1 481 (500-1)		680-1¼ 481 (500-1¼)	680-1½ 481 (500-1½)
CIRCLING	700-1 484 (500-1)		700-1½ 484 (500-1½)	780-2 564 (600-2)

3L-21R	13,300 X 200
3R-21L	9239 X 150
8-26	6146 X 150
17-35	5710 X 150

RNAV (GPS) RWY 21R

YUMA MCAS/YUMA INTL (KNYL)

APCH CRS	Rwy ldg	13,300
211°	TDZE	195
	Arpt Elev	213

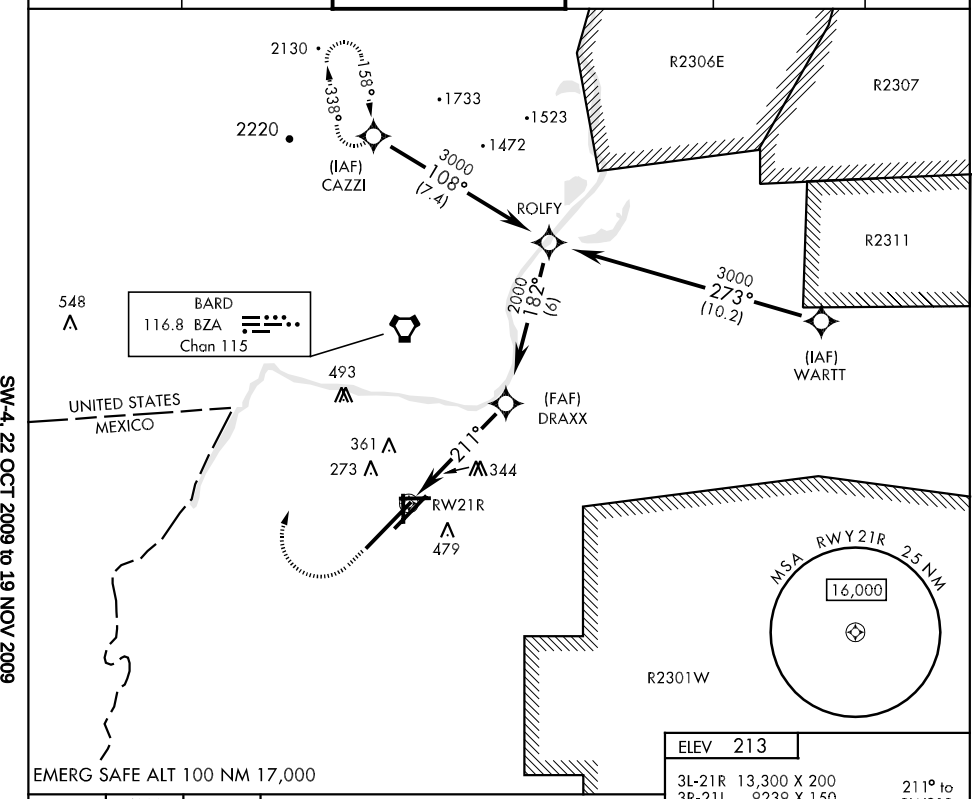
AL-511 [USN]

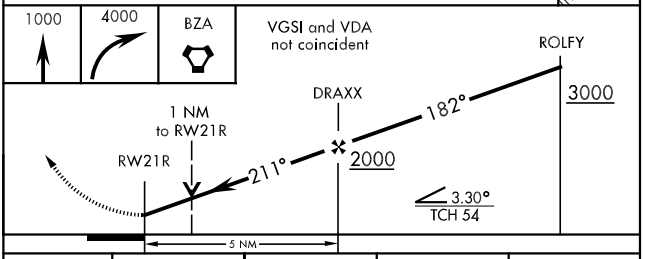
* When ALS inop, increase vis CAT AB to 1 mile, CAT CD to 1¼ miles.

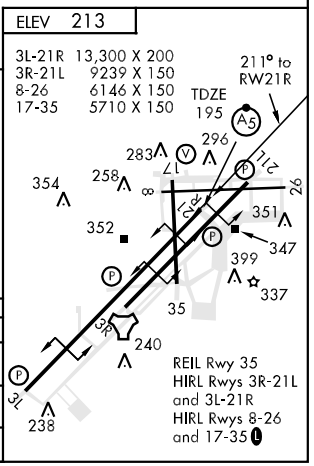
MALSR

MISSED APPROACH: Climb to 1000, then climbing right turn to 4000 direct BZA VORTAC and course 338° to CAZZI WP and hold.

ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) Ⓛ 382.8	121.9 315.7	118.0 336.4	







CATEGORY	A	B	C	D
LNAV MDA*	600-½ 405 (400-½)		600-¾ 405 (400-¾)	
CIRCLING	700-1 484 (500-1)		700-1½ 484 (500-1½)	780-2 564 (600-2)
S-PAR 21R	295-½ 100 (100-½) GS 3.0°			

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 3L

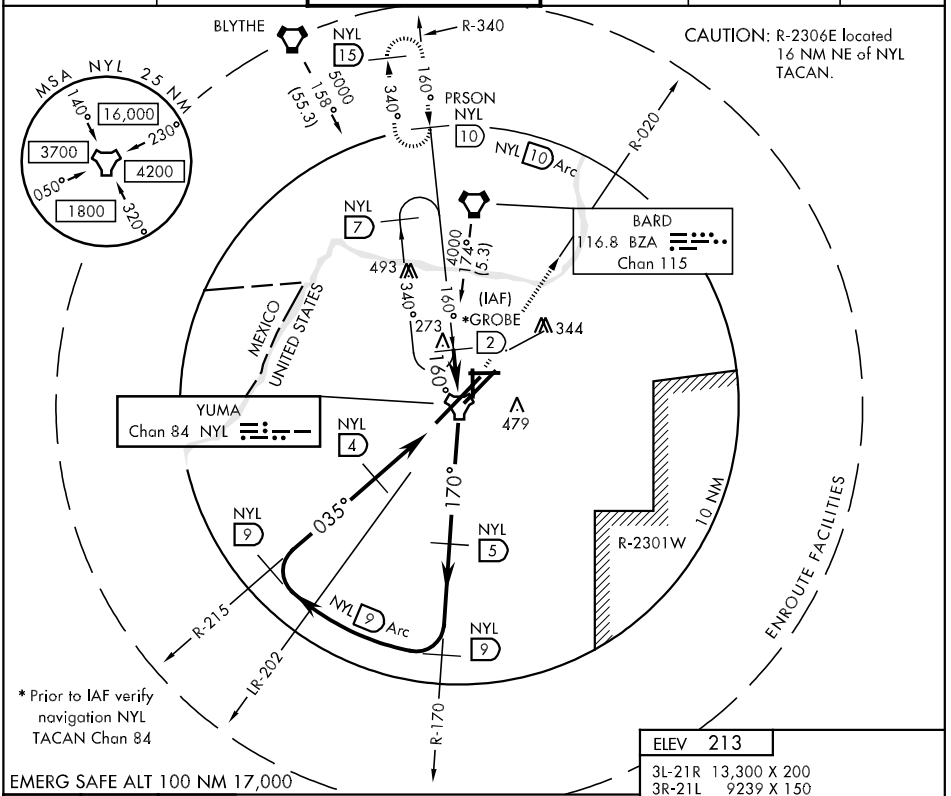
TACAN	APCH CRS	Rwy ldg	13,300
NYL	035°	TDZE	198
Chan 84		Arpt Elev	213

AL-511 [USN]

YUMA MCAS/YUMA INTL (KNYL)

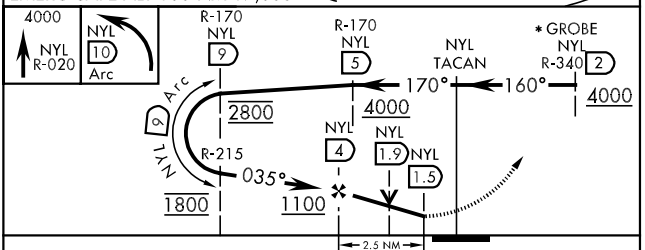
MISSED APPROACH: Climb to 4000 on NYL TACAN R-020, join and Arc N on the 10 mile Arc to PRSON and hold.

ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) L 382.8	121.9 315.7	118.0 336.4	



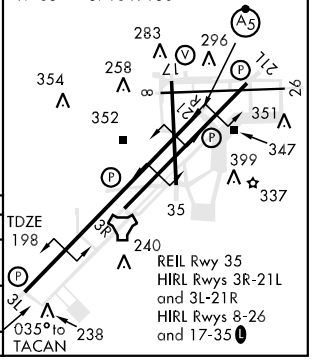
SW-4, 22 OCT 2009 to 19 NOV 2009

EMERG SAFE ALT 100 NM 17,000



ELEV 213

3L-21R	13,300 X 200
3R-21L	9239 X 150
8-26	6146 X 150
17-35	5710 X 150



CATEGORY	A	B	C	D
S-3L	540-1	342	(400-1)	540-1¼ 342 (400-1¼)
CIRCLING	700-1 484	(500-1)	700-1½ 484 (500-1½)	780-2 564 (600-2)
S-PAR 3L	298-½	100	(100-½)	GS 3.0°

TACAN RWY 21R

TACAN	APCH CRS	Rwy ldg	13,300
NYL	205°	TDZE	195
Chan 84		Arpt Elev	213

AL-511 [USN]

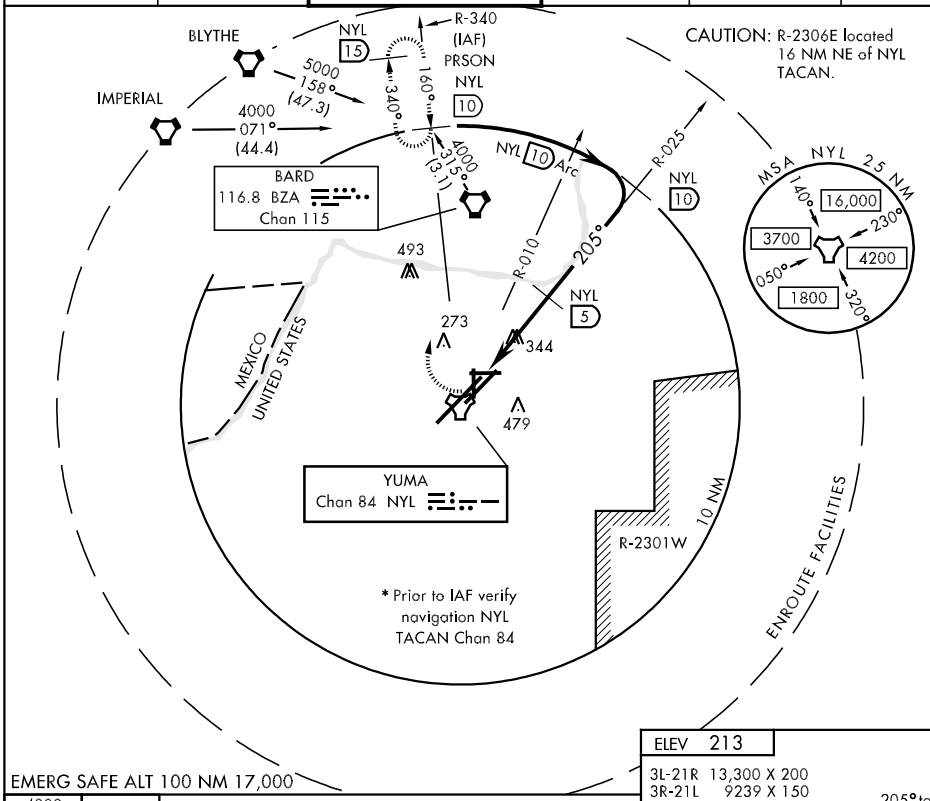
YUMA MCAS/YUMA INTL (KNYL)

** When ALS inop, increase vis ½ mile.

MALSR

MISSED APPROACH: Climbing right turn to 4000 via NYL TACAN R-340 to PRSON and hold.

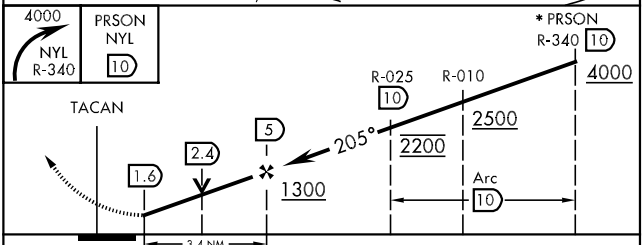
ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) L 382.8	121.9 315.7	118.0 336.4	



EMERG SAFE ALT 100 NM 17,000

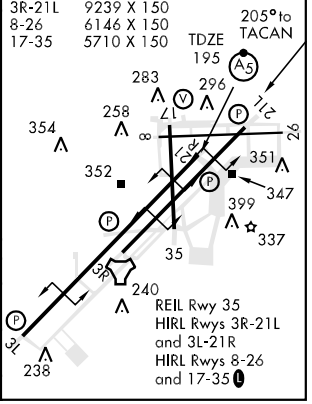
4000 NYL R-340

PRSON NYL 10



ELEV 213

3L-21R	13,300 X 200
3R-21L	9239 X 150
8-26	6146 X 150
17-35	5710 X 150



CATEGORY	A	B	C	D
S-21R **	620-½ 425 (500-½)		620-¾ 425 (500-¾)	
CIRCLING	700-1 484 (500-1)		700-1½ 484 (500-1½)	780-2 564 (600-2)
S-PAR 21R**	295-½ 100 (100-½)		GS 3.0°	

VOR/DME or TACAN Y RWY 17

VORTAC BZA	APCH CRS	Rwy ldg 5710
116.8	167°	TDZE 199
Chan 115		Arpt Elev 213

AL-511 [USN]

YUMA MCAS/YUMA INTL (KNYL)

MISSED APPROACH: Climbing right turn to 4000 direct BZA VORTAC, then fly R-337 to BRIDG and hold.

ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) L 382.8	121.9 315.7	118.0 336.4	

PROCEDURE USE RESTRICTED

When authorized in VMC, military turbojet and turboprop aircraft expect to begin circle to land at BZA; to maintain 1700'; and to enter left downwind Rwy 3L/R or make straight-in Rwy 21L/R as assigned.

BLYTHE

5000
157°
(42.2)

R-337

(IAF)
BZA
8

1523
1472

BZA
8

IMPERIAL

4000
064°
(45.5)

2220

R-2306E

157°
337°

BRIDG
BZA
3

EFFECTIVE BY NOTAM

UNITED STATES
MEXICO

493

167°

BARD
116.8 BZA
Chan 115

361
273
344

R-2301W

479

10 NM

ENROUTE FACILITIES

R-167

MSA BZA 25 NM
180°
16,000
3700
270°
4200
360°

EMERG SAFE ALT 100 NM 17,000

R-337
8

4000

157°

VORTAC

2500

167°

WOGIX
6

4000
BZA

6 NM

CATEGORY	A		B	C	D
S-17	680-1	481	(500-1)	680-1¼ 481 (500-1¼)	680-1½ 481 (500-1½)
CIRCLING	700-1	484	(500-1)	700-1½ 484 (500-1½)	780-2 564 (600-2)

ELEV 213

167° 6.0 NM from VORTAC

3L-21R	13,300 X 200
3R-21L	9239 X 150
8-26	6146 X 150
17-35	5710 X 150

283
296
258
354
TDZE
199
352
351
347
399
337
35
240
238

REIL Rwy 35
HIRL Rwys 3R-21L and 3L-21R
HIRL Rwys 8-26 and 17-35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME or TACAN Z RWY 17

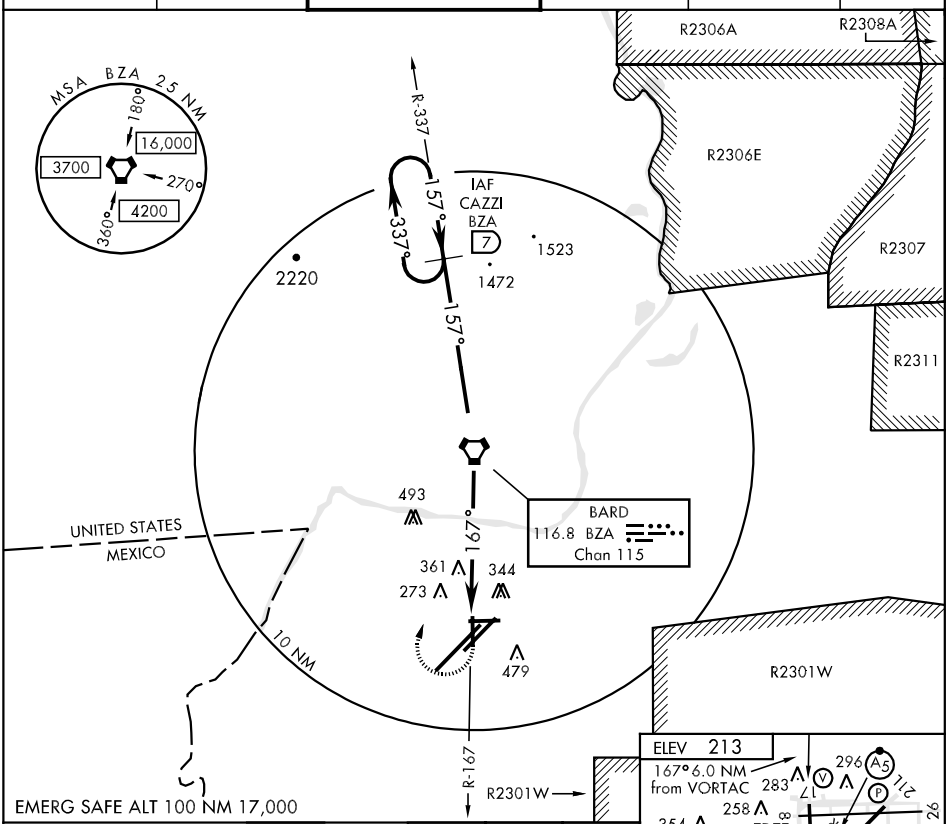
VORTAC BZA 116.8 Chan 115	APCH CRS 167°	Rwy ldg 5710 TDZE 199 Arpt Elev 213

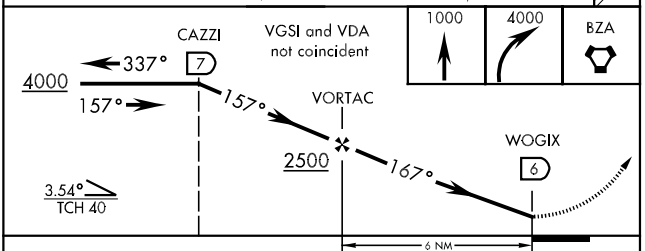
AL-511 [USN]

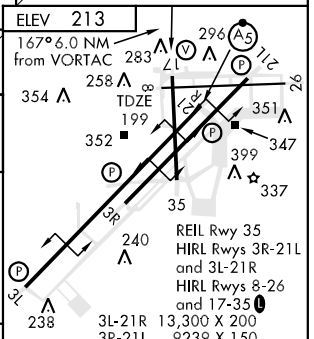
YUMA MCAS/YUMA INTL (KNYL)

MISSED APPROACH: Climb to 1000, then climbing right turn to 4000 direct BZA VORTAC and BZA R-337 to CAZZI/BZA 7 DME and hold.

ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) 382.8	121.9 315.7	118.0 336.4	







CATEGORY	A	B	C	D
S-17	680-1 481 (500-1)		680-1¼ 481 (500-1¼)	680-1½ 481 (500-1½)
CIRCLING	700-1 484 (500-1)		700-1½ 484 (500-1½)	780-2 564 (600-2)

FAF to MAP 6.0 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

YUMA, ARIZONA

VOR/DME RNAV RWY 21R

AL-511 [USN]

YUMA MCAS/YUMA INTL (KNYL)

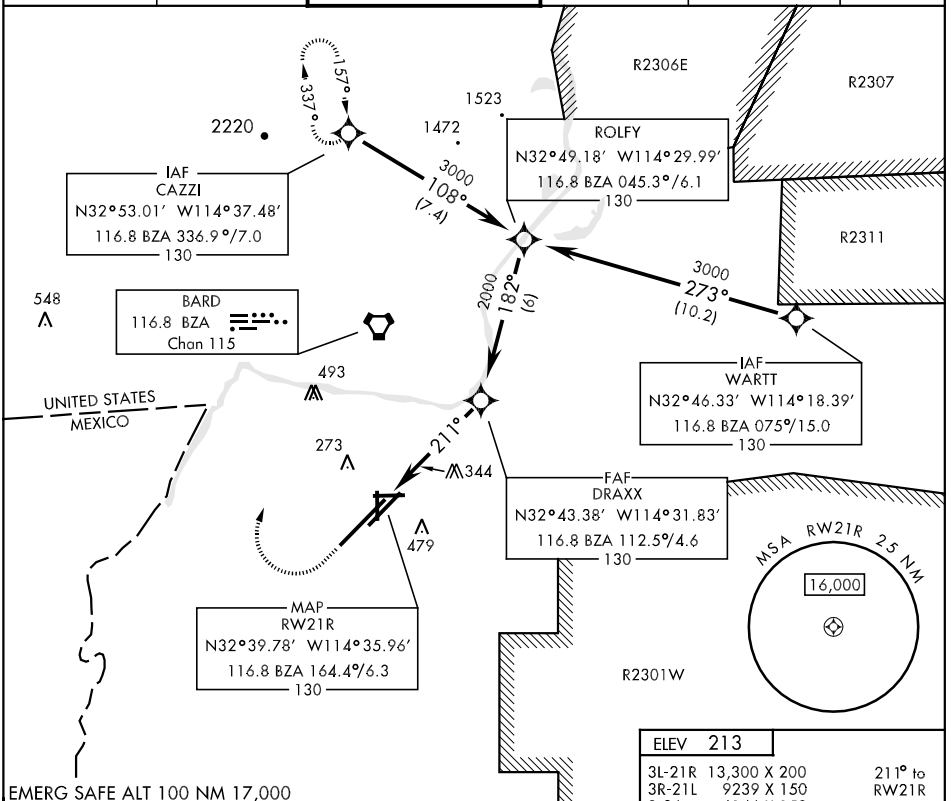
VORTAC BZA	APCH CRS	Rwy ldg 13,300
116.8	211°	TDZE 195
Chan 115		Arpt Elev 213

* When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles.

MALSR

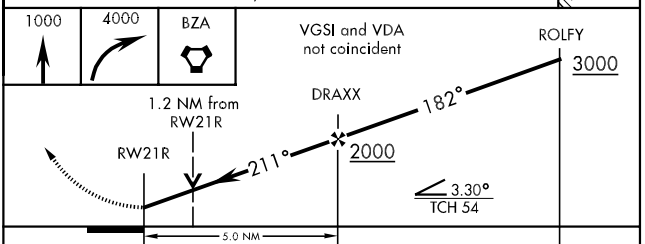
MISSED APPROACH: Climb to 1000, then climbing right turn to 4000 direct BZA VORTAC and course 338° to CAZZI WP and hold.

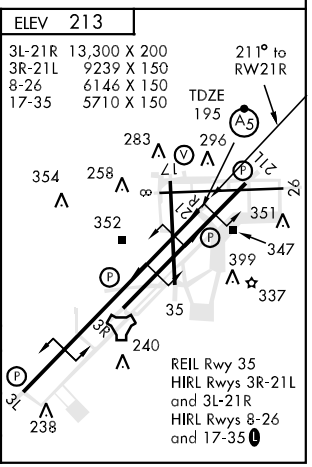
ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) 382.8	121.9 315.7	118.0 336.4	



EMERG SAFE ALT 100 NM 17,000

1000	4000	BZA





CATEGORY	A	B	C	D
S-21R*	660-½ 465	(500-½)	660-¾ 465 (500-¾)	660-1 465 (500-1)
CIRCLING	700-1 484	(500-1)	700-1½ 484 (500-1½)	780-2 564 (600-2)
S-PAR 21R	295-½ 100	(100-½) GS 3.0°		

SW-4, 22 OCT 2009 to 19 NOV 2009

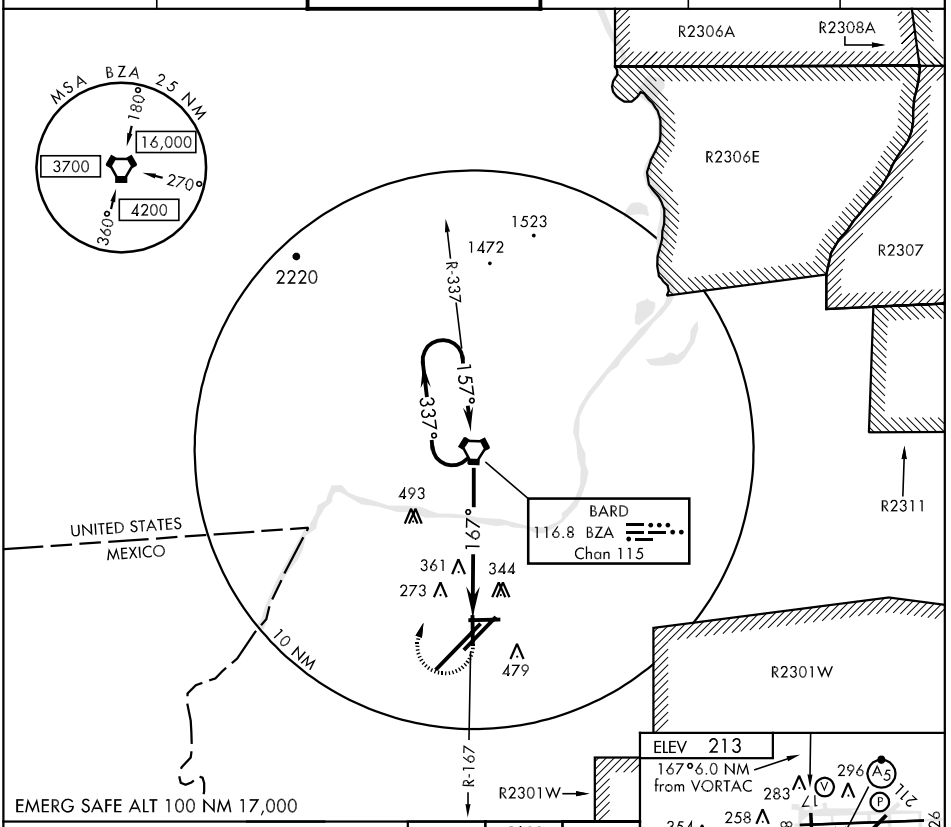
VORTAC BZA 116.8 Chan 115	APCH CRS 167°	Rwy ldg 5710 TDZE 199 Arpt Elev 213	AL-511 [USN]

VOR RWY 17

YUMA MCAS/YUMA INTL (KNYL)

MISSED APPROACH: Climb to 1000, then climbing right turn to 2800 direct BZA VORTAC and hold.

ATIS ★	YUMA APP CON	YUMA TOWER ★	GND CON	CLNC DEL	ASR/PAR
118.8 273.2	124.7 374.8	119.3 (CTAF) L 382.8	121.9 315.7	118.0 336.4	



CATEGORY	A	B	C	D
S-17	680-1	481 (500-1)	NA	
CIRCLING	700-1	484 (500-1)	NA	

FAF to MAP 6.0 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

SW-4, 22 OCT 2009 to 19 NOV 2009

INSTRUMENT APPROACH PROCEDURE CHARTS

AIFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

ARCATA-EUREKA, CA

ARCATA ..... **ILS Rwy 32[13]**
ILS or LOC/DME Rwy 32[23]
RNAV (GPS) Rwy 1[34]
RNAV (GPS) Rwy 14[35]
RNAV (GPS) Rwy 32[35]
VOR/DME Rwy 14[3]

[1]LOC, NA.
[2]ILS, 700-2.
[3]NA when local weather not available.
[4]Categories A, B, 1000-2½; Category C, 1000-2¾; Category D, 1000-3.
[5]Category D, 800-2¼.

BISHOP, CA

EASTERN SIERRA RGNL .... **LDA/DME Rwy 16[1]**
RNAV (GPS) Y Rwy 12[23]
RNAV (GPS) Z Rwy 12[24]
VOR or GPS-A,3300-3[5]
VOR/DME or GPS-B[6]

[1]Categories A,B, 2300-2; Categories C,D, 2300-3.
[2]NA when local weather not available.
[3]Categories A, B 2500-2; Category C, 2500-3.
[4]Categories A, B, 2300-2; Category C, 2300-3.
[5]NA when Bishop altimeter setting not available.
[6]Categories A,B, 3200-2; Categories C,D, 3200-3.

CHICO, CA

CHICO MUNI ..... **VOR/DME Rwy 13L**
VOR/DME Rwy 31R

NA when control tower closed except for operators with approved weather reporting service.

CONCORD, CA

BUCHANAN FIELD ..... **LDA Rwy 19R**
RNAV (GPS) Rwy 19R[1]

NA when control tower closed.
[1]Categories A, B, 1000-2; Categories C,D, 1000-3.

NAME — ALTERNATE MINIMUMS

CRESCENT CITY, CA

JACK MC NAMARA FIELD ..... **RNAV (GPS) Rwy 11**

NA when local weather not available.

DAVIS WOODLAND WINTERS, CA

YOLO COUNTY ..... **RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34

NA when local weather not available.

FRESNO, CA

FRESNO YOSEMITE INTL ..... **ILS or LOC/DME Rwy 29R**
LOC Rwy 11L
VOR/DME or TACAN Rwy 11L
VOR/DME or TACAN Rwy 29R

Category E, 900-2¾.

HANFORD, CA

HANFORD MUNI ..... **RNAV (GPS) Rwy 32**
VOR-A

NA when local weather not available.

HAYWARD, CA

HAYWARD EXECUTIVE ..... **LOC/DME Rwy 28L[1]**
RNAV (GPS) Y Rwy 28L[2]
RNAV (GPS) Z Rwy 28L[2]
VOR or GPS-A[3]

[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Category C, 800-2¼; Category D, 800-2½.

HOLLISTER, CA

HOLLISTER MUNI ..... **RNAV (GPS) Rwy 31**

NA when local weather not available.

LIVERMORE, CA

LIVERMORE MUNI ..... **ILS Rwy 25R**

NA when control tower closed.
Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

MADERA, CA

MADERA MUNI ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

MARYSVILLE, CA

YUBA COUNTY ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

MERCED, CA

CASTLE ..... **ILS or LOC/DME Rwy 31**
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 31
VOR/DME Rwy 31
NA when local weather not available.

MERCED RGNL/MACREADY
FIELD ..... **ILS or LOC Rwy 30**[1]
LOC BC Rwy 12[1]
RNAV (GPS) Rwy 30[2]
VOR Rwy 30[2]
[1]NA when class E airspace not in effect.
[2]NA when local weather not available.

MODESTO, CA

MODESTO CITY-COUNTY-HARRY
SHAM FIELD ..... **ILS or LOC/DME Rwy 28R**[1]
RNAV (GPS) Rwy 28R
NA when local weather not available.
[1]NA when control tower closed.

MONTEREY, CA

MONTEREY
PENINSULA ..... **ILS or LOC Rwy 10R**[12]
LOC/DME Rwy 28L[13]
RNAV (GPS) Rwy 10L[4]
RNAV (GPS) Y Rwy 10R[5]
RNAV (GPS) Y Rwy 28L[6]
[1]NA when control tower closed.
[2]ILS, Categories A,B,C, 800-2; Category D, 900-2¾. LOC, Category D, 900-2¾.
[3]Categories A,B, 1500-2, Categories C,D, 1500-3.
[4]Categories A,B, 1100-2.
[5]Category D 900-2¾.
[6]Categories A, B, 1400-2; Category C, 1400-3.

NAME ALTERNATE MINIMUMS

NAPA, CA

NAPA COUNTY ..... **LOC Rwy 36L**[1]
RNAV (GPS) Y Rwy 36L[23]
RNAV (GPS) Z Rwy 36L[34]
VOR Rwy 6[5]
[1]NA when control tower closed; Category D, 1200-3.
[2]Categories A, B, 1600-2; Categories C, D, 1600-3.
[3]NA when local weather not available.
[4]Category C, 900-2¾; Category D, 1200-3.
[5]Category D, 1300-3.

PALO ALTO, CA

PALO ALTO AIRPORT OF
SANTA CLARA COUNTY .... **VOR/DME Rwy 31**
NA when control tower closed.

RED BLUFF, CA

RED BLUFF MUNI ..... **RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
VOR Rwy 33
VOR/DME Rwy 15
NA when local weather not available.

REDDING, CA

REDDING MUNI ..... **ILS or LOC/DME Rwy 34**[13]
LOC/DME BC Rwy 16[23]
RNAV (GPS) Rwy 34[3]
VOR Rwy 34[4]
[1]ILS, Categories A, B, C, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]NA when control tower closed.
[3]NA when local weather not available.
[4]Category C, 800-2¼; Category D, 800-2½.

SACRAMENTO, CA

SACRAMENTO
EXECUTIVE ..... **ILS or LOC Rwy 2**
RNAV (GPS) Rwy 2
VOR Rwy 2
NA when local weather not available.

SACRAMENTO INTL ..... **ILS or LOC Rwy 34L**
RNAV (GPS) Rwy 16L
RNAV (GPS) Rwy 16R
RNAV (GPS) Rwy 34L
RNAV (GPS) Rwy 34R[1]
NA when local weather not available.
[1]Category D, 800-2¼.

SACRAMENTO MATHER . **ILS or LOC Rwy 22L**
NA when control tower closed.
Category E, 800-2½.

NAME ALTERNATE MINIMUMS

SALINAS, CA

SALINAS MUNI ..... **ILS Rwy 31[1]**
LOC/DME Rwy 31[2]
RNAV (GPS) Rwy 13[2][3]
RNAV (GPS) Y Rwy 31[2][3]
RNAV (GPS) Z Rwy 31[2][3]
VOR Rwy 13[4]

[1]ILS, Category D, 700-2¼. LOC, NA.
[2]Category D, 800-2¼.
[3]NA when local weather not available.
[4]Category D, 1000-3.

SAN FRANCISCO, CA

SAN FRANCISCO INTL ..... **ILS Rwy 19L[1]**
ILS or LOC Rwy 28L[1]
ILS Rwy or LOC 28R[1]
RNAV (GPS) Z Rwy 19L[2]
RNAV (GPS) Rwy 28L[3]
RNAV (GPS) Z Rwy 28R[4]
VOR or GPS-B,1200-3
VOR Rwy 19L[5]

[1]ILS, Category A, 800-2; Category B, 1000-2; Category C, 1100-3; Category D, 1200-3. LOC, Category B, 1000-2; Category C, 1100-3; Category D, 1200-3.
[2]Categories A, B, C, D, 1200-5.
[3]Categories A, B, 1200-2; Categories C, D, 1200-3.
[4]Categories A,B, 1100-2; Category C, 1100-3; Category D, 1200-3.
[5]Category B, 1000-2; Category C, 1100-3; Category D, 1300-3.

SAN JOSE, CA

NORMAN Y MINETA SAN JOSE INTL ..... **ILS or LOC Rwy 12R[1]**
ILS or LOC/DME Rwy 30L[1]
RNAV (GPS) Y Rwy 30L[2]
VOR Rwy 12R[1]

[1]NA when control tower closed.
[2]NA when local weather not available.

NAME ALTERNATE MINIMUMS

SANTA ROSA, CA

CHARLES M. SCHULTZ-SONOMA COUNTY ..... **ILS or LOC Rwy 32**
ILS, Categories C,D, 700-2.
NA when control tower closed.

SOUTH LAKE TAHOE, CA

LAKE TAHOE ..... **VOR/DME or GPS-A,**2600-5

STOCKTON, CA

STOCKTON METRO ..... **ILS or LOC Rwy 29R[1]**
RNAV (GPS) Rwy 11L[2]
RNAV (GPS) Rwy 29R[2]

[1]ILS,Category D, 700-2.
[2]NA when local weather not available.

UKIAH, CA

UKIAH MUNI ..... **LOC Rwy 15[1]**
RNAV (GPS)-B[2]
VOR-A[3]

[1]Categories A, B, 1800-2; Categories C, D, 1800-3.
[2]Categories A, B, 2000-2; Categories C, D, 2000-3.
[3]Categories A, B, 2800-2; Categories C, D, 2800-3.

VACAVILLE, CA

NUT TREE ..... **RNAV (GPS) Y Rwy 20**
RNAV (GPS) Z Rwy 20
VOR/DME-A

NA when local weather not available.

VISALIA, CA

VISALIA MUNI ..... **ILS or LOC/DME Rwy 30**
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 30

NA when local weather not available.

WATSONVILLE, CA

WATSONVILLE MUNI ..... **LOC Rwy 2**
NA when local weather not available.

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

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NAME — ALTERNATE MINIMUMS

BAKERSFIELD, CA
MEADOWS FIELD . **ILS or LOC/DME Rwy 30R**
VOR/DME Rwy 30R
NA when control tower closed.
NA when local weather not available.

BLYTHE, CA
BLYTHE ..... **RNAV (GPS) Rwy 26**
VOR /DME-A
VOR/DME Rwy 26
Category D, 900-2¾.

BURBANK, CA
BOB HOPE ..... **ILS or LOC Z Rwy 8[1]**
LOC Y Rwy 8[2]
RNAV (GPS) Y Rwy 8[2]
VOR Rwy 8[3]
[1]Category D, 700-2.
[2]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[3]Category D, 900-3.

CAMARILLO, CA
CAMARILLO ..... **RNAV (GPS) Rwy 8[1]**
RNAV (GPS) Y Rwy 26[1]
RNAV (GPS) Z Rwy 26[1]
VOR Rwy 26[2]
[1]NA when local weather not available.
[2]Categories A, B, 1100-2; Category C, 1100-3.

CARLSBAD, CA
McCLELLAN-PALOMAR ... **ILS or LOC Rwy 24[12]**
RNAV (GPS) Rwy 24[3]
VOR-A[4]
[1]NA when control tower closed.
[2]ILS, Categories A,B,700-2; Category C, 800-2¼. LOC, Category C 800-2¼.
[3]Category D, 800-2¼.
[4]Categories A,B, 1000-2; Category C, 1000-3.

CHINO, CA
CHINO ..... **ILS or LOC Rwy 26R**
NA when control tower closed.

NAME — ALTERNATE MINIMUMS

DAGGETT, CA
BARSTOW-DAGGETT ..... **RNAV (GPS) Rwy 22**
RNAV (GPS) Rwy 26
NA when local weather not available.
Category B, 900-2; Category C, 1000-2¾; Category D, 1000-3.

EL MONTE, CA
EL MONTE ..... **NDB or GPS-C[1]**
VOR or GPS-A[1]
VOR/DME or GPS-B[2]
NA when control tower closed.
[1]Categories A,B, 1000-2.
[2]Categories A,B, 1100-2.

FULLERTON, CA
FULLERTON MUNI ..... **LOC/DME Rwy 24[1]**
VOR-A[2]
[1]NA when control tower closed.
[2]Categories A,B, 1500-2.

HAWTHORNE, CA
HAWTHORNE MUNI ..... **LOC Rwy 25**
NA when control tower closed.

LA VERNE, CA
BRACKETT FIELD ..... **ILS Rwy 26L**
LOC Rwy 26L
VOR or GPS-A[1]
NA when control tower closed.
[1]Category C, 800-2¼.

LANCASTER, CA
GENERAL WILLIAM J. FOX AIRFIELD ..... **VOR-B[1]**
RNAV (GPS) Rwy 6[2]
[1]Categories A,B, 1000-2; Categories C,D, 1000-3.
[2]NA when local weather not available.

NAME ALTERNATE MINIMUMS

LOMPOC,CA

LOMPOC ..... **RNAV (GPS) Rwy 25[1]**
VOR/DME-A[2]

[1]NA when local weather not available.
[2]Categories A,B, 900-2.

LONG BEACH, CA

LONG BEACH(DAUGHERTY FIELD) ..... **ILS or LOC Rwy 30[12]**
RNAV (GPS) Z Rwy 30[3]
VOR or TACAN Rwy 30[14]

[1]NA when control tower closed.
[2]ILS, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. LOC, Categories A,B, 900-2, Category C, 900-2½; Category D, 900-2¾.
[3]Categories A,B, 900-2¼; Category C, 900-2½; Category D, 900-2¾.
[4]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

LOS ANGELES, CA

WHITEMAN ..... **VOR-A**
Categories A,B, 900-2; Category C, 900-2½.
NA when control tower closed.

NEEDLES, CA

NEEDLES ..... **VOR-A**
Category D, 800-2½.

OCEANSIDE, CA

OCEANSIDE MUNI ..... **VOR-A**
Categories A,B, 1200-2.

ONTARIO, CA

ONTARIO INTL ..... **RNAV (GPS) Y Rwy 8L**
RNAV (GPS) Y Rwy 26L
RNAV (GPS) Y Rwy 26R
NA when local weather not available.

OXNARD, CA

ONTARIO INTL ..... **ILS Rwy 25[1]**
LOC Rwy 25[1]
RNAV (GPS) Rwy 25
NA when local weather not available.
[1]NA when control tower closed.

PALM SPRINGS, CA

JACQUELINE COCHRAN RGNL ..... **VOR-A**
NA when control tower closed.
Categories A,B, 1300-2; Categories C,D, 1300-3.

PALM SPRINGS INTL ..... **VOR or GPS-B**
Categories A,B, 1900-2; Categories C,D, 1900-3.

NAME ALTERNATE MINIMUMS

PASO ROBLES, CA

PASO ROBLES MUNI ..... **VOR or GPS-A**
Categories A,B, 1300-2; Categories C,D, 1300-3.

RAMONA, CA

RAMONA ..... **RNAV (GPS)-B[1]**
RNAV (GPS) Rwy 9[2]
VOR/DME-A[3]
NA when local weather not available.
[1]Categories A,B, 1400-2; Category C, 1400-3.
[2]Categories A, B, 900-2; Category C, 900-2½.
[3]Categories A,B 1200-2; Category C, 1200-3.

RIVERSIDE, CA

RIVERSIDE MUNI ..... **ILS or LOC Rwy 9[12]**
RNAV (GPS) Rwy 9[34]
RNAV (GPS) Rwy 27[5]
VOR-A[36]
VOR-B[37]
VOR Rwy 9[35]
[1]NA when control tower closed.
[2]ILS,LOC, Category C, 900-2¼; Category D, 900-2½.
[3]NA when local weather not available.
[4]Categories A, B, 1000-2; Categories C, D, 1000-3.
[5]Categories A, B, 1300-2; Categories C, D, 1300-3.
[6]Categories A, B, 1500-2; Categories C, D, 1500-3.
[7]Categories A, B, 1200-2; Categories C, D, 1200-3.

SAN DIEGO, CA

BROWN FIELD MUNI ... **RNAV (GPS) Rwy 8L[1]**
VOR or GPS-A,800-2¾[2]
[1]NA when local weather not available.
[2]NA when control tower closed.

MONTGOMERY FIELD ..... **ILS or LOC/DME Rwy 28R**
NA when control tower closed.

SAN DIEGO INTL ..... **ILS or LOC Rwy 9**
LOC Rwy 27
RNAV (GPS) Rwy 9
Categories A,B, 900-2; Category C, 900-2¼; Category D, 900-2½.

NAME ALTERNATE MINIMUMS

SAN DIEGO(EL CAJON), CA

GILLESPIE FIELD ..... **LOC-D[12]**
RNAV (GPS) Rwy 17[34]

[1]NA when control tower closed.
[2]Categories A, B, 2400-2; Categories C, D, 2400-3.
[3]Categories A, B, 1100-2; Category C, 1100-3; Category D, 1200-3.
[4]NA when local weather not available.

SAN LUIS OBISPO, CA

SAN LUIS COUNTY ..... **ILS Rwy 11[1]**
VOR or TACAN A[2]

[1]NA when control tower closed.
Categories A,B, 900-2; Category C, 1000-2¾; Category D, 1100-3.
[2]Categories A,B, 1500-2; Categories C,D, 1500-3.

SANTA ANA, CA

JOHN WAYNE AIRPORT-
ORANGE COUNTY ..... **ILS or LOC Rwy 19R[12]**
LDA Rwy 19R[34]
LOC BC Rwy 1L[2]
NDB Rwy 19R[4]

[1]ILS, Categories A,B,C, 800-2; Category D, 800-2¼. LOC, Category D, 800-2¼.
[2]NA when control zone not in effect.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[4]NA when control tower closed.

SANTA BARBARA, CA

SANTA BARBARA MUNI . **ILS or LOC Rwy 7[12]**
RNAV (GPS) Rwy 7[13]
VOR or GPS Rwy 25[4]

[1]NA when local weather not available.
[2]ILS, Categories A,B, 800-2; Category C,800-2¼; Category D, 1000-3. LOC, Category C, 800-2¼; Category D, 1000-3.
[3]Category C, 800-2¼; Category D, 1000-3.
[4]Categories A,B, 1000-2; Categories C,D, 1000-3.

SANTA MARIA, CA

SANTA MARIA PUBLIC/CAPTAIN G. ALLEN HANCOCK FIELD ..... **ILS or LOC Rwy 12[14]**
LOC/DME BC-A[24]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 30[67]
VOR Rwy 12[35]

[1]ILS, Category C, 700-2; Category D, 1100-3. LOC, Category D, 1100-3.
[2]Category A,B, 900-2; Category C, 900-2½; Category D, 1100-3.
[3]Category D, 1100-3.
[4]NA when control tower closed.
[5]NA when control tower closed except for operators with approved weather reporting service.
[6]NA when local weather not available.
[7]Categories A, B, 1400-2; Category C, 1400-3.

SANTA MONICA, CA

SANTA MONICA MUNI ..... **VOR or GPS-A**
Category A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

SANTA YNEZ, CA

SANTA YNEZ ..... **VOR or GPS-B**
Categories A,B, 1300-2.
NA except for operators with approved weather reporting service.

TORRANCE, CA

ZAMPERINI FIELD ..... **ILS or LOC Rwy 29R[1]**
VOR or GPS Rwy 11L,900-2[2]

[1]NA when control tower closed.
[2]NA when control tower closed except for operators with approved weather reporting service.

VAN NUYS, CA

VAN NUYS ..... **ILS Rwy 16R[1]**
LDA-C[2]
VOR-A[34]

[1]NA when control tower closed.
[2]Categories A, B, 1900-2; Categories C,D, 1900-3.
[3]Category D, 800-2¼.
[4]NA when local weather not available.

VICTORVILLE, CA

SOUTHERN CALIFORNIA LOGISTICS ..... **ILS or LOC Rwy 17[1]**
RNAV (GPS) Rwy 17[2]
VOR/DME Rwy 17[2]

NA when local weather not available.
[1]ILS, Category D, 700-2¼; LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.

LEMOORE NAS (KNLC), (REEVES FIELD), CA (Amdt 1, 08045 USN) ELEV **232**

RADAR - (E) 125.95 264.5x 270.8x 301.2x 309.9x 314.0x 336.4x 344.4x 348.75x 363.7x 383.6x 383.9x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	32L[2]	3.0°/40/758	ABCDE	**330**/16	100	(100-¼)
	14L	3.0°/54/1015	ABCDE	**322**-½	100	(100-½)
	32R	3.0°/45/853	ABCDE	**325**/24	100	(100-½)
	14R	3.0°/51/984	ABCDE	**331**-½	100	(100-½)
PAR W/O GS	14L		ABCDE	**500**-1¼	278	(300-1¼)
	14R		ABCDE	**520**-1¼	289	(300-1¼)
	32L[3]		ABCDE	**540**/40	310	(400-¾)
	32R		ABCDE	**540**/60	315	(400-1¼)
ASR	32L[4]		AB	**540**/24	310	(400-½)
			CDE	**540**/40	310	(400-¾)
	14L		ABCDE	**520**-1	298	(300-1)
	14R		ABCDE	**520**-1	289	(300-1)
	32R		ABC	**620**/50	395	(400-1)
			DE	**620**/60	395	(400-1¼)
CIR	All Rwys[5]		A	**680**-1	448	(500-1)
			B	**700**-1	468	(500-1)
			C	**700**-1½	468	(500-1½)
			DE	**800**-2	568	(600-2)

[1]No-NOTAM MP: PAR-Rwy 14R-32L 1600-2400Z++ Mon, Rwy 14L-32R 1600-2400Z++ Wed. [2]When ALS inop, increase CAT ABCDE RVR to 24 and vis to ½ mile. [3]When ALS inop, increase CAT ABCDE RVR to 60 and vis to 1¼ miles. [4]When ALS inop, increase CAT ABCDE RVR to 50 and vis to 1 mile. [5]CIR from PAR W/O GS Rwy 14L, 14R and 32R, increase vis CAT AB to 1¼ miles.

CAMP PENDLETON MCAS (MUNN FLD)(KNFG), CA (Oceanside)

(07158 USN) ELEV **78**

RADAR - (E) 281.7 338.1 ▽ ⚠NA

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	21[125]	3.5°/49/843	ABCD	**438**-¾	360	(400-¾)
W/O GS	21[56]		ABC	**520**-1	442	(500-1)
			D	**520**-1¼	442	(500-1¼)
ASR	21[3]		A	**900**-¾	822	(900-¾)
			B	**900**-1	822	(900-1)
			C	**900**-2¼	822	(900-2¼)
			D	**900**-2½	822	(900-2½)
CIR	All Rwy[4]		A	**960**-1¼	882	(900-1¼)
			B	**1080**-1½	1002	(1100-1½)
			C	**1180**-3	1102	(1200-3)
			D	**1200**-3	1122	(1200-3)

[1]CAUTION: Trees penetrate obstacle surfaces within the visual portion of the procedure approximately 900' from threshold. Pilots must have trees in sight prior to descending from decision height. [2]When ALS inop, increase vis CAT ABCD to 1 mile. [3]When ALS inop, increase vis CAT A to 1 mile, CAT B to 1¼ miles, CAT C to 2½ miles and CAT D to 2¾ miles. [4]Circling auth fr ASR and PAR W/O GS only. Circling Rwy 3 not auth at night. [5]No-NOTAM prevent main sked: PAR 2100-0100Z++Mon. [6]When ALS inop, increase vis CAT ABC to 1¼ miles, CAT D to 1½ miles.

LOS ALAMITOS AAF (KSLI), CA (1-Amdt 5, 2-Amdt 2, 3-Orig 08101 USA) ELEV **32**

RADAR[12] - (E) 124.75 127.95 279.5 285.55 290.9 ▽ ⚠ NA

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
RADAR 1						
PAR	22L[3]	3.0°/40/745	ABCD	**282**-¾	250	(300-¾)
PAR W/O GS	22L[45]		ABC	**420**-¾	388	(400-¾)
			D	**420**-1	388	(400-1)
RADAR 2						
PAR	22L	4.0°/40/572	COPTER	**235**-¼	200	(200-¼)
RADAR 3						
ASR	22L[45]		AB	**440**-¾	408	(500-¾)
			CD	**440**-1	408	(500-1)
CIR	22L[4]		A	**440**-1	408	(500-1)
			B	**500**-1	468	(500-1)
			C	**500**-1½	468	(500-1½)
			D	**600**-2	568	(600-2)

[1]PAR opr 1600-0000Z++ Mon, 1500-0600Z++ Tue-Thu, 2200-0600Z++ Fri. [2]Multiple PAR apch avbl during VFR ctc twr for freq assn. [3]When ALS inop, increase CAT CD vis to 1 mile. [4]Circling NA N of Rwy 4L-22R. [5]When ALS inop, increase vis all CATs ¼ mile.

MIRAMAR MCAS (MITSCHER FLD) (KNKX), CA (08325 USN) ELEV 478

RADAR[1] - (E) 133.625 266.8x 270.35 307.9x 328.4x 348.75 350.275 373.575 379.125 380.3x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	24R[2]	3.0°/55/1179	ABCDE	**575**-¼	100	(100-¼)
	24L	3.0°/48/1047	ABCDE	**578**-½	100	(100-½)
PAR w/o GS[4]						
	24R[3]		AB	**820**-½	345	(400-½)
			CDE	**820**-¾	345	(400-¾)
	24L		ABC	**820**-1	342	(400-1)
			DE	**820**-1¼	342	(400-1¼)
ASR	24R[3]		AB	**860**-½	385	(400-½)
			CDE	**860**-¾	385	(400-¾)
	6L		ABC	**800**-1	367	(400-1)
			DE	**800**-1¼	367	(400-1¼)
	24L		ABC	**860**-1	382	(400-1)
			DE	**860**-1¼	382	(400-1¼)
CIR[5]	All Rwy		A	**920**-1	442	(500-1)
			B	**940**-1	462	(500-1)
			C	**940**-1½	462	(500-1½)
			D	**1160**-2¼	682	(700-2¼)
			E	**1360**-3	882	(900-3)

[1]Other APP CON freq as asgn. [2] When ALS inop, increase vis CAT ABCDE to ½ mile. [3]When ALS inop, increase vis CAT ABC 1 mile, CAT DE 1¼ miles. [4]No NOTAM MP: PAR 1700-2200Z++ Tue. [5]Circling not authorized to Rwy 10-28. CAT E circling not authorized S of Rwy 6R-24L.

NORTH ISLAND NAS (KNZY), (HALSEY FIELD),CA (San Diego)(09127USN) **ELEV26**

RADAR - (E) 127.7x 133.175x 319.9x 350.8x 353.5x 382.0x 385.5x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	29[3]	3.0°/36/730	ABCDE	276-¾	250	(300-¾)
	36[6]	3.0°/46/850	ABCDE	119-¼	100	(100-¼)
(OFFSET)	29[8]	3.0°/36/730	ABCDE	620-2	594	(600-2)
PAR W/O GS[1]	29[24]		AB	460-½	434	(500-½)
			CD	460-¾	434	(500-¾)
			E	460-1	434	(500-1)
PAR W/O GS[1]	36		ABC	380-1	361	(400-1)
			DE	380-1¼	361	(400-1¼)
PAR W/O GS[1] (OFFSET)	29[2]		ABCDE	620-2	594	(600-2)
ASR	29[25]		AB	540-½	514	(600-½)
			C	540-1	514	(600-1)
			DE	540-1¼	514	(600-1¼)
	36[7]		A	800-¾	781	(800-¾)
			B	800-1	781	(800-1)
			C	800-2	781	(800-2)
			D	800-2¼	781	(800-2¼)
			E	800-2½	781	(800-2½)
(OFFSET)	29[2]		ABCDE	620-2	594	(600-2)
CIR	29[2]		AB	620-2	594	(600-2)
			CDE	NOT AUTHORIZED		
	36		ABCDE	NOT AUTHORIZED		

[1]No-NOTAM MP sked 2000-2400Z++ Mon. [2]Cir auth to Rwy 18 only. Cir not auth W Rwy 18-36. [3]When ALS inop, increase vis CAT ABCDE to 1 mile. [4]When ALS inop, increase vis CAT ABC to 1¼ mile, CAT DE to 1½ mile. [5]When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1½ miles, CAT DE to 1¾ miles. [6]When ALS inop, increase vis CAT ABCDE to ½ mile. [7]When ALS inop, increase vis CAT A to 1 mile, CAT B to 1¼ mile, CAT C to 2¼ mile, CAT D to 2½ mile, CAT E 2¾ mile. [8]Minima applicable for rotorcraft short offset approaches.

POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD), CA

(Oxnard) (09267 USN) ELEV **12**

RADAR[7] **- (E)** 123.75x 133.25 233.7x 269.225 350.25 353.925

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	3[2]	3.0°/47/901	ABCDE	**111**-¼	100	(100-¼)
	21	3.0°/47/891	ABCDE	**113**-½	100	(100-½)
PAR	21(altn MAP)[4]	3.0°/47/891	ABCDE	**650**-1¾	637	(700-1¾)
PAR W/O GS	3[5]		ABCDE	**300**-1	289	(300-1)
	21[5]		ABCDE	**360**-¾	347	(400-¾)
	21(altn MAP)[4]		ABCDE	**440**-1¾	427	(500-1¾)
ASR	3[3]		ABC	**380**-¾	369	(400-¾)
			DE	**380**-1	369	(400-1)
	21[3]		AB	**380**-½	367	(400-½)
			CDE	**380**-¾	367	(400-¾)
ASR	21(altn MAP)[6]		ABCDE	**440**-1½	427	(500-1½)
CIR[1]	3,21		A	**420**-1	407	(500-1)
			B	**480**-1	467	(500-1)
			C	**480**-1½	467	(500-1½)
			D	**580**-2	567	(600-2)
			E	NOT AUTHORIZED		

ATC Missed apch climb rate to 1500

	Knots	60	120	180	240	300	360
PAR 3	FPM	330	660	990	1320	1650	1980

Expanded RADAR svc-All flt conducted under positive ctl. Inbd acft not opr under ATC or PLEAD ctc APP CON 25 NM out on 307.275 or 128.65.

[1]Circling not authorized E of Rwy 3-21,with PAR approach, or when Alternate MAP Rwy 21 in use. [2]When ALS inop, increase vis CAT ABCDE to ½ mile. [3]When ALS inop, increase vis CAT ABC to 1 mile, CAT DE to 1¼ miles. [4]When ALS inop, increase vis CAT ABCDE to 2¼ miles. [5]When ALS inop, increase vis CAT ABCDE to 1¼ miles. [6]When ALS inop, increase vis CAT ABCDE to 2 miles. [7]No-NOTAM preventive maint 1400-1800Z++ Mon.

SAN CLEMENTE ISLAND NALF (KNUC), (FREDERICK SHERMAN FIELD), CA

RADAR - (E) 127.05x 305.3x (09071 USN) ELEV **184**

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	23	3.0°/40/939	ABCDE	**434**-1	250	(300-1)
PAR[1]	W/O GS 23		ABCDE	**520**-1¼	336	(400-1¼)
ASR[2]	23		AB	**780**-1	596	(600-1)
			C	**780**-1½	596	(600-1½)
			D	**780**-1¾	596	(600-1¾)
			E	**780**-2	596	(600-2)
CIR[3]	W/O GS All Rwy		A	**540**-1¼	356	(400-1¼)
			B	**640**-1¼	456	(500-1¼)
			C	**640**-1½	456	(500-1½)
			DE	**740**-2	556	(600-2)
CIR[3]	All Rwy		AB	**780**-1	596	(600-1)
			C	**780**-1½	596	(600-1½)
			DE	**780**-2	596	(600-2)

[1]No-NOTAM MP PAR 1800-2000Z++ Tue. [2]No-NOTAM MP ASR 2000-2200Z++ Tue.
[3]Circling not authorized S of Rwy 5-23.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

ALTURAS, CA

ALTURAS MUNI (AAT)
AMDT 2 08101 (FAA)
DEPARTURE PROCEDURE: Use BACHS DEPARTURE.

AMEDEE AAF (KAHC),

HERLONG, CA. . . . . AMDT 1, 09239
Rwy 8, 26: 4000-3 for climb in visual conditions.
Rwy 8, 26: Cross Amedee AAF at or above 7900 before proceeding on course.

NAME TAKE-OFF MINIMUMS

ARCATA-EUREKA, CA

ARCATA
TAKE-OFF MINIMUMS: **Rwy 1,** std. w/ a min. climb of 429' per NM to 1900. **Rwy 14,** 600-2¼ or std. w/ a min. climb of 486' per NM to 1000'.
DEPARTURE PROCEDURE: **Rwy 1,** climbing left turn thence..., or for climb in visual conditions: cross Arcata Airport westbound at or above 1100, thence...**Rwys 14, 19,** climbing right turn thence...**Rwy 32,** climbing left turn thence...
...via ACV R-250 to HOCUT INT and continue climb to MEA on V27.
NOTE: **Rwy 1,** multiple trees beginning 182' from departure end of runway, 11' right of centerline, up to 161' AGL/370' MSL. Multiple tees beginning 281' from departure end of runway, 86' left of centerline, up to 148' AGL/357' MSL. **Rwy 14,** multiple trees beginning 838' from departure end of runway, 372' left of centerline, up to 200' AGL/759' MSL. Multiple trees beginning 1286' from departure end of runway, 716' right of centerline, up to 65' AGL/286' MSL. **Rwy 19,** multiple trees beginning 57' from departure end of runway, 270' right of centerline, up to 30' AGL/218' MSL. **Rwy 32,** multiple trees beginning 113' from departure end of runway, 211' right of centerline, up to 86' AGL/267' MSL. Multiple trees 1' from departure end of runway, 161' left of centerline, up to 21' AGL/202' MSL. Obstruction light 426' from departure end of runway, 257' right of centerline, 21' AGL/202' MSL.

AUBURN, CA

AUBURN MUNI

TAKE-OFF MINIMUMS: **Rwy 7,** CAT A,B 600-2 or std. with a min. climb of 350' per NM to 2300. CAT C,D NA. **Rwy 25,** CAT A,B 300-1 or std. with a min. climb of 390' per NM to 1700. CAT C,D NA.

DEPARTURE PROCEDURE: **Rwy 7,** climbing left turn to 3000 heading 305°, intercept MYV R-089 to MYV VOR/DME, then via assigned routing. **Rwy 25,** climb runway heading to 3000, intercept and proceed via MYV R-098 to MYV VOR/DME, then via assigned heading.

BEALE AFB (KBAB)

MARYSVILLE, CA. . . . . ORIG, 09155

DEPARTURE PROCEDURE: **Rwy 15,** Climb on a heading between 100° CW to 325° from DER. **Rwy 33,** Climb on a heading between 146° CW to 344° from DER.

TAKE-OFF OBSTACLES: **Rwy 33,** Terrain 118' MSL, 62' from DER, 500' right of centerline. Terrain 119' MSL, 190' from DER, 551' right of centerline.

BECKWOURTH, CA

NERVINO

TAKE-OFF MINIMUMS: **Rwys 7, 25,** 3500-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 7, 25,** for climb in visual conditions: cross Nervino Airport at or above 8300 before proceeding on course.

NOTE: **Rwy 7,** road 58' from departure end of runway, 469' right of centerline, 15' AGL/4920' MSL. Pole 310' from departure end of runway, 522' right of centerline, 49' AGL/4925' MSL. Pole 528' from departure end of runway, 522' right of centerline, 39' AGL/4924' MSL. Tree 1.47 NM from departure end of runway, 727' right of centerline, 100' AGL/5193' MSL. Tree 1.9 NM from departure end of runway, 2534' right of centerline, 100' AGL/5499' MSL. Bush 2.03 NM from departure end of runway, 2126' right of centerline, 4' AGL/5406' MSL. **Rwy 25,** tree 5856' from departure end of runway, 1984' right of centerline, 100' AGL/5339' MSL. Tree 1.25 NM from departure end of runway, 2439' right of centerline, 100' AGL/5420' MSL. Tree 2.07 NM from departure end of runway, 3302' left of centerline, 100' AGL/5570' MSL.

BISHOP, CA

EASTERN SIERRA RGNL

TAKE-OFF MINIMUMS: **Rwys 7,12,16,** NA. **Rwys 25, 30,34,** 4000-2 or std. with a min. climb of 350' per NM to 9000.

DEPARTURE PROCEDURE: **Rwys 25,30,** turn right. **Rwy 34,** turn left, climb northwestbound to 13000 via BIH R-322 to NIKOL Int.

BYRON, CA

BYRON

TAKE-OFF MINIMUMS: **Rwy 23,** NA-obstacles. **Rwy 30,** 200-1 or std. with a min. climb of 240' per NM to 300. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn via heading 120° and ECA VORTAC before proceedingon course. **Rwy 12,** climbing left turn via heading 050° and ECA VORTAC R-250 to ECA VORTAC before proceeding on course. **Rwy 30,** climbing right turn via heading 130° and ECA VORTAC R-250 to ECA VORTAC before proceeding on course.

NOTE: **Rwy 5,** bush 17' from departure end of runway, 67' right of centerline, 6' AGL/52' MSL. **Rwy 12,** multiple trees and bush beginning 240' from departure end of runway, 286' right of centerline, up to 39' AGL/76' MSL. **Rwy 30,** multiple poles, building, and terrain beginning 66' from departure end of runway, 228' left of centerline, up to 65' AGL/225' MSL. Multiple poles beginning 949' from departure end of runway, 28' right of centerline, up to 42' AGL/103' MSL.

CHICO, CA

CHICO MUNI

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing right turn. **Rwys 31L/R,** climbing left turn. **All aircraft,** climb via CIC R-205 to JINGO Int. Aircraft departing JINGO Int 020° CW 350° climb on course. All others climb in JINGO Int holding pattern (SE, right turns,320° inbound) to depart JINGO Int at or above 2800.

CLOVERDALE, CA

CLOVERDALE MUNI

TAKE-OFF MINIMUMS: **Rwy 14,** 400-2 or std. with a min. climb of 280' per NM to 1500, then a min. climb of 260' per NM to 3900. **Rwy 32,** NA.

DEPARTURE PROCEDURE: **Rwy 14,** climb direct STS VOR/DME. Continue climb in holding pattern (NW right turns, 140° inbound) to MEA for route of flight.

NOTE: **Rwy 14,** tree 9337' from departure end of runway, 4633' right of centerline, 150' AGL/889' MSL.

COLUMBIA, CA

COLUMBIA

TAKE-OFF MINIMUMS: **Rwy 17,** 300-1 with a min. climb rate of 300' per NM to 3000. **Rwy 35,** NA.

DEPARTURE PROCEDURE: **Rwy 17,** use FICHU RNAV DEPARURE. **Rwy 35,** NA.

NOTE: **Rwy 17,** 51' AGL pole 502' from departure end of runway, 368' right of centerline, 90' AGL tree 483' from departure end of runway, 535' right of centerline; 100 AGL tree 1258' from departure end of runway, 494' left of centerline;167' AGL tree 1644' from departure end of runway, 924' right of centerline.

COLUSA, CA

COLUSA COUNTY

DEPARTURE PROCEDURE: Climb direct to ILA VORTAC.

CONCORD, CA

BUCHANAN FIELD (CCR)

AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwys 1L/R,** std. w/ min. climb of 360' per NM to 1100, or 2200-3 for climb in visual conditions. **Rwys 14L/R,** std. w/ min. climb of 420' per NM to 2700, or 2200-3 for climb in visual conditions. **Rwys 19L/R,** std. w/ min. climb of 490' per NM to 4000, or 2200-3 for climb in visual conditions. **Rwys 32L/R,** std. w/ min. climb of 320' per NM to 500, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 1L/R,** climb direct CCR VOR/DME, or climb in visual conditions to cross Buchanan Airport northbound at or above 2100 via CCR R-173 to CCR VOR/DME, thence...**Rwys 14L/R, 19L/R** climbing left turn direct CCR VOR/DME, or climb in visual conditions to cross Buchanan Airport northbound at or above 2100 via CCR R-173 to CCR VOR/DME, thence...**Rwys 32L/R,** climbing right turn direct CCR VOR/DME, or climb in visual conditions to cross Buchanan Airport northbound at or above 2100 via CCR R-173 to CCR VOR/DME, thence...

...aircraft departing CCR VOR/DME R-150 clockwise R-110 climb on course. All others climb in CCR VOR/DME holding pattern (north, left turns, 191° inbound) to cross CCR VOR/DME at or above 2700 before proceeding on course.

NOTE: **Rwy 1L,** multiple trees and bushes beginning 675' from departure end of runway, 9' left of centerline, up to 48' AGL/98' MSL. Multiple poles, light poles and antennas on buildings beginning 639' from departure end of runway, 120' left of centerline, up to 50' AGL/72' MSL. Fence 117' from departure end of runway, 2' right of centerline, 12' AGL/29' MSL. Sign 1996' from departure end of runway, 812' left of centerline, 45' AGL/78' MSL. Flagpole 1520' from departure end of runway, 753' left of centerline, 40' AGL/71' MSL. **Rwy 1R,** multiple trees and poles beginning 1552' from departure end of runway, 98' right of centerline, up to 52' AGL/131' MSL. **Rwy 19R,** multiple trees beginning 604' from departure end of runway, 82' left of centerline, up to 70' AGL/108' MSL. Light pole 1392' from departure end of runway, 749' right of centerline, 51' AGL/71' MSL. Obstruction light on building 2451' from departure end of runway, 911' left of centerline, 73' AGL/97' MSL. Fence 123' from deparure end of runway, 503' left of centerline, 6' AGL/30' MSL. **Rwy 19L,** multiple trees beginning 2132' from departure end of runway, 28' left of centerline, up to 70' AGL/106' MSL. **Rwy 32L,** road/vehicle 561' from departure end of runway, on centerline, 15' AGL/49' MSL. Light on tank 6617' from departure end of runway, 1926' right of centerline, 114' AGL/213' MSL. Hangar 259' from departure end of runway, 300' left of centerline, 21' AGL/37' MSL. Transmission tower 6015' from departure end of runway, 1338' left of centerline, 145' AGL/173' MSL. Tree 825' from departure end of runway, 136' left of centerline, 25' AGL/40' MSL, building 633' from departure end of runway, 254' right of centerline, 20' AGL/35' MSL.

BUCHANAN FIELD (CON'T)

Rwy 32R, train 6345' from departure end of runway, 1948' left of centerline, 23' AGL/102' MSL, obstruction light on hopper 2110' from departure end of runway, 601' right of centerline, 79' AGL/99' MSL. Obstacle light on tank 6617' from departure end of runway, 1426' right of centerline, 193' AGL/213' MSL. Flagpole 655' from departure end of runway, 300' right of centerline, 35' AGL/43' MSL. Sign 697' from departure end of runway, 248' right of centerline, 25' AGL/41' MSL. Road/vehicle 561' from departure end of runway, on centerline, 15' AGL/49' MSL. Building 633' from departure end of runway, 246' left of centerline, 20' AGL/35' MSL, tree 825' from departure end of runway, 635' left of centerline, 25' AGL/40' MSL, transmission tower 6015' from departure end of runway, 1839' left of centerline, 145' AGL/173' MSL. **Rwy 14R,** obstacle lights, obstacle lights on buildings, obstacle lights on windsocks, buildings and trees beginning 412' from departure end of runway, 167' right of centerline, upt o 104' AGL/136' MSL. **Rwy 14L,** multiple trees beginning 841' from departure end of runway, 61' left of centerline, up to 78' AGL/102' MSL, building 1071' from departure end of runway, 35' left of centerline, 30' AGL/58' MSL. Fence 225' from departure end of runway, 29' left of centerline, 12' AGL/33' MSL.

CRESCENT CITY, CA

JACK MCNAMARA FIELD

TAKE-OFF MINIMUMS: **Rwy 11,** 300-1. **Rwy 17,** 300-1 or std. with a min. climb of 240' per NM to 300.

DEPARTURE PROCEDURE: **Rwys 11,17,** climbing right turn. **Rwys 29,35,** climbing left turn. **All aircraft,** climb direct CEC VORTAC. Aircraft departing CEC R-131 CW R-330 climb on course. All others continue climb in CEC holding pattern (S, left turns, 341° inbound) to cross CEC VORTAC at or above: R-331 CW R-010, 1100; R-011 CW R-050, 2200; R-051 CW R-090, 4100; R-091 CW R-130, 2700.

DAVIS, CA

UNIVERSITY (EDU)

AMDT 3 09127 (FAA)

DEPARTURE PROCEDURE: **Rwy 17,** climbing right turn via heading 200° and ILA R-151 to EMBER INT/ILA 48 DME before proceeding on course. **Rwy 35,** climbing left turn via heading 320° and ILA R-145 to ILA VORTAC before proceeding on course.

NOTE: **Rwy 17,** trees beginning 1353' from DER, 31' right of centerline, up to 40' AGL/109' MSL. **Rwy 35,** tree 24' from DER, 433' left of centerline, 40' AGL/104' MSL. Vehicle 288' from DER, on centerline, 15' AGL/74' MSL.

DAVIS/WOODLAND/WINTERS, CA

YOLO COUNTY (DWA)

AMDT 1 09127 (FAA)

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 164° to 2100 before turning right. **Rwy 34,** climb heading 344° to 1500 before turning left.

NOTE: **Rwy 16,** multiple trees beginning 595' from DER, 308' right of centerline, up to 120' AGL/206' MSL. Multiple trees beginning 1046' from DER, 257' left of centerline, up to 120' AGL/195' MSL. **Rwy 34,** multiple trees beginning 417' from DER, 361' right of centerline, up to 120' AGL/206' MSL. Trees beginning 683' from DER, 491' left of centerline, up to 120' AGL/206' MSL. Pole 859' from DER, 548' left of centerline, 47' AGL/137' MSL.

EUREKA, CA

MURRAY FIELD (EKA)

AMDT 4 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. w/ min. climb of 465' per NM to 1800 or 3800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12** climbing right turn heading 265° to intercept V27. For climb in visual conditions: cross Eureka airport at or above 3700 before proceeding on course. **Rwy 30,** climbing left turn heading 265° to intercept V27.

NOTE: **Rwy 12,** bush 50' from DER, 82' left of centerline, 6' AGL/16' MSL. Multiple trees beginning 1.5 NM from DER, 2993' left of centerline. Multiple trees beginning 1.6 NM from DER, 2318' right of centerline. **Rwy 30,** multiple trees, beginning 443' from DER, 389' right of centerline, up to 93' AGL/103' MSL. Tree 664' from DER, 587' left of centerline, 46' AGL/56' MSL. Pole 753' from DER, 155' right of centerline 27' AGL/ 37' MSL. Railroad 786' from DER, 4' left of centerline 23' AGL/31' MSL. Road beginning 602' from DER, 4' left of centerline up to 15' AGL/23' MSL. Bush 566' from DER, 69' left of centerline, 8' AGL/18' MSL.

FIREBAUGH, CA

FIREBAUGH

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn. **Rwy 30,** climbing left turn. **All aircraft** climb via heading 150° and PXN R-061 to MENDO Int. Aircraft departing MENDO Int, heading 230° CW 150° climb on course. All others climb in MENDO holding pattern (NE, right turns, 241° inbound) to cross MENDO Int at or above 2000.

FORTUNA, CA

ROHNERVILLE

TAKE-OFF MINIMUMS: **Rwy 11,** NA.

DEPARTURE PROCEDURE: Climb direct FOT VORTAC. Continue climb in holding pattern (N, right turns, 161° inbound) to cross FOT VORTAC at or above 3000.

FRESNO, CA

FRESNO-CHANDLER EXECUTIVE (FCH)

AMDT 2 09015 (FAA)

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 111° to 2000 then climbing right turn to 6300 via heading 200° and CZQ VORTAC R-167 before proceeding on course. **Rwy 30,** climb heading 291° to 2000 then climbing left turn to 5500 via heading 140° and CZQ VORTAC R-167 before proceeding on course.

NOTE: **Rwy 12,** multiple trees, poles, and terrain beginning 84' from departure end of runway, 16' left of centerline, up to 92' AGL/371' MSL. Multiple trees, poles, road, fence and terrain beginning 53' from departure end of runway, 94' right of centerline, up to 62' AGL/341' MSL. **Rwy 30,** multiple trees, poles, bushes and terrain beginning 125' from departure end of runway, 46' left of centerline, up to 111' AGL/389' MSL. Multiple poles, road, and fence beginning 236' from departure end of runway, 23' right of centerline, up to 42' AGL/320' MSL.

FRESNO YOSEMITE INTL

DEPARTURE PROCEDURE: **Rwys 11L, 11R** ,climbing left turn direct CZQ VORTAC. **Rwys 29L, 29R,** climbing right turn direct CZQ VORTAC. All aircraft climb in CZQ VORTAC holding pattern (SE, left turns, 322° inbound) to cross CZQ VORTAC at or above MEA/MCA for direction of flight before proceeding en route.

NOTE: **Rwy 11L,** pole 647' from departure end of runway, 543' left of centerline, 17' AGL/349' MSL. Sign 1693' from departure end of runway, 863' right of centerline, 53' AGL/383' MSL. **Rwy 11R,** transmisometer 432' from departure end of runway, 281' left of centerline, 19' AGL/349' MSL. Light, 1701' from departure end of runway, 293' right of centerline, 53' AGL/386' MSL. **Rwy 29L,** arresting sys, 124' from departure end of runway, 527' right of centerline, 2' AGL/334' MSL. Building 219' from departure end of runway, 296' left of centerline, 7' AGL, 336' MSL. **Rwy 29R,** trees 1076' from departure end of runway, 775' right of centerline, 63' AGL/397' MSL. Arresting sys, 95' from departure end of runway, 149' right of centerline, 3' AGL/336' MSL. Multiple trees beginning 1076' from departure end of runway, 775' right of centerline, up to 75' AGL/397' MSL.

GRASS VALLEY, CA

NEVADA COUNTY AIR PARK

TAKE-OFF MINIMUMS: **Rwy 7,** NA.

DEPARTURE PROCEDURE: **Rwy 25,** climb via MYV R-058 to 6000 then continue climb on course.

GROVELAND, CA

PINE MOUNTAIN LAKE

TAKE-OFF MINIMUMS: **Rwy 9,** 400-2 or std. with a min. climb of 400' per NM to 4000.

DEPARTURE PROCEDURE: **Rwy 9,** turn right. **Rwy 27,** turn left. **All aircraft** climb direct LIN VORTAC. Cross LIN VORTAC at or above 5000.

HALF MOON BAY, CA

HALF MOON BAY

TAKE-OFF MINIMUMS: **Rwy 12,** 2600-2 or std. with a min. climb of 300' per NM to 3000. **Rwy 30,** NA.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading to 3000, then climb direct OSI VORTAC, to cross OSI VORTAC at or above 3500 before proceeding on course.

HANFORD, CA

HANFORD MUNI

DEPARTURE PROCEDURE: **Rwy 14,** climbing left turn heading 050° to intercept V-23. **Rwy 32,** climbing right turn heading 050° to intercept V-23.

HAYWARD, CA

HAYWARD EXECUTIVE

TAKE-OFF MINIMUMS: **Rwys 10L,10R,** 300-1.

DEPARTURE PROCEDURE: **Rwys 28L,28R,** climb straight ahead. **Rwys 10L,10R,** turn right, climb to 2500 via direct OAK VORTAC and OAK R-288. Aircraft southeastbound and capable of climbing 250' per NM to 4500 may proceed direct to MABRY Int via OAK R-114.

HOLLISTER, CA

HOLLISTER MUNI (CVH)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** NA-obstacles. **Rwy 24,** NA-ATC. **Rwy 13,** std. w/ min. climb of 391' per NM to 3500, or 3100-3 for climb in visual conditions. **Rwy 31,** std. w/ min climb of 209' per NM to 2300, or 3100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climbing right turn to heading 332° and via SJC R-121 direct SJC VOR/DME to 6000 before proceeding on course or for climb in visual conditions: cross Hollister Muni Airport at or above 3100 MSL before proceeding on course. **Rwy 31,** climb heading 307° and via SJC R-121 direct SJC VOR/DME to 6000 before proceeding on course or for climb in visual conditions: cross Hollister Muni Airport at or above 3100 MSL before proceeding on course.

NOTE: **Rwy 13,** terrain beginning 992' from departure end of runway, 348' left of centerline, up to 289' MSL. Terrain beginning 2467' from departure end of runway, 154' right of centerline, up to 309' MSL, trees beginning 1277' from departure end of runway, 348' left of centerline, up to 309' MSL, trees beginning 2467' from departure end of runway, 153' right of centerline, up to 270' MSL. **Rwy 31,** terrain beginning 76' from departure end of runway, 392' left of centerline, up to 247' MSL. Terrain beginning 14' from departure end of runway, 179' right of centerline, up to 231' MSL.

JACKSON, CA

WESTOVER FIELD AMADOR COUNTY

DEPARTURE PROCEDURE: **Rwy 1,** turn left. **Rwy 19,** turn right. **All aircraft** climb direct LIN VORTAC, continue climb on course.

LAKEPORT, CA

LAMPSON FIELD

TAKE-OFF MINIMUMS: **Rwy 10,** 1700-3 or std. with a min. climb of 610' per NM to 3200. **Rwy 28,** 1500-3 or std. with a min. climb of 620' per NM to 2200.

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn to heading 275°. **Rwy 28,** climbing right turn to heading 035°. Intercept and climb northwestbound via the LOP NDB 336° bearing to 4000, then climbing left turn direct ENI VORTAC. Cross ENI VORTAC at or above 6000.

LEMOORE NAS (REEVES FIELD) (KNLC)

LEMOORE, CA 07270

Rwy 14L, Cross DER at or above 15' AGL/235' MSL.
Rwy 14R, Cross DER at or above 15' AGL/245' MSL.
Rwy 32L, Cross DER at or above 15' AGL/ 234' MSL, Departure headings 142° CW 283°, minimum military climb 220 ft/NM to 6400, minimum civil climb 220 ft/NM to 6600.
Rwy 32R, Cross DER at or above 15' AGL/239' MSL, Departure headings 142° CW 281° minimum military climb 220 ft/NM to 6400, minimum civil climb 220 ft/NM to 6600.

LINCOLN, CA

LINCOLN RGNL/KARL HARDER FIELD

DEPARTURE PROCEDURE: **Rwy 15,** climbing right turn. **Rwy 33,** climbing left turn. **All aircraft** climb direct MYV VOR/DME, then climb on course.

LIVERMORE, CA

LIVERMORE MUNI

TAKE-OFF MINIMUMS: **Rwys 7L, 7R,** 1500-2 or std. with a min. climb of 260' per NM to 2200. **Rwys 25L, 25R,** 2300-2 or std. with a min. climb of 375' per NM to 3100.

DEPARTURE PROCEDURE: **Rwys 7L, 7R,** climb direct REIGA LOM, then climbing left turn via the 030° bearing from REIGA LOM to intercept V109, then proceed on course. **Rwys 25L, 25R,** climb runway heading to 1200, then climbing right turn via heading 020° and OAK R-060 to ALTAM Int, then proceed on course.

LODI, CA

LODI

DEPARTURE PROCEDURE: Climb direct to LIN VORTAC.

LOS BANOS, CA

LOS BANOS MUNI

DEPARTURE PROCEDURE: Aircraft departing 320° CW 120° climb on course. All others climb via heading 240° to intercept V109. Southeastbound via V109 requires a climb rate of 300' per NM to 4000.

MADERA, CA

MADERA MUNI

DEPARTURE PROCEDURE: **Rwy 30,** climbing right turn via FRA R-243 to BEREN Int/FRA 18.6 DME then via assigned route. **Rwy 12,** turn left, climb heading 095° to 1500, continue climb direct CZQ VORTAC, then via assigned route.

MAMMOTH LAKES, CA

MAMMOTH YOSEMITE

TAKE-OFF MINIMUMS: **Rwy 9,** 500-2 or std. with a min. climb of 400' per NM to 10700. **Rwy 27,** 5000-5 or std. with a min. climb of 450' per NM to 11800.

DEPARTURE PROCEDURE: **Rwy 9,** climbing left turn heading 050° to intercept BIH R-307. **Rwy 27,** climbing right turn to heading 095° to intercept BIH R-307. **All aircraft** proceed via BIH R-307 to BIH VOR/DME, then via BIH R-322 (V381) to NIKOL Int then via assigned route.

MARINA, CA

MARINA MUNI

TAKE-OFF MINIMUMS: **Rwy 11,** std. with a min. climb of 291' PER nm TO 4600, OR 2000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11,** for climb in visual conditions: cross Marina Municipal Airport at or above 2100, continue climb direct SNS VORTAC, thence... **Rwy 29,** climb via heading 288° to 1000', then climbing right turn direct SNS VORTAC, thence...**All aircraft** continue climb in SNS holding pattern (W, left turns, SNS VORTAC 084° inbound) to cross SNS VORTAC at or above MEA/MCA for direction of flight before proceeding enroute.

MARIPOSA, CA

MARIPOSA-YOSEMITE

TAKE-OFF MINIMUMS: **Rwy 8,** N/A-Obstacles

DEPARTURE PROCEDURE: **Rwy 26,** climb via heading 265° to 3000, then climbing left turn to 7000 direct FRA VORTAC before proceeding on course.

NOTE: **Rwy 26,** tree 10' from departure end of runway, 313' left of centerline, 100' AGL/2265' MSL. Tree 1146' from departure end of runway, 303' left of centerline, 100' AGL/2298' MSL.

MARYSVILLE, CA

YUBA COUNTY

DEPARTURE PROCEDURE: **All runways,** climb direct ILA VORTAC.

MERCED, CA

CASTLE (MER)

AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** std. w/ min. climb of 250' per NM to 2500 or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climb heading 126° to 2500 before turning left. For climb in visual conditions: Cross Castle Airport at or above 2200 before proceeding on course. **Rwy 31,** climb heading 306° to 1100 before turning right.

NOTE: **Rwy 13,** tree 2539' from departure end of runway, 1005' right of centerline, 89' AGL/261' MSL. **Rwy 31,** Tree 1274' from departure end of runway, 829' left of centerline, 20' AGL/224' MSL. Trees beginning 2909' from departure end of runway, 542' right of centerline, 65' AGL/269' MSL.

MERCED RGNL/MACREADY FIELD (MCE)

AMDT 5A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn to 3000 via heading 330° and MOD R-120 to MOD. **Rwy 30,** climb to 3000 via heading 300° and MOD R-120 to MOD.

MODESTO, CA

MODESTO CITY-COUNTY HARRY SHAM FIELD (MOD)

AMDT 5 08269 (FAA)

DEPARTURE PROCEDURE: **Rwys 28L, 28R,** climb on a heading between 256° CW to 109° from departure end of runway, or minimum climb of 230' per NM to 5000 for all other courses.

NOTE: **Rwy 10R,** post 55' from departure end of runway, 204' right of centerline, 15' AGL/85' MSL. Multiple trees beginning 180' from departure end of runway, 295' right of centerline, up to 105' AGL/194' MSL. Multiple trees beginning 839' from departure end of runway, 81' left of centerline, up to 88' AGL/148' MSL. **Rwy 10L,** multiple trees beginning 915' from departure end of runway, 598' right of centerline, up to 87' AGL/167' MSL. **Rwy 28R,** pole 746' from departure end of runway, 700' right of centerline, 40' AGL/133' MSL. Pole 1414' from departure end of runway, 624' right of centerline, 40' AGL/133' MSL. Multiple trees beginning 2069' from departure end of runway, 378' left of centerline, up to 74' AGL/173' MSL. Building 2176' from departure end of runway, 21' left of centerline, 56' AGL/151' MSL. **Rwy 28L ,** light pole 142' from departure end of runway, 519' left of centerline, 40' AGL/136' MSL. Hanger 358' from departure end of runway, 306' left of centerline, 15' AGL/109' MSL. Multiple trees beginning 745' from departure end of runway, 375' left of centerline, up to 79' AGL/173' MSL. Multiple trees, building and antenna beginning 1170' from departure end of runway, 322' right of centerline, up to 57' AGL/152' MSL.

MONTAGUE, CA

SISKIYOU COUNTY

TAKE-OFF MINIMUMS: **Rwy 17,** CAT A,B 2400-2 or std. with a min. climb of 350' per NM to 5500. CAT C,D 4100-2 or std. with a min. climb of 350' per NM to 7400. **Rwy 35,** 4000-2 or std. with a min. climb of 300' per NM to 7000.

DEPARTURE PROCEDURE: **Rwy 17,** climb direct MOG NDB. Continue climb to 10000 in MOG holding pattern (N, right turns, 172° inbound). **Rwy 35,** climb to 7000 via runway heading and 352° bearing from MOG NDB, then climbing right turn to 10000 direct MOG NDB. **All aircraft** depart MOG NDB at or above MEA for route of flight.

MONTEREY, CA

MONTEREY PENINSULA (MRY)
AMDT 6 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10L,** std. w/ min. climb of 428' per NM to 1900 or 1700-2½ for climb in visual conditions. **Rwy 10R,** std. w/ min. climb of 451' per NM to 1900 or 1700-2½ for climb in visual conditions. **Rwy 28L**, std. w/ min. climb of 218' per NM to 800 or 1700-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10L,** climbing left turn heading 020° and SNS VORTAC R-231 to SNS VORTAC before proceeding on course or for climb in visual conditions, cross Monterey Peninsula airport at or above 1800, then via SNS VORTAC R-231 to SNS VORTAC before proceeding on course. **Rwy 10R,** climbing left turn heading 020° and SNS VORTAC R-231 to SNS VORTAC before proceeding on course or for climb in visual conditions, cross Monterey Peninsula airport at or above 1800, then via SNS VORTAC R-231 to SNS VORTAC before proceeding on course. **Rwy 28L,** climbing right turn heading 045° and SNS VORTAC R-260 to SNS VORTAC before proceeding on course or for climb in visual conditions, cross Monterey Peninsula airport at or above 1800, then via SNS VORTAC R-231 to SNS VORTAC before proceeding on course. **Rwy 28R**, climbing right turn heading 045° and SNS VORTAC R-260 to SNS VORTAC before proceeding on course.

NOTE: **Rwy 10L,** obstruction light on DME 555' from DER, 217' right of centerline, 12' AGL/272' MSL. Tree 1.8 NM from DER, 2817' right of centerline, up to 100' AGL/859' MSL. **Rwy 10R**, obstruction light on DME 64' from DER, 284' left of centerline, 12' AGL/ 272' MSL. Tree 1.7 NM from DER, 2318' right of centerline, up to 100' AGL/859' MSL. **Rwy 28L,** tree 743' from DER, 619' left of centerline, up to 100' AGL/240' MSL. Tree 2.9 NM from DER, 2298' left of centerline, up to 100' AGL/640' MSL. Tree 2.9 NM from DER, 4578' left of centerline, 114' AGL/853' MSL. **Rwy 28R,** airplane 6' from DER, 179' left of centerline, 64' AGL/263' MSL.

MOUNTAIN VIEW, CA

MOFFETT FEDERAL AFLD

TAKE-OFF MINIMUMS: **Rwy 14L,** std. with a min. climb of 489' per NM to 6100. **Rwy 14R,** std. with a min. climb of 495' per NM to 6100. **Rwy 32L,** std. with a min. climb of 429' per NM to 6100. **Rwy 32R,** std. with a min. climb of 424' per NM to 6100.

NAPA, CA

NAPA COUNTY

TAKE-OFF MINIMUMS: **Rwy 6,** 1800-2½, climb in visual conditions to cross Napa County Airport at or above 1700 MSL before proceeding direct SGD VORTAC or std. with a min. climb of 475' per NM to 1400. **Rwys 36L,36R,** 1800-2½, climb in visual conditions to cross Napa County Airport at or above 1700 MSL before proceeding direct SGD VORTAC or std. with a min. climb of 370' per NM to 1200.

DEPARTURE PROCEDURE: **Rwys 6,18L,18R,** turn right. **Rwys 24,36L,36R,** turn left. **All aircraft** climb direct SGD VORTAC. Aircraft departing SGD R-060 CW R-270 climb on course. All others continue climb via SGD R-165 to 2000, then climbing right turn direct SGD VORTAC, climb on course.

NOTE: **Rwy 6,** Flood light 90' from departure end of runway, 500' left of centerline, 30' AGL/64' MSL. Flood light 581' from departure end of runway, 485' left of centerline, 30' AGL/67' MSL. Railroad 1143' to 1236' from departure end of runway, on centerline to 500' left of centerline, 23' AGL/64' to 67' MSL. Pole 1396' from departure end of runway, 741' right of centerline, 33' AGL/77' MSL. Trees 1563' from departure end of runway, 575' left of centerline, 34' AGL/78' MSL. Trees 2331' from departure end of runway, 203' right of centerline, 53' AGL/106' MSL. Trees 3297' from departure end of runway, 476' left of centerline, 52' AGL/ 131' MSL. Obstruction light hopper 3440' from departure end of runway, 273' right of centerline, 50' AGL/133' MSL. Trees 4895' from departure end of runway, 1067' left of centerline, 108' AGL/198' MSL. **Rwy 18L,** tree 4982' from departure end of runway, 237' left of centerline, 58' AGL/92' MSL. **Rwy 24,** bridge 4964' from departure end of runway, 1716' right of centerline, 167' AGL/167' MSL. **Rwy 36R,** floodlight 462' from departure end of runway, 339' right of centerline, 29' AGL/53' MSL. Tree 8701' from departure end of runway, 1286' right of centerline, 70' AGL/289' MSL. Tree 8838' from departure end of runway, 2299' right of centerline, 64' AGL/383' MSL. **Rwy 36L,** terrain 1' from departure end of runway, 491' left of centerline, 34' MSL. Terrain 210' from departure end of runway, 417' left of centerline, 32' MSL. Trees 595' from departure end of runway, 517' right of centerline, 18' AGL/42' MSL. Trees 3182' from departure end of runway, 793' right of centerline, 81' AGL/117' MSL. Trees 4636' from departure end of runway, 345' right of centerline, 114' AGL/153' MSL. Trees 7061' from departure end of runway, 1800' right of centerline, 70' AGL/289' MSL. Pole 12845' from departure end of runway, 1471' right of centerline, 53' AGL/372' MSL. Pole 13005' from departure end of runway, 3483' right of centerline, 39' AGL/558' MSL. Tree 19688' from departure end of runway, 2155' right of centerline, 100' AGL/894' MSL.

NOVATO, CA

GNOSS FIELD

TAKE-OFF MINIMUMS: **Rwy 13,** NA. **Rwy 31,** 500-2 or std. with a min. climb of 250' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 31,** climbing right turn direct SGD VORTAC before proceeding on course.

OAKDALE, CA

OAKDALE

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn via heading 020° and LIN VORTAC R-124 to WRAPS INT/LIN 16.66 DME. Climb in WRAPS holding pattern (Northwest, right turn, 124° inbound) to cross WRAPS INT at or above MEA for direction of flight. **Rwy 28,** climb via heading 276° and LIN VORTAC R-146 to LIN VORTAC cross LIN VORTAC at or above MEA for direction of flight.

NOTE: **Rwy 10,** terrain beginning 388' from departure end of runway, up to 279' MSL. **Rwy 28,** powerline 3447' from departure end of runway, 407' right of centerline, 115' AGL/329' MSL.

OAKLAND, CA

METROPOLITAN OAKLAND INTL

DEPARTURE PROCEDURE: **Rwys 9L,9R,11,15,29,** turn right. **Rwys 27L,27R,** maintain runway heading. **Rwy 33,** turn left. **All aircraft** climb to 4000 or above via V107 to COMMO Int. If not at 4000 at COMMO Int, climb in holding pattern (E, right turns, 288° inbound) before proceeding on course.

ORLAND, CA

HAIGH FIELD

DEPARTURE PROCEDURE: **Rwy 15,** climbing left turn. **Rwy 33,** climbing right turn. **All aircraft** climb via CIC R-238 to GONGS Int. Aircraft departing GONGS Int 070° CW 240° or 290° CW 360° climb on course. All others climb in GONGS holding pattern (NE, right turns, 238° inbound) to depart GONGS Int at or above: 001° CW 069°, 3200; 241° CW 289°, 2300.

OROVILLE,CA

OROVILLE MUNI (OVE)

AMDT 2A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 1300-2 or std. w/ min. climb of 260' per NM to 1700. **Rwy 30,** 400-1¾ or std. w/ min. climb of 245' per NM to 600.

DEPARTURE PROCEDURE: **Rwys 1, 30,** climbing left turn heading 170°. **Rwys 12, 19,** climbing right turn heading 290°. **All aircraft** climb via MXW R-052 to TALUM Int/MXW 16.9 DME. Continue climb on course.

NOTE: **Rwy 1,** light poles beginning 1368' from DER, 538'right of centerline, up to 71'AGL/255' MSL. Tree 513' from DER, 603'left of centerline, 52'AGL/236' MSL. Windsock 1143'from DER, 350' right of centerline, 19' AGL/213'MSL. Ground 191' from DER, 489' right of centerline, 190' MSL. **Rwy 12,** light on pole 128' from DER, 293'right of centerline, 27'AGL/203' MSL. **Rwy 19,** pole 902' from DER, 655' right of centerline, 36' AGL/ 217' MSL. Vehicle on road 819' from DER, 376' left of centerline, 15' AGL/203' MSL. **Rwy 30,** obstruction light on transmission tower 1.4 NM from DER, 1825'right of centerline, 250' AGL/442' MSL. Tree 642' from DER, 638' left of centerline, 52'AGL/244' MSL.

PALO ALTO, CA

PALO ALTO AIRPORT OF SANTA CLARA COUNTY

DEPARTURE PROCEDURE: **Rwy 13**, turn left. **Rwy 31,** turn right. **All aircraft** climb direct SJC VOR/ DME before proceeding on course.

PETALUMA, CA

PETALUMA MUNI

DEPARTURE PROCEDURE: **Rwy 11,** climb to 2400 or above direct SGD VORTAC. **Rwy 29,** climb runway heading to 1500 then climbing left turn to 3000 direct SGD VORTAC. **All aircraft** continue climb to MEA for route of flight.

PLACERVILLE, CA

PLACERVILLE (PVF)

AMDT 2 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 23,** climb to 5000 via HNW R-226 then climbing right turn via HNW R-226 to HNW VOR/DME. Aircraft departing HNW VOR/DME R-180 CW R-303 climb on course; all others climb in HNW VOR/DME holding pattern (Hold SW, right turn, 048° inbound) to cross HNW VOR/DME at or above MEA/MCA for direction of flight before proceeding en route.

NOTE: **Rwy 23,** hangar 20' from departure end of runway, 340' right of centerline, 27' AGL/2586' MSL.

PORTERVILLE, CA

PORTERVILLE MUNI

TAKE-OFF MINIMUMS: **Rwy 12,** 200-1 or std. with a min. climb rate of 220' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn. **Rwy 30,** climbing left turn. **All aircraft** climb direct to TTE VOR/DME. Aircraft departing TTE R-146 CW R-330 climb on course. All others, continue climb in TTE holding pattern (NW, right turns, 143° inbound) to cross: TTE R-331 CW R-060, 8600; R-061 CW R-145, 7000.

NOTE: 559' frost fan 3000' east southeast runway 12.

RED BLUFF, CA

RED BLUFF MUNI

TAKE-OFF MINIMUMS: **Rwy 33,** CATS C,D 2500-2 or std. with a min. climb of 300' per NM to 3300.

DEPARTURE PROCEDURE: **Rwy 15,** climb direct RBL VORTAC. **Rwy 33,** climbing right turn direct RBL VORTAC. **All aircraft** departing RBL R-091 CW R-200 climb on course. All others climb in RBL holding pattern (S, right turns, 341° inbound) to depart RBL VORTAC at or above: R-021 CW R-060, 4500; R-061 CW R-090, 2100; R-201 CW R-270, 4000; R-271 CW R-020, 2400.

REDDING, CA

REDDING MUNI

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 122° and RBL R-344 to RBL VORTAC to 3000 before proceeding on course. **Rwy 16,** climbing left turn heading 110° and RBL R-344 to RBL VORTAC to 3000 before proceedingon course. **Rwys 30, 34,** climbing right turn heading 110° and RBL R-344 to RBL VORTAC to 3000 before proceeding on course.

NOTE: **Rwy 12,** multiple trees and bush 86' from departure end of runway, 174' left of centerline up to 87' AGL/576' MSL, fence and equipment 282' from departure end of runway, 330' left of centerline, up to 8' AGL/500' MSL. **Rwy 30,** multiple trees beginning 1936' from departure end of runway, 210' left of centerline, up to 94' AGL/594' MSL, multiple trees beginning 1686' from departure end of runway, 326' right of centerline, 68' AGL/568' MSL. Multiple poles and antenna on hangar beginning 289' from departure end of runway, 385' left of centerline up to 34' AGL/534' MSL. Rod on pole 850' from departure end of runway, 524' right of centerline, 36' AGL/536' MSL. Powerline 2419' from departure end of runway, 1091' left of centerline 84' AGL/584' MSL. Hangar 1126' from departure end of runway, 528' left of centerline, 37' AGL/537' MSL. **Rwy 34,** sign 98' from departure end of runway, 356' left of centerline 5' AGL/510' MSL, tree 588' from departure end of runway, 483' left of centerline 16' AGL/521' MSL.

RIO VISTA, CA

RIO VISTA MUNI

DEPARTURE PROCEDURE: **Rwy 7,** turn left. **Rwys 14,25,32** turn right. **All aircraft** climb direct SAC VORTAC.

SACRAMENTO, CA

MC CLELLAN AIRFIELD (MCC)

AMDT 1 08101 (FAA)

TAKE-OFF MINIMUMS: STANDARD.

SACRAMENTO, CA (CON'T)

SACRAMENTO EXECUTIVE (SAC)

ORIG 08325 (FAA)

NOTE: **Rwy 2,** multiple trees 1128' from departure end of runway, 108' left of centerline, up to 76' AGL/96' MSL. Antenna 1376' from departure end of runway, 663' left of centerline, 51' AGL/71' MSL. Trees 1858' from departure end of runway, 137' right of centerline, 73' AGL/93' MSL. **Rwy 12,** multiple trees 518' from departure end of runway, 26' left of centerline, up to 83' AGL/98' MSL. Light pole 507' from departure end of runway, 336' left of centerline, 37' AGL/52' MSL. Transmission pole 3971' from departure end of runway 647' left of centerline, 130' AGL/154' MSL. Multiple trees 475' from departure end of runway, 476' right of centerline up to 97' AGL/112' MSL. Light poles 711' from departure end of runway, 241' right of centerline, 36' AGL/51' MSL. **Rwy 16,** light pole 22' from departure end of runway, 481'left of centerline, 38' AGL/53' MSL. Antenna 540' from departure end of runway, 516' left of centerline, 53' AGL/67' MSL. Multiple trees beginning 1317' from departure end of runway, 36' left of centerline, up to 78' AGL/88' MSL. Multiple trees beginning 588' from departure end of runway, 195' right of centerline, up to 67' AGL/77' MSL. **Rwy 20,** multiple trees beginning 850' from departure end of runway, 626' left of centerline, up to 92' AGL/107' MSL. Multiple trees beginning 714' from departure end of runway, 515' right of centerline, up to 66' AGL/81' MSL. **Rwy 30,** obstruction light on hangers 460' from departure end of runway, 360' right of centerline, 25' AGL/43' MSL. Multiple trees beginning 631' from departure end of runway, 195' right of centerline, up to 56' AGL/74' MSL. Multiple trees beginning 1331' from departure end of runway, 247' left of centerline, up to 90' AGL/110' MSL. Antenna on building 1543' from departure end of runway, 442' left of centerline, 47' AGL/67' MSL. **Rwy 34,** trees 1724' from departure end of runway, 854' left of centerline, 56' AGL/74' MSL. Tree 2233' from departure end of runway, 1062' right of centerline, 79' AGL/99' MSL.

SACRAMENTO INTL

DEPARTURE PROCEDURE: **Rwy 16L,** climb via heading 164° to 800 before turning east.

SACRAMENTO MATHER

DEPARTURE PROCEDURE: **Rwys 4L,4R,** climbing right turn direct SAC VORTAC. **Rwys 22 L,22R** climb direct SAC VORTAC.

SALINAS, CA

SALINAS MUNI

TAKE-OFF MINIMUMS: **Rwys 3, 14, 21, 32,** NA. **Rwy 8,** CAT C,D 3600-2 or std. with a min. climb of 420' per NM to 4100. **Rwy 13,** CAT C,D 3600-2 or std. with min. climb of 500' per NM to 4000. **Rwy 31,** RVR/24, FAR 135.

DEPARTURE PROCEDURE: **Rwys 8, 13, 26,** turn right. **Rwy 31,** turn left. Climb on SNS R-275 to 2000, then climbing right turn to cross SNS VORTAC at or above 3000.

SAN ANDREAS, CA

CALAVERAS CO-MAURY RASMUSSEN FIELD

TAKE-OFF MINIMUMS: **Rwy 13,** 1800-5 or std. with a min. climb of 290' per NM to 3100.

DEPARTURE PROCEDURE: **Rwy 13,** climb runway heading to 3100, then climbing right turn via LIN R-085 to LIN VORTAC. **Rwy 31,** climb via heading 311° to 3000, then climbing left turn via Linden (LIN) VORTAC R-029 to LIN VORTAC.

SAN CARLOS, CA

SAN CARLOS (SQL)

AMDT 1 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 30**, NA.

DEPARTURE PROCEDURE: **Rwy 12,** climbing left turn via heading 120° and SJC VOR/DME R-281 to SJC VOR/DME before proceeding on course.

NOTE: **Rwy 12,** ground 0' from DER, 148' left of centerline, 0' AGL/11' MSL. Building 2' from DER, 167' right of centerline, 27' AGL/30' MSL. Levee beginning 117' from DER, 90' left of centerline, up to 12' AGL/12' MSL. Pole 715' from DER, 294' right of centerline, 34' AGL/38' MSL. Tower 1674' from DER, 741' right of centerline, 106' AGL/111' MSL.

SAN FRANCISCO, CA

SAN FRANCISCO INTL

TAKE-OFF MINIMUMS: **Rwy 19L,** 2000-2 or std. with a min. climb of 520' per NM to 2300. **Rwy 19R,** 2000-2 or std. with a min. climb of 500' per NM to 2300. **Rwys 28L, 28R,** 800-2 or std. with a min. climb of 270' per NM to 1000.

DEPARTURE PROCEDURE: **Rwys 1L,1R, 28L, 28R,** climb runway heading to 2000. **Rwys 10L,10R, 19L, 19R,** climbing left turn via heading 050° and SFO R-090. **All aircraft** continue climb on course.

SAN JOSE, CA

NORMAN Y MINETA SAN JOSE INTL (SJC)

AMDT 6A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 11, 12R**, 400-2½ or std. with a min. climb of 260' per NM to 500. **Rwy 12L**, 400-1¾ or std. with a min. climb of 278' per NM to 500.

DEPARTURE PROCEDURE: **Rwys 11, 12L, 12R,** climbing right turn via heading 315° to 2000, then via OAK R-135 to OAK VORTAC before proceeding on course. **Rwys 29, 30L, 30R**, Climb via heading 312° to 2000, then via OAK R-132 to OAK VORTAC before proceeding on course.

NOTE: **Rwy 11**, multiple trees beginning 1837' from DER, 230' right of centerline, up to 85' AGL/154' MSL. Crane 2.14 NM from DER, 1144' left of centerline, 305' AGL/389' MSL. **Rwy 12L**, multiple cranes, trees, and bldg beginning 286' from centerline, 69' right of centerline, up to 305' AGL/389' MSL. Multiple antennas, poles, bldg, and trees beginning 191' from DER, 48' left of centerline, up to 275' AGL/366' MSL. **Rwy 12R**, multiple antennas, bldg, cranes, poles, and trees beginning 1402' from DER, 194' left of centerline, up to 305' AGL/389' MSL. Multiple antennas, bldg, cranes, poles, and trees beginning 659' from DER, 150' right of centerline, up to 73' AGL/142' MSL. **Rwy 29**, tree 2252' from DER, 114' left of centerline, 86' AGL/125' MSL. OL on GS 821' from DER, 400' right of centerline, 35' AGL/74' MSL. **Rwy 30L,** multiple antennas, poles, towers, and trees beginning 1014' from DER, 350' left of centerline, up to 59' AGL/94' MSL. Multiple antennas, poles, and trees beginning 1279' from DER, 379' right of centerline, up to 52' AGL/88' MSL. **Rwy 30R**, multiple antennas, fences, and poles beginning 139' from DER, 40' right of centerline, up to 95' AGL/124' MSL. Multiple poles and trees beginning 185' from DER, 38' left of centerline, up to 51' AGL/85' MSL.

REID-HILLVIEW OF SANTA CLARA COUNTY

TAKE-OFF MINIMUMS: **Rwys 13L, 13R,** NA - environmental.

DEPARTURE PROCEDURE: Use DECOT DEPARTURE.

SAN MARTIN, CA

SOUTH COUNTY AIRPORT OF SANTA CLARA COUNTY

TAKE-OFF MINIMUMS: **Rwy 14,** NA. **Rwy 32,** 400-2 or std. with a min. climb of 350' per NM to 4000.

DEPARTURE PROCEDURE: **Rwy 32, all aircraft** climb runway heading to 2200, aircraft departing northwest via V-485, climbing left turn to 4600, heading 270° to intercept SJC R-121 (V-485) to SJC VOR/DME proceed on course; aircraft departing southeast via V-485, climbing left turn to 4600, heading 170° to intercept SJC R-121 (V485) southeast bound to GILRO Int and proceed on course.

SANTA ROSA, CA

CHARLES M. SCHULZ-SONOMA COUNTY

TAKE-OFF MINIMUMS: **Rwy 1,** std. with a min. climb of 267' per NM to 2400, or 1000-2½ for climb in visual conditions. **Rwy 32,** std. with a min. climb of 314' per NM to 2400, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 1, 32,** climbing left turn heading 164°, thence...or climb in visual conditions to cross the STS VOR/DME southwestbound at or above 1100, thence...**Rwy 14,** climbing right turn heading 250°, thence...**Rwy 19,** climb on heading 190°, thence...

...intercept and climb via STS R-202 to FREES INT, cross FREES at or above MEA for route of flight or continue climb in FREES holding pattern (SE, right turns, PYE VORTAC 334.73 inbound) to MEA for route of flight.

NOTE: **Rwy 1,** tree 739' from departure end of runway, 525' left of centerline, 40' AGL/141' MSL. **Rwy 14,** multiple trees beginning 321' from departure end of runway, 421' left of centerline up to 73' AGL/172' MSL. Tree 2113' from departure end of runway, 721' right of centerline, 77' AGL/176' MSL. **Rwy 19,** posts 39' from departure end of runway, 259' right of centerline, 7' AGL/126' MSL. Multiple trees beginning 1482' from departure end of runway, 461' right of centerline, up to 100 ' AGL/253' MSL. Multiple trees beginning 1666' from departure end of runway, 58' left of centerline, up to 55' AGL/257' MSL. **Rwy 32,** windsock 39' from departure end of runway, 341' left of centerline, 25' AGL/133' MSL. Multiple trees beginning 810' from departure end of runway, 87' right of centerline up to 50' AGL/205' MSL. Multiple trees beginning 2419' from departure end of runway, 167' left of centerline, up to 50' AGL/216' MSL.

SOUTH LAKE TAHOE, CA

LAKE TAHOE

TAKE-OFF MINIMUMS: **Rwy 18,** 4000-3 or std. with min. climb of 700' per NM to 9800. **Rwy 36,** 2700-3 or std. with a min. climb of 400' per NM to 8300.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 9800, then continue climbing right turn via heading 280° and SWR R-152 to SWR VOR/DME. **Rwy 36,** climb runway heading to 8300, then continue climbing left turn via heading 340° and SWR R-102 to SWR VOR/DME. Then **all aircraft** proceed on course.

STOCKTON, CA

STOCKTON METROPOLITAN (SCK)

ORIG 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29R,** 300-1¼ or std. w/ min. climb of 210' per NM to 300 or alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 11L,** truck on road 199' from departure end of runway, 439' left of centerline, 15' AGL/49' MSL. Obstruction light on blast fence and antenna on building beginning 294' from departure end of runway, 39' right of centerline, up to 20' AGL/50' MSL. **Rwy 29L,** antenna on building 2956' from departure end of runway, 1204' left of centerline, 90' AGL/117' MSL. Stack 5562' from departure end of runway, 1721' right of centerline, 143' AGL/171' MSL. **Rwy 29R,** obstruction light on grain elevator, 1.0 NM from departure end of runway, 1882' left of centerline, 161' AGL/191' MSL. Light tower and rod on field light tower beginning 245' from departure end of runway, 1' left of centerline up to 44' AGL/71' MSL. Stacks and light on silo beginning 256' from departure end of runway, 381' right of centerline, up to 144' AGL/171' MSL.

SUSANVILLE, CA

SUSANVILLE MUNI

DEPARTURE PROCEDURE: Use AMEDEE DEPARTURE.

TRACY, CA

TRACY MUNI (TCY)

AMDT 3 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 26,** 700-3 or std. w/ a min. climb of 320' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 8**, climb to 3000 via heading 073° and MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course. **Rwy 12,** climbing left turn to 3000 to intercept MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course. **Rwy 26,** climbing right turn to 3000 via heading 150° and MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course. **Rwy 30,** climbing right turn to 3000 via heading 150° to intercept MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course.

NOTE: **Rwy 8,** tree 472' from DER, 198' left of centerline, 50' AGL/194' MSL. Fence 167' from DER, 8' right of centerline, 25' AGL/176' MSL. Vehicle on road 241' from DER, 412' left of centerline, 15' AGL/183' MSL. Vehicles on roads starting 241' from DER, 7' right of centerline, up to 15' AGL/189' MSL. Poles starting 403' from DER, 204' left of centerline, up to 54' AGL/208' MSL. Poles starting 727' from DER, 49' right of centerline, up to 54' AGL/212' MSL. **Rwy 12,** trees starting 436' from DER, 251' right of centerline, up to 72' AGL/253' MSL. Conveyor 1995' from DER, 504' left of centerline, 66' AGL/ 270' MSL. Poles starting 832' from DER, 396' right of centerline, up to 56' AGL/240' MSL. Obstruction light on hopper 1934' from DER, 274' right of centerline, 74' AGL/255' MSL. Vehicles on road starting 133' from DER, 272' left of centerline, up to 15' AGL/206' MSL. Fence 32' from DER 405' left of centerline, 25' AGL/194' MSL. **Rwy 26,** tree 1173' from DER, 180' right of centerline, 35' AGL/234'MSL. Trees starting 1067' from DER, 125' left of centerline, up to 35' AGL/794' MSL. Vehicle on road 236' from DER, 150' left of centerline, 15' AGL/214' MSL. Fence 69' from DER, 133' left of centerline, 23' AGL/203' MSL. Rising terrain 11105' from DER, 2814' left of centerline, up to 739' MSL. **Rwy 30,** trees starting 438' from DER, 30' right of centerline, up to 35' AGL/209' MSL. Tree 1079' from DER, 82' left of centerline, 35' AGL/214' MSL. Obstruction light on hopper 985' from DER, 353' right of centerline, 72' AGL/236' MSL. Bush 195' from DER, 364' left of centerline, 25' AGL/189' MSL. Light pole 1149' from DER, 160' left of centerline, 47' AGL/211' MSL. Obstruction light on building 2289' from DER, 65' right of centerline, 74' AGL/238' MSL.

TRAVIS AFB (KSUU)

FAIRFIELD, CA 09295

All Rwy: Comply with assigned SID or ATC radar vectors.

TAKE-OFF OBSTACLES: **Rwy 3L,** 56' MSL, Terrain 10' to 46' from DER, 500' left of centerline. **Rwy 21L,** Light pole 15' AGL/83' MSL, 148' from DER, 546' left of centerline. Light pole 15' AGL/84' MSL, 346' from DER, 547' left of centerline. Light pole 15' AGL/84' MSL, 521' from DER, 548' left of centerline. Light pole 15' AGL/83' MSL, 702' from DER, 549' left of centerline. Light pole 15' AGL/84' MSL, 880' from DER, 549' left of centerline. Light pole 15' AGL/85' MSL, 926' from DER, 661' left of centerline.

DEPARTURE PROCEDURE: **Rwy 3L,** Climb on a heading between 344° CW to 137° from DER. **Rwy 3R,** Climb on a heading between 328° CW to 140° from DER.

TRUCKEE, CA

TRUCKEE-TAHOE (TRK)

AMDT 4 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwys 10, 19,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwys 1, 28,** use TRUCK DEPARTURE.

TULARE, CA

MEFFORD FIELD

DEPARTURE PROCEDURE: **Rwy 13,** climbing right turn. **Rwy 31,** climbing left turn. **All aircraft** climb direct to VIS VOR/DME. Aircraft departing VIS R-001 CW R-140 continue climb in VIS holding pattern (E, right turns, 287° inbound) to cross VIS VOR/DME at or above 4000. All other aircraft climb on course.

UKIAH, CA

UKIAH MUNI

TAKE-OFF MINIMUMS: **Rwy 15,** NA. **Rwy 33,** 300-1 and min. climb of 350' per NM to 4000.

DEPARTURE PROCEDURE: Climb to 4000 via heading 350° then climbing left turn to 6000 direct ENI.

VACAVILLE, CA

NUT TREE (VCB)

AMDT 4 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 20,** std. w/ min. climb of 424' per NM to 1600, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 2,** climbing right turn to intercept SAC R-242 to SAC VORTAC, to 2000 before proceeding on course. **Rwy 20,** climbing left turn to intercept SAC R-242 to SAC VORTAC, to 2000 before proceeding on course, or, for climb in visual conditions: cross Nut Tree Airport eastbound at or above 1300, then climb to 2000 via SAC R-242 to SAC VORTAC, proceed on course.

NOTE: **Rwy 2,** trees beginning 222' from DER, 514' left of centerline up to 106' AGL/225' MSL. Light pole 337' from DER, 534' left of centerline, 28' AGL/147' MSL. **Rwy 20,** pole 161' from DER, 500' left of centerline, 120' AGL/239' MSL. Trees beginning 269' from DER, 335' left of centerline, up to 117' AGL/236' MSL. Pole 777' from DER, 436' left of centerline, 119' AGL/238' MSL. Windsock 6' from DER, 166' right of centerline, 8' AGL/ 127' MSL. Fence 193' from DER, 202' right of centerline, 3' AGL/122' MSL.

VISALIA, CA

VISALIA MUNI (VIS)

AMDT 3 09239 (FAA)

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn via heading 230° to 2000 to intercept V23. **Rwy 30,** climbing left turn via heading 230° to 2000 to intercept V23.

NOTE: **Rwy 12,** tree 774' from DER, 618' right of centerline, 46' AGL/340' MSL. Tree 1327' from DER, 823' left of centerline, 55' AGL/349' MSL. **Rwy 30,** multiple trees beginning 179' from DER, 260' left of centerline, up to 54' AGL/343' MSL. Antenna on building 285' from DER, 250' right of centerline, 16' AGL/305' MSL. Truck on road 522' from DER, on centerline, 17' AGL/342' MSL. Railroad 690' from DER, 549' left of centerline, 23' AGL/317' MSL. Multiple trees beginning 876' to 3029' from DER, 341' to 461' left of centerline, up to 90' AGL/379' MSL. Multiple trees beginning 1886' from DER, 103' right of centerline, up to 58' AGL/347' MSL.

WATSONVILLE, CA

WATSONVILLE MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** 1100-2 CAT A,B, 1900-2 CAT C,D or std. with a min. climb of: CAT A,B 330' per NM to 2200; CAT C,D 460' per NM to 2400. **Rwy 8,** std. with a min. climb of 290' per NM to 2200. **Rwy 20,** std. with a min. climb of 330' per NM to 2200. **Rwy 26,** std. with a min. climb of 330' per NM to 2200.

DEPARTURE PROCEDURE: **Rwy 2** climbing right turn. **Rwy 20,** climb runway heading. **Rwy 26,** climbing left turn. **All aircraft** intercept 212° bearing from PAJAR NDB and climb to cross MOVER Int at or above 2200. Climb in MOVER INT holding pattern (NE, right turns, 212° inbound) until reaching MEA or assigned altitude.

NOTE: **Rwy 2,** 40' AGL pole 17' from departure end of runway, 340' left of centerline. **Rwy 8,** 189' AGL tower 4696' from departure end of runway, 1200' right of centerline. **Rwy 20,** 106' AGL tree 954' from departure end of runway, 550' left of centerline. **Rwy 26,** 174' AGL tree 625' from departure end of runway, 580' left of centerline.

WILLITS, CA

ELLS FIELD-WILLITS MUNI

DEPARTURE PROCEDURE: **Rwy 16,** use MENDOCINO RNAV DEPARTURE. **Rwy 34,** use FLUEN RNAV DEPARTURE.

WILLOWS, CA

WILLOWS-GLENN COUNTY

DEPARTURE PROCEDURE: **Rwy 13,** climbing right turn. **Rwy 16,** climb runway heading. **Rwy 31, 34,** climbing left turn. **All aircraft** climb direct to MXW VORTAC. Aircraft departing MXW Vortac R-330 CW R-220, climb on course. All others continue climb in MXW holding pattern (S, 350° inbound, left turns) to depart MXW Vortac 220° CW 290°, 6500, 291° CW 330°, 5500.

NOTE: **Rwy 34,** 55' AGL pole 530' from departure end of runway, 430' right of centerline.

WOODLAND, CA

WATTS-WOODLAND (O41)

AMDT 3 09127 (FAA)

DEPARTURE PROCEDURE: **Rwy 18,** climb heading 185° and ILA R-151 to EMBER INT/ILA 48 DME before proceeding on course. **Rwy 36,** climbing left turn via heading 320° and ILA R-145 to ILA VORTAC before proceeding on course.

NOTE: **Rwy 18,** tree 2478' from DER, 283' right of centerline, 100' AGL/249' MSL. Vehicle on road 192' from DER, on centerline, 15' AGL/144' MSL. **Rwy 36,** tree 453' from DER, 69' left of centerline, 100' AGL/224' MSL. Vehicle on road 350' from DER, on centerline, 15' AGL/134' MSL. Tree 4489' from DER, 1688' left of centerline, 100' AGL/234' MSL.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

APPLE VALLEY, CA

APPLE VALLEY

TAKE-OFF MINIMUMS: **Rwy 36,** 300-1 or std . with a min. climb gradient of 340' per NM until 5800. **Rwy 8,18,26,** NA.

DEPARTURE PROCEDURE: Use EXCON ONE RNAV DEPARTURE. **Rwy 8,18,26,** NA.

AVALON, CA

CATALINA

DEPARTURE PROCEDURE: **Rwys 4,22,** climb straight ahead to 2300 then proceed on course.

BAKERSFIELD, CA

BAKERSFIELD MUNI

TAKE-OFF MINIMUMS: **Rwy 16,** 300-1 or std. with a min. climb of 230' per NM to 500. **Rwy 34,** 400-2 or std. with a min. climb of 400' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 16,** turn right. **Rwy 34,** turn left. **All aircraft** climb direct EHF VORTAC. Aircraft departing EHF R-120 CW R-360, climb on course, all others continue climb in EHF VORTAC holding pattern (NW, right turns, 144° inbound) to cross EHF at or above 4000, before proceeding on course.

NOTE: 120' powerlines on centerline, 2551' from departure end of runway 16.

NAME TAKE-OFF MINIMUMS

BAKERSFIELD, CA (CON'T)

MEADOWS FIELD

DEPARTURE PROCEDURE: **All aircraft** climbing right turn direct EHF VORTAC. Aircraft departing EHF R-180 CW R-350 climb on course. All others continue climb northwestbound via EHF R-324, then climbing left turn to cross EHF VORTAC at or above: EHF R-110 CW R-179 3000; EHF R-351 CW R-109 4000.

BIG BEAR CITY, CA

BIG BEAR CITY

TAKE-OFF MINIMUMS: **Rwy 8,** 1200-2 or std. with a min. climb of 282' per NM to 8000. **Rwy 26,** NA.

DEPARTURE PROCEDURE: Use OKACO RNAV DEPARTURE. **Rwy 26,** NA.

BLYTHE, CA

BLYTHE

TAKE-OFF MINIMUMS: **Rwy 26,** 700-2 or std. with a min. climb of 330' per NM to 1100.

DEPARTURE PROCEDURE: **Rwys 8,17,35,** turn right. **Rwy 26,** turn left, climb to 1500 via heading 180° and BLH R-120, then climbing left turn direct BLH VORTAC, MCA 2000.

BORREGO SPRINGS, CA

BORREGO VALLEY (L08)
AMDT 2 08101 (FAA)
DEPARTURE PROCEDURE: Use ZUNGU DEPARTURE (RNAV).

BRAWLEY, CA

BRAWLEY MUNI
TAKE-OFF MINIMUMS: **Rwy 26,** NA.
DEPARTURE PROCEDURE: **Rwy 8,** turn right. Climb to 3000 via IPL R-009 to IPL VORTAC, then climb on course.

BURBANK, CA

BOB HOPE
TAKE-OFF MINIMUMS: **Rwy 8,** Cats A,B 1500-2 or std. with 480' per NM to 2400. Cats C,D 2300-2 or std. with 650' per NM to 3200. **Rwy 15,** 1300-2 or std. with 290' per NM to 2100. **Rwy 33,** 1100-2 or std. with 390' per NM to 2000.
DEPARTURE PROCEDURE: **Rwy 26,** climb direct VNY VOR/DME. **Rwys 8,15,** climbing right turn. **Rwy 33,** climbing left turn direct to VNY VOR/DME. **All aircraft** continue climb to MEA. North/westbound via V326 to GINNA Int, south/eastbound via V186 to DARTS Int.

CALIFORNIA CITY, CA

CALIFORNIA CITY MUNI
DEPARTURE PROCEDURE: Use CALIFORNIA CITY (RNAV) DEPARTURE.

CALIPATRIA, CA

CLIFF HATFIELD MEMORIAL
DEPARTURE PROCEDURE: **Rwy 8,** climb runway heading to 400', then climbing right turn to 3000 via heading 200° and IPL R-336 to IPL VORTAC. **Rwy 26,** climb runway heading to 400', then climbing left turn to 3000 via IPL R-336 to IPL VORTAC.

CAMARILLO, CA

CAMARILLO
TAKE-OFF MINIMUMS: **Rwy 8,** 1100-2 or std. with a min. climb of 250' per NM to 1500.
DEPARTURE PROCEDURE: **Rwy 8,** climb to 2500 via CMA R-061. **Rwy 26,** climbing right turn to 2500 via CMA R-265. **All aircraft** climbing left turn direct CMA VOR/DME. Continue climb on course to assigned altitude.

CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

OCEANSIDE, CA 09015
RWY 3: Diverse departures not authorized.
RWY 21: Cross DER 35' AGL/96' MSL or above. Diverse departure authorized between 199° to 226° CW – Civil standard with minimum obstacle climb of 500 ft/NM to 1000'; Military standard with minimum obstacle climb of 430 ft/NM to 800'. 800-2 ceiling and vis authorized in lieu of minimum climb rate.
TAKE-OFF OBSTACLES: **RWY 3:** Multiple trees up to 101' AGL/165' MSL, beginning 2180' from DER, 490' to 700' right of centerline. Tree 66' AGL/141' MSL, 2209' from DER, 207' left of centerline. Tree 101' AGL/164' MSL, 2286' fromDER, 506' right of centerline. Antenna 276' MSL, 4525' from DER, 1233' left of centerline. Terrain 739' MSL, 4.02 NM from DER, 3721' left of centerline. **RWY 21:** Terrain 219' MSL, 3790' from DER, 815' left of centerline. Terrain 399' MSL, 5598' from DER, 1853' left of centerline. Terrain 530' MSL, 1.5 NM from DER, 943' right of centerline. Antennas and Tower up to 50' AGL/623' MSL, beginning 1.5 NM from DER, 2390' to 2745' right of centerline. Multiple Pylons and Terrain up to 50' AGL/606' MSL, beginning 1.6 NM from DER, 1022' to 1605' right of centerline. TACAN 70' AGL/560' MSL, 1.75 NM from DER, 90' right of centerline. Trees 43' AGL/104' MSL, 552' from DER, 182' right of centerline. Trees 63' AGL/124' MSL, 836' from DER, 714' left of centerline. Trees 40' AGL/101' MSL, 502' from DER, 273' left of centerline.

CARLSBAD, CA

MCCLELLAN-PALOMAR
TAKE-OFF MINIMUMS: **Rwy 6,** 1400-2 or std. with a min. climb of 260' per NM to 2100.
DEPARTURE PROCEDURE: **Rwy 6,** climbing left turn to 3100 heading 245°. **Rwy 24,** climb runway heading to 2800. **All aircraft** climb on course.

CHINA LAKE NAWS (ARMITAGE FLD)(KNID)

RIDGECREST, CA 07130
Rwy 3, 8, Diverse departure not authorized.
Rwy 14, Diverse departures authorized 071° to 141° CW with minimum civil climb of 450'/NM to 6900, minimum military climb of 390'/NM to 6300. 141° to 211° CW with minimum civil climb of 310'/NM to 5400, minimum military climb of 290'/NM to 5100.
Rwy 21, Diverse departures authorized 143° to 208° CW with minimum civil climb of 310'/NM to 5900, minimum military climb of 280'/NM to 5600.
Rwy 26, Diverse departures authorized 143° to 200° CW with minimum civil climb of 300'/NM to 5900, minimum military climb of 280'/NM to 5600. Turn left on departure to assigned heading. Maximum departure speed 250 KIAS until established on assigned heading. **Rwy 32**, Diverse departures authorized 126° to 175° CW with minimum civil climb of 350'/NM to 6300, minimum military climb of 310'/NM to 5900. Turn left on departure to assigned heading. Maximum departure speed 250 KIAS until established on assigned heading.
TAKE-OFF OBSTACLES: **Rwy 14**, Tower 176' AGL/2415' MSL, 5545' from DER, 246' right of centerline.

CHINO, CA

CHINO

TAKE-OFF MINIMUMS: **Rwy 3,** std. with a min. climb of 270' per NM to 4800. **Rwys 8L/R,** std. with a min. climb of 270' per NM to 4800. **Rwy 21,** Cat A/B std. with a min climb of of 290' per NM to 4800, Cat C/D std. with a min. climb of 400' per NM 4800. **Rwys 26L/R,** Cat A/B std. with a min. climb of 270' per NM to 4800, Cat C/D std. with a min. climb of 410' per NM to 4800.

DEPARTURE PROCEDURE: **Rwys 3, 8L/R,** climbing right turn direct PDZ VORTAC. **Rwys 21,26L/R,** climbing left turn direct PDZ VORTAC. **All aircraft** climb in PDZ VORTAC holding pattern (Hold E, right turns, 258° inbound) to the appropriate MEA.

NOTE: 108' AGL trees 1200' from departure end of runway 3, 600' left of centerline.

CORONA, CA

CORONA MUNI

TAKE-OFF MINIMUMS: **Rwy 7,** 1000-2 or std. with a min. climb of 310' per NM to 1700. **Rwy 25,** 600-2 or std. with a min. climb of 280' per NM to 1200.

DEPARTURE PROCEDURE: **Rwy 7,** climbing left turn. **Rwy 25,** climbing right turn. **All aircraft** continue climb direct to PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ VORTAC holding pattern (Hold NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-141 CW R-230 4000, R-281 CW R-090 6700.

DAGGETT, CA

BARSTOW-DAGGETT (DAG)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** std w/ min. climb of 401' per NM to 4400 or 3500-3 for climb in visual conditions. **Rwy 26,** std. w/ min. climb of 432' per NM to 4600 or 3500-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb direct DAG VORTAC. Thence...**Rwy 8,** climbing left turn direct DAG VORTAC. Thence...**Rwys 22,26,** climbing right turn heading 090° and DAG VORTAC R-224 to DAG VORTAC. Thence...

...climb in DAG VORTAC holding pattern (NE, left turns, 224° inbound) to cross DAG VORTAC at or above 7500 before proceeding on course, or for climb in visual conditions: cross Barstow-Daggett airport Northeastbound at or above 5300, then climb to 7500 via DAG R-224 to DAG VORTAC before proceeding on course.

NOTE: **Rwy 4,** multiple bushes, terrain, and AG equipment beginning at DER, from 295' left and 286' right of centerline, up to 40' AGL/1928' MSL. **Rwy 8,** multiple trees and bushes beginning 113' from DER, from 343' left and 259' right of centerline, up to 40' AGL/1924' MSL. **Rwy 22,** multiple terrain beginning at 5668' from DER, from 2019' right and 2019' left of centerline, up to 3895' MSL. **Rwy 26,** road beginning 360' from DER, from 596' left and 596' right of centerline, up to 15' AGL/1946' MSL. Railroad beginning 953' from DER, from 755' left and 755' right of centerline, up to 23' AGL/1958' MSL.

DELANO, CA

DELANO MUNI (DLO)

AMDT 3A 08129 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32,** 400-1 or std. with a min. climb rate of 390' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 14,** Climb via heading 140° and EHF VORTAC R-324 to 3000 before proceeding on course. **Rwy 32,** climb via heading 320° and EHF VORTAC R-324 to 3000 before proceeding on course.

NOTE: 65' AGL tree 600' from departure end of runway, 500' left of centerline runway 14.

EDWARDS AF AUX NORTH BASE (9L2)

EDWARDS, CA

Rwy 6-24, climb on course, cross 15 NM from ARP at or above 4500.

EDWARDS AFB (KEDW)

EDWARDS, CA 08269

Rwy 4L/R, Radar Required, Climb 340/NM to 5500, track inbound on EDW R-223 to EDW VORTAC, then out EDW R-043. Climb as instructed, expect radar vectors after passing 4500 or climb on course, cross 15 NM from ARP at or above 4500. **Rwy 22L/R,** Radar and DME Required. CAT ABC track outbound EDW R-223. At 12 DME turn right heading 020, intercept EDW R-247 to EDW VORTAC. Climb as instructed, expect radar vectors after passing 4500 or climb on course, cross 15 NM from ARP at or above 4500. CAT DE track outbound EDW R-223. At 12 DME turn right, intercept EDW R-247 to EDW VORTAC. Climb as instructed, expect radar vectors after passing 4500 or climb on course, cross 15 NM from ARP at or above 4500.

EL CENTRO NAF (KNJK)

EL CENTRO, CA 09127

Diverse Departures not authorized.

DEPARTURE PROCEDURE: **All Rwys,** use published departure procedure or if ceiling and visibility is below 2100-2½, make climbing turn direct IPL VORTAC within 3.6 DME of NJK TACAN and expect radar vectors to join assigned route. Expect filed altitude 10 minutes after departure. Cross IPL VORTAC at or below 7000.

EL MONTE, CA

EL MONTE

TAKE-OFF MINIMUMS: **Rwy 1,** 600-1 or std. with a min. climb of 280' per NM to 1000. **Rwy 19,** 1200-2 or std. with min. climb of 230' per NM to 1900.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn. **Rwy 19,** climb runway heading to 800 then climbing left turn. **All aircraft** intercept PDZ R-278 to PDZ VORTAC. Aircraft departing PDZ R-091 CW R-280 climb on course. All others continue climb in PDZ holding pattern (NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 6700.

FALLBROOK, CA

FALLBROOK COMMUNITY AIRPARK

TAKE-OFF MINIMUMS: **Rwy 36,** CAT A,B, 700-2 or std. with a min. climb of 340' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 1200, then climbing left turn via heading 160° to join V208-458. Aircraft westbound proceed on course. Aircraft eastbound V208-458 proceed to VISTA Int and climb in holding pattern (E, left turns, 263° inbound) to 5000 before proceeding on course. **Rwy 36,** climb runway heading to 1500, then climbing right turn to intercept OCN VORTAC R-027 to TANNR Int before proceeding on course.

FULLERTON, CA

FULLERTON MUNI (FUL)

AMDT 4A 08185 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** std. with a min. climb of 230' per NM to 900, or 1100-2½ for climb in visual conditions. **Rwy 24,** std. with a min. climb of 320' per NM to 2300, or 1100-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn to 2300 direct SLI VORTAC, or for climb in visual conditions: cross Fullerton Airport southwest bound at or above 1100, then climb to 2300 via SLI R-020 to SLI VORTAC. **Rwy 24,** climbing left turn to 2300 direct SLI VORTAC, or for climb in visual conditions: cross Fullerton Airport southwest bound at or above 1100, then climb to 2300 via SLI R-020 to SLI VORTAC.

NOTE: **Rwy 6,** obstruction light 109' from departure end of runway, 117' left of centerline, 22' AGL/118' MSL. Train 122' from departure end of runway, 106' left of centerline, 23' AGL/121' MSL. Multiple poles 58' to 1003' from threshold centerline to 373' right of centerline, 39' AGL/135' MSL. Hopper on building 977' from departure end of runway, 468' left of centerline, 36' AGL/132' MSL. Light pole 1247' from threshold, 143' left of centerline, 35' AGL/131' MSL. Tree 1463' from departure end of runway, 35' left of centerline, 72' AGL/168' MSL. Obstruction light 1620' from departure end of runway, 318' right of centerline, 50' AGL/146' MSL. Pole 2234' from departure end of runway, 754' left of centerline, 78' AGL/174' MSL. Pole 3597' from departure end of runway, 793' left of centerline, 102' AGL/198' MSL. Building 3208' from departure end of runway, 820' right of centerline, 112' AGL/217' MSL. Tower 1 NM from departure end of runway, 1937' left of centerline, 94' AGL/267' MSL. Pole 1.6 NM from departure end of runway, 1.5 NM left of centerline, 90' AGL/575' MSL. Tower 1.1 NM from departure end of runway, 1.7 NM left of centerline, 130' AGL/729' MSL. Tower 2 NM northwest of departure end of runway, 760' AGL/820' MSL. **Rwy 24,** road 82' from departure end of runway, on centerline, 15' AGL/99' MSL. Light 85' from departure end of runway, 260' right of centerline, 25' AGL/110' MSL. Light 217' from departure end of runway, 320' left of centerline, 104' AGL/122' MSL. Antenna on building 272' from departure end of runway, 278' left of centerline, 31' AGL/116' MSL. Trees 253' from departure end of runway, 228' right of centerline, 57' AGL/142' MSL. Obstruction light 400' from departure end of runway, on centerline, 18' AGL/103' MSL. Trees 1336' to 2492' from departure end of runway, 160' left of centerline to 419' right of centerline, 70' AGL/155' MSL. Tower 1.3 NM from departure end of runway, 5034' right of centerline, 684' AGL/750' MSL.

HAWTHORNE, CA

JACK NORTHROP FIELD/HAWTHORNE MUNI

TAKE-OFF MINIMUMS: **Rwy 7,** 300-2 or std. with a min. climb of 363' per NM to 500. **Rwy 25,** 200-1 or std. w/ a min. climb of 289' per NM to 300.

DEPARTURE PROCEDURE: **Rwy 7,** turn right, climb via heading 240°. **Rwy 25,** turn left, climb via heading 210°. **All runways** climb to 3000 via LAX R-170 to LIMBO Int.

NOTE: **Rwy 7,** multiple transmission towers beginning 5428' from departure end of runway, 205' left of centerline, up to 247' AGL/307' MSL. Antenna on building 1.1 NM from departure end of runway, 2020' left of centerline, 244' AGL/305' MSL. Multiple trees, poles, light poles and buildings beginning 130' from departure end of runway, 12' left of centerline, up to 266' AGL/327' MSL. Multiple trees, poles, signs and OL lights beginning 73' from departure end of runway, 90' right of centerline, up to 184' AGL/245' MSL. **Rwy 25,** OL light on tank 4471' from departure end of runway, 1311' left of centerline, 227' MSL. Multiple antennas on buildings, trees and poles 91' from departure end of runway, 64' left of centerline, up to 93' AGL/154' MSL. Multiple trees and poles beginning 309' from departure end of runway, 162' right of centerline, up to 84' AGL/149' MSL.

HEMET, CA

HEMET-RYAN

TAKE-OFF MINIMUMS: **Rwys 4,22,** N/A-restricted to glider operations. **Rwy 5,** std. with a min. climb of 526' per NM to 5200, or 1400-2½ for climb in visual conditions. **Rwy 23,** std. with a min. climb of 414' per NM to 3200, or 1400-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn via HDF VOR R-084 to HDF VOR, thence...or climb in visual conditions to cross Hemet-Ryan Airport westbound at or above 2900, then climb via HDF VOR R-093 to HDF VOR, thence... **Rwy 23,** climbing right turn via HDF VOR R-108 to HDF VOR, thence...or climb in visual conditions to cross Hemet-Ryan Airport westbound at or above 2900, then climb via HDF VOR R-093 to HDF VOR, thence...
....climb in HDF VOR holding pattern, (SE, right turns, 315° inbound), to cross HDF VOR at or above MEA/MCA for direction of flight.

NOTE: **Rwy 5,** road and vehicle 200' from departure end of runway, on centerline, 15' AGL/1534' MSL. **Rwy 23,** road and vehicle 394' from departure end of runway, 545' left of centerline, 15' AGL/1524' MSL. Tree 1.4 NM from departure end of runway, 2613' right of centerline, 100' AGL/1979' MSL.

IMPERIAL, CA

IMPERIAL COUNTY (IPL)
AMDT 2A 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 14,** 400-2¼ or std. w/ min. climb of 220' per NM to 400, or alternatively, with standadard take-off minimums and a normal 200' per NM climb gradient, take-off must occur no later than 1800' prior to DER.

DEPARTURE PROCEDURE: **Rwys 8, 32,** turn right. **Rwy 14,** climb runway heading. **Rwy 26,** turn left. **All aircraft** climb direct IPL VORTAC.

NOTE: **Rwy 8,** multiple VASI beginning 687' from DER, 31' right of centerline, up to 5' AGL/-52' MSL. Antenna on building 1033' from DER, 703' left of centerline, 45' AGL/ -12' MSL. Light on pole, 1984' from DER, 386' left of centerline, 55 ft AGL/-2' MSL. **Rwy 14,** building 1770' from DER, 38' left of centerline, 45' AGL/-11' MSL. Road 430'from DER, 291' left of centerline, 15' AGL/-41' MSL. Sign 1733'from DER, 35' left of centerline, 45' AGL/-11' MSL. Pole 1457' from DER, 393' right of centerline, 37' AGL/-19' MSL. **Rwy 26,** multiple obstruction lights on poles beginning 1509' from DER, 15' left of centerline, up to 60' AGL/3' MSL. Obstruction light on pole 1511' from DER, 459' right of centerline, 59' AGL/2' MSL. **Rwy 32**, obstruction light on tank, 823' from DER, 574' right of centerline 110' AGL/53' MSL. Numerous tanks beginning 3580' from DER, 296' right of centerline, up to 109' AGL/53' MSL. Tree 373' from DER, 387' right of centerline, 80' AGL/-24' MSL. Multiple lights beginning 243' from DER, 361' right of centerline, up to 28' AGL/-29' MSL. Pole 657' from DER, 370' left of centerline, 27' AGL/-30' MSL. Road 191' from DER, 237' left of centerline, 13' AGL/-44' MSL.

IMPERIAL BEACH NOLF (REAM FIELD) (KNRS)

IMPERIAL BEACH, CA. 09043

Rwy 8,9,26 departures not authorized.

Rwy 27: Diverse departure not authorized.

Departures authorized for military rotorcraft only. Climb to 2000 via heading 272° to intercept NRS TACAN R-270. Cross NRS 1.5 DME at or above 800. Minimum ATC climb rate of 600'/NM til 800 with take-off occurring NLT 3038' prior to DER or cross DER at or above 320.

INYOKERN, CA

INYOKERN

TAKE-OFF MINIMUMS: **Rwys 2, 10, 15, 28, 33,** NA.

DEPARTURE PROCEDURE: **Rwy 20,** use LAKE HUGHES RNAV DEPARTURE.

LA VERNE, CA

BRACKETT FIELD

TAKE-OFF MINIMUMS: **Rwys 26L,26R,** 300-1.

DEPARTURE PROCEDURE: **Rwys 8L,8R,** climb via heading 079° to 1500, then climbing right turn via heading 195° and POM R-164 to PRADO Int. **Rwys 26L, 26R,** climb via heading 259° to 1400, then climbing left turn via heading 130° and POM R-164 to PRADO Int.

Aircraft departing PRADO Int heading 141° clockwise 290° climb on course. All others climb in PRADO Int holding pattern (hold north, right turn, 164° inbound) to depart PRADO Int at or above: 291° clockwise 340°, 4500; 341° clockwise 050°, 6800; 051° clockwise 090°, 5200; 091° clockwise 140°, 4200.

NOTE: **Rwy 26L,** multiple trees and antenna beginning 370' from departure end of runway, 269' left of centerline up to 100' AGL/1116' MSL. Multiple trees beginning 896' from departure end of runway, 70' right of centerline, up to 100' AGL/1010' MSL. Multiple buildings and tanks beginning 2732' from departure end of runway, 416' right of centerline, up to 50' AGL/1230' MSL. **Rwy 26R,** hangar 241' from departure end of runway, 326' right of centerline, 35' AGL/994' MSL. Multiple trees beginning 1473' from departure end of runway, 807' left of centerline, up to 100' AGL/1116' MSL. Tank and trees beginning 2510' from departure end of runway, 503' right of centerline, up to 100' AGL/ 1289' MSL.

LANCASTER, CA

GENERAL WILLIAM J. FOX AIRFIELD (WJF)
ORIG-A 09267 (FAA)

DEPARTURE PROCEDURE: Climb southeastbound on R-299 to PMD VORTAC. Depart PMD at published MCA for direction of flight.

NOTE: **Rwy 6,** trees beginning 1170' from DER, 590' right of centerline, up to 44' AGL/2374' MSL.

LOMPOC, CA

LOMPOC

TAKE-OFF MINIMUMS: **Rwy 7,** std. with a min. climb of 425' per NM to 1400, or 1000-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 7,** climbing right turn. For climb in visual conditions: cross Lompoc Airport eastbound at or above 1200 MSL. **Rwy 25,** turn right heading 130°.

All aircraft climb to 6000 via GVO R-278 to GVO VORTAC. Aircraft departing GVO R-120 CW R-020 climb on course, all others climb in GVO holding pattern (NW, right turns, 127° inbound) to depart GVO VORTAC at or above MEA for route of flight.

NOTE: **Rwy 7,** trees 3583' from departure end of runway, 2.3 NM right of centerline, 50' AGL/889' MSL. Trees 1.2 NM from departure end of runway, 2.2 NM right of centerline, 50' AGL/791' MSL. Trees 1.6 NM from departure end of runway, 1.9 NM right of centerline, 50' AGL/743' MSL.

LONG BEACH, CA

LONG BEACH (DAUGHERTY FIELD)

TAKE-OFF MINIMUMS: **Rwy 16L,** 400-1½ or std. w/ min climb of 321' per NM to 500. **Rwy 16R,** 400-1 or std. w/ min. climb of 518' per NM to 500. **Rwy 25L,** std. w/ min. climb of 225' per NM to 2300. **Rwy 25R,** std. w/ min. climb of 223' per NM to 2200. **Rwys 34L,34R,** NA-Environmental and noise abatement.

DEPARTURE PROCEDURE: **Rwys 7L,7R,** climb heading 076° to 800, then climbing right turn direct SLI VORTAC and SLI R-210 to PADDR INT. **Rwy 12,** climb heading 121° to intercept SLI VORTAC R-210 to PADDR INT. **Rwys 16L,16R,** climb heading 166° to 800, then climbing right turn heading 180° and SLI VORTAC R-210 to PADDR INT. **Rwys 25L,25R,** climb heading 256° to 800, then climbing left turn heading 200° and LAX VORTAC R-145 to PADDR INT. **Rwy 30,** climb heading 301° to 800, then climbing left turn heading 200° and LAX VORTAC R-145 to PADDR INT.

NOTE: **Rwy 7L,** sign 287' from DER, 173' left of centerline, 8' AGL/45' MSL. Vehicle on road 320' from DER, 248' left of centerline, 13' AGL/50' MSL. Light 468' from DER, 307' left of centerline, 19' AGL/56' MSL. Tree 1326' from DER, 75' left of centerline, 60' AGL/97' MSL. Trees beginning 579' from DER, 7' right of centerline, up to 71' AGL/108' MSL. Hangar 347' from DER, 416' right of centerline, 13' AGL/50' MSL. **Rwy 7R,** hangar 260' from DER, 498' left of centerline, 31' AGL/64' MSL. Multiple trees beginning 1408' from DER, 1' left of centerline, up to 64' AGL/94' MSL. Light 459' from DER, 581' right of centerline, 14' AGL/44' MSL. Antenna obstruction light 1473' from DER, 822' right of centerline, 88' AGL/115' MSL. **Rwy 12,** multiple trees beginning 1431' from DER, 469' left of centerline, up to 66' AGL/86' MSL. Light 1127' from DER, 606' left of centerline, 36' AGL/56' MSL. Multiple trees beginning 970' from DER, 392' right of centerline, up to 64' AGL/87' MSL. Spire 3095' from DER, 1183' right of centerline, 92' AGL/115' MSL. **Rwy 16L,** terrain beginning 155' from DER, 152' left of centerline, up to 40' MSL. Multiple trees beginning 427' from DER, 136' left of centerline, up to 32' AGL/109' MSL. Multiple lights, buildings and lights on buildings beginning 285' from DER, 256' left of centerline, up to 113' AGL/159' MSL. Multiple flag poles 1165' from DER, 8' left of centerline, up to 60' AGL/116' MSL. Rising terrain beginning 156' from DER, 100' right of centerline 40' MSL. Multiple trees beginning 296' from DER, 149' right of centerline, up to 38' AGL/218' MSL. Multiple buildings beginning 2057' from DER, 253' right of centerline, up to 30' AGL/91' MSL. **Rwy 16R,** rising terrain beginning 29' from DER on centerline, up to 309' MSL. Multiple trees beginning 835' from DER, 46' left of centerline, up to 112' AGL/156' MSL. Sign 1453' from DER, 139' left of centerline, 50' AGL/94' MSL. Pole 3034' from DER, 302' left of centerline, 91' AGL/135' MSL. Light on tank 4079' from DER, 114' left of centerline, 108' AGL/152' MSL. Multiple tower antennas beginning 8017' from DER, 1913' left of centerline, up to 291' AGL/335' MSL. Antenna on hangar 352' from DER, 399' right of centerline, 38' AGL/82' MSL. Multiple trees beginning 787' from DER, 319' right of centerline, 32' AGL/293' MSL. Multiple poles beginning 2028' from DER, 295' right of centerline, up to 241' AGL/248' MSL. Chimney on building, 4661' from DER, 1553' right of centerline, 33' AGL/353' MSL.

LONG BEACH (DAUGHERTY FIELD) (CON'T)

Rwy 25L, multiple trees beginning 2407' from DER, 111' left of centerline, up to 38' AGL/117' MSL. Obstruction light on tower 2493' from DER, 503' left of centerline, 69' AGL/152' MSL. Rising terrain beginning 110' on centerline, up to 66' MSL. Obstruction light rod on hangar, 1149' from DER, 793' right of centerline, 109' AGL/169' MSL. Antenna 3821' from DER, 439' right of centerline, 66' AGL/155' MSL. **Rwy 25R,** Ford sign beginning 551' from DER, 27' right of centerline, up to 100' AGL/159' MSL. Railroad beginning 202' from DER, 3' left of centerline, 66' AGL/155' MSL. Multiple lights and light poles beginning 321'from DER, 111' left of centerline, up to 32' AGL/92' MSL. Sign 1142' from DER, 33' left of centerline, 35' AGL/104' MSL. Multiple trees beginning 1142' from DER, 9' left of centerline, up to 67' AGL/146' MSL. Multiple obstruction lights beginning 67' from DER, 59' right of centerline, up to 202' AGL/260' MSL. Multiple trees beginning 1246' from DER, 1' right of centerline, up to 87' AGL/145' MSL. **Rwy 30,** railroad beginning 647' from DER, on centerline, up to 27' AGL/91' MSL. Multiple antennas, rods, vents and lights on buildings beginning 356' from DER, 289' left of centerline, up to 27' AGL/87' MSL. Multiple poles beginning 2061' from DER, 312' left of centerline, up to 51' AGL/124' MSL. Railroad beginning 207' from DER, 485' right of centerline, up to 25' AGL/81' MSL. Multiple obstruction lights and poles beginning 632' from DER, 240' right of centerline, up to 66' AGL/142' MSL. Multiple trees beginning 1701' from DER, 136' right of centerline, up to 73' AGL/146' MSL. Building 2617' from DER, 802' right of centerline, 63' AGL/136' MSL.

LOS ALAMITOS AAF (KSLI)

LOS ALAMITOS, CA

. . . . . Rwy 22L/R, 300-1*

* Or standard with minimum climb of 230/NM to 400. Rwy 4L/R climbing right turn; Rwy 22L/R climbing left turn. All aircraft climb direct SLI VORTAC. Aircraft departing SLI VORTAC R-040 CW 345 climb on course. All others continue climb via the SLI R-171 southbound then climbing right turn direct SLI VORTAC to cross at or above 4600'.

LOS ANGELES, CA

LOS ANGELES INTL (LAX)

AMDT 12 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6R,** 200-1¼ or std. with a min. climb of 275' per NM to 400.

DEPARTURE PROCEDURE: **Rwys 6L/R, 7L/R,** climb to 2000 heading 070°, then climbing right turn, thence... **Rwys 24L/R,** climb to 2000 heading 250°, then climbing left turn, thence... **Rwys 25L/R,** turbojet climb to 2000 heading 250°, then climbing left turn, thence...non-turbojet climb to 2000 heading 250°, at the SMO R-154 turn left heading 200°, thence...

...climb direct SLI VORTAC, then climb on course.

NOTE: **Rwy 6L,** buildings and signs beginning 1693' from departure end of runway, 339' left of centerline, up to 50' AGL/201' MSL. **Rwy 6R,** antenna on building 560' from departure end of runway, 479' right of centerline, 18' AGL/127' MSL, obstruction light on building 5550' from departure end of runway, 1791' right of centerline, 202' AGL/306' MSL, obstruction light on sign and sign beginning 1866' from departure end of runway, 920' left of centerline, up to 49' AGL/161' MSL. **Rwy 7L,** obstruction light on blast fence 168' from departure end of runway, 33' left of centerline, 14' AGL/106' MSL, poles beginning 1290' from departure end of runway, 505' left of centerline, up to 55' AGL/147' MSL, antenna on building 1576' from departure end of runway, 315' left of centerline, 55' AGL/147' MSL, sign and railroad beginning 351' from departure end of runway, 10' left of centerline, up to 29' AGL/124' MSL, railroad 275' from departure end of runway, 500' right of centerline, 23' AGL/115' MSL, approach light and obstruction light on LOC beginning 979' from departure end of runway, on runway centerline, up to 27' AGL/119' MSL. **Rwy 7R,** trees and building beginning 790' from departure end of runway, 606' right of centerline, up to 58' AGL/157' MSL. **Rwy 24L,** bush 956' from departure end of runway, 600' left of centerline, 40' AGL/148' MSL. Light poles beginning 273' from departure end of runway, 425' left of centerline, up to 10' AGL/120' MSL, antenna on pole 1357' from departure end of runway, 286' right of centerline, 36' AGL/144' MSL, light poles and bushes beginning 239' from departure end of runway, 321' right of centerline, up to 8' AGL/116' MSL. **Rwy 24R,** obstruction light on glideslope 212' from departure end of runway, 399' left of centerline, 39' AGL/151' MSL. **Rwy 25L,** tree and pole beginning 2366' from departure end of runway, 764' left of centerline, up to 80' AGL/197' MSL, transmission towers beginning 2800' from departure end of runway, 926' left of centerline, up to 71' AGL/192' MSL, bush 133' from departure end of runway, 397' left of centerline, 4' AGL/123' MSL.

WHITEMAN

TAKE-OFF MINIMUMS: **Rwys 12, 30,** 2900-2 or std. with a min. climb of 350' per NM to 4300.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct VNY VOR/DME. **Rwy 30,** climbing left turn heading 260°. **All aircraft** climb to 4500 via VNY R-325, then climbing left turn direct VNY VOR/DME.

MARCH ARB (KRIV),

RIVERSIDE, CA . . . . . AMDT 1, 08353

Rwy 14, 32, 10,300-3*

2300-3**

3300-3***

Rwy 14, Diverse Departure:

Runway 14 appropriate departure procedure.

* Or standard, climb direct HDF VOR then outbound HDF R-135 with a minimum climb rate of 400/NM to 14,000', leaving 4100' diverse departure headings authorized. Standard, proceed direct HDF VOR, then right turn to sector diverse departure between 155 degrees clockwise to 181 degrees only. Maximum 250 KIAS.

VCOA route SKYES intersection:

** Climb in visual conditions within 6 NM of March ARB, cross March ARB at or above 3700 MSL, then climb and maintain 6000 direct HDF VOR, then via HDF R-152 to HDF R-152/PDZ R-130, direct SKYES INT. Do not exceed 250 KIAS until passing SKYES. Aircraft shall advise ATC prior to executing VCOA.

VCOA route PDZ VORTAC:

** Climb in visual conditions within 9 NM of March ARB, cross March ARB at or above 3700 MSL, then climb and maintain 5000 direct PDZ VORTAC. Do not exceed 350 KIAS until passing PDZ. Aircraft shall advise ATC prior to executing VCOA.

Rwy 32, Diverse Departure:

Runway 32 appropriate departure procedure.

* Or standard, cross departure end at or above 35' AGL/1570' MSL, then climb with a minimum rate of 620/NM to 14,000'. Standard, cross departure end at or above 35' AGL/1570' MSL then left turn to sector diverse departure between 150 degrees to 135 degrees counter-clockwise only. Maximum 250 KIAS. Standard, cross departure end at or above 35' AGL/1570' MSL then left turn to sector diverse departure between 269 degrees to 249 degrees counter-clockwise only. Maximum 250 KIAS.

*** Or standard with a minimum climb rate of 250/NM to 5800', cross departure end at or above 35' AGL/1570' MSL, leaving 2100' turn left to sector diverse departure between 156 degrees to 149 degrees counter-clockwise only, Maximum 270 KIAS.

VCOA route SKYES intersection:

** Cross departure end at or above 35' AGL/1570' MSL climb in visual conditions within 6 NM of March ARB, cross March ARB at or above 3700 MSL, then climb and maintain 6000 direct HDF VOR, then via HDF R-152 to HDF R-152/PDZ R-130, direct SKYES INT. Do not exceed 250 KIAS until passing SKYES. Aircraft shall advise ATC prior to executing VCOA.

VCOA route PDZ VORTAC:

** Cross departure end at or above 35' AGL/1570' MSL climb in visual conditions within 8 NM of March ARB, cross March ARB at or above 3700 MSL, then climb and maintain 5000 direct PDZ VORTAC. Do not exceed 350 KIAS until passing PDZ. Aircraft shall advise ATC prior to executing VCOA.

MARCH ARB (CON'T)

TAKE-OFF OBSTACLES: **Rwy 14,** Aircraft 65' AGL/1550' MSL, 28' inward of DER, 541' left of centerline. Aircraft 30' AGL/1516' MSL, 32' inward of DER, 297' left of centerline. Tree 150' AGL/2470' MSL, 3.5 NM from DER, 2.2 NM left of centerline. Tree 150' AGL/2568' MSL, 3.6 NM from DER, 2.6 NM left of centerline. Tree 150' AGL/ 2466' MSL, 3.6 NM from DER, 2.7 NM left of centerline. Use caution when departing Rwy 14, rapid rising terrain within 3.5 NM SE of March ARB. **Rwy 32,** Aircraft 65' AGL/1600' MSL, 30' from DER, 526' right of centerline. Aircraft 30' AGL/1565' MSL, 6' from DER, 282' right of centerline.

MIRAMAR MCAS (MITSCHER FLD) (KNKX)

SAN DIEGO, CA 06299

Rwy 6L/R 340° through 150° CW-Civil standard with minimum climb of 315'/NM to 5400; Military, standard with minimum climb of 290'/NM to 6300. **Rwy 24L/R** 340° through 100° CW-Civil standard with minimum climb of 290'/NM to 7600; Military, standard with minimum climb of 270'/NM to 7600.

MOJAVE, CA

MOJAVE (MHV)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,8,12,** NA-restricted airspace. **Rwys 22, 26,** std. with a min. climb of 415' per NM to 6800 or 4200-3 for climb in visual conditions. **Rwy 30,** std. with a min. climb of 485' per NM to 6300 or 4200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 22,** climb to 8000 via heading 218° and LHS R-023 to LHS VORTAC or for climb in visual conditions: cross Mojave Airport southwest bound at or above 6800, then climb to 8000 via LHS R-023 to LHS VORTAC. **Rwys 26, 30,** climbing left turn to 8000 via heading 190° and LHS R-023 to LHS VORTAC or for climb in visual conditions: cross Mojave Airport southwest bound at or above 6800, then climb to 8000 via LHS R-023 to LHS VORTAC.

NOTE: **Rwy 30,** vehicle on road 3181' from departure end of runway, 22' right of centerline, 17' AGL/2896' MSL. Train 1441' from departure end of runway, 351' right of centerline, 23' AGL/2882' MSL.

MURRIETA/TEMECULA, CA

FRENCH VALLEY

TAKE-OFF MINIMUMS: **Rwy 18,** NA. **Rwy 36,** 700-2 or std. with a min. climb of 340' per NM to 2200.

DEPARTURE PROCEDURE: **Rwy 36,** climb runway heading to 2200, then climbing left turn via HDF R-145 to HDF VOR. Aircraft departing HDF VOR 065° CW 352° climb on course. Aircraft departing northeastbound, climb in HDF holding pattern, (SE, right turns, 315° inbound) to depart HDF VOR at or above: 353° CW 054°, 6800; 055° CW 064°, 5800; before proceeding on course.

NEEDLES, CA

NEEDLES

DEPARTURE PROCEDURE: **Rwys 2, 29,** turn right. **Rwy 20,** turn left. **All aircraft** climb direct EED VORTAC, then continue climb on curse. Departures on V12, J6, and J8 cross EED VORTAC at or above 2600.

NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

SAN DIEGO,CA. 09127

Rwy 11, diverse departures authorized 129° CW 182°. Make immediate right turn to assigned heading within 1.4 DME of NZY TACAN to avoid over flying the City of Coronado.

Rwy 18, diverse departures authorized 129° CW 175°.

Rwy 29, diverse departures not authorized. Use published DP or 800-2¼ for climb in visual conditions via immediate climbing left turn to cross North Island airport at or above 800' MSL, during visual climb do not overfly Point Loma and remain south of Rwy 11-29, then climb to 2000 via heading 175°, expect radar vectors to join assigned route. Cross DER at or above 35' AGL (54' MSL).

Rwy 36, departure not authorized.

TAKE-OFF OBSTACLES:

Rwy 11, Trees 52' AGL/78' MSL, 108' from DER, 336' right of centerline; Trees 30' AGL/54' MSL, 994' from DER, 733' left of centerline.

Rwy 29, Shipping Channel accommodating vessels up to 200' AGL (206' MSL with tidal range), starting 2577' from DER on centerline. Twin Towers 145' AGL/534' MSL, 1.4 NM from DER, 2645' left of centerline; Tower 479' MSL, 1.5 NM from DER, 1969' left of centerline; Tower 100' AGL/ 455' MSL, 1.5 NM from DER, 2054' left of centerline; Tower 120' AGL/544' MSL, 1139' from DER, 2.1 NM left of centerline.

OCEANSIDE, CA

OCEANSIDE MUNI

TAKE-OFF MINIMUMS: **Rwy 6,** 400-1 or std. with a min. climb of 320' per NM to 500. **Rwy 24,** 300-1 or std. with a min. climb of 670' per NM to 300.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn. **Rwy 24,** climbing left turn. **All aircraft** climb via heading 235° to 1500, then climbing right turn direct OCN VORTAC.

ONTARIO, CA

ONTARIO INTL

TAKE-OFF MINIMUMS: **Rwys 8L,8R,** CAT C, D 1000-2 or std. with a min. climb of 220' per NM to 2200.

DEPARTURE PROCEDURE: **Rwys 8L,8R,** climbing right turn. **Rwys 26L,26R,** climbing left turn. **All aircraft** climb direct PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ holding pattern (NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 6700; R-141 CW R-230, 4000.

OXNARD, CA

OXNARD

TAKE-OFF MINIMUMS: **Rwy 7,** 2100-5 or std. with a min. climb of 290' per NM to 2600.

DEPARTURE PROCEDURE: **Rwy 7,** climbing left turn. **Rwy 25,** climb runway heading. **All aircraft** continue climb to 6000 (or assigned altitude) via CMA R-249 to SQUID Int. Aircraft departing SQUID Int 040° CW 300° climb on course. All others continue climb in SQUID holding pattern (Hold W, right turns, 069° inbound) to cross SQUID INT at or above 2300.

NOTE: **Rwy 7,** 59' AGL tree 527' from departure end of runway, 501' left of centerline.

PALM SPRINGS, CA

BERMUDA DUNES

TAKE-OFF MINIMUMS: **Rwy 28,** CAT A,B 1200-2 or std. with a min. climb of 450' per NM to 1400. CAT C,D 2100-2 or std. with a min. climb of 490' per NM to 3400.

DEPARTURE PROCEDURE: **Rwy 10,** climbing right turn heading 150°. **Rwy 28,** climbing left turn heading 090°. **All aircraft** continue climb via TRM R-304 to TRM VORTAC. Aircraft departing TRM R-095 CW R-165 climb on course. All others continue climb in TRM holding pattern (E, right turns, 289° inbound) to cross TRM VORTAC at or above: R-166 CW 290°, 6500; 291° CW R-310, 4900; R-311 CW 094°, 3200.

JACQUELINE COCHRAN RGNL

TAKE-OFF MINIMUMS: **Rwy 30,** CAT C,D 3400-2 or std. with a min. climb of 410' per NM to 3700. **Rwy 35,** CAT A,B 400-2 or std. with a min. climb of 210' per NM to 400. CAT C,D 3400-2 or std. with a min. climb of 410' per NM to 3700.

DEPARTURE PROCEDURE: **Rwys 12,17,** climbing left turn. **Rwys 30, 35,** climbing right turn heading 150°. Aircraft departing TRM R-101 CW R-139, climb on course. All others continue climb east- bound via the TRM R-109 then climbing right turn to cross TRM VORTAC at or above: R-304 CW R-100, 4000; R-140 CW R-199, 4700; R-200 CW R-303, 6600.

PALM SPRINGS, CA (CON'T)

PALM SPRINGS INTL (PSP)

AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13L,** minimum climb of 440' per NM to 2300' or 5900-3 for climb in visual conditions. **Rwy 13R,** minimum climb of 422' per NM to 2300' or 5900-3 for climb in visual conditions. **Rwy 31L,** minimum climb of 386' per NM to 4500' or 5900-3 for climb in visual conditions. **Rwy 31R,** minimum climb of 405' per NM to 4500' or 5900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing left turn heading 090° to intercept TRM R-304 to TRM VORTAC or for climb in visual conditions cross Palm Springs Intl airport at or above 6300 then direct PSP VORTAC thence ... **Rwy's 31L/R,** climbing right turn direct PSP VORTAC thence ..., or for climb in visual conditions cross Palm Springs Intl airport at or above 6300 then direct PSP VORTAC thence ...

... via PSP R-124 and TRM R-304 to TRM VORTAC. **All Rwys** if not at MEA/MCA at TRM VORTAC, climb in TRM holding pattern (hold E, right turns, 289° inbound) until reaching MEA/MCA for assigned route of flight.

NOTE: **Rwy 13L,** trees beginning 299' from departure end of runway, 530' left of centerline, up to 66' AGL/465' MSL. HGR 935' from departure end of runway, 552' left of centerline, 31' AGL/440' MSL. **Rwy 13R,** trees beginning 1170' from departure end of runway, 239' right of centerline, up to 100' AGL/599' MSL. Poles beginning 815' from departure end of runway, 209' right of centerline, up to 44' AGL/433' MSL. Light 843' from departure end of runway, 441' right of centerline,38' AGL/427' MSL. Antenna 1642' from departure end of runway, 26' right of centerline, 53' AGL/442' MSL. **Rwy 31L,** poles beginning 1641' from departure end of runway, 125' right of centerline, up to 31' AGL/550' MSL. Towers beginning 2418' from departure end of runway, 402' left of centerline, up to 59' AGL/560' MSL. Tree 3016' from departure end of runway, 66' right of centerline, 43' AGL/562' MSL. **Rwy 31R,** multiple trees and bushes beginning 305' from departure end of runway, 233' right of centerline, up to 48' AGL/507' MSL. Vent on building 919' from departure end of runway, 399' right of centerline, 15' AGL/474' MSL.

PALMDALE, CA

PALMDALE RGNL/USAF PLANT 42

TAKE-OFF MINIMUMS: **Rwy 22,** 1000-1 or std. with a min. climb of 260' per NM to 4200.

DEPARTURE PROCEDURE: **Rwys 4, 7,** turn left. **Rwys 22, 25,** turn right. Eastbound V12, J6 climb on course. All others climb on R-298 to FISCH Int. (northwestbound climb in holding pattern SE, left turns, 298° inbound. Depart at 8100), continue climb direct PMD VORTAC to depart at or above published MCA.

PASO ROBLES, CA

PASO ROBLES MUNI

DEPARTURE PROCEDURE: All departures maintain 250 kts or less until inbound to PRB. **Rwy 1,** climb to 3000 via heading 280° to intercept PRB R-326 outbound. V248 northbound climb on course. All others climbing right turn to 4500 direct PRB. **Rwy 13,** climb to 3000 via heading 160° to intercept PRB R-133 outbound. V25 southbound continue climb on course. All others climbing right turn to 4500 direct PRB. **Rwy 19,** climb to 3000 via heading 150° to intercept PRB R-179 outbound. V113 southbound continue climb on course. All others climbing left turn to 4500 direct PRB. **Rwy 31,** climb to 3000 via heading 340° to intercept PRB R-326 outbound. V248 northbound climb on course. All others climbing right turn to 4500 direct PRB.

POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)

OXNARD, CA 09267

DEPARTURE PROCEDURE:

Rwy 3, Diverse departures authorized 210° to 250° CW. Right turns on departure not authorized. Turn left to assigned heading within 3 DME of NTD TACAN. Do not exceed 310 KIAS until established on assigned heading.

Rwy 9, Diverse departures not authorized.

Rwy 21, Diverse departures authorized 150° to 250° CW.

Rwy 27, Diverse departures authorized 150° to 250° CW. Right turns on departure not authorized. Turn left to assigned heading. Do not exceed 310 KIAS until established on assigned heading.

CAUTION: Mountainous terrain NW thru SE.

TAKE-OFF OBSTACLES: **Rwy 3,** Tower 90' MSL, 3005' from DER, 1238' left of centerline; Trees 90' MSL, 2920' from DER, 1199' left of centerline.

RAMONA, CA

RAMONA (RNM)

AMDT 3 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** std. w/ min. climb of 500' per NM to 4000, or 3800-3 for climb in visual conditions. **Rwy 27,** std. w/ min. climb of 332' per NM to 2600, or 3800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 9,** climb via heading 088° to 4000, then climbing left turn via heading 330° and JLI VORTAC R-263/OCN VORTAC R-083 to ROBNN INT before proceeding on course, or for climb in visual conditions, cross Ramona airport at or above 5000 before proceeding on course. **Rwy 27,** climb via heading 268° to 2600, then climbing right turn via PGY VORTAC R-336 to ROBNN INT before proceeding on course, or for climb in visual conditions, cross Ramona airport at or above 5000 before proceeding on course.

NOTE: **Rwy 9,** sign 23' from DER, 178' left of centerline, 9' AGL/1399' MSL. Tree 94' from DER, 343' right of centerline, 20' AGL/1403' MSL. Trees beginning 2468' from DER, 180' right of centerline, up to 100' AGL/1539' MSL. Trees beginning 2637' from DER, 305' left of centerline, up to100' AGL/1487' MSL. **Rwy 27,** tree 657' from DER, 12' left of centerline, 100' AGL/1499' MSL. Trees 1.85 NM from DER, 92' left of centerline, up to 100' AGL/1719' MSL.

REDLANDS, CA

REDLANDS MUNI

TAKE-OFF MINIMUMS: **Rwy 8,** NA. **Rwy 26,** 1700-2 or std. with a min. climb of 300' per NM to 4000.

DEPARTURE PROCEDURE: Climbing left turn direct PDZ VORTAC. Aircraft departing PDZ VORTAC R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue in PDZ VORTAC holding pattern (hold NE, right turns, 210° inbound) to cross PDZ VORTAC at or above, R-281 CW R-090, 7700; R-141 CW R-230, 4900.

RIALTO, CA

RIALTO MUNI-MIRO FIELD

TAKE-OFF MINIMUMS: **Rwys 17, 35,** NA.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn. **Rwy 24,** climbing left turn. **All aircraft** climb via PDZ R-012 to PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ holding pattern (NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 6700; R-141 CW R-230, 4000.

RIVERSIDE, CA

RIVERSIDE MUNI

TAKE-OFF MINIMUMS: **Rwy 9,** CAT A,B 1200-2 or std. with a min. climb of 210' per NM to 2300. CAT C,D 2100-2 or std. with a min. climb of 240' per NM to 3500. **Rwy 16,** NA. **Rwy 27,** CAT C,D 2400-2 or std. with a min. climb of 230' per NM to 3800. **Rwy 34,** CAT A,B 700-2 or std. with a min. climb of 400' per NM to 1600. CAT C,D 1600-2 or std. with a min. climb of 400' per NM to 2600.

DEPARTURE PROCEDURE: **Rwy 9,** climbing right turn. **Rwy 34,** climbing left turn. **Rwy 27,** climb heading 280° to 2000, then climbing left turn. **All aircraft** climb direct PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ holding pattern (NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 6700; R-141 CW R-230, 4000; or Airway MEA.

SAN BERNARDINO, CA

SAN BERNARDINO INTL

TAKE-OFF MINIMUMS: **Rwy 6,** CAT A,B 2100-2 or std. with a min. climb of 340' per NM to 3700. CAT C,D 3100-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn. **Rwy 24,** climbing left turn. **All aircraft** climb direct PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ holding pattern (Hold NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 7700; R-141 CW R-230, 4900.

SAN CLEMENTE ISLAND NALF (FREDERICKSHERMAN FLD)(KNUC)

SAN CLEMENTE ISLAND, CA 09071

Rwy 5: Diverse departures authorized 090° to 233° CCW.

Rwy 23: Diverse departures authorized 160° to 053° CW.

TAKEOFF OBSTACLES: **Rwy 5,** Pylon 198' MSL, 44' from DER, 273' right of centerline.

SAN DIEGO, CA

BROWN FIELD MUNI (SDM)

AMDT 3A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8L,** Cat. A,B 1900-2 or std. w/ min. climb of 460' per NM to 2600. Cat. C,D 3100-3 or std. w/ min. climb of 520' per NM to 3900.
Rwys 8R,26L, NA - ATC.

DEPARTURE PROCEDURE: **Rwy 8L,** climbing left turn. **Rwy 26R,** climbing right turn. **All aircraft,** climb heading 280° to intercept MZB R-160 northwestbound to MZB VORTAC.

NOTE: **Rwy 26R,** trees 2184' from departure end of runway, 778' left of centerline, 60' AGL/561' MSL.

MONTGOMERY FIELD

TAKE-OFF MINIMUMS: **Rwy 5,** 1500-2 or std. with a min. climb of 290' per NM to 1700.

DEPARTURE PROCEDURE: **Rwys 5, 10L/R,** climbing right turn. **Rwys 28L/R,** climbing left turn. **All aircraft** climb direct to MZB VORTAC. Aircraft departing MZB R-090 CW R-360 climb on course. All others climb in MZB holding pattern (W, right turns, 075° inbound) to cross MZB VORTAC at or above 1800.

SAN DIEGO INTL

TAKE-OFF MINIMUMS: **Rwy 9,** CAT A,B 400-1 or 300-1 with a min. climb of 610' per NM to 600. CAT C,D 300-1 with a min. climb of 610' per NM to 2300. **Rwy 27,** 300-1½ or std. with a min. climb of 317' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 9,** climb runway heading to 600, then climbing left turn direct MZB VORTAC. **Rwy 27,** climb runway heading to 900, then climbing right turn direct MZB VORTAC. Aircraft departing MZB VORTAC R-180 CW R-360 climb on course. All others climb in MZB VORTAC holding pattern (W, right turns, 075° inbound) to cross MZB VORTAC at or above 2000.

NOTE: **Rwy 9,** trees 792' from departure end of runway, 142' left of centerline, 60' AGL/99' MSL. Antenna 740' from departure end of runway, 302' right of centerline, 62' AGL/82' MSL. Antenna 1946' from departure end of runway, 969' left of centerline, 126' AGL/192' MSL. Trees 1377' from departure end of runway, 285' left of centerline, 80' AGL/135' MSL. Trees 4625' from departure end of runway, 1414' left of centerline, 250' AGL/385' MSL. **Rwy 27,** trees 1 mile from departure end of runway, 685' right of centerline, 220' AGL/253' MSL. Trees 3118' from departure end of runway, 846' right of centerline, 120' AGL/149' MSL. Flagpole 2511' from departure end of runway, 700' left of centerline, 90' AGL/116' MSL.

SAN DIEGO (EL CAJON), CA

GILLESPIE FIELD

TAKE-OFF MINIMUMS: **Rwys 9L, 9R,** 900-2 or std. with a min. climb of 1000' per NM to 1600. **Rwy 17,** 500-1 or std. with a min. climb of 260' per NM to 800. **Rwys 27L, 27R,** CAT A,B 500-1 or std. with a min. climb of 370' per NM to 900. CAT C,D 2500-2 or std. with a min. climb of 370' per NM to 2500. **Rwy 35,** 1300-2 or std. with a min. climb of 460' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 9L, 9R, 27L, 27R,** climbing right turn. **Rwys 17, 35,** climbing left turn. **All aircraft** climb via heading 165° and MZB R-076 to MZB VORTAC.

SAN LUIS OBISPO, CA

SAN LUIS COUNTY RGNL

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA. **Rwy 11,** 1800-2 or std. with a min. climb of 320' per NM to 2300. **Rwy 29,** 1200-2 or std. with a min. climb of 390' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 11,** climb runway heading to 900, then climbing right turn direct MQO VORTAC. **Rwy 29,** climb via runway heading and MQO R-050 to MQO VORTAC. **All aircraft** departing on MQO R-130 CW R-320 climb on course. All others continue climbing in MQO holding pattern (SE, left turns, 306° inbound) to cross MQO VORTAC at or above 4000.

SAN NICOLAS ISLAND NOLF (NSI)

SAN NICOLAS ISLAND, CA

Rwy 12: Diverse departures authorized 300° to 120° CW.

Rwy 30: Diverse departures not authorized. Rwy 30 climb heading 300° to 1300', then turn right to assigned heading.

Rwy 12-30 Obstacle identification surface begins 10 ft above departure end of runway.

TKOFF OBSTACLES: Rwy 30: 1076' MSL (589' AGL) Tower, 2805' past DER, 1882' left of centerline.

SANTA ANA, CA

JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

AMDT 5 09239 (FAA)

DEPARTURE PROCEDURE: **Rwys 1L, 1R,** climbing left turn direct SLI VORTAC. **Rwys 19L, 19R,** climbing right turn direct SLI VORTAC. **All aircraft** climb in SLI holding pattern (hold South, left turns, 351° inbound) to cross SLI VORTAC at or above MEA for direction of flight before proceeding on course.

NOTE: **Rwy 1L,** multiple trees beginning 466' from DER, 553' left of centerline, up to 85' AGL/127' MSL. Light pole 94' from DER, 490' left of centerline, 21' AGL/63' MSL. Obstruction light on DME 497' from DER, 625' right of centerline, 13' AGL/55' MSL. **Rwy 1R,** obstruction light on DME 497' from DER, 125' right of centerline, 13' AGL/55' MSL. Tree 1745' from DER, 309' right of centerline, 51' AGL/85' MSL. Light pole 1104' from DER, 307' right of centerline, 34' AGL/68' MSL. **Rwy 19R,** WSK on HGR 536' from DER, 605' left of centerline, 44' AGL/92' MSL. Multiple trees beginning 289' from DER, 500' right of centerline, up to 52' AGL/108' MSL. Light poles beginning 204' from DER, 490' right of centerline, up to 35' AGL/85' MSL. Tree 1574' from DER, 765' left of centerline, 59' AGL/113' MSL.

SANTA BARBARA, CA

SANTA BARBARA MUNI

TAKE-OFF MINIMUMS: **Rwy 7,** std. with a min. climb of 280' per NM to 1200, or 1900-2½ for climb in visual conditions. **Rwy 33L, 33R,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 7,** climbing right turn via heading 170°, thence..., or for climb in visual conditions: cross Santa Barbara Muni Airport southbound at or above 1900, thence...**Rwys 15L, 15R,** climb via heading 152°, thence...**Rwy 25,** climbing left turn via heading 155°, thence...

...then via RZS R-185 to GOLET INT, climb in GOLET INT holding pattern (SE, right turns, 307° inbound), to cross GOLET INT at or above MEA for route of flight, before proceeding on course.

NOTE: **Rwy 7,** obstruction light on DME antenna, road and numerous trees beginning 350' from departure end of runway, 101' right of centerline, up to 55' AGL/74' MSL. Antennas, poles, tower, and numerous trees beginning 194' from departure end of runway, 11' left of centerline, up to 79' AGL/98' MSL. **Rwy 15L,** numerous trees beginning 1242' from departure end of runway, 119' right of centerline, up to 100' AGL/159' MSL. **Rwy 15R,** sign and numerous trees beginning 29' from departure end of runway, 94' right of centerline, up to 100' AGL/159' MSL. Tree 1325' from departure end of runway, 243' left of centerline, 19' AGL/59' MSL. **Rwy 25,** trees beginning 1999' from departure end of runway, 793' right of centerline, up to 67' AGL/86' MSL.

SANTA MARIA, CA

SANTA MARIA PUBLIC/ CAPTAIN G. ALLAN HANCOCK FIELD

TAKE-OFF MINIMUMS: **Rwy 12,** CAT C,D 3400-2 or std. with a min. climb of 310' per NM to 3600. **Rwy 20,** CAT A,B 1300-2 or std. with a min. climb of 250' per NM to 1500; CAT C,D 1600-2 or std. with a min. climb of 250' per NM to 2100.

DEPARTURE PROCEDURE: **Rwys 2, 12,** climbing left turn. **Rwy 20,** climbing right turn. **Rwy 30,** climb via runway heading. **All aircraft** climb direct GLJ VOR. Continue climb via GLJ R-300 northwestbound to 2000, then continue climbing direct MQO VORTAC.

NOTE: 400' - 550' trees beginning ¾ mile from departure end of Rwy 12.

SANTA MONICA, CA

SANTA MONICA MUNI

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min. climb of 325' per NM to 1100, or 1200-3 for climb in visual conditions. **Rwy 21,** std. w/ min. climb of 215' per NM to 4000, or 1200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn to 5000 via SMO R-210 and LAX R-276 to SADDE INT, or for climb in visual conditions: cross SMO VOR/DME at or above 1200 then continue climb to 5000 via SMO R-210 and LAX R-276 to SADDE INT. **Rwy 21,** climb to 5000 via SMO R-210 and LAX R-276 to SADDE INT, or for climb in visual conditions: cross SMO VOR/DME at or above 1200, then climb to 5000 via SMO R-210 and LAX R-276 to SADDE INT.

NOTE: **Rwy 3,** multiple signs and trees beginning 19' from departure end of runway, 300' right of centerline, up to 36' AGL/211' MSL, tower 5488' from departure end of run way, 1902' right of centerline, 150' AGL/325' MSL, light standard 19' from departure end of runway, 176' right of centerline, 6' AGL/181' MSL, multiple trees beginning 325' from departure end of runway, 227' left of centerline, up to 34' AGL/209' MSL, sign 56' from departure end of runway, 185' left of centerline, 6' AGL/181' MSL. **Rwy 21,** multiple trees and poles beginning 140' from departure end of runway, 247' right of centerline, up to 81' AGL/196' MSL, antenna on building 280' from departure end of runway, 486' right of centerline, 35' AGL/150' MSL, VOR 101' from departure end of runway, 255' left of centerline, 7' AGL/122' MSL.

SANTA YNEZ, CA

SANTA YNEZ

TAKE-OFF MINIMUMS: **Rwy 8,** CAT C,D 1100-2 or std. with a min. climb of 280' per NM to 2000.

DEPARTURE PROCEDURE: **Rwy 8,** turn left, climb to 6000 heading 260° and V27 to ORCUT Int. **Rwy 26,** climb to 6000 via RZS R-275 and V27 to ORCUT Int.

SHAFTER, CA

SHAFTER-MINTER FIELD

DEPARTURE PROCEDURE: **Rwys 12, 17,** turn right. **Rwys 30,35,** turn left. Climb westbound to 4000 via V248. Westbound aircraft continue at 4000 on course. Eastbound aircraft turn right at 4000 direct EHF VORTAC.

TORRANCE, CA

ZAMPERINI FIELD

TAKE-OFF MINIMUMS: **Rwys 11L, 11R,** 400-1 or std. with a min. climb of 325' per NM to 500.

DEPARTURE PROCEDURE: **Rwys 29L, 29R,** climb runway heading. **Rwys 11L, 11R,** climbing left turn to heading 290°. Both departures climb to 3000, intercept LAX R-170 to LIMBO Int.

TUSI AHP (KHGT),

HUNTER LIGGETT, CA . . . . . AMDT 3, 08269

Helicopter use only. Climb on a heading between 010° CW to 190° from heliport (or a minimum climb rate of 530' per NM to 7800 for all other courses).

TWENTYNINE PALMS, CA

TWENTYNINE PALMS

TAKE-OFF MINIMUMS: **Rwy 17,** NA. **Rwys 8, 26, 35,** std. with a min. climb of 280' per NM to 5500.

DEPARTURE PROCEDURE: **Rwys 8, 26, 35,** turn right direct TNP VORTAC. Eastbound on V264 continue climb on course. All others climb in TNP holding pattern (E, left turns, 255° inbound) to cross TNP VORTAC at or above 6000 before proceeding on course. Northeast bound on V514-538 cross TNP VORTAC at or above 7900.

TWENTYNINE PALMS SELF (NXP)

TWENTYNINE PALMS, CA 07354

Diverse departure not authorized.

UPLAND, CA

CABLE

TAKE-OFF MINIMUMS: **Rwy 6,** 300-1 or std. with a min. climb of 240' per NM to 1900.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn. **Rwy 24,** climbing left turn. **All aircraft** climb direct PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ holding pattern (E, right turns, 258° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 6700; R-141 CW R-230, 4000.

VAN NUYS, CA

VAN NUYS

TAKE-OFF MINIMUMS: **Rwys 16L, 16R,** 2500-2 or std. with a min. climb of 300' per NM to 3800. **Rwys 34L, 34R,** 3300-2 or std. with a min. climb of 425' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climbing left turn. **Rwys 34L, 34R,** climbing right turn. **All aircraft** intercept VNY R-095 to DARTS Int. Aircraft eastbound via V186 and southeastbound via V459 climb on course. All others, continue climbing right turn direct VNY VOR/DME before proceeding on course.

VANDENBERG AFB (KVBG)

LOMPOC, CA 09071

Rwy 12: GAVIATO ONE, 300-1.5

Rwy 12/30: All departures (GAVIATO ONE, VANDENBERG ONE, Diverse Departures Rwy 12/30, VCOA Rwy 12/30) CROSS DER AT OR ABOVE 35' AGL. **Rwy 12:** Diverse Departure Authorized: 6500-3 or standard with a minimum climb rate of 300'/NM to 8800, cross DER at or above 35' AGL/404' MSL. **Rwy 30:** Diverse Departure Authorized: 6400-3 or standard with a minimum climb rate of 270 ft/NM to 8800, cross DER at or above 35' AGL/274' MSL.

TAKE-OFF OBSTACLES: **Rwy 12** trees 40' AGL/479' MSL, 3814' from DER, 1126' right of centerline. Road with possible vehicles 10' AGL/443' MSL, 2961' from DER, 360' right of centerline. Trees 200' AGL/594' MSL, 1.3 NM from DER, 795' right of centerline. Trees 200' AGL/600' MSL, 1.1 NM from DER, 2250' right of centerline. Trees 200' AGL/604' MSL, 1.0 NM from DER, 90' right of centerline. Trees 200' AGL/600' MSL, 1.4 NM from DER, 2665' left of centerline. Trees 200' AGL/620' MSL, 6051' from DER, 2044' left of centerline. Trees 50' AGL/1375' MSL, 3.2 NM from DER, 5.0 NM left of centerline. Trees 107' AGL/546' MSL, 4548' from DER, 1479' right of centerline. **Rwy 12/30 VCOA**: For climb in Visual Conditions 2200-3, remain within 6.5 NM from airport, cross Vandenberg airport at or above 2400, then proceed as filed. Maximum airspeed 250 kts. Note: Aircrews must notify ATC prior to executing this VCOA procedure.

VICTORVILLE, CA

SOUTHERN CALIFORNIA LOGISTICS

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min. climb of 266' per NM to 3500 or 5300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climbing left turn heading 220°, thence. . .or for climb in visual conditions cross Southern California Logistics Airport at or above 8000 MSL before proceeding on course. **Rwys 17, 21,** climbing right turn heading 325°, thence. . . **Rwy 35,** climbing left turn heading 220°, thence. . .

. . .All aircraft climb via VCV VOR/DME R-269 to ETHER INT. Continue climb in ETHER holding pattern (NE PMD VORTAC, left turn, 247° inbound) to MEA for direction of flight.

NOTE: **Rwy 3,** pole 408' from departure end of runway, 511' right of centerline, 29' AGL/2873' MSL. Terrain beginning 153' from departure end of runway, 41' right of centerline, up to 3196' MSL. Terrain beginning 17' from departure end of runway, 104' left of centerline, up to 2855' MSL. Tree 2.1 NM from departure end of runway, 3735' right of centerline, 50' AGL/3269' MSL. **Rwy 17,** sign 248' from departure end of runway, 277' left of centerline, 14' AGL/2896' MSL. Antenna on building 701' from departure end of runway, 203' left of centerline, 20' AGL/2902' MSL.

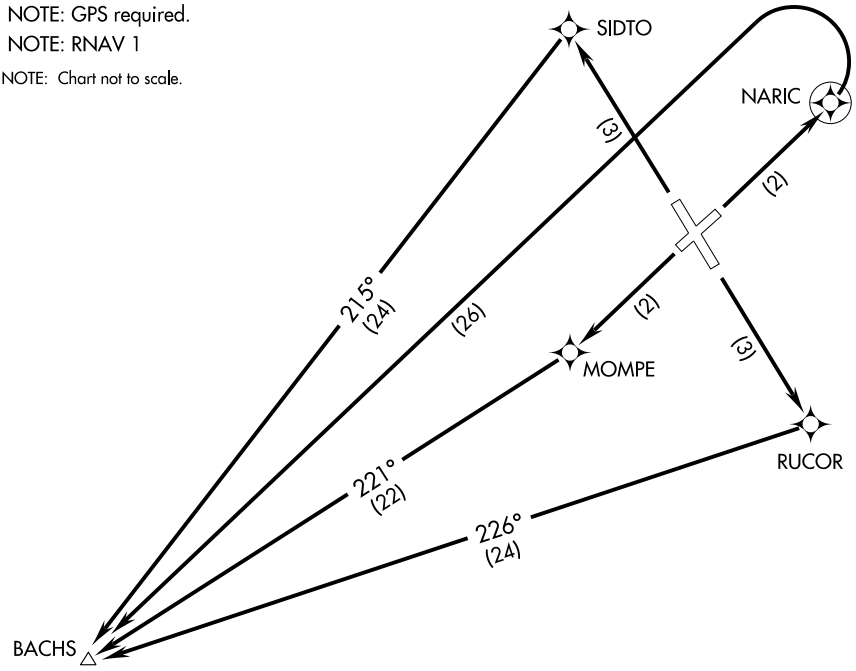
BACHS TWO DEPARTURE (RNAV) (OBSTACLE)

SEATTLE CENTER
127.6 346.35
CTAF 122.8

TAKE-OFF MINIMUMS

Rwy 3: Standard with minimum climb of 340 feet per NM to 5900.
Rwy 13: Standard with minimum climb of 230 feet per NM to 8200.
Rwy 21: Standard with minimum climb of 365 feet per NM to 6000.
Rwy 31: Standard with minimum climb of 450 feet per NM to 5800.

NOTE: GPS required.
NOTE: RNAV 1
NOTE: Chart not to scale.



TAKE-OFF OBSTACLE NOTES

Rwy 3: Trees, buildings, poles and a road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4659′ MSL.
Rwy 21: Trees and road with vehicles beginning 1′ from DER, right and left of centerline, to 100′ AGL/4469′ MSL.
Rwy 13: Trees and a road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4519′ MSL.
Rwy 31: Trees and road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4469′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climb to 9000 direct NARIC, then climbing left turn direct BACHS.

TAKE-OFF RUNWAY 13: Climb to 9000 direct RUCOR, turn right via 226° track to BACHS.

TAKE-OFF RUNWAY 21: Climb to 9000 direct MOMPE, then via 221° track to BACHS.

TAKE-OFF RUNWAY 31: Climb to 9000 direct SIDTO, turn left via 215° track to BACHS.

SW-2, 22 OCT 2009 to 19 NOV 2009

CHOIR TWO DEPARTURE (RNAV)

SEATTLE CENTER
127.6 346.35
CTAF 122.8

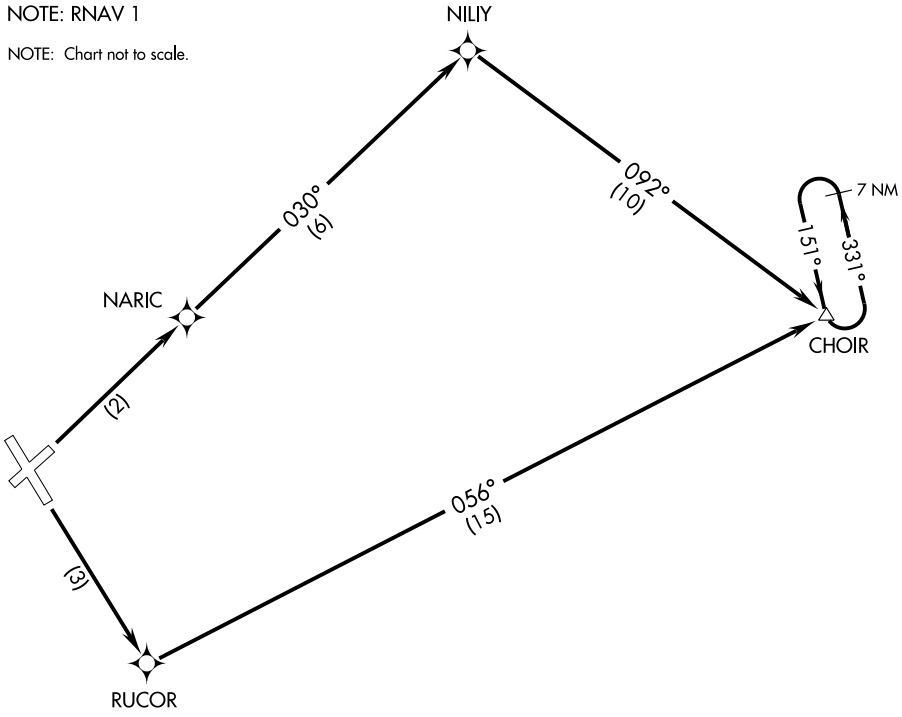
TAKE-OFF MINIMUMS

Rwy 3: Standard with minimum climb of 367′ per NM to 11000.
Rwy 13: Standard with minimum climb of 389′ per NM to 11000.
Rwys 21 and 31: NA - ATC.

NOTE: GPS required.

NOTE: RNAV 1

NOTE: Chart not to scale.



TAKE-OFF OBSTACLE NOTES

Rwy 3: Trees, buildings, poles and a road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4659′ MSL.
Rwy 13: Trees and road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4519′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climb to 11000 direct NARIC and via 030° track to NILIY and via 092° track to CHOIR, Thence....

TAKE-OFF RUNWAY 13: Climb to 11000 direct RUCOR and via 056° track to CHOIR, Thence....

....climb in holding, (if required) before proceeding on course.

SW-2, 22 OCT 2009 to 19 NOV 2009

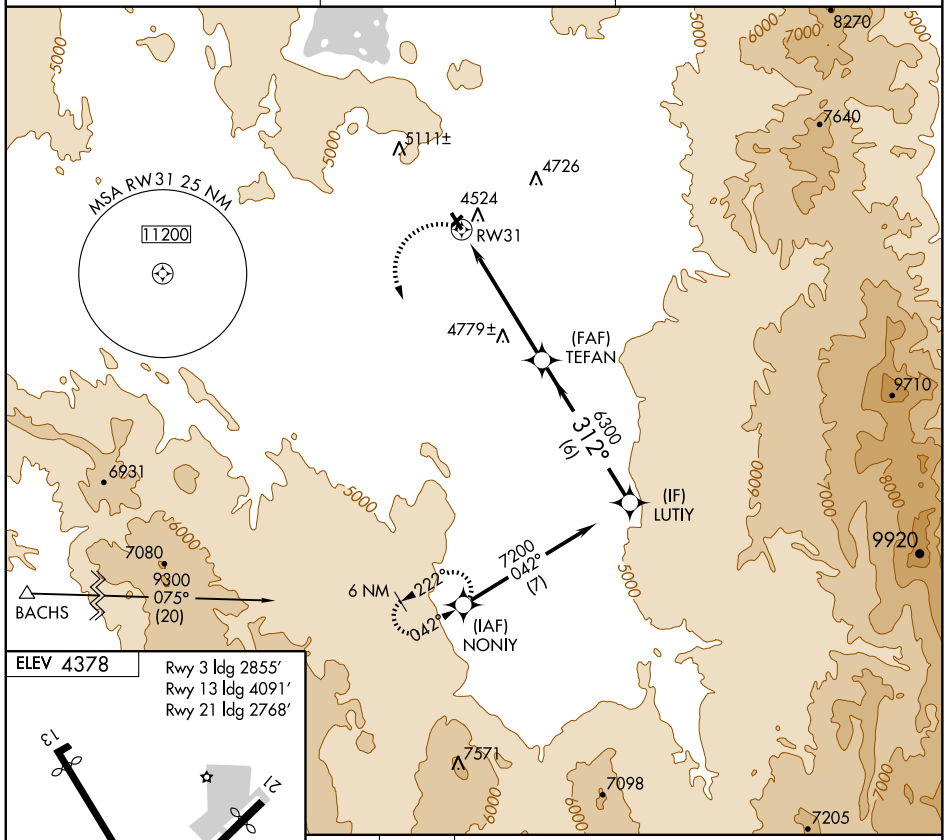
APP CRS	Rwy Idg	4300
312°	TDZE	4378
	Apt Elev	4378

RNAV (GPS) RWY 31
ALTURAS MUNI (AAT)

DME/DME RNP- 0.3 NA.

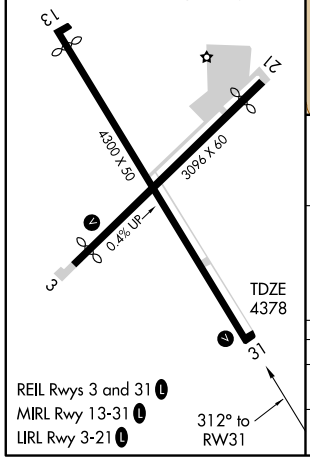
MISSED APPROACH: Climbing left turn to 9300 direct NONIY and hold, continue climb-in-hold to 9300.

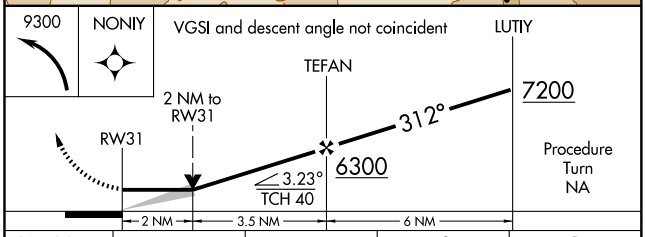
ASOS	SEATTLE CENTER	UNICOM
124.175	127.6 346.35	122.8 (CTAF) L



ELEV 4378

Rwy 3 ldg 2855′
Rwy 13 ldg 4091′
Rwy 21 ldg 2768′



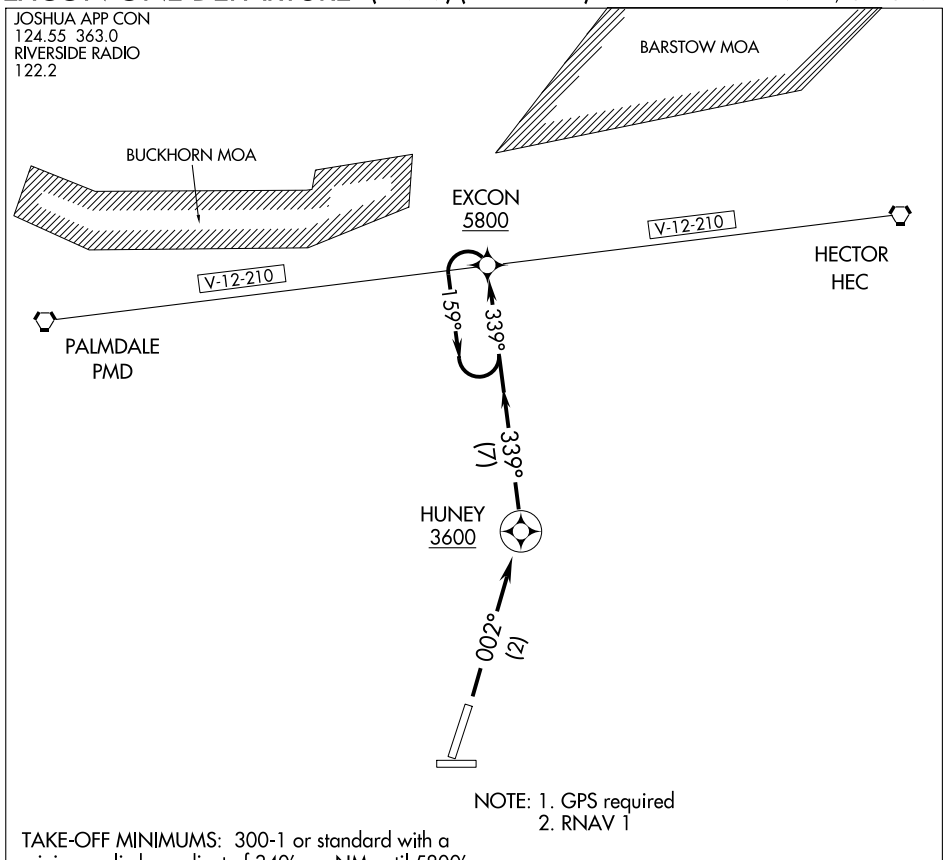


CATEGORY	A	B	C	D
LNAV MDA	5040-1	662 (700-1)	NA	
CIRCLING	5040-1	662 (700-1)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

EXCON ONE DEPARTURE (RNAV) (OBSTACLE)

APPLE VALLEY (APV)
APPLE VALLEY, CALIFORNIA



NOTE: 1. GPS required
2. RNAV 1

TAKE-OFF MINIMUMS: 300-1 or standard with a minimum climb gradient of 340′ per NM until 5800′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 36: Climb via 002° course to HUNEY WP, then 339° course to EXCON WP, then climb in EXCON WP holding pattern (hold S left turns 339° inbound) to 7500′ MSL then proceed on course.

SW-3, 22 OCT 2009 to 19 NOV 2009

APPLE VALLEY, CALIFORNIA

AL-5822 (FAA)

APP CRS		
182°	Rwy Idg	6498
	TDZE	3062
	Apt Elev	3062

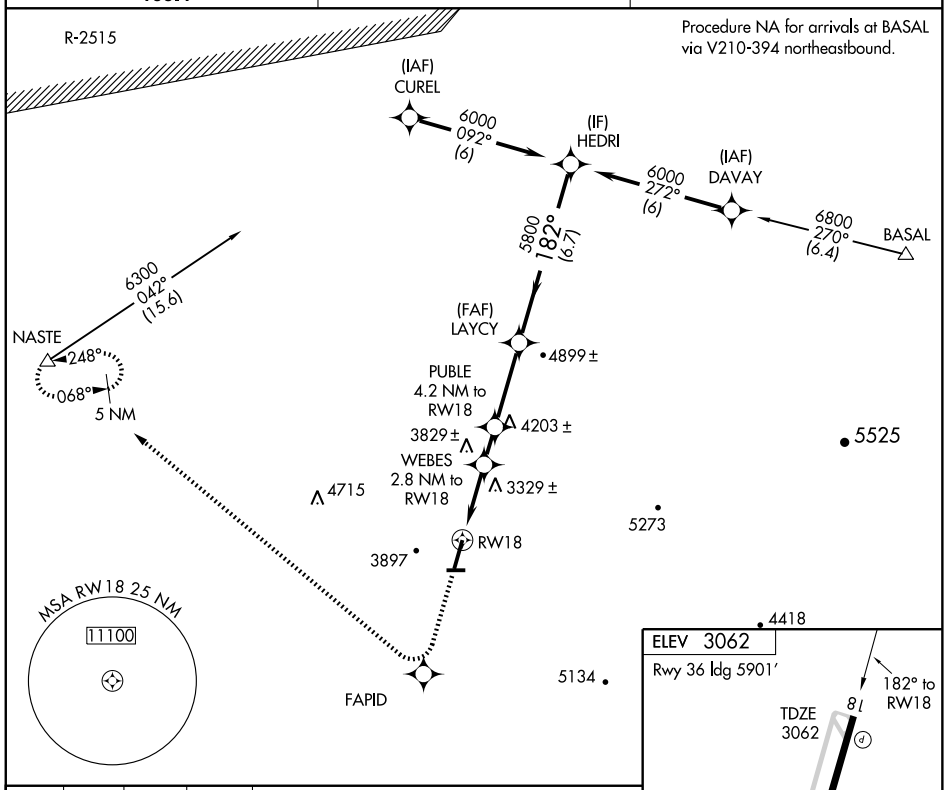
RNAV (GPS) Y RWY 18

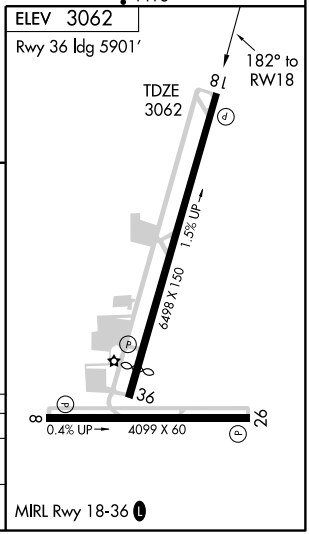
APPLE VALLEY (APV)

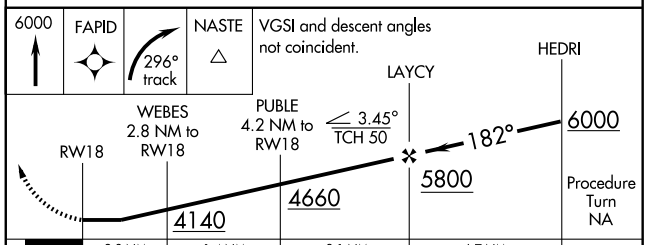
Circling to Rwy 8 and 26 NA at night.
DME/DME RNP-0.3 NA.
NA Visibility reduction by helicopters NA.
Use Southern California Logistics altimeter setting; if not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct FAPID and right turn via 296° track to NASTE and hold.

SOUTHERN CALIFORNIA LOGISTICS AWOS-3	JOSHUA APP CON	UNICOM
109.4	124.55 363.0	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3700-1 638 (700-1)		3700-1¾ 638 (700-1¾)	3700-2 638 (700-2)
CIRCLING	4000-1 938 (1000-1)	4300-1 1238 (1300-1)	4320-3 1258 (1300-3)	4660-3 1598 (1600-3)

MIRL Rwy 18-36 L

SW-3, 22 OCT 2009 to 19 NOV 2009

APPLE VALLEY, CALIFORNIA

AL-5822 (FAA)

WAAS	APP CRS	Rwy Idg	6498
Ch 63102	182°	TDZE	3062
W18A		Apt Elev	3062

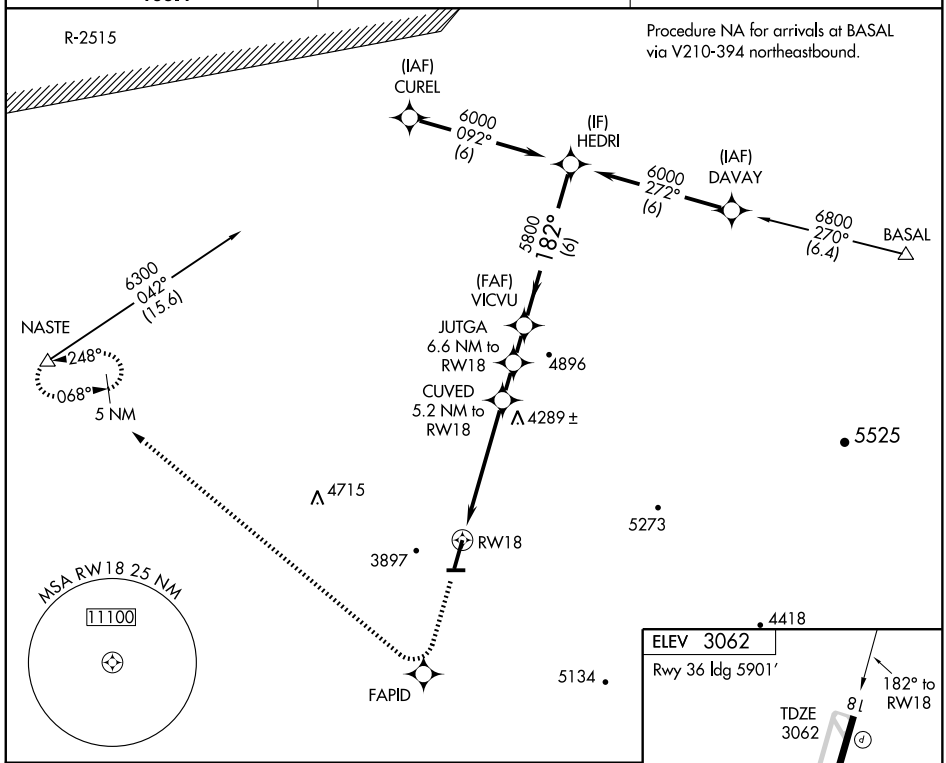
RNAV (GPS) Z RWY 18

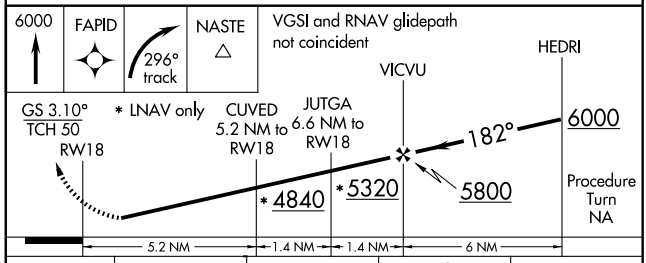
APPLE VALLEY (APV)

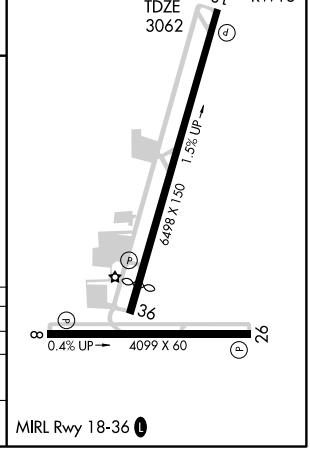
Circling to Rwy 8 and 26 NA at night.
DME/DME RNP-0.3 NA.
NA Visibility reduction by helicopters NA.
W Use Southern California Logistics altimeter setting; if not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct FAPID and right turn via 296° track to NASTE and hold.

SOUTHERN CALIFORNIA LOGISTICS AWOS-3	JOSHUA APP CON	UNICOM
109.4	124.55 363.0	122.8 (CTAF) L







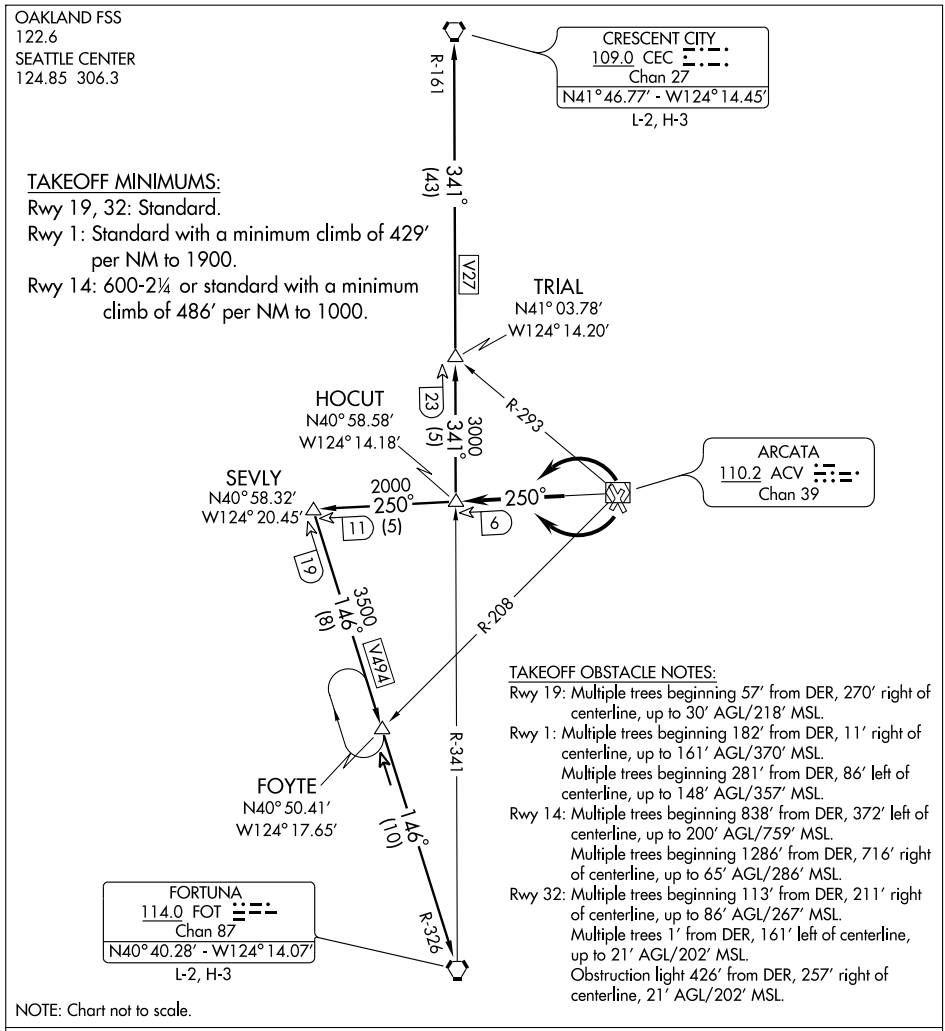
CATEGORY	A	B	C	D
LPV DA	3439-1¼ 377 (400-1¼)			
LNAV MDA	4600-1¼ 1538 (1600-1¼)	4600-1½ 1538 (1600-1½)	4600-3 1538 (1600-3)	
CIRCLING	4600-1¼ 1538 (1600-1¼)	4600-1½ 1538 (1600-1½)	4600-3 1538 (1600-3)	4660-3 1598 (1600-3)

MIRL Rwy 18-36 L

SW-3, 22 OCT 2009 to 19 NOV 2009

HOCUT THREE DEPARTURE

SL-519 (FAA)



TAKEOFF MINIMUMS:
Rwy 19, 32: Standard.
Rwy 1: Standard with a minimum climb of 429′ per NM to 1900.
Rwy 14: 600-2¼ or standard with a minimum climb of 486′ per NM to 1000.

TAKEOFF OBSTACLE NOTES:
Rwy 19: Multiple trees beginning 57′ from DER, 270′ right of centerline, up to 30′ AGL/218′ MSL.
Rwy 1: Multiple trees beginning 182′ from DER, 11′ right of centerline, up to 161′ AGL/370′ MSL.
Multiple trees beginning 281′ from DER, 86′ left of centerline, up to 148′ AGL/357′ MSL.
Rwy 14: Multiple trees beginning 838′ from DER, 372′ left of centerline, up to 200′ AGL/759′ MSL.
Multiple trees beginning 1286′ from DER, 716′ right of centerline, up to 65′ AGL/286′ MSL.
Rwy 32: Multiple trees beginning 113′ from DER, 211′ right of centerline, up to 86′ AGL/267′ MSL.
Multiple trees 1′ from DER, 161′ left of centerline, up to 21′ AGL/202′ MSL.
Obstruction light 426′ from DER, 257′ right of centerline, 21′ AGL/202′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1 and 32: Climbing left turn, thence. . . .
TAKE-OFF RUNWAYS 14 and 19: Climbing right turn, thence. . . .
. . . .via ACV R-250 to HOCUT INT.

CRESCENT CITY TRANSITION (HOCUT3.CEC): From over HOCUT INT via FOT R-341 and CEC R-161 to CEC VORTAC.
FORTUNA TRANSITION (HOCUT3.FOT): From over HOCUT INT via ACV R-250 to SEVLY INT, then via FOT R-326 to FOT VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-ACV	APP CRS	Rwy Idg	5198
109.5	316°	TDZE	221
Chan 32		Apt Elev	221

ILS or LOC/DME RWY 32
ARCATA (ACV)

Circling NA east of Rwy 14-32. When local altimeter setting not received, use Crescent City altimeter setting and increase all DA 135 feet, all MDA 140 feet. Increase S-ILS 32 visibility to RVR 4000, S-LOC 32 Cat B visibility to RVR 4000, Cat C to 1¾, and Cat D to 2. Increase visibility circling Cats B/C ¼ mile, Cat D ½ mile.

MALSR

MISSED APPROACH: Climb to 800, then climbing left turn to 3000 via heading 250° and FOT R-341 to TRIAL Int and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L

DME REQUIRED

R-341 TRIAL FOT 23.5
161° 341°
R-293 116°
LOCALIZER 109.5 I-ACV Chan 32
ARCATA 110.2 ACV Chan 39
LMM ABETA 233 CV
882 597± 619±
ACATA OM I-ACV 5.7
2000 316° (1.8)
I-ACV 7.5
2500 316° (2.5)
I-ACV 10
1934
KORBE INT I-ACV 12
3200 316° (2)
2386
R-341
10 NM
R-034
MSA ACV 25 NM
5900 220° 7200 2300 110° 010°
3600 034° (13.7)
IAF FORTUNA 114.0 FOT Chan 87
3049 ELEV 3049
4092 4260 3404
1000 2000 3000 4000

ELEV 221 D

800	3000	FOT	TRIAL
	250°	R-341	△
		114.0	

Use I-ACV DME when on LOC course.

Procedure Turn NA
I-ACV 10
KORBE INT I-ACV 12

ACATA OM I-ACV 5.7
ABETA LMM I-ACV 1.1
I-ACV 7.5
1753
316° 3600 3200
2500 2000 2000
GS 3.00° TCH 48
0.4 4.2 NM 1.8 NM 2.5 NM 2 NM

14 32 0.7% UP 0.5% UP 6000 X 150 4499 X 150 TDZE 221 251 267 268 334± 316° 4.6 NM from FAF

TDZ/CL Rwy 32 L
MIRL Rwy 1-19
HIRL Rwy 14-32 L
REIL Rwys 14 and 32 L
REIL Rwy 1

CATEGORY	A	B	C	D
S-ILS 32	421/18 200 (200-½)			
S-LOC 32	860/24 639 (700-½)		860/60 639 (700-1¼)	860-1½ 639 (700-1½)
CIRCLING	860-1 639 (700-1)		860-1¾ 639 (700-1¾)	860-2 639 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-ACV	APP CRS	Rwy Idg	5198
109.5	316°	TDZE	221
Chan 32		Apt Elev	221

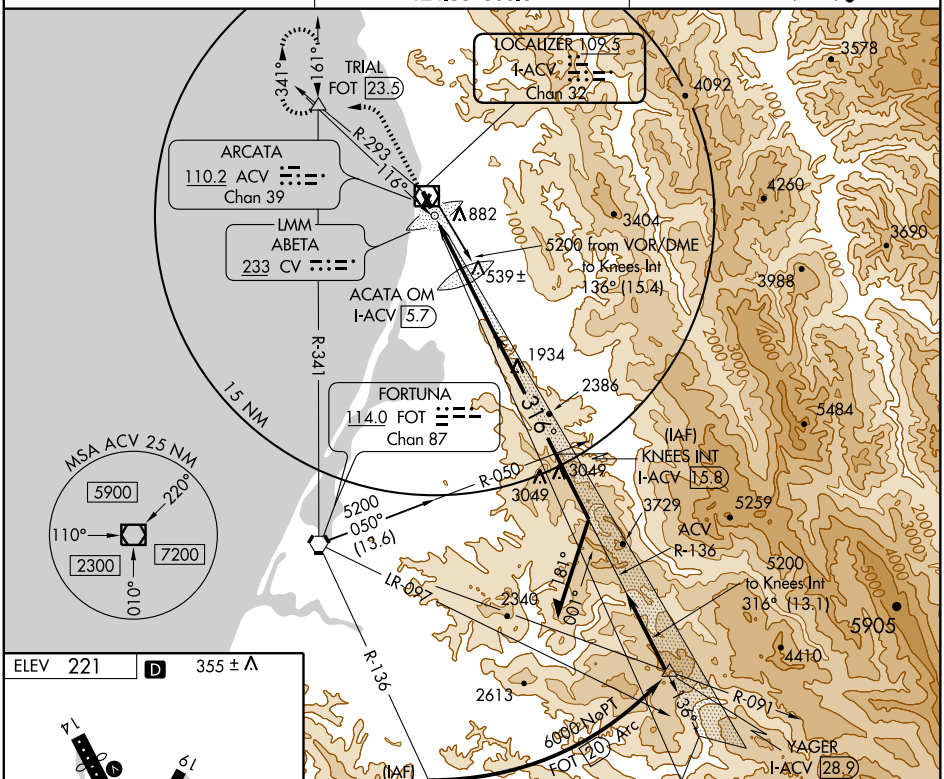
ILS RWY 32
ARCATA (ACV)

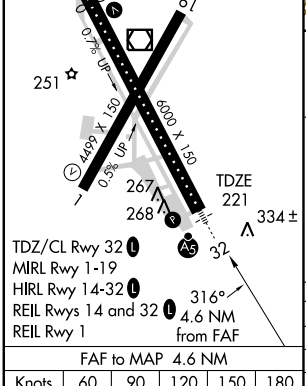
Circling NA east of Rwy 14-32. Circling requires descent on glide slope to MDA. When local altimeter setting not received, use Crescent City altimeter setting and increase all DA 135 feet, all MDA 140 feet. Increase S-ILS 32 visibility to RVR 4000 and increase circling visibility Cat D to 2¼ .

MALSR

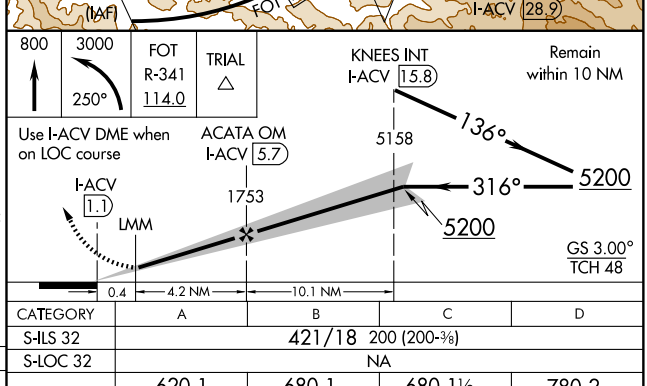
MISSED APPROACH: Climb to 800, then climbing left turn to 3000 via heading 250° and FOT R-341 to TRIAL INT and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L





FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32



CATEGORY	A	B	C	D
S-ILS 32	421/18 200 (200-⅜)			
S-LOC 32	NA			
CIRCLING	620-1 399 (400-1)	680-1 459 (500-1)	680-1½ 459 (500-1½)	780-2 559 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

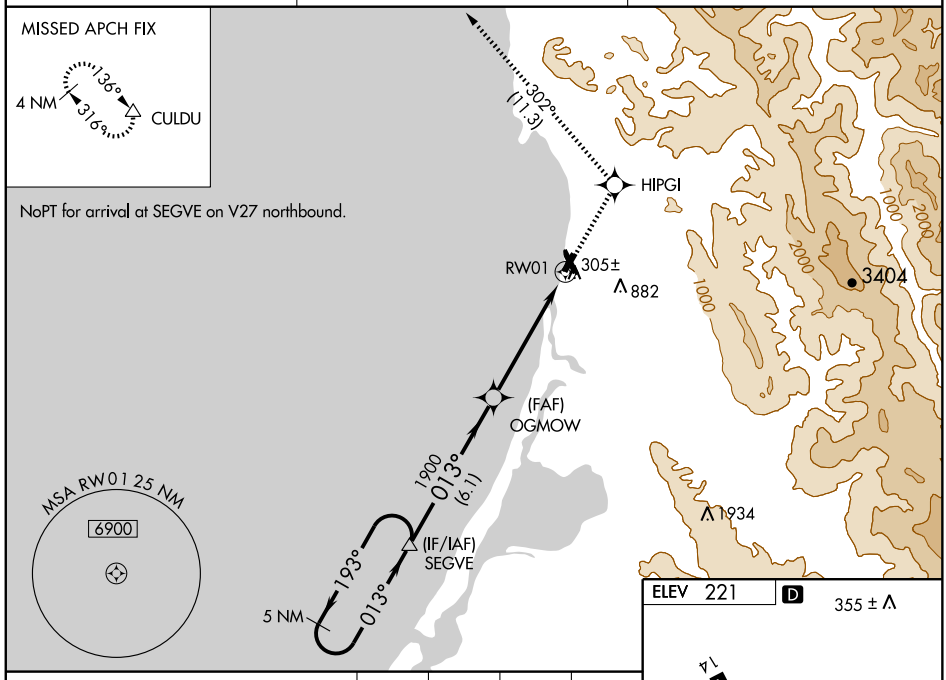
WAAS	APP CRS	Rwy Idg	4499
CH 63200	013°	TDZE	204
W01A		Apt Elev	221

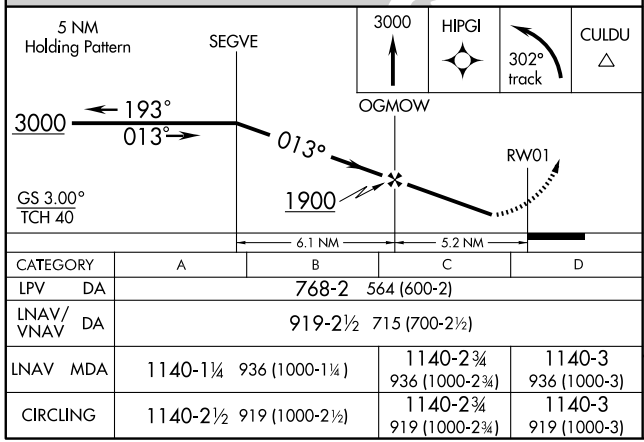
RNAV (GPS) RWY 1
ARCATA (ACV)

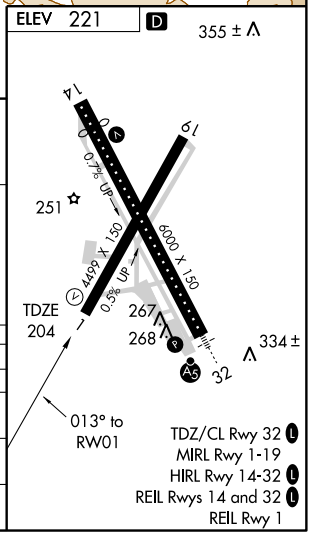
T DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
A Circling NA east of Rwy 14-32.
W For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (119°F).
If local altimeter setting not received, use Crescent City altimeter setting and increase all DA/MDAs 140 feet.
Baro-VNAV NA when using Crescent City altimeter setting.

MISSED APPROACH: Climb to 3000 direct HIPGI and left turn via 302° track to CULDU and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	768-2 564 (600-2)			
LNAV/VNAV DA	919-2½ 715 (700-2½)			
LNAV MDA	1140-1¼ 936 (1000-1¼)		1140-2¾ 936 (1000-2¾)	1140-3 936 (1000-3)
CIRCLING	1140-2½ 919 (1000-2½)		1140-2¾ 919 (1000-2¾)	1140-3 919 (1000-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	5198
CH 62801	136°	TDZE	207
W14A		Apt Elev	221

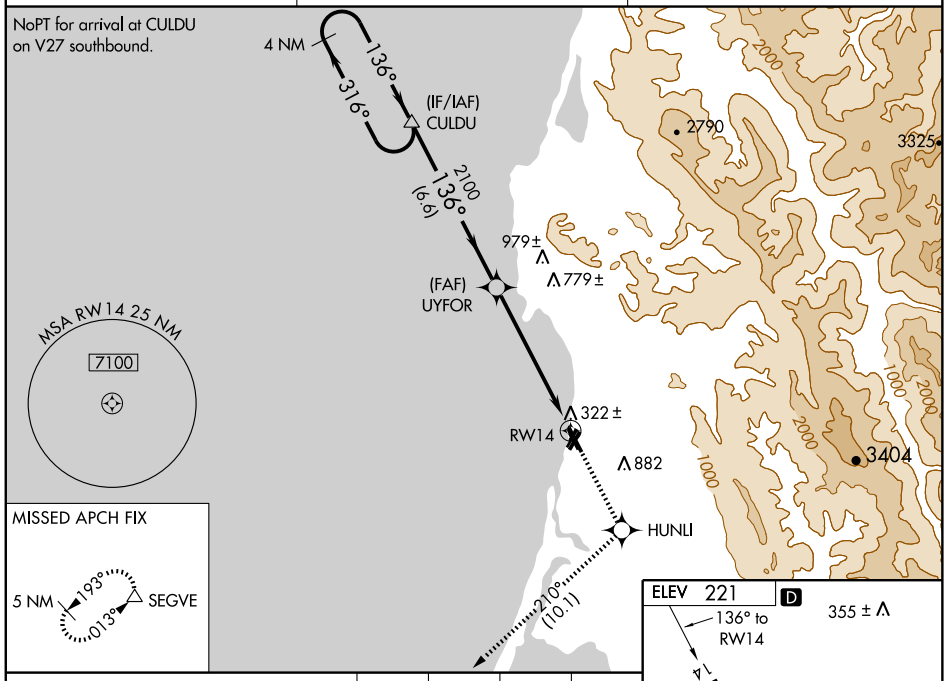
RNAV (GPS) RWY 14
ARCATA (ACV)

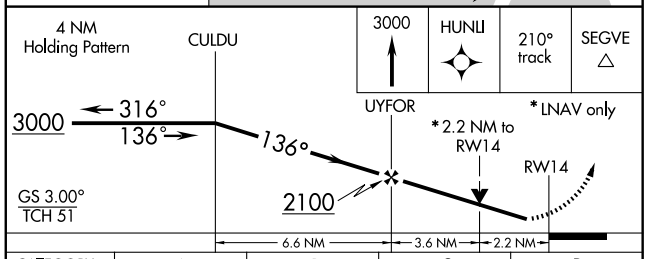
T DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
A Circling NA east of Rwy 14-32.
W For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (119°F).
If local altimeter setting not received, use Crescent City altimeter setting and increase all DA/MDAs 140 feet.
VDP and Baro-VNAV NA when using Crescent City altimeter setting.

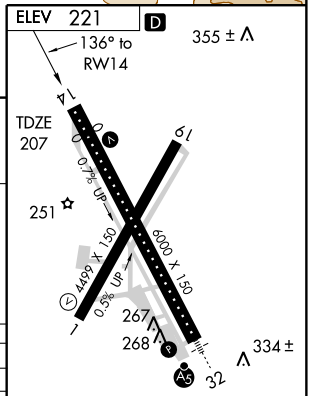
MISSED APPROACH: Climb to 3000 direct HUNLI and via 210° track to SEGVE and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L

NoPT for arrival at CULDU on V27 southbound.







CATEGORY	A	B	C	D
LPV DA	459-1 252 (300-1)			
LNAV/VNAV DA	710-1¾ 503 (500-1¾)			
LNAV MDA	880-1 673 (700-1)		880-2 673 (700-2)	880-2¼ 673 (700-2¼)
CIRCLING	880-1¾ 659 (700-1¾)		880-2 659 (700-2)	880-2¼ 659 (700-2¼)

TDZ/CL Rwy 32 L
MIRL Rwy 1-19
HIRL Rwy 14-32 L
REIL Rwys 14 and 32 L
REIL Rwy 1

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	5198
CH 63108	316°	TDZE	221
W32A		Apt Elev	221

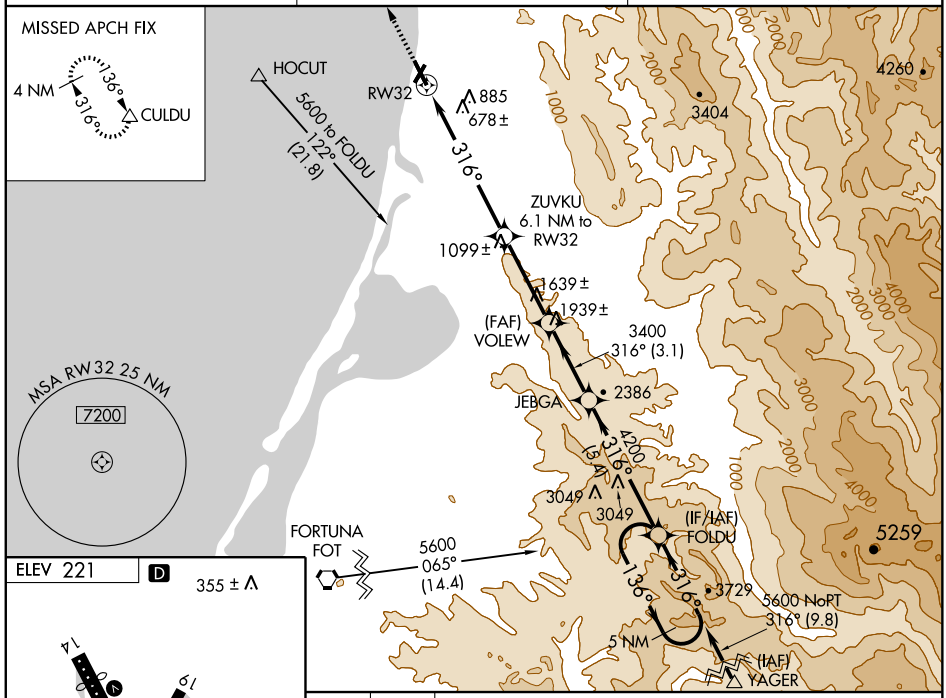
RNAV (GPS) RWY 32
ARCATA (ACV)

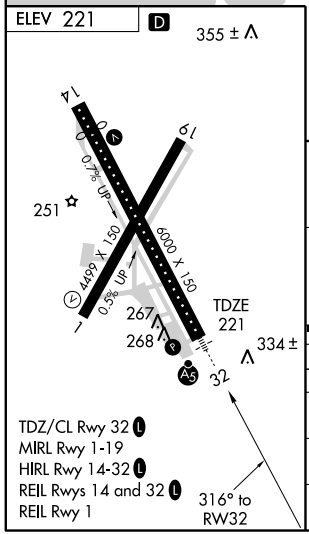
T Circling NA east of Rwy 14-32.
A Baro-VNAV NA when using Crescent City altimeter setting.
W For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
Inoperative table does not apply to LPV, LNAV/VNAV, and LNAV Cats A and B.
When local altimeter setting not received, use Crescent City altimeter setting and increase all DA/MDA 140 feet, increase visibilities LPV ½ mile all Cats, LNAV Cats A, B ¼ mile, Cats C, D 1 mile, inoperative table does not apply.

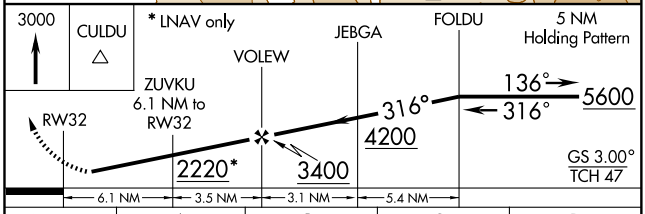
MALSR

MISSED APPROACH: Climb to 3000 direct CULDU and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	509/50 288 (300-1)			
LNAV/VNAV DA	1164-4 943 (1000-4)			
LNAV MDA	940/50 719 (800-1)		940-1½ 719 (800-1½)	940-1¾ 719 (800-1¾)
CIRCLING	940-1 719 (800-1)		940-2 719 (800-2)	940-2¼ 719 (800-2¼)

SW-2, 22 OCT 2009 to 19 NOV 2009

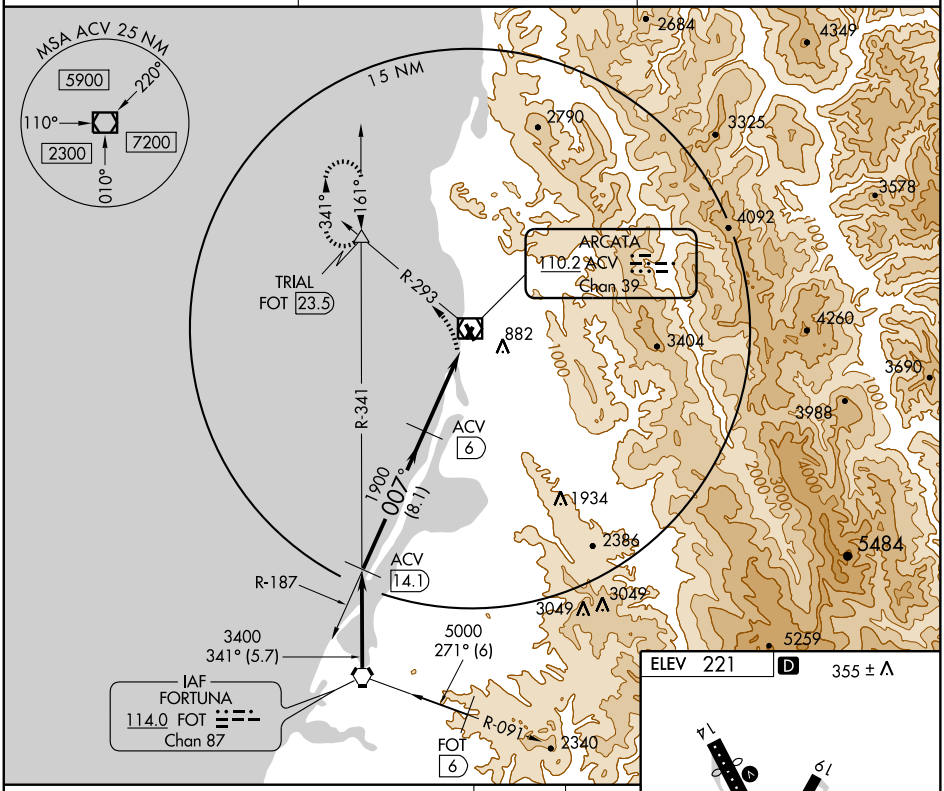
VOR/DME ACV	APP CRS	Rwy Idg	4499
110.2	007°	TDZE	204
Chan 39		Apt Elev	221

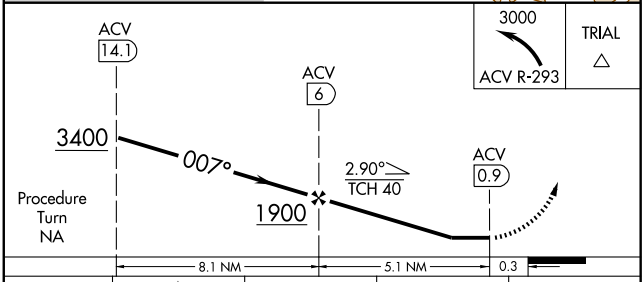
VOR/DME RWY 1
ARCATA (ACV)

Circling not authorized east of Rwy 14-32.

MISSED APPROACH: Climbing left turn to 3000 via ACV R-293 to TRIAL Int/DME and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-1	580-1 376 (400-1)			580-1¼ 376 (400-1¼)
CIRCLING	620-1 399 (400-1)	680-1 459 (500-1)	680-1½ 459 (500-1½)	780-2 559 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME ACV	APP CRS	Rwy Idg	5198
110.2	123°	TDZE	207
Chan 39		Apt Elev	221

VOR/DME RWY 14
ARCATA (ACV)

Circling NA east of Rwy 14-32.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Crescent City altimeter setting and increase all MDA 140 feet and S-14 visibility Cat C ¼ mile, Cat D ½ mile, and circling Cat D ¼ mile.
VDP NA when using Crescent City altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 via ACV VOR/DME R-208 to HEXIT INT/8.2 DME and hold, continue climb-in-hold to 3000.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L

DME REQUIRED

R-303 123° 1 min 303°
(IAF) WHEEL ACV 9.1
123°
3500 to WHEEL 303° (9.1)
LIGHT ACV 2.4
357 ±
HONAD ACV 0.2
R-341
R-208
882
ARCATA 110.2 ACV Chan 39
10 NM
2790
3325
4092
3404
3000
2000
1000
MSA ACV 25 NM
5900
7200
2300
220°
110°
010°
208°
028°
HEXIT ACV 8.2
1934
4800 to VOR/DME 31.6 115.4
2386
KNEES ACV 15.4
3049
114.0 FOT Chan 87

ELEV 221 D
355 ± 334 ±
123° 8.9 NM from FAF
TDZE 207
14 19 32
0.7% UP
0.5% UP
6000 X 150
4499 X 150
251
267
268
A5

TDZ/CL Rwy 32 L
MIRL Rwy 1-19
HIRL Rwy 14-32 L
REIL Rwys 14 and 32 L
REIL Rwy 1

One Minute Holding Pattern
WHEEL ACV 9.1
LIGHT ACV 2.4
ACV 1.5
HONAD ACV 0.2
3000 ACV R-208 HEXIT
3000
303°
123°
123°
2.93°
TCH 51
920
6.7 NM 0.9 1.3 NM

CATEGORY	A	B	C	D
S-14	620-1 413 (400-1)		620-1¼ 413 (400-1¼)	
CIRCLING	620-1 399 (400-1)	680-1 459 (500-1)	680-1½ 459 (500-1½)	780-2 559 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

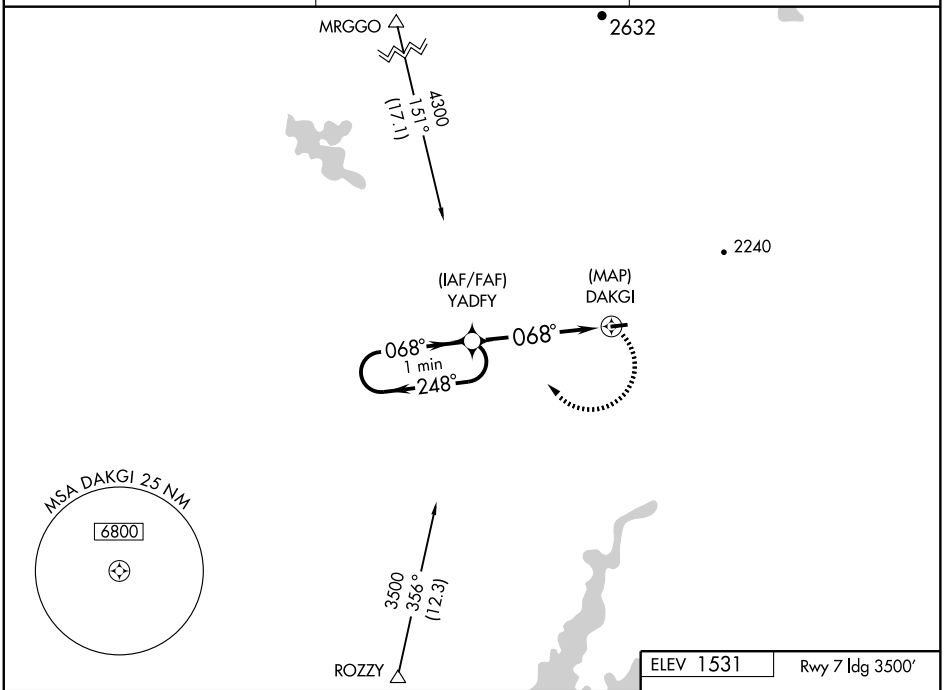
APP CRS	Rwy Idg	3500
068°	TDZE	1531
	Apt Elev	1531

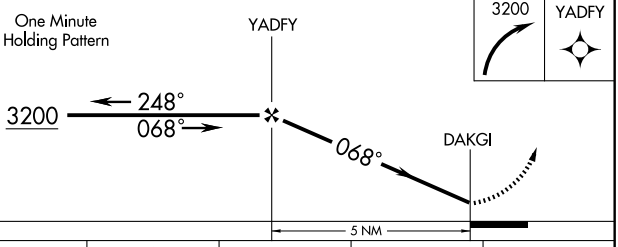
GPS RWY 7
AUBURN MUNI (AUN)

Obtain local altimeter setting on CTAF; when not received use Lincoln, CA (Lincoln Regional) altimeter setting, when neither received procedure not authorized.

MISSED APPROACH: Climbing right turn to 3200 direct YADFY WP and hold.

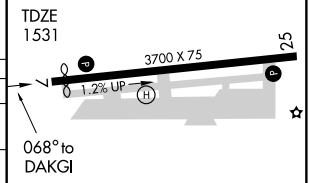
AWOS-3	NORCAL APP CON	UNICOM
119.375	125.4 317.5	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-7	1980-1	449 (500-1)	NA	
CIRCLING	2200-1 669 (700-1)	2260-1 729 (800-1)	NA	
LINCOLN, CA (LINCOLN REGIONAL) ALTIMETER SETTING MINIMUMS				
S-7	2200-1	669 (700-1)	NA	
CIRCLING	2440-1¼ 909 (1000-1¼)	2480-1¼ 949 (1000-1¼)	NA	

ELEV 1531 Rwy 7 ldg 3500′



MIRL Rwy 7-25 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC SXC 111.4 Chan 51	APP CRS 172°	Rwy Idg N/A TDZE N/A Apt Elev 1602

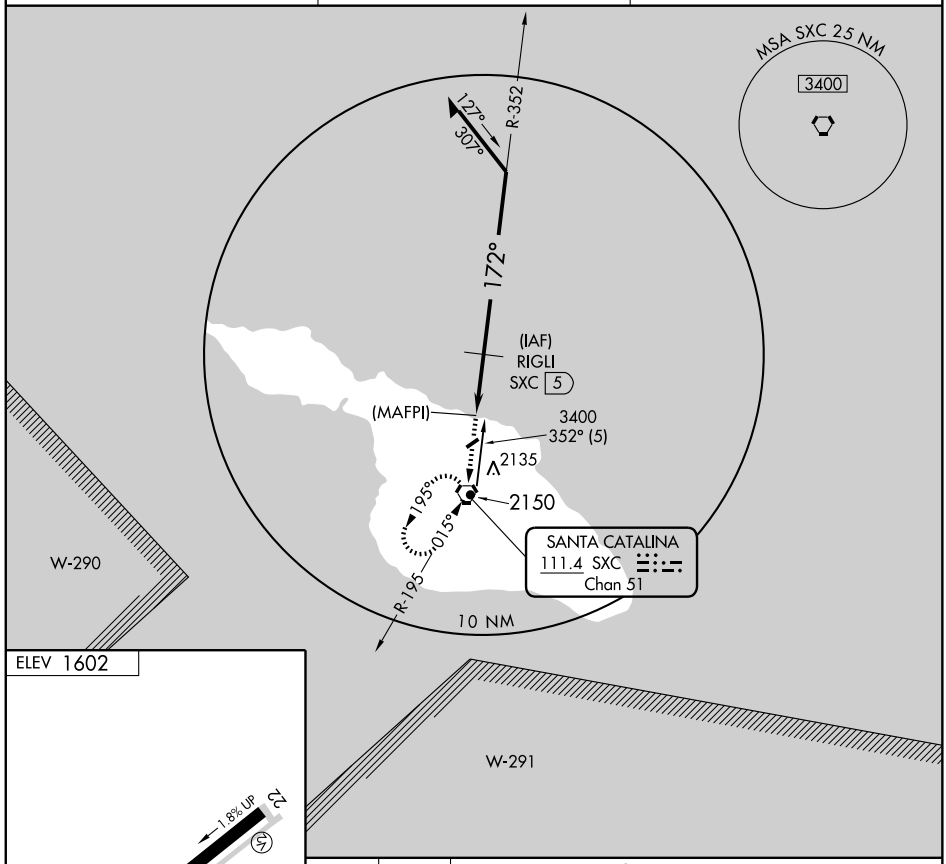
VOR/DME or GPS-B
AVALON/ CATALINA (AVX)

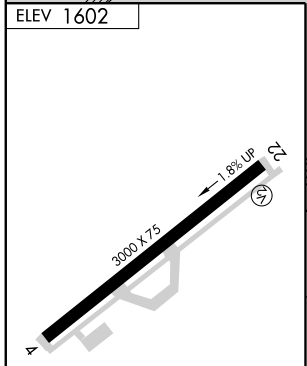
NA

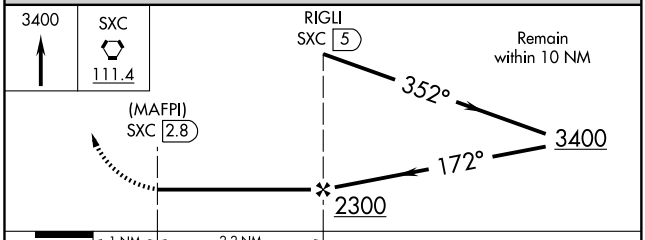
Circling southeast runway 4-22 not authorized.

MISSED APPROACH: Climb to 3400 direct SXC VORTAC and hold.

ASOS	SOCAL APP CON	UNICOM
120.675	127.4 323.275	122.7 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	2220-1 618 (700-1)		NA	

REIL Rwy 22
MIRL Rwy 4-22

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC SXC	APP CRS	Rwy Idg	N/A
111.4	352°	TDZE	N/A
Chan 51		Apt Elev	1602

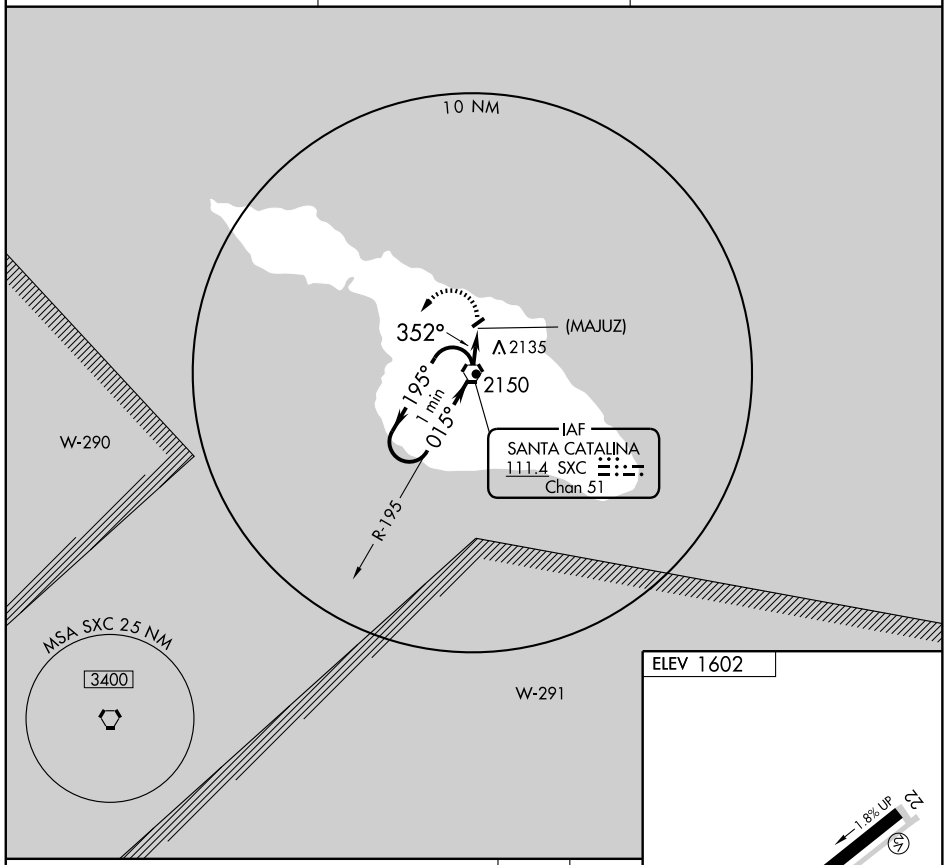
VOR or GPS-A

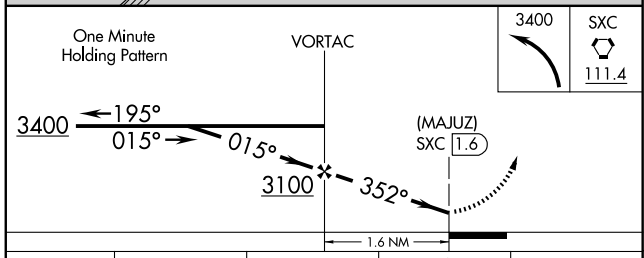
AVALON/ CATALINA (AVX)

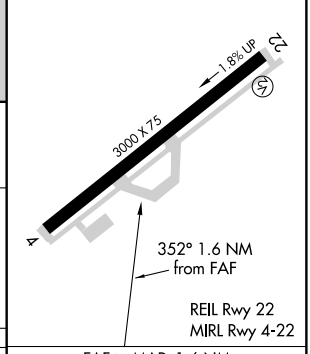
NA

MISSED APPROACH: Climbing left turn to 3400 in SXC VORTAC holding pattern.

ASOS	SOCAL APP CON	UNICOM
120.675	127.4 323.275	122.7 (CTAF)





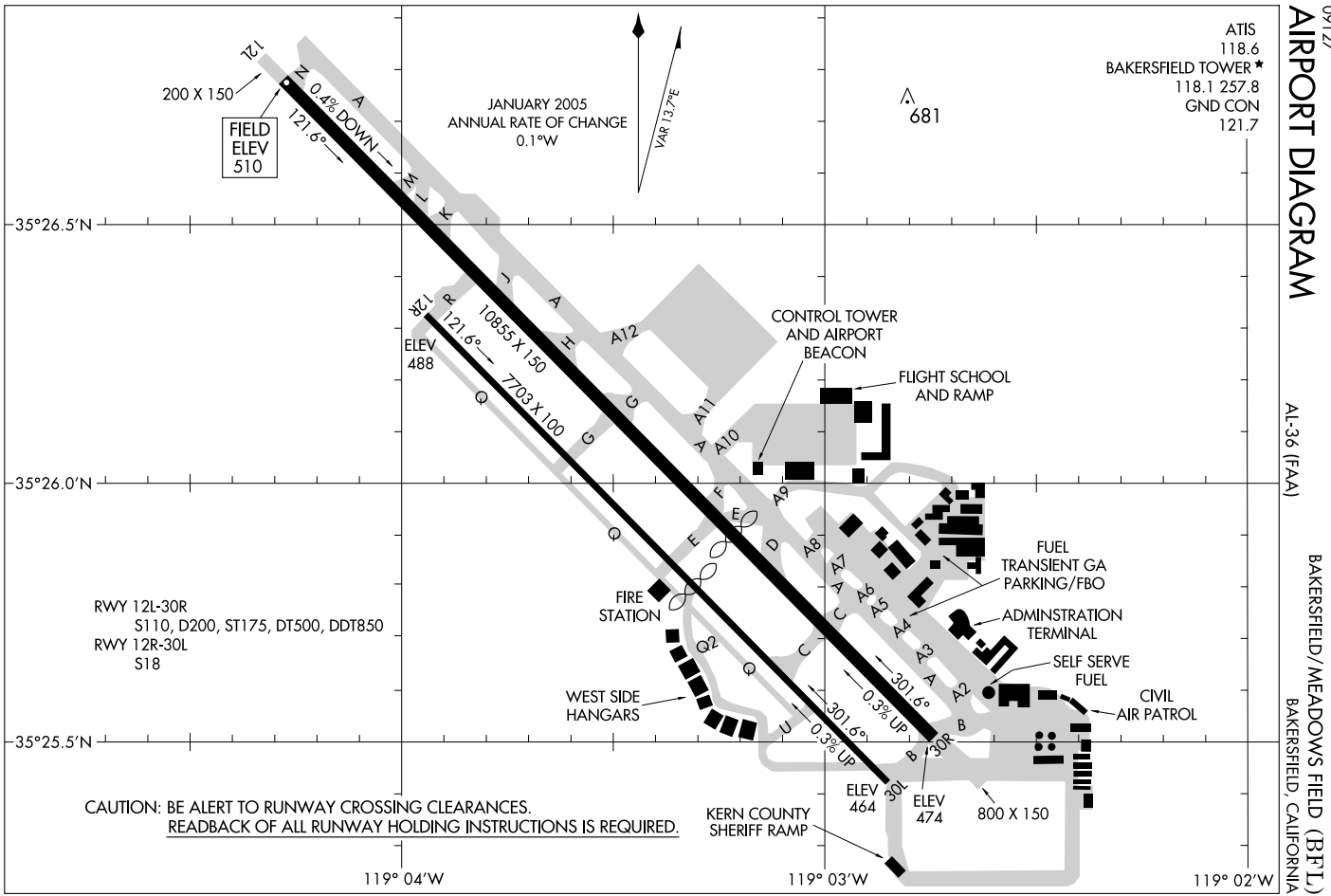


CATEGORY	A	B	C	D
CIRCLING	2560-1¼ 958 (1000-1¼)	2560-1½ 958 (1000-1½)	NA	

FAF to MAP 1.6 NM

Knots	60	90	120	150	180
Min:Sec	1:36	1:04	0:48	0:38	0:32

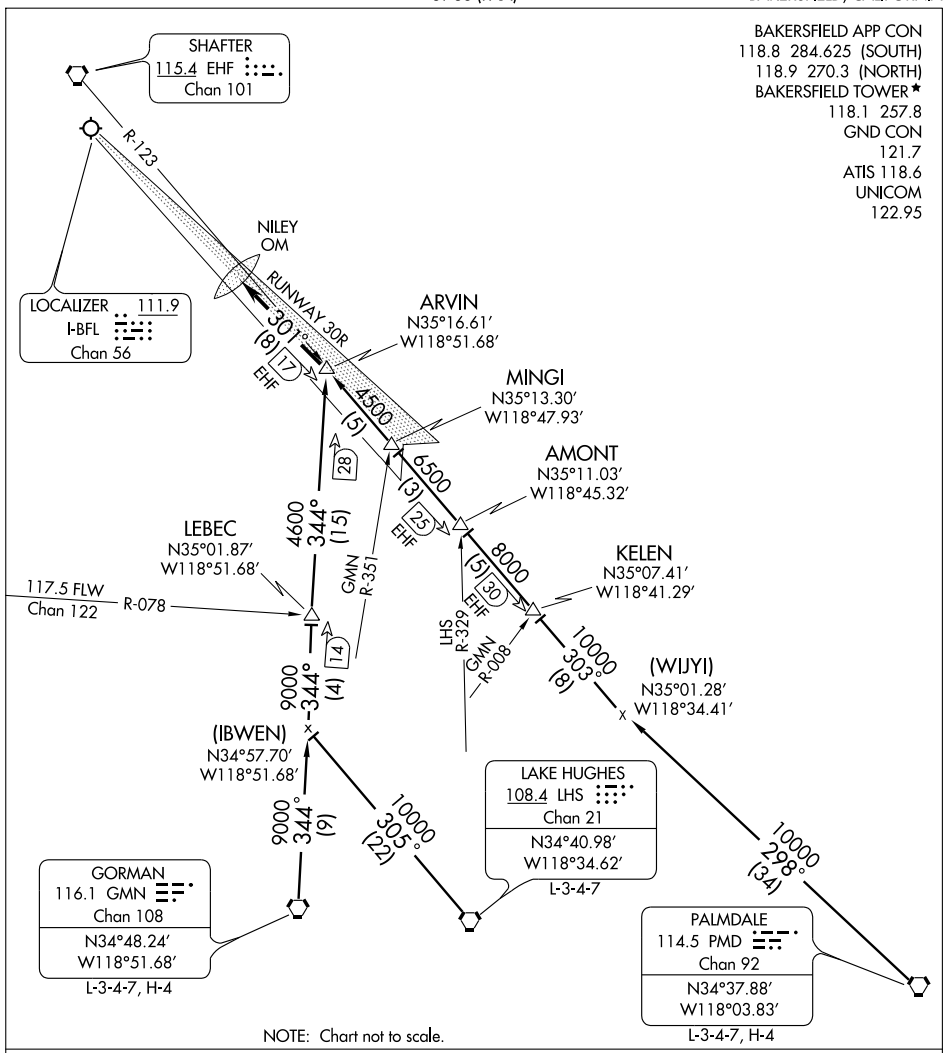
SW-3, 22 OCT 2009 to 19 NOV 2009


AIRPORT DIAGRAM
BAKERSFIELD/MEADOWS FIELD (BFL)
BAKERSFIELD, CALIFORNIA
AL-36 (FAA)
ATIS
118.6
BAKERSFIELD TOWER ★
118.1 257.8
GND CON
121.7
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
VAR 13.7°E
681
12L
200 X 150
FIELD
ELEV
510
0.4% DOWN
121.6°
12R
ELEV
488
10855 X 150
7703 X 100
121.6°
CONTROL TOWER
AND AIRPORT
BEACON
FLIGHT SCHOOL
AND RAMP
FUEL
TRANSIENT GA
PARKING/FBO
ADMINSTRATION
TERMINAL
SELF SERVE
FUEL
CIVIL
AIR PATROL
FIRE
STATION
WEST SIDE
HANGARS
301.6°
0.3% UP
30R
30L
ELEV
464
ELEV
474
800 X 150
KERN COUNTY
SHERIFF RAMP
RWY 12L-30R
S110, D200, ST175, DT500, DDT850
RWY 12R-30L
S18
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
35°26.5'N
35°26.0'N
35°25.5'N
119° 04'W
119° 03'W
119° 02'W

ARVIN ONE ARRIVAL

ST-36 (FAA)

MEADOWS FIELD
BAKERSFIELD, CALIFORNIA



GORMAN TRANSITION (GMN.ARVIN1): From over GMN VORTAC via GMN R-344 to ARVIN INT. Thence....

LAKE HUGHES TRANSITION (LHS.ARVIN1): From over LHS VORTAC via LHS R-305 and GMN R-344 to ARVIN INT. Thence....

PALMDALE TRANSITION (PMD.ARVIN1): From over PMD VORTAC via PMD R-298 and EHF R-123 to ARVIN INT. Thence....

....From over ARVIN INT via the I-BFL ILS 30R localizer to NILEY OM.

LOST COMMUNICATIONS: From over ARVIN INT via I-BFL ILS 30R to NILEY OM.

SW-3, 22 OCT 2009 to 19 NOV 2009

BAKERSFIELD, CALIFORNIA

AL-36 (FAA)

LOC/DME I-BFL	APP CRS	Rwy Idg	7429
111.9	301°	TDZE	490
Chan 56		Apt Elev	507

ILS or LOC/DME RWY 30R

BAKERSFIELD/MEADOWS FIELD (BFL)

Circling NA northeast of Rwy 12L-30R. If local altimeter setting not received, use Porterville altimeter setting and increase DA/MDAs 100 feet. VDP NA when using Porterville altimeter setting.

MALSR

MISSED APPROACH: Climb to 3000 to intercept EHF R-145 to EHF VORTAC and hold, continue climb-in-hold to 3000.

PORTERVILLE AWOS-3	ATIS	BAKERSFIELD APP CON	BAKERSFIELD TOWER ★	GND CON	UNICOM
134.625	118.6	118.8 284.625 (SOUTH) 118.9 270.3 (NORTH)	118.1 (CTAF) 257.8	121.7	122.95

117.1 AVE Chan 118

R-072

R-172

IVECU

TTE 15

109.2 TTE Chan 29

Procedure NA for arrivals at AMONT via V459 and V165-197 southeast bound and arrivals on GMN VORTAC airway radials 297 CW 328.

R-324

3100 to JUPEX

125° (9.8)

SHAFTER 115.4 EHF Chan 101

LOCALIZER 111.9 I-BFL Chan 56

NILEY OM

1 min

(IAF) JUPEX I-BFL 7.4

(IF) FASTO INT I-BFL 14.7

R-344

4500 NoPT 301° (7.4)

2500 301° (7.4)

EHF R-124

4500 344° (14.4)

(IAF) AMONT I-BFL 22.2 RADAR

LEBEC GMN 13.6

117.5 FLW Chan 122

R-078

9000 NoPT 344° (13.6)

IAF GORMAN 116.1 GMN Chan 108

15 NM

MSA EHF 25 NM

180°

3400

8800

330°

ELEV 507

TWR 580

TDZE 490

12L

12R

30R

30L

0.3% DOWN

0.3% UP

0.3% UP

10855 X 150

7703 X 100

513

562

639±

301° 6.1 NM from FAF

3000

EHF R-145

EHF 115.4

Use I-BFL DME when on localizer course.

JUPEX I-BFL 7.4

One Minute Holding Pattern

2500

121°

301°

2500

2500

GS 3.00° TCH 51

I-BFL 1.3

I-BFL 2.4

VGSI and ILS glidepath not coincident.

1.1 NM

5 NM

CATEGORY	A	B	C	D
S-ILS 30R	690/18 200 (200-½)			
S-LOC 30R	900/24 410 (400-½)		900/40 410 (400-¾)	
CIRCLING	920-1 413 (500-1)	960-1 453 (500-1)	960-1½ 453 (500-1½)	1060-2 553 (600-2)

TDZ/CL Rwy 30R

HIRL Rwy 12L-30R

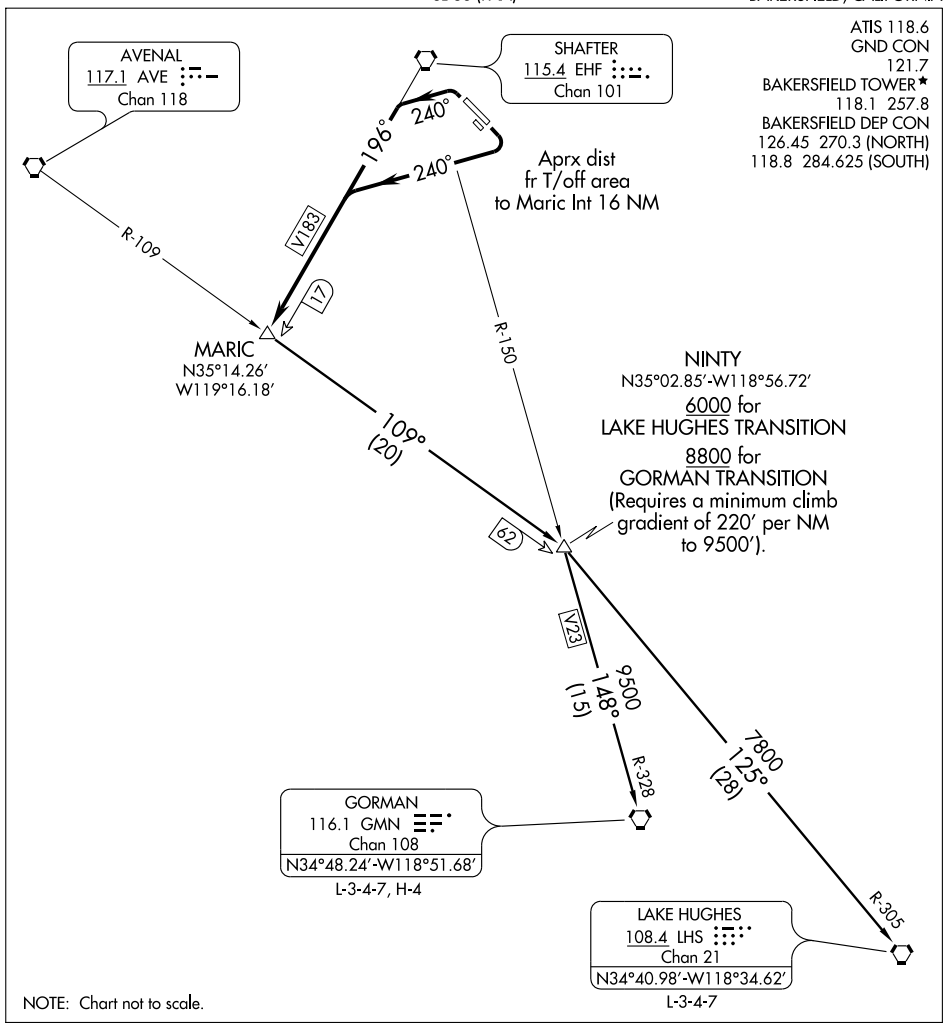
MIRL Rwy 12R-30L

SW-3, 22 OCT 2009 to 19 NOV 2009

MARIC THREE DEPARTURE

SL-36 (FAA)

BAKERSFIELD/ MEADOWS FIELD (BFL)
BAKERSFIELD, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 12L/R: Turn right heading 240°. Thence....

TAKE-OFF RUNWAYS 30L/R: Turn left heading 240°. Thence....

....intercept and proceed via the EHF R-196 to MARIC INT. Thence via (transition) or (assigned route).

GORMAN TRANSITION (MARIC3.GMN): From over MARIC INT via AVE R-109 and GMN R-328 to GMN VORTAC.

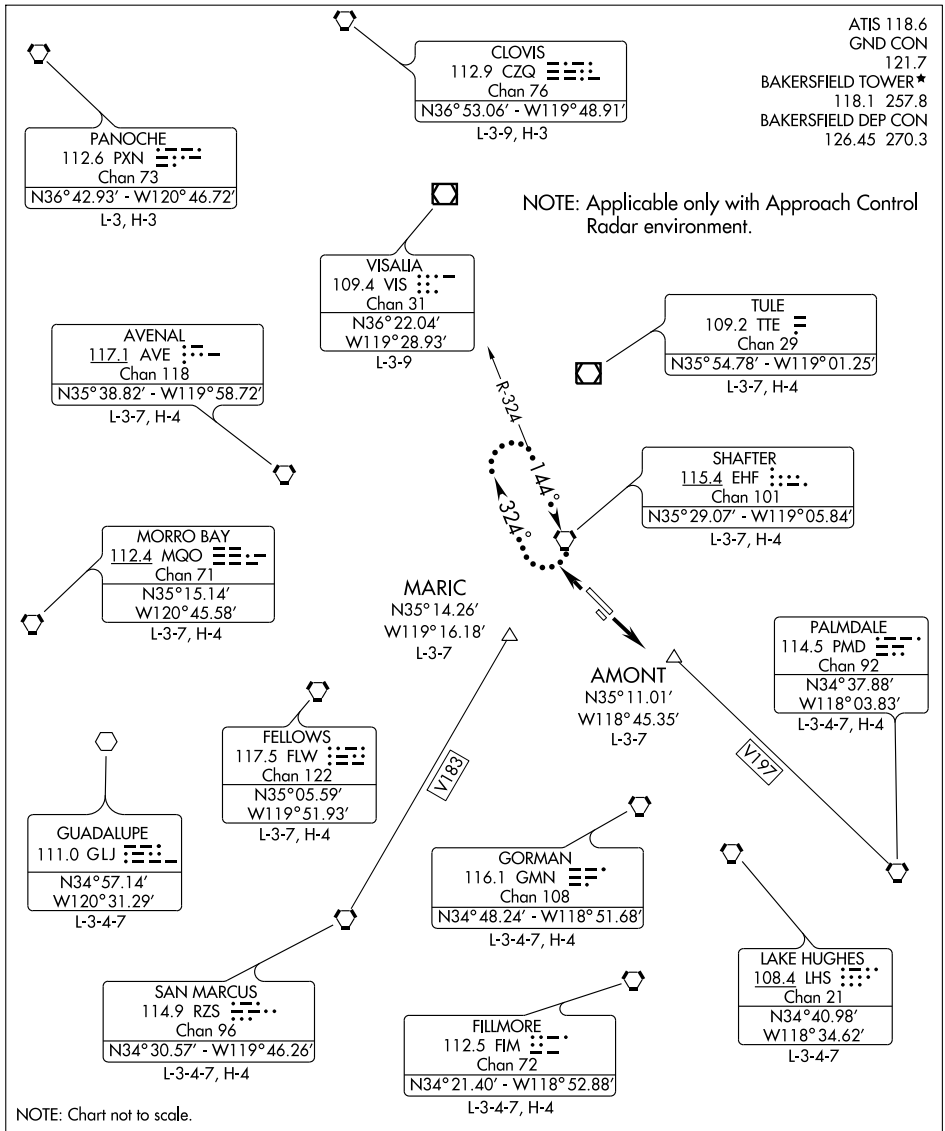
LAKE HUGHES TRANSITION (MARIC3.LHS): From over MARIC INT via AVE R-109 and LHS R-305 to LHS VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

(MEADO1.MEADO) 08213
MEADOWS ONE DEPARTURE

SL-36 (FAA)

BAKERSFIELD/MEADOWS FIELD (BFL)
BAKERSFIELD, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly runway heading for vector to assigned route/fix. Expect clearance to requested altitude five minutes after departure.

LOST COMMUNICATIONS: If no radio contact for two minutes, proceed direct EHF VORTAC and hold. Climb in holding pattern to expected altitude prior to proceeding on course.

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy ldg	10855
121°	TDZE	507
	Apt Elev	507

RNAV (GPS) RWY 12L

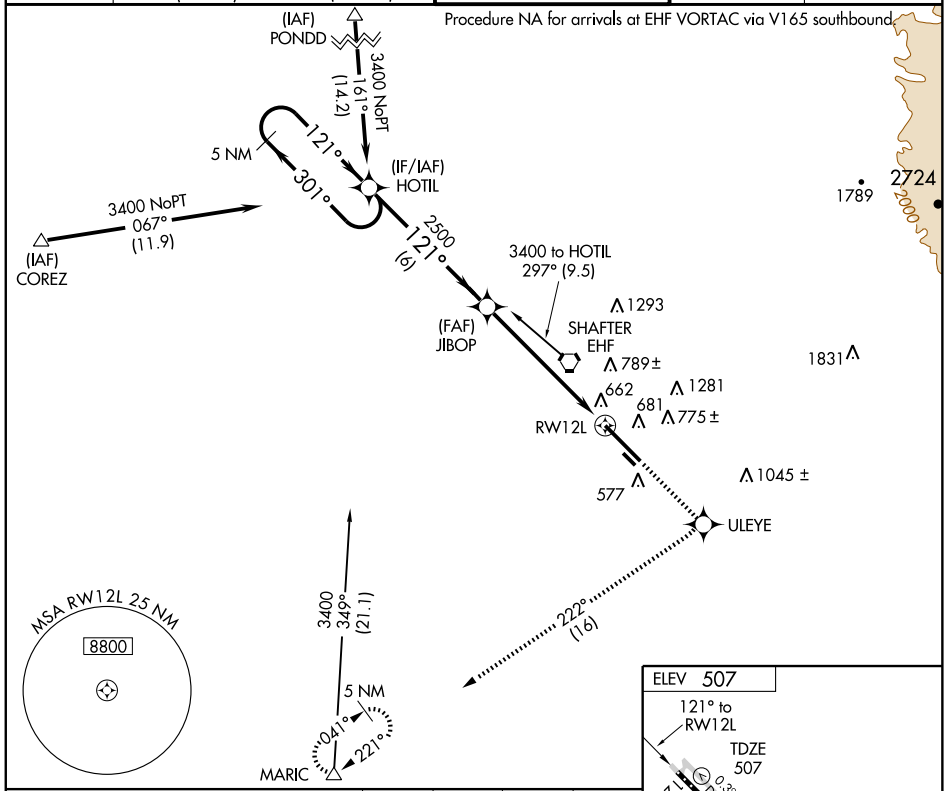
BAKERSFIELD/ MEADOWS FIELD (BFL)

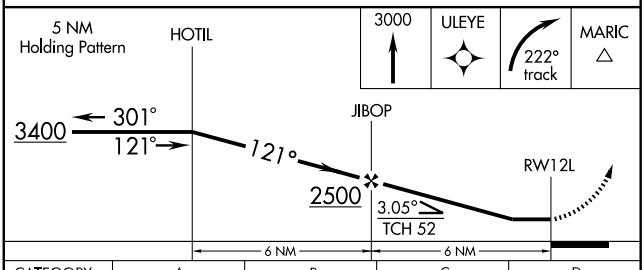
When local altimeter setting not received use Delano Muni altimeter setting and increase all MDA 80 feet and increase LNAV Cat D visibility ¼ mile.
Circling NA northeast of Rwy 12L-30R.
DME/DME RNP- 0.3 NA.

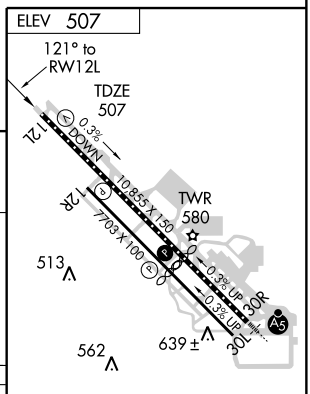
MISSED APPROACH: Climb to 3000 direct ULEYE and right turn via 222° track to MARIC and hold.

ATIS	BAKERSFIELD APP CON ★		BAKERSFIELD TOWER ★	GND CON	UNICOM
118.6	118.8 284.625 (SOUTH)	118.9 270.3 (NORTH)	118.1 (CTAF) L 257.8	121.7	122.95

Procedure NA for arrivals at EHF VORTAC via V165 southbound.







CATEGORY	A	B	C	D
LNAV MDA	920-1 413 (500-1)		920-1¼ 413 (500-1¼)	
CIRCLING	920-1 413 (500-1)	960-1 453 (500-1)	960-1½ 453 (500-1½)	1060-2 553 (600-2)

TDZ/CL Rwy 30R
HIRL Rwy 12L-30R L
MIRL Rwy 12R-30L

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7429
301°	TDZE	490
	Apt Elev	507

RNAV (GPS) RWY 30R

BAKERSFIELD/MEADOWS FIELD (BFL)

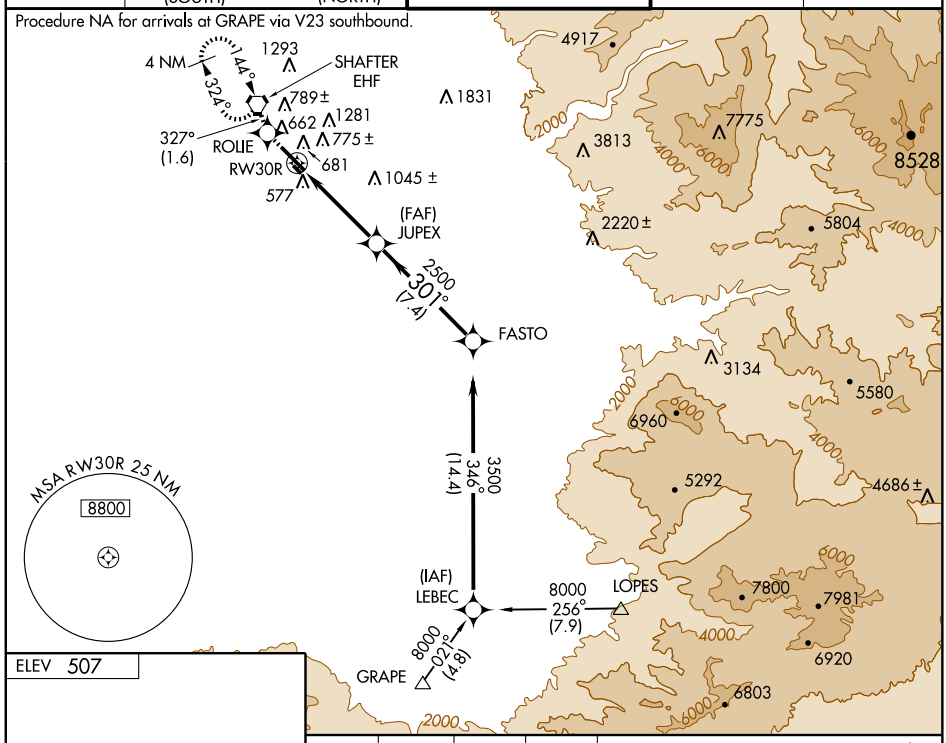
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Circling not authorized northeast of Rwy 12L-30R. Baro/VNAV NA below -16°C (3°F)

MALSR

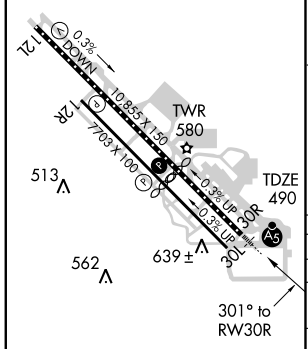
MISSED APPROACH: Climb to 3000 direct ROLIE WP and via 327° track to EHF VORTAC and hold.

ATIS	BAKERSFIELD APP CON	BAKERSFIELD TOWER ★	GND CON	UNICOM
118.6	118.8 284.625 (SOUTH) 118.9 270.3 (NORTH)	118.1 (CTAF) L 257.8	121.7	122.95

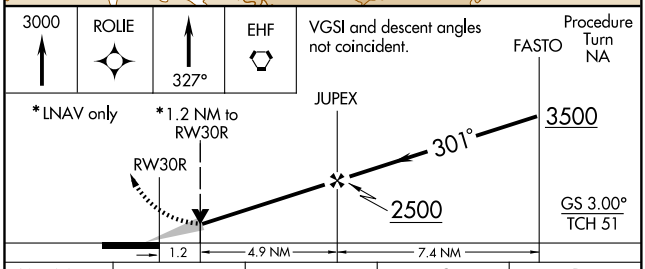
Procedure NA for arrivals at GRAPE via V23 southbound.



ELEV 507



TDZ/CL Rwy 30R
HIRL Rwy 12L-30R L
MIRL Rwy 12R-30L



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	940/50 450 (500-1)			
LNAV MDA	940/24 450 (500-½)		940/40 450 (500-¾)	940/50 450 (500-1)
CIRCLING	940-1½ 433 (500-1½)	960-1½ 453 (500-1½)		1060-2 553 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC EHF	APP CRS	Rwy Idg	N/A
115.4	137°	TDZE	N/A
Chan 101		Apt Elev	507

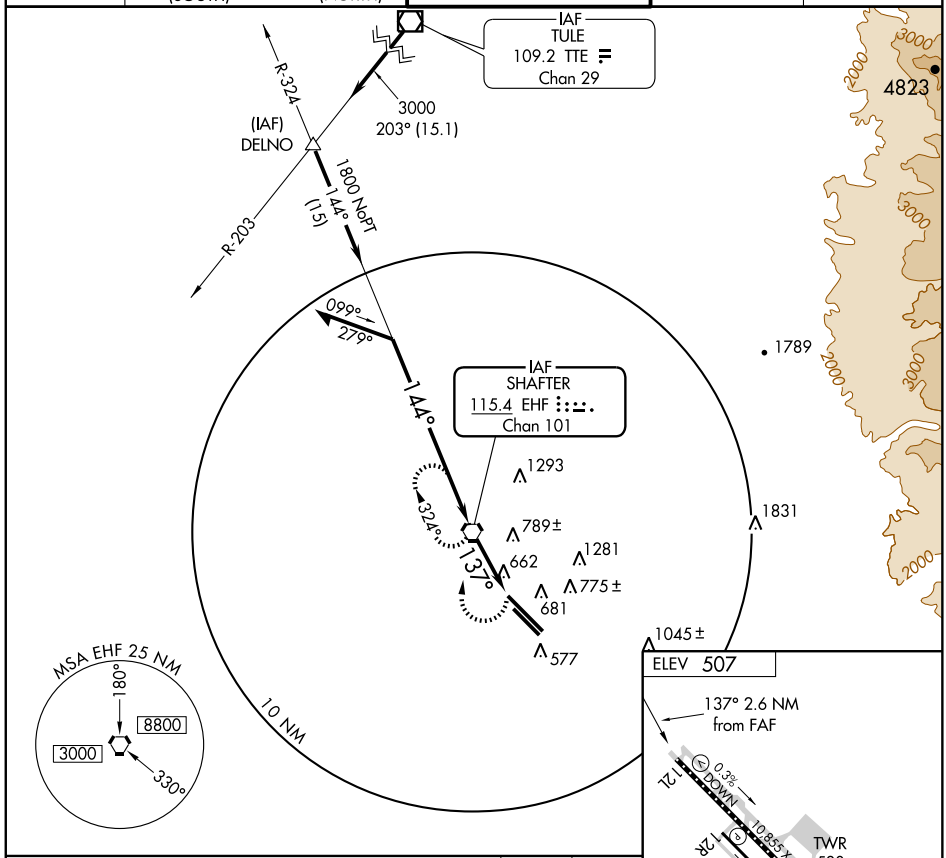
VOR-A

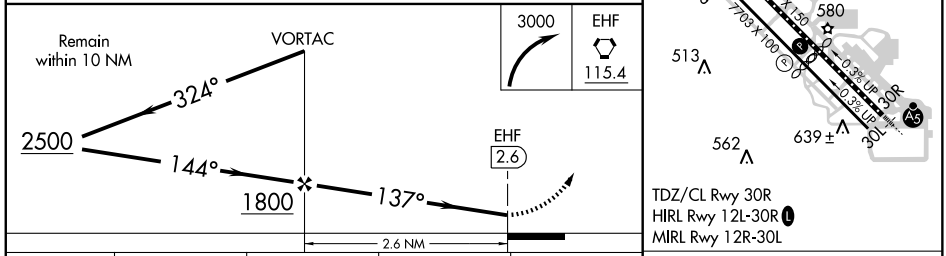
BAKERSFIELD/MEADOWS FIELD (BFL)

Circling not authorized northeast of Rwy 12L-30R.

MISSED APPROACH: Climbing right turn to 3000 direct EHF VORTAC and hold.

ATIS	BAKERSFIELD APP CON	BAKERSFIELD TOWER ★	GND CON	UNICOM
118.6	118.8 284.625 (SOUTH) 118.9 270.3 (NORTH)	118.1 (CTAF) L 257.8	121.7	122.95





CATEGORY	A	B	C	D
CIRCLING	1000-1	493 (500-1)	1000-1½ 493 (500-1½)	1060-2 553 (600-2)

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC EHF	APP CRS	Rwy Idg	7429
115.4	311°	TDZE	490
Chan 101		Apt Elev	507

VOR/DME RWY 30R

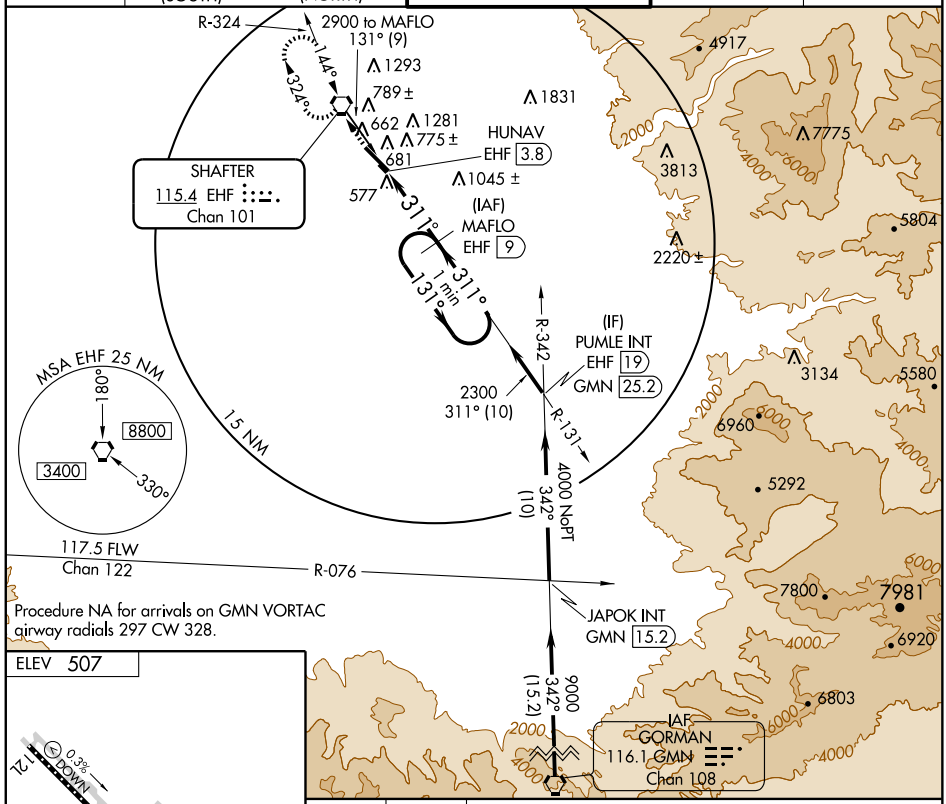
BAKERSFIELD/MEADOWS FIELD (BFL)

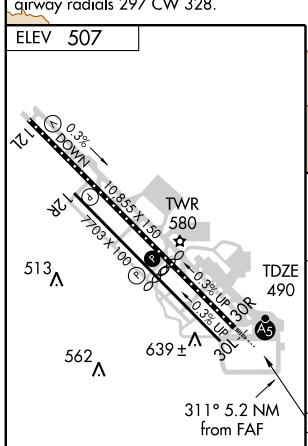
Circling NA northeast of Rwy 12L-30R.
If local altimeter setting not received, use Porterville altimeter setting and increase all MDAs 100 feet.

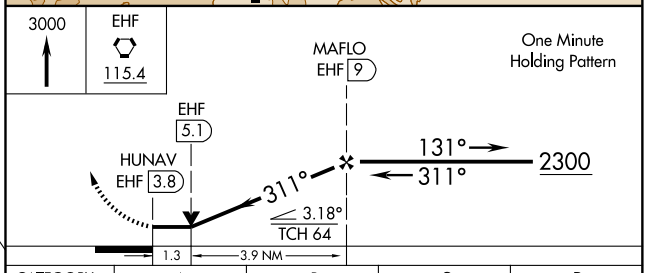
MALSR

MISSED APPROACH: Climb to 3000 direct EHF VORTAC and hold, continue climb-in-hold to 3000.

ATIS	BAKERSFIELD APP CON	BAKERSFIELD TOWER ★	GND CON	UNICOM
118.6	118.8 284.625 (SOUTH) 118.9 270.3 (NORTH)	118.1 (CTAF) L 257.8	121.7	122.95





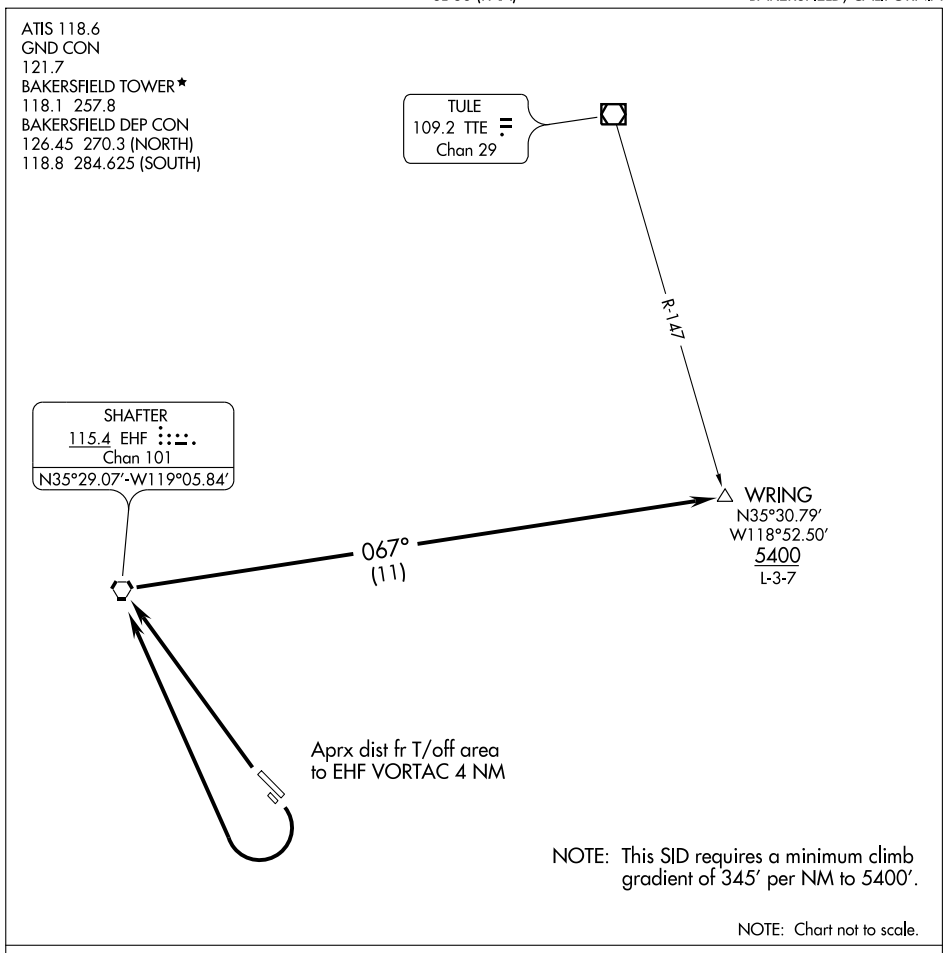


CATEGORY	A	B	C	D
S-30R	960/24	470 (500-½)	960/40 470 (500-¾)	960/50 470 (500-1)
CIRCLING	960-1	453 (500-1)	960-1½ 453 (500-1½)	1060-2 553 (600-2)

TDZ/CL Rwy 30R
HIRL Rwy 12L-30R L
MIRL Rwy 12R-30L

SW-3, 22 OCT 2009 to 19 NOV 2009

WRING THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 12L/R: As soon as practical after take-off, make climbing right turn direct EHF VORTAC. Thence....

TAKE-OFF RUNWAYS 30L/R: Climb direct EHF VORTAC. Thence....

....From over EHF VORTAC via EHF R-067 to WRING INT. Then via (assigned route).

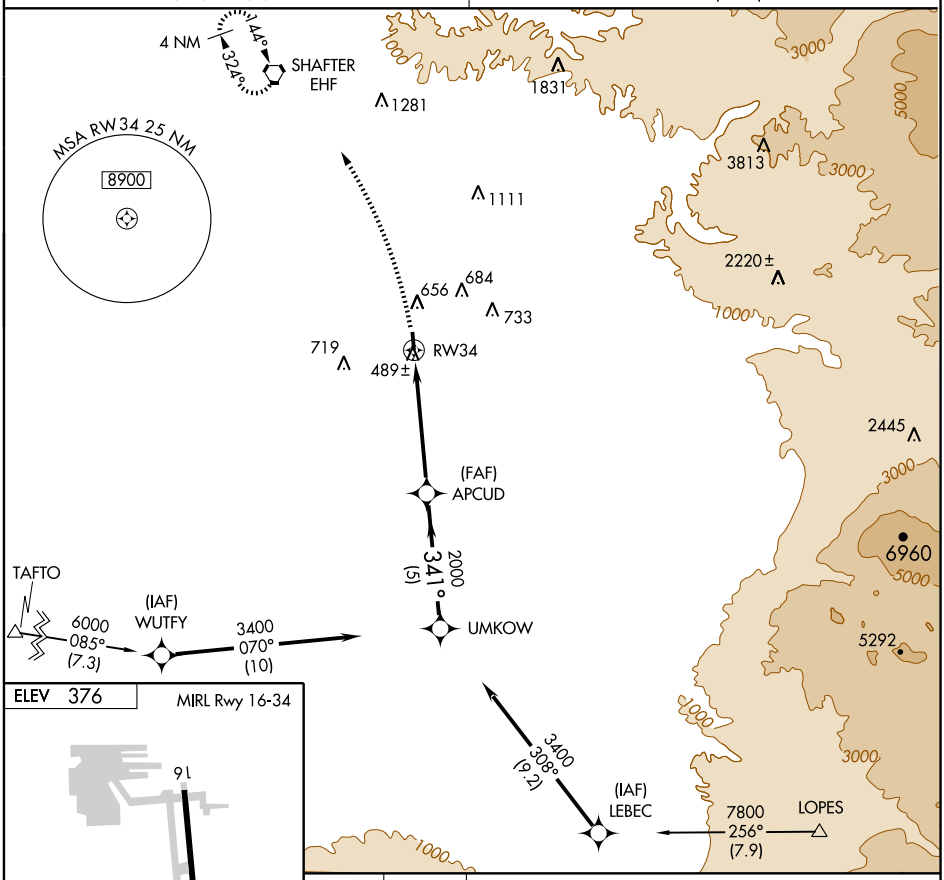
SW-3, 22 OCT 2009 to 19 NOV 2009

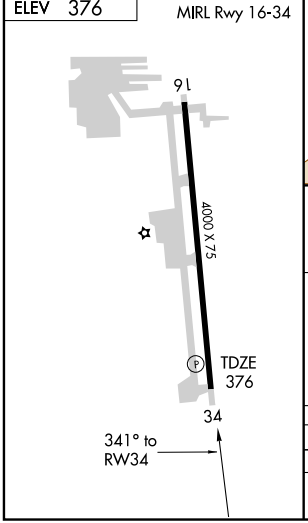
BAKERSFIELD, CALIFORNIA AL-9118 (FAA)

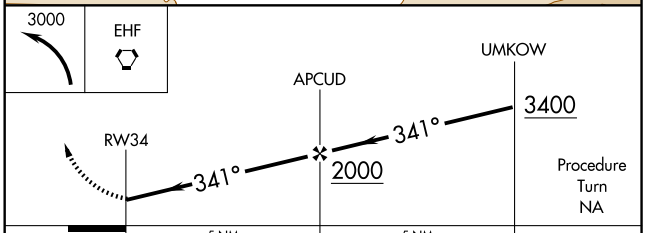
APP CRS	Rwy Idg	4000
341°	TDZE	376
	Apt Elev	376

GPS RWY 34
BAKERSFIELD MUNI (L45)

NA Use Meadows Field altimeter setting.	MISSED APPROACH: Climbing left turn to 3000 direct EHF VORTAC and hold.
BAKERSFIELD APP CON ★ 126.45 270.3	UNICOM 122.8 (CTAF)







CATEGORY	A	B	C	D
S-34	780-1	404 (500-1)	780-1¼	404 (500-1¼)
CIRCLING	1060-1	684 (700-1)	1060-2 684 (700-2)	1080-2¼ 704 (800-2¼)

SW-3, 22 OCT 2009 to 19 NOV 2009

BAKERSFIELD, CALIFORNIA

AL-9118 (FAA)

VORTAC EHF	APP CRS	Rwy Idg	4000
115.4	320°	TDZE	376
Chan 101		Apt Elev	376

VOR/DME RWY 34

BAKERSFIELD MUNI (L45)

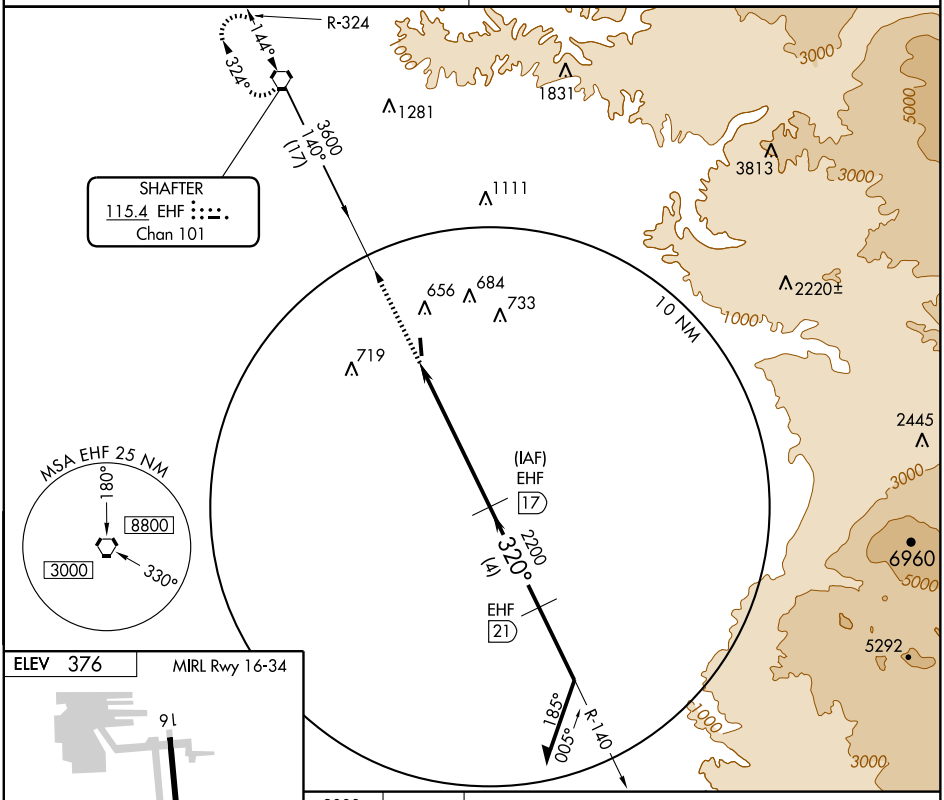
NA

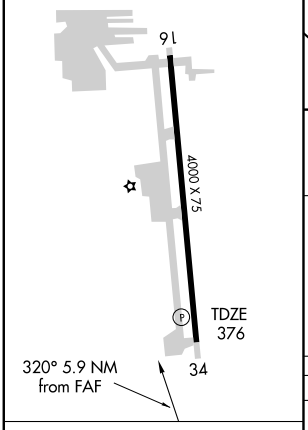
Use Meadows Field altimeter setting.

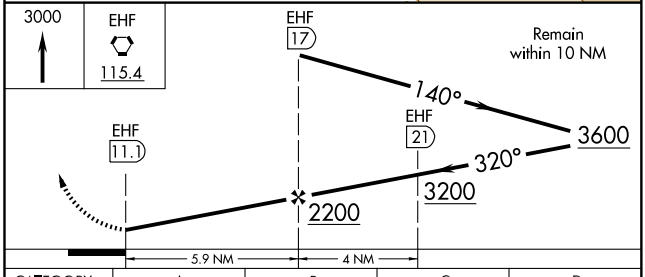
MISSED APPROACH: Climb to 3000 direct EHF VORTAC and hold.

BAKERSFIELD APP CON ★
126.45 270.3

UNICOM
122.8 (CTAF)







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-34	980-1	604 (700-1)	980-1¾ 604 (700-1¾)	980-2 604 (700-2)
CIRCLING	1060-1	684 (700-1)	1060-2 684 (700-2)	1080-2¼ 704 (800-2¼)

SW-3, 22 OCT 2009 to 19 NOV 2009

BECKWOURTH, CALIFORNIA

AL-10032 (FAA)

APP CRS	Rwy Idg	4651
266°	TDZE	4896
	Apt Elev	4900

RNAV (GPS) Y RWY 25

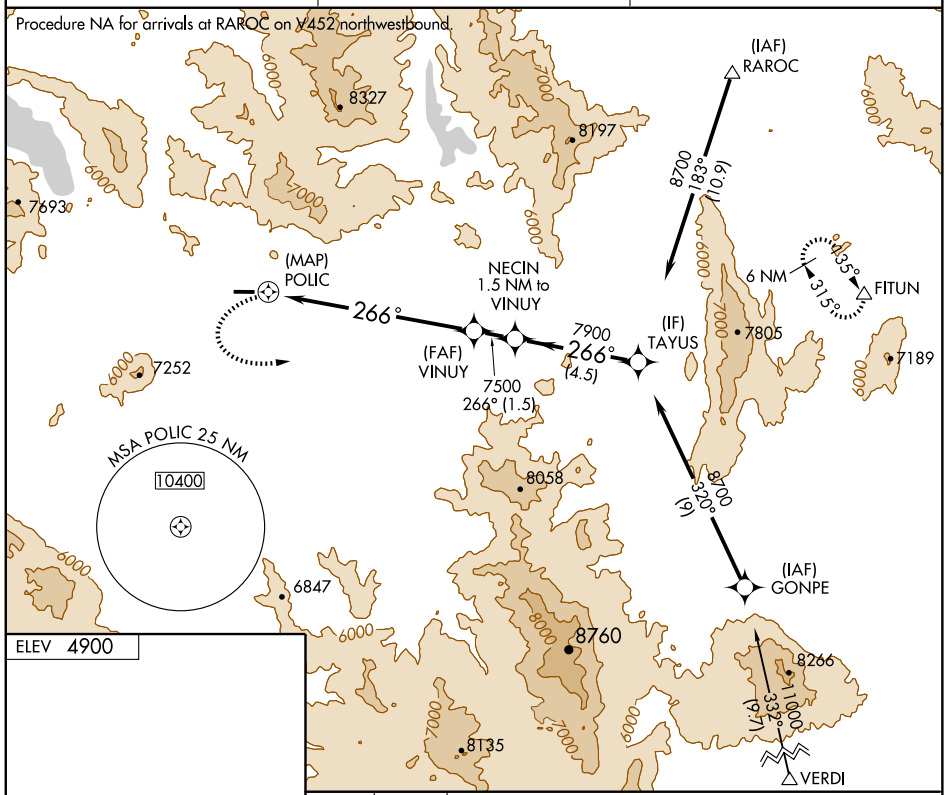
BECKWOURTH/NERVINO (O02)

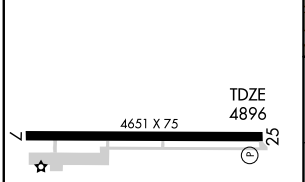
DME/DME RNP- 0.3 NA.
Use Reno/Stead altimeter setting; if not received, use Reno/Tahoe Intl altimeter setting and increase all MDAs 180 feet.
Circling NA at night

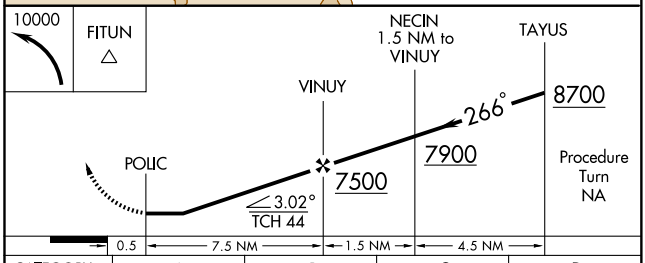
MISSED APPROACH: Climbing left turn to 10000 direct FITUN and hold.

RENO/STEAD AWOS-3	RENO APP CON	UNICOM
135.175	126.3	122.8 (CTAF) L

Procedure NA for arrivals at RAROC on V452 northwestbound.







CATEGORY	A	B	C	D
LNAV MDA	7300-1¼ 2404 (2400-1¼)	7300-1½ 2404 (2400-1½)	7300-3 2404 (2400-3)	
CIRCLING	7300-1¼ 2400 (2400-1¼)	7300-1½ 2400 (2400-1½)	7300-3 2400 (2400-3)	

MIRL Rwy 7-25 L

SW-2, 22 OCT 2009 to 19 NOV 2009

BECKWOURTH, CALIFORNIA

AL-10032 (FAA)

WAAS	APP CRS	Rwy Idg	4651
CH 49203	255°	TDZE	4896
W25A		Apt Elev	4900

RNAV (GPS) Z RWY 25

BECKWOURTH/NERVINO (0Ø2)

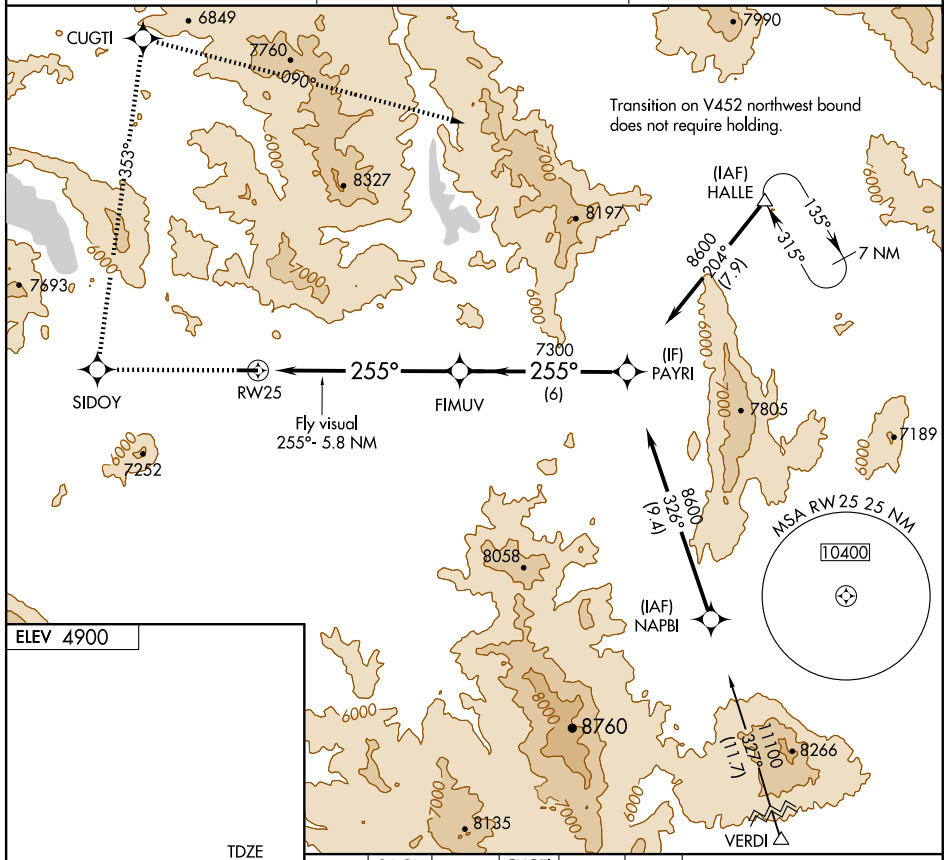
T Use Reno/Stead altimeter setting; if not received, use Reno/Tahoe Intl altimeter setting and increase DA 166 feet.

NA DME/DME RNP -0.3 NA.

W Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 10000 direct SIDOY and right turn via 353° track to CUGTI, and right turn 090° track to HALLE and hold.

RENO/STEAD AWOS-3	RENO APP CON	UNICOM
135.175	126.3	122.8 (CTAF) L



ELEV 4900

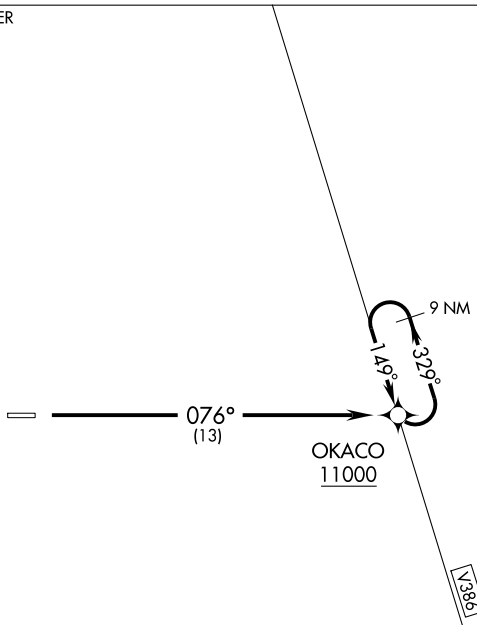
CATEGORY	A	B	C	D
LPV DA	6787-2 1891 (1900-2)		6787-3 1891 (1900-3)	

MIRL Rwy 7-25 L

SW-2, 22 OCT 2009 to 19 NOV 2009

OKACO ONE DEPARTURE (RNAV) (OBSTACLE)

LOS ANGELES CENTER
126.35 290.2
UNICOM 122.725



NOTE: TAKE-OFF MINIMUMS: Rwy 8: 1200-2 or standard with minimum climb of 282′ per NM to 8000′.

NOTE: For use by slant E, F, and G equipped aircraft only.

NOTE: 7439′ MSL trees 2.5 NM from departure end of runway, 2400′ right of centerline.

NOTE: 1. GPS required
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb via course 076° to OKACO WP; maintain 11,000′ or as assigned by ATC. If not at 11,000′ or at assigned cruising altitude upon reaching OKACO WP, climb in holding pattern (hold NW, LT, 149° inbound), unless otherwise advised by ATC.

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS		
256°	Rwy Idg	5250
	TDZE	6748
	Apt Elev	6748

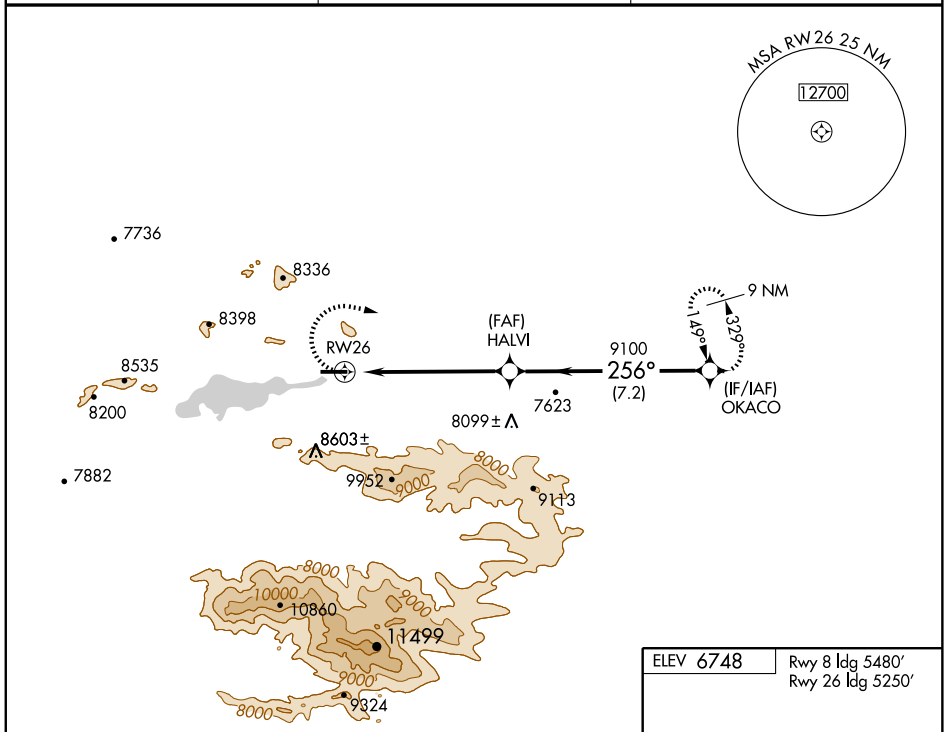
RNAV (GPS) RWY 26

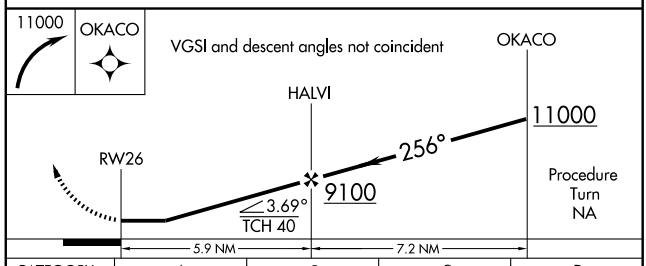
BIG BEAR CITY (L35)

If local altimeter setting not received procedure NA.
Circling NA north of Rwy 8-26, procedure NA at night.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing right turn to 11000 direct OKACO and hold.

AWOS-3	LOS ANGELES CENTER	UNICOM
135.925	126.35 290.2	122.725 (CTAF) L

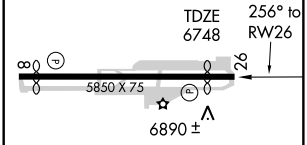




CATEGORY	A	B	C	D
LNAV MDA	8680-1¼ 1932 (2000-1¼)	8680-1½ 1932 (2000-1½)	NA	
CIRCLING	8680-1¼ 1932 (2000-1¼)	8680-1½ 1932 (2000-1½)	NA	

ELEV 6748

Rwy 8 ldg 5480′
Rwy 26 ldg 5250′



MIRL Rwy 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

BISHOP, CALIFORNIA

AL-5737 (FAA)

LOC/DME I-BIH	APP CRS	Rwy Idg	5600
109.1	141°	TDZE	4113
Chan 28		Apt Elev	4124

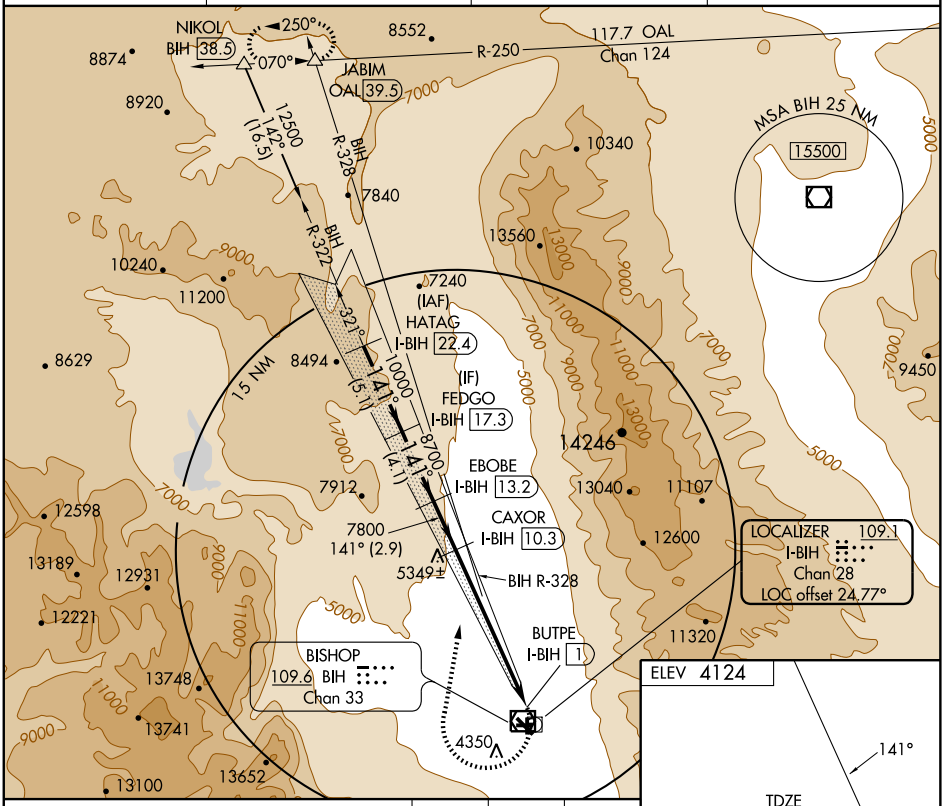
LDA/DME RWY 16

BISHOP / EASTERN SIERRA RGNL (BIH)

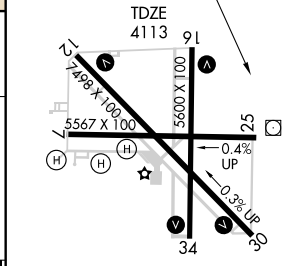
Visibility reduction by helicopters NA.

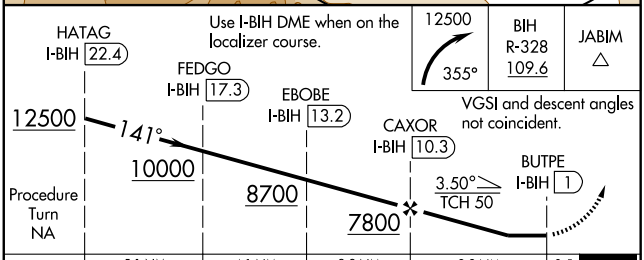
MISSED APPROACH: Climbing right turn to 12500 via heading 355° and via BIH VOR/DME R-328 to JABIM INT/OAL 39.5 DME and hold.

ASOS	OAKLAND CENTER	RIVERSIDE RADIO	UNICOM
119.025	125.75 284.65	122.6	123.0 (CTAF) L



ELEV 4124





CATEGORY	A	B	C	D
S-16	6340-1¼ 2227 (2300-1¼)	6340-1½ 2227 (2300-1½)	6340-3	2227 (2300-3)
CIRCLING	6340-1¼ 2216 (2300-1¼)	6340-1½ 2216 (2300-1½)	6340-3	2216 (2300-3)

MIRL Rwy 7-25 L

HIRL Rwys 12-30 and 16-34 L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7498
120°	TDZE	4123
	Apt Elev	4124

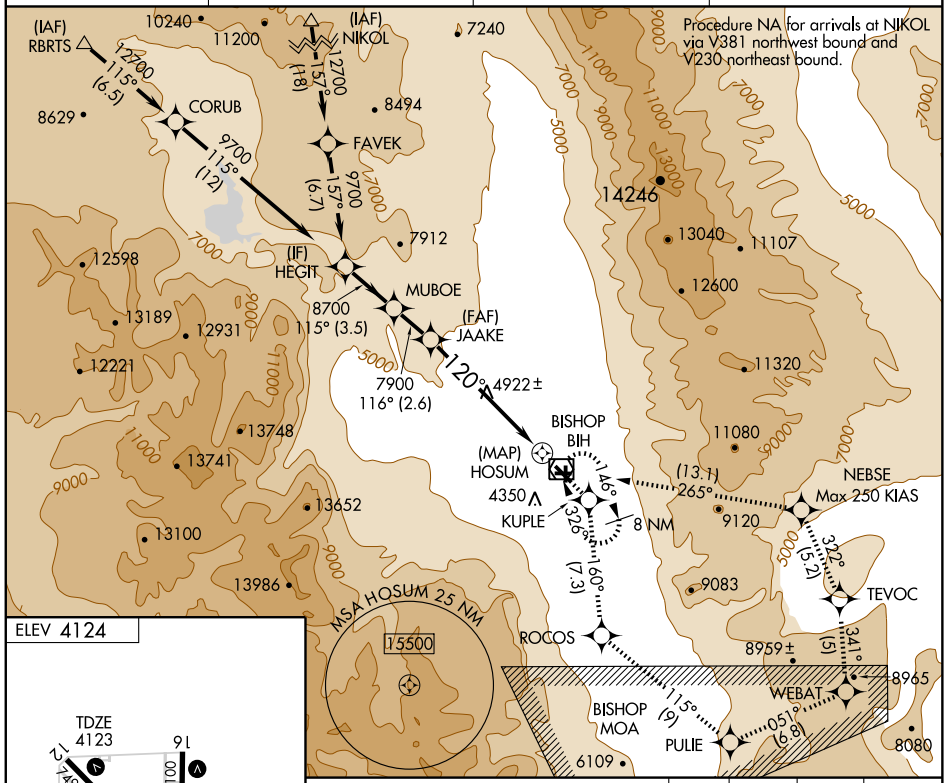
RNAV (GPS) Y RWY 12

BISHOP / EASTERN SIERRA RGNL (BIH)

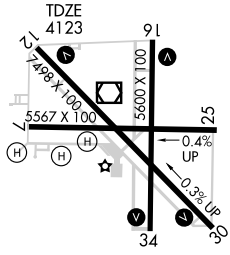
When local altimeter setting not received, procedure NA.
Visibility reduction by helicopters NA.
DME/DME RNP-0.3 NA

MISSED APPROACH: (Do not exceed 250 KIAS until NEBSE) Climb to 13000 direct KUPLE, and 160° track to ROCOS, and 115° track to PULIE, and 051° track to WEBAT, and 341° track to TEVOC, and 322° track to NEBSE, and 265° track to BIH VOR/DME and hold.

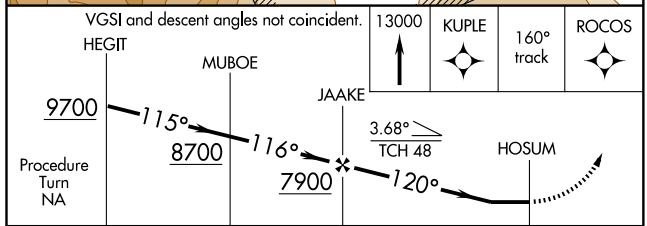
ASOS	OAKLAND CENTER	RIVERSIDE RADIO	UNICOM
119.025	125.75 284.65	122.6	123.0 (CTAF) L



ELEV 4124



MIRL Rwy 7-25 L
HIRL Rwys 12-30 and 16-34 L



CATEGORY	A	B	C	D
LNAV MDA	6600-1¼ 2477 (2500-1¼)	6600-1½ 2477 (2500-1½)	6600-3 2477 (2500-3)	NA
CIRCLING	6600-1¼ 2476 (2500-1¼)	6600-1½ 2476 (2500-1½)	6600-3 2476 (2500-3)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7498
120°	TDZE	4123
	Apt Elev	4124

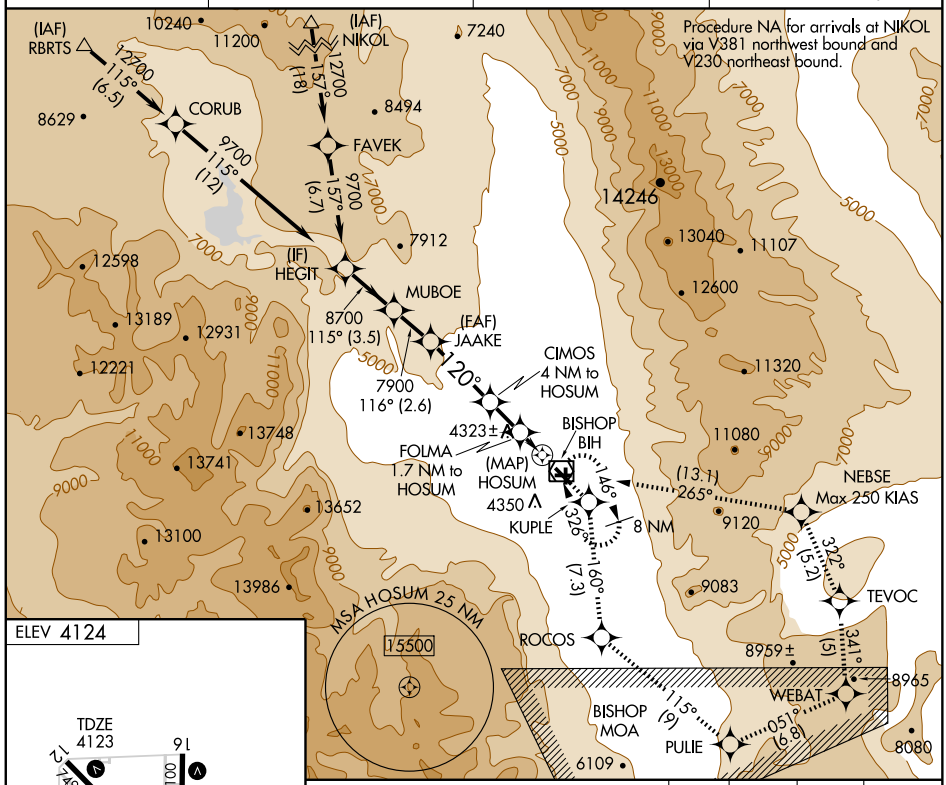
RNAV (GPS) Z RWY 12

BISHOP / EASTERN SIERRA RGNL (BIH)

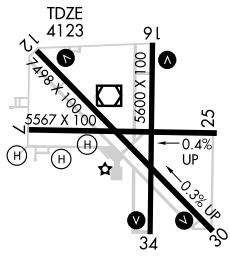
When local altimeter setting not received, procedure NA.
*Missed approach requires minimum climb of 325 feet per NM to 11000; if unable, see RNAV (GPS) Y RWY 12.
Visibility reduction by helicopters NA.
DME/DME RNP-0.3 NA

MISSED APPROACH: (Do not exceed 250 KIAS until NEBSE) Climb to 13000 direct KUPLE, and 160° track to ROCOS, and 115° track to PULIE, and 051° track to WEBAT, and 341° track to TEVOC, and 322° track to NEBSE, and 265° track to BIH VOR/DME and hold.

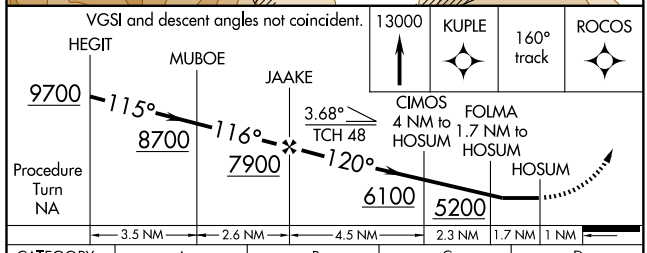
ASOS	OAKLAND CENTER	RIVERSIDE RADIO	UNICOM
119.025	125.75 284.65	122.6	123.0 (CTAF) L



ELEV 4124



MIRL Rwy 7-25 L
HIRL Rwys 12-30 and 16-34 L



CATEGORY	A	B	C	D
LNAV MDA*	4580-1¼ 457 (500-1¼)			NA
CIRCLING	6420-1¼ 2296 (2300-1¼)	6420-1½ 2296 (2300-1½)	6420-3 2296 (2300-3)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7498
301°	TDZE	4111
	Apt Elev	4124

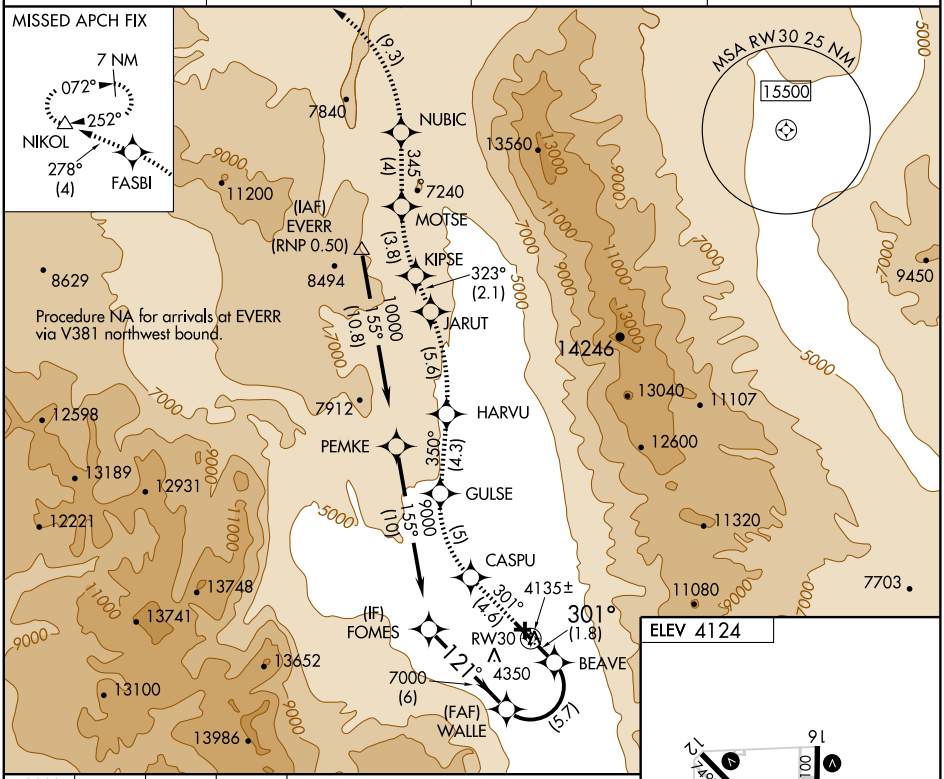
RNAV (RNP) RWY 30

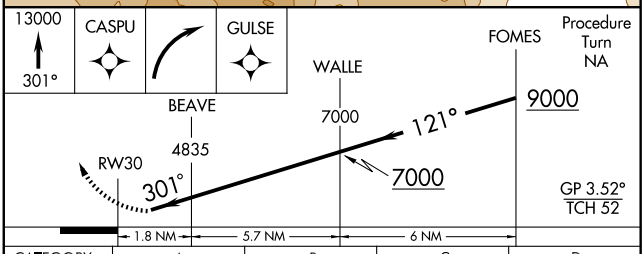
BISHOP / EASTERN SIERRA RGNL (BIH)

RF and GPS required.
NA When local altimeter setting not received, procedure NA.
For uncompensated Baro-VNAV systems, procedure NA below -12°C (11°F) or above 38°C (100°F).
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 13000 via 301° track to CASPU, right turn to GULSE, 350° track to HARVU, left turn to JARUT, 323° track to KIPSE, right turn to MOTSE, 345° track to NUBIC, left turn to FASBI, 278° track to NIKOL and hold.

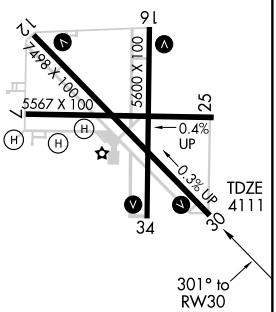
ASOS	OAKLAND CENTER	RIVERSIDE RADIO	UNICOM
119.025	125.75 284.65	122.6	123.0 (CTAF) L





CATEGORY	A	B	C	D
RNP 0.30 DA	4434-1	323 (400-1)		NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



MIRL Rwy 7-25 L
HIRL Rwys 12-30 and 16-34 L

SW-2, 22 OCT 2009 to 19 NOV 2009

BISHOP, CALIFORNIA

AL-5737 (FAA)

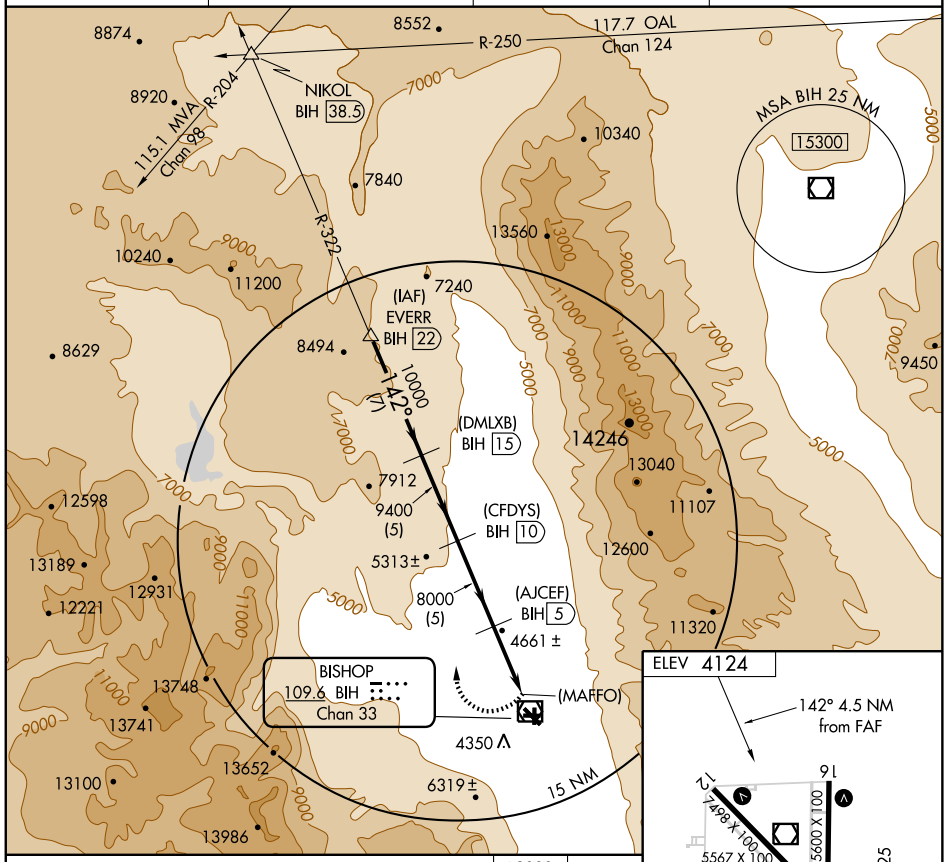
VOR/DME BIH	APP CRS	Rwy Idg	N/A
109.6	142°	TDZE	N/A
Chan 33		Apt Elev	4124

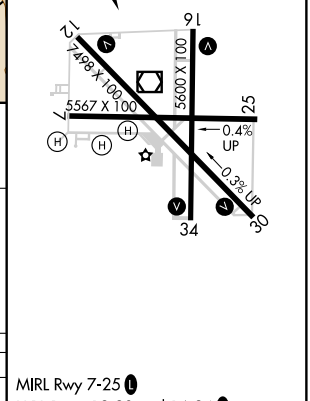
VOR/DME or GPS-B

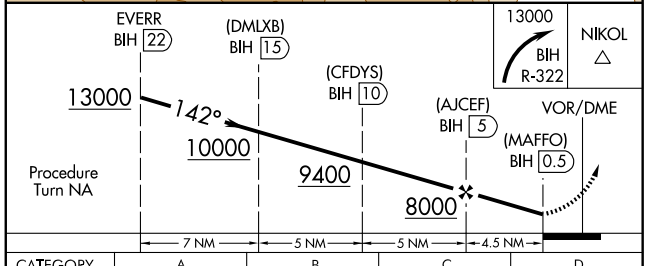
BISHOP / EASTERN SIERRA RGNL (BIH)

MISSED APPROACH: Climbing right turn to 13000 via BIH R-322 to NIKOL INT/BIH 38.5 DME.

ASOS	OAKLAND CENTER	RIVERSIDE RADIO	UNICOM
119.025	125.75 284.65	122.6	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	7300-1¼ 3176 (3200-1¼)	7300-1½ 3176 (3200-1½)	7300-3 3176 (3200-3)	

MIRL Rwy 7-25 L
HIRL Rwys 12-30 and 16-34 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME BIH	APP CRS	Rwy Idg	N/A
109.6	142°	TDZE	N/A
Chan 33		Apt Elev	4120

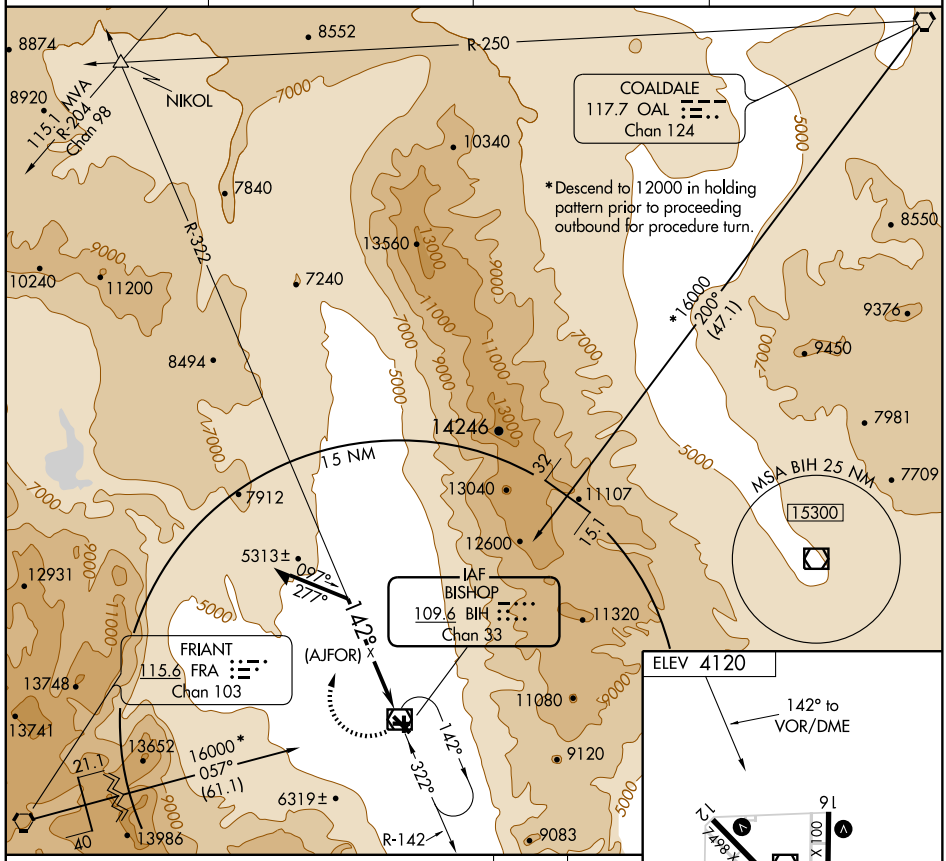
VOR or GPS-A

BISHOP / EASTERN SIERRA RGNL (BIH)

If local altimeter setting not received, procedure not authorized.

MISSED APPROACH: Climbing right turn to 13000 via BIH R-322 to NIKOL Int.

ASOS	OAKLAND CENTER	RIVERSIDE RADIO	UNICOM
119.025	125.75 284.65	122.6	123.0 (CTAF) L



* Descend to 12000 in holding pattern prior to proceeding outbound for procedure turn.

CATEGORY	A	B	C	D
CIRCLING	7400-1¼ 3280 (3300-1¼)	7400-1½ 3280 (3300-1½)	7400-3 3280 (3300-3)	

MIRL Rwy 7-25 L
HIRL Rwys 12-30 and 16-34 L

SW-2, 22 OCT 2009 to 19 NOV 2009

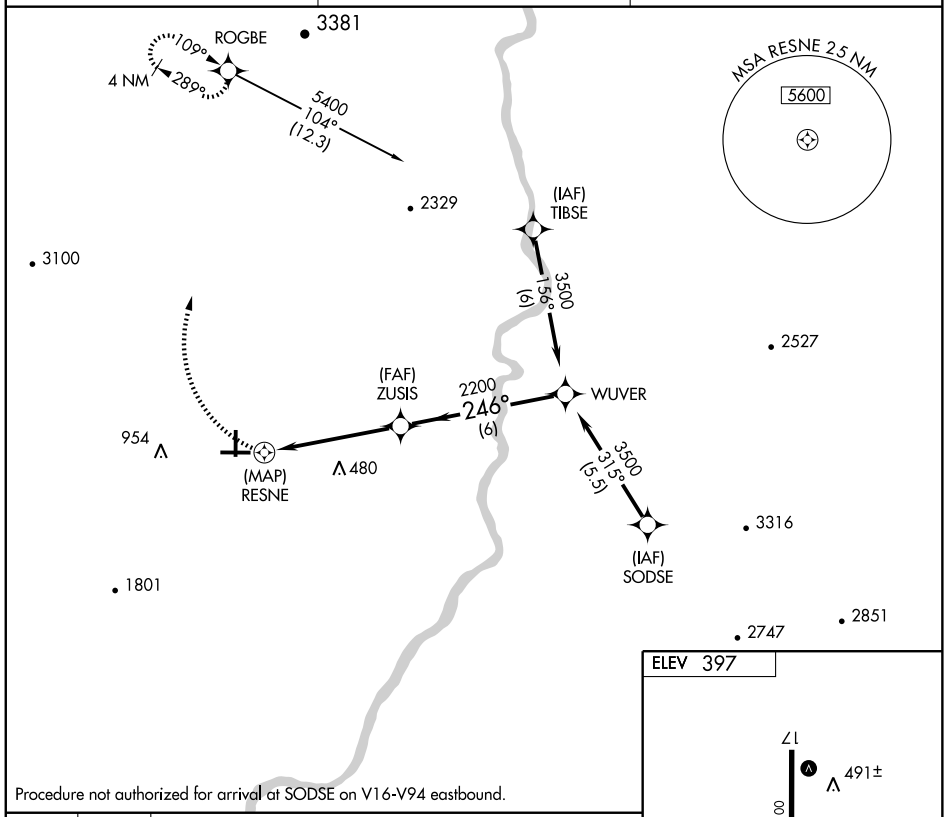
APP CRS	Rwy Idg	6543
246°	TDZE	394
	Apt Elev	397

RNAV (GPS) RWY 26
BLYTHE (BLH)

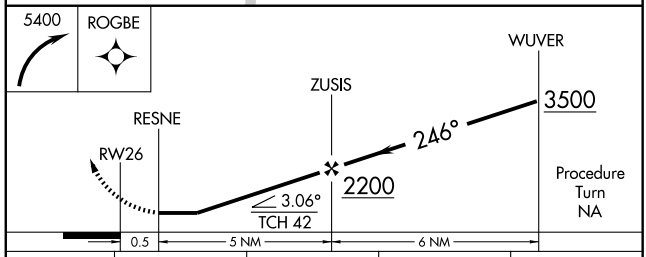
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing right turn to 5400 direct ROGBE WP and hold.

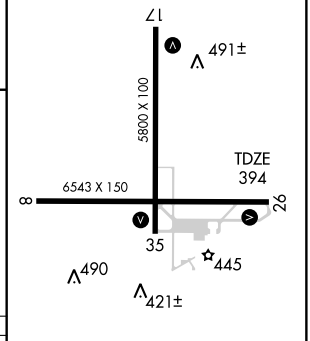
ASOS	LOS ANGELES CENTER	UNICOM
120.175	128.15 285.6	122.8 (CTAF) L



Procedure not authorized for arrival at SODSE on V16-V94 eastbound.



CATEGORY	A	B	C	D
LNAV MDA	760-1 366 (400-1)			760-1¼ 366 (400-1¼)
CIRCLING	840-1 443 (500-1)	860-1 463 (500-1)	960-1½ 563 (600-1½)	1260-2¾ 863 (900-2¾)



MIRL Rwys 8-26 and 17-35 L

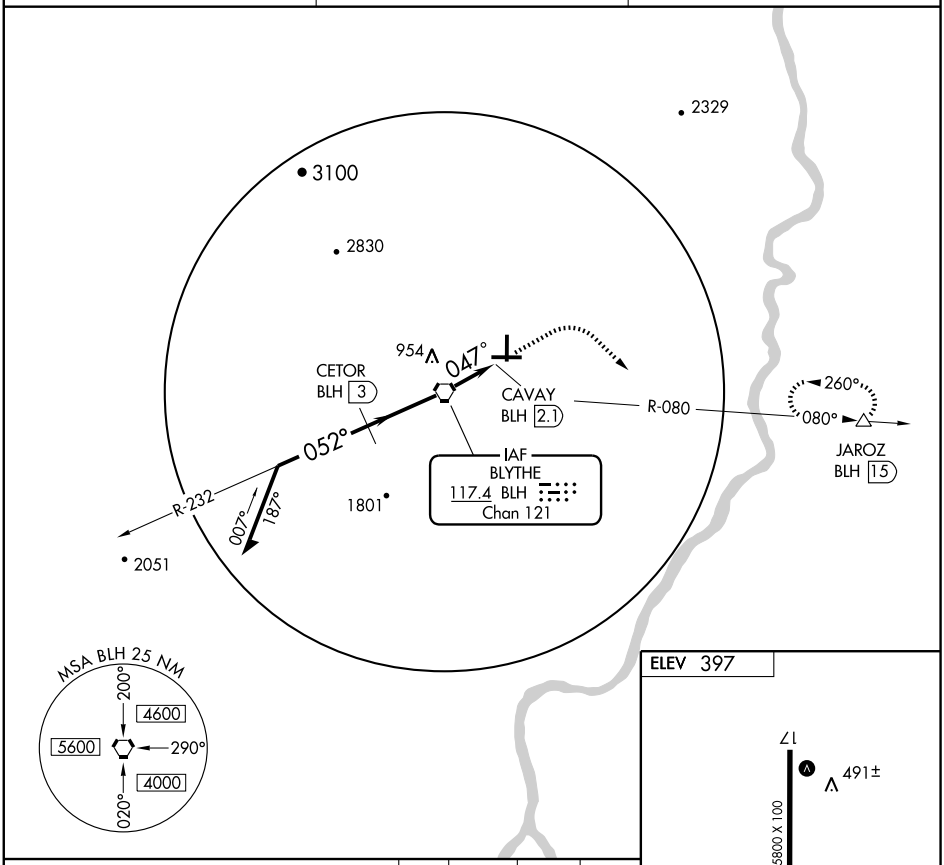
SW-3, 22 OCT 2009 to 19 NOV 2009

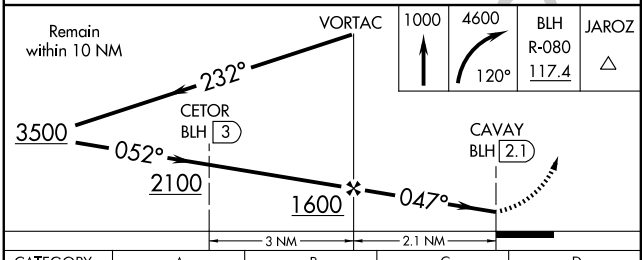
VORTAC BLH	APP CRS	Rwy Idg	N/A
117.4	047°	TDZE	N/A
Chan 121		Apt Elev	397

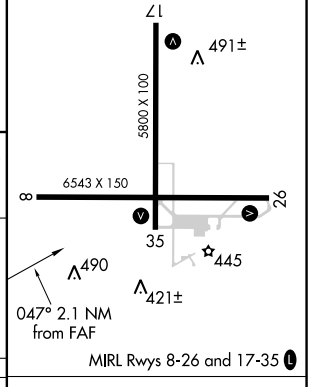
VOR/DME-A
BLYTHE (BLH)

MISSED APPROACH: Climb to 1000, then climbing right turn to 4600 via heading 120° and BLH R-080 outbound to JAROZ/15 DME and hold.

ASOS	LOS ANGELES CENTER	UNICOM
120.175	128.15 285.6	122.8 (CTAF) L







MIRL Rwys 8-26 and 17-35 L

CATEGORY	A	B	C	D
CIRCLING	840-1 443 (500-1)	860-1 463 (500-1)	960-1½ 563 (600-1½)	1260-2¾ 863 (900-2¾)

Knots	60	90	120	150	180
Min:Sec					

SW-3, 22 OCT 2009 to 19 NOV 2009

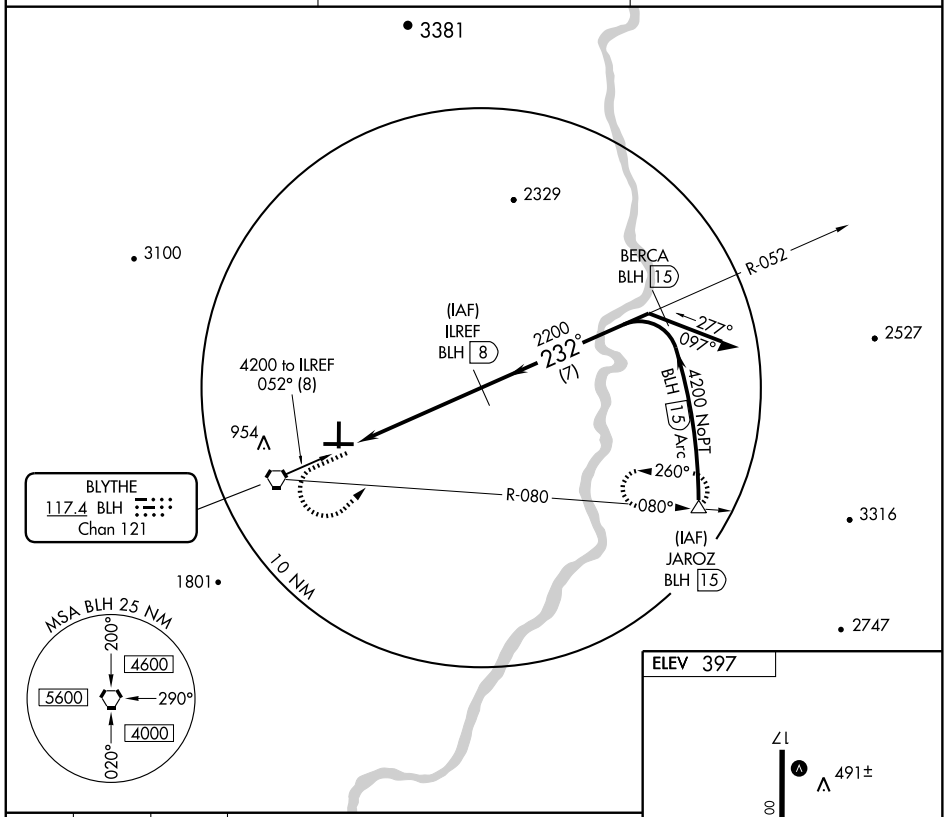
VORTAC BLH 117.4 Chan 121	APP CRS 232°	Rwy Idg 6543 TDZE 394 Apt Elev 397

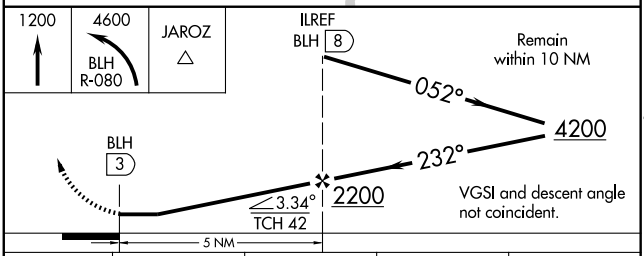
VOR/DME RWY 26

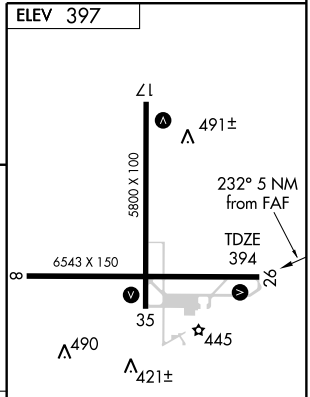
BLYTHE (BLH)

MISSED APPROACH: Climb to 1200 then climbing left turn to 4600 via BLH VORTAC R-080 to JAROZ/15 DME and hold.

ASOS 120.175	LOS ANGELES CENTER 128.15 285.6	UNICOM 122.8 (CTAF)







CATEGORY	A	B	C	D
S-26	760-1 366 (400-1)			760-1¼ 366 (400-1¼)
CIRCLING	840-1 443 (500-1)	860-1 463 (500-1)	960-1½ 563 (600-1½)	1260-2¾ 863 (900-2¾)

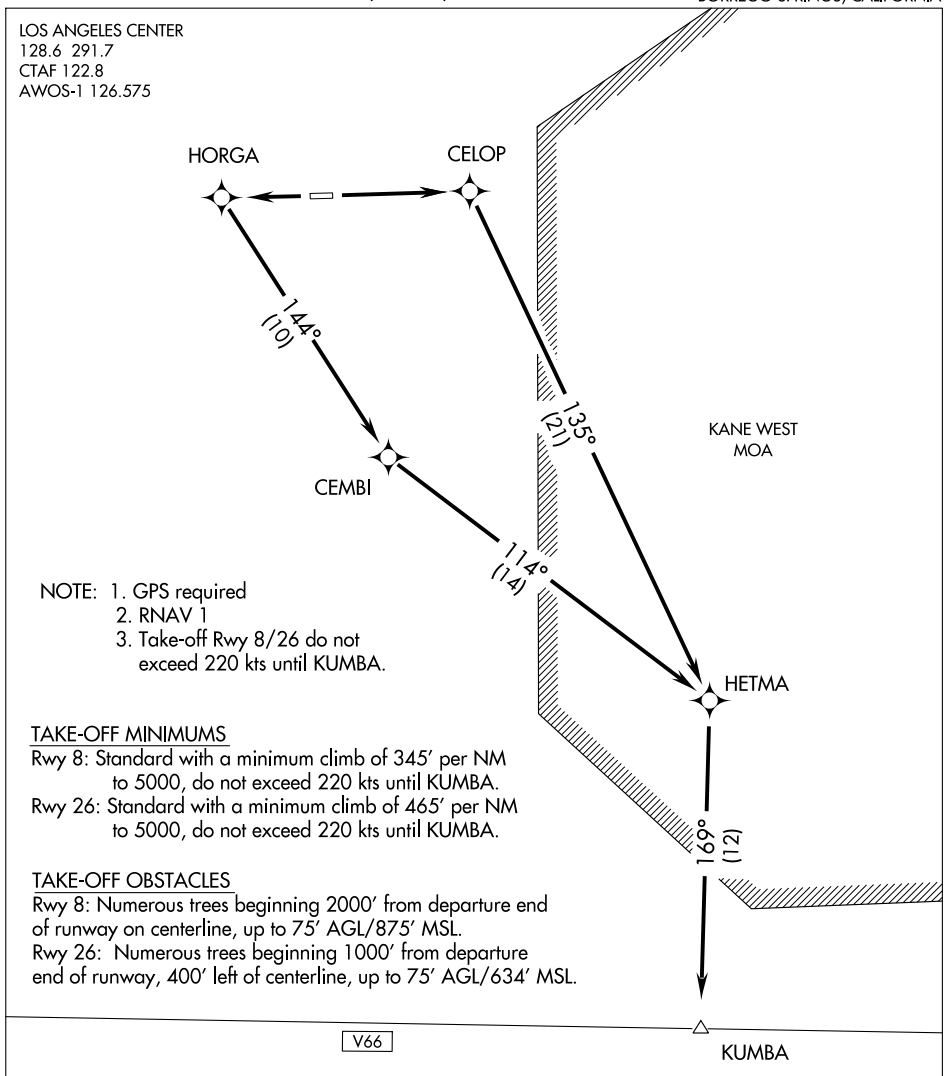
MIRL Rwys 8-26 and 17-35 (L)

Knots	60	90	120	150	180
Min:Sec					

SW-3, 22 OCT 2009 to 19 NOV 2009

KUMBA ONE DEPARTURE (RNAV)

BORREGO VALLEY (L08)
BORREGO SPRINGS, CALIFORNIA



NOTE: 1. GPS required
2. RNAV 1
3. Take-off Rwy 8/26 do not exceed 220 kts until KUMBA.

TAKE-OFF MINIMUMS
Rwy 8: Standard with a minimum climb of 345′ per NM to 5000, do not exceed 220 kts until KUMBA.
Rwy 26: Standard with a minimum climb of 465′ per NM to 5000, do not exceed 220 kts until KUMBA.

TAKE-OFF OBSTACLES
Rwy 8: Numerous trees beginning 2000′ from departure end of runway on centerline, up to 75′ AGL/875′ MSL.
Rwy 26: Numerous trees beginning 1000′ from departure end of runway, 400′ left of centerline, up to 75′ AGL/634′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb direct CELOP then via depicted route to KUMBA.

TAKE-OFF RUNWAY 26: Climb direct HORGA, and left turn 144° track to CEMBI, then via depicted route to KUMBA.

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5011
250°	TDZE	520
	Apt Elev	520

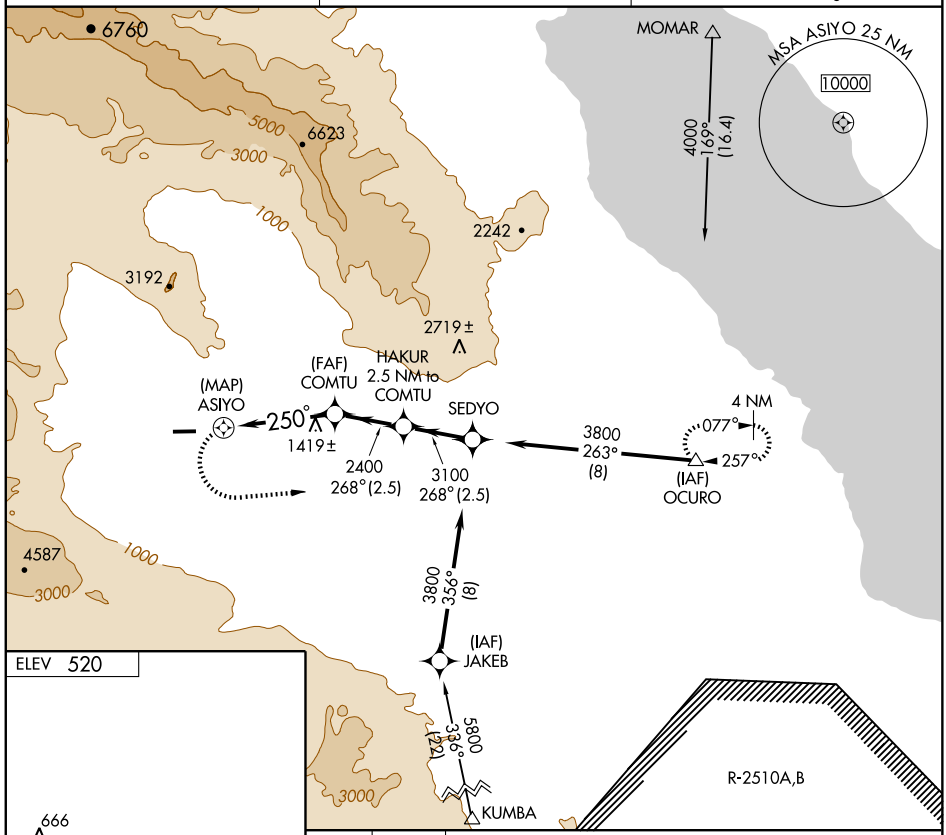
RNAV (GPS) RWY 26
BORREGO VALLEY (L08)

If local altimeter setting not received, use Imperial County altimeter setting and increase all MDAs 580 feet.
Circling not authorized south of Rwy 8-26.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

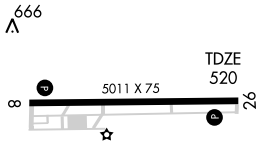
NA

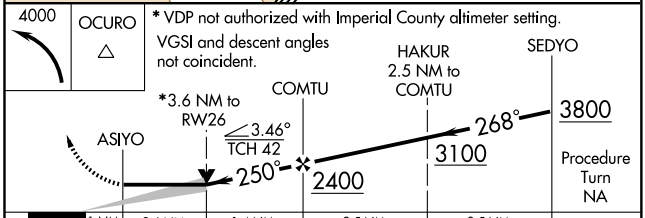
MISSED APPROACH: Climbing left turn to 4000 direct OCURO WP and hold.

AWOS-1	LOS ANGELES CENTER	UNICOM
126.575	128.6 291.7	122.8 (CTAF) L



ELEV 520





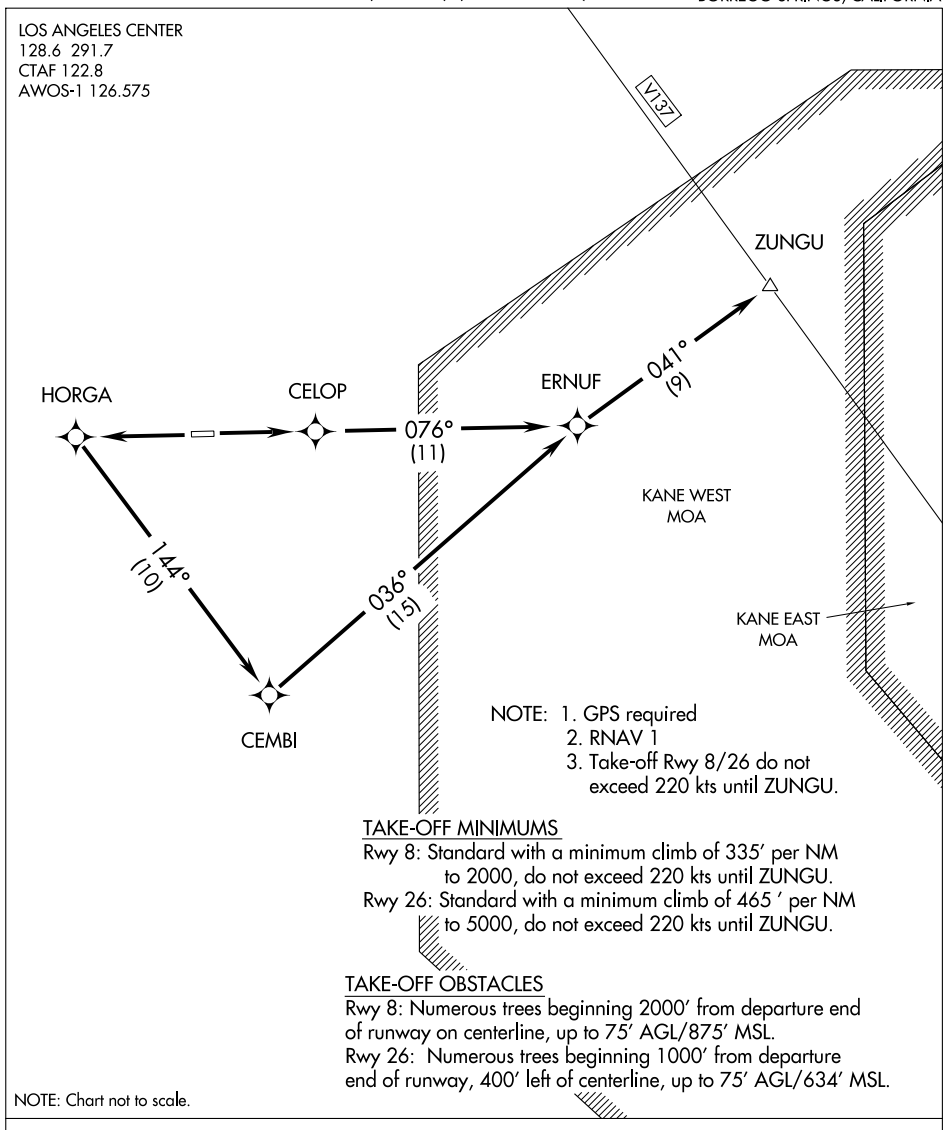
CATEGORY	A	B	C	D
LNAV MDA	1720-1¼ 1200 (1200-1¼)	1720-1½ 1200 (1200-1½)	1720-3 1200 (1200-3)	
CIRCLING	1720-1¼ 1200 (1200-1¼)	1720-1½ 1200 (1200-1½)	1720-3 1200 (1200-3)	

MIRL Rwy 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

ZUNGU ONE DEPARTURE (RNAV) (OBSTACLE)

BORREGO VALLEY (L08)
BORREGO SPRINGS, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb direct CELOP then via depicted route to ZUNGU.

TAKE-OFF RUNWAY 26: Climb direct HORGA, and left turn 144° track to CEMBI, then via depicted route to ZUNGU.

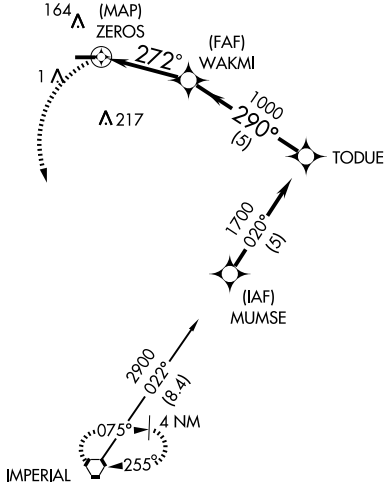
SW-3, 22 OCT 2009 to 19 NOV 2009

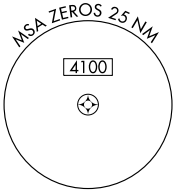
APP CRS	Rwy Idg	4007
272°	TDZE	-135
	Apt Elev	-129

RNAV (GPS) RWY 26

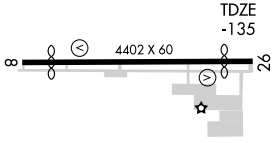
BRAWLEY MUNI (BWC)

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Use Imperial County altimeter setting.	MISSED APPROACH: Climbing left turn to 3600 direct IPL VORTAC and hold.
LOS ANGELES CENTER **128.6 291.7**	CTAF **122.9** L

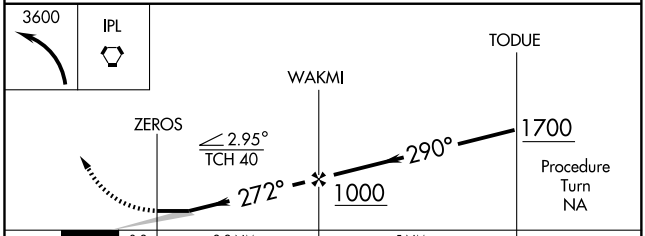




ELEV -129



571



CATEGORY	A	B	C	D
LNAV MDA	360-1 495 (500-1)		360-1¼ 495 (500-1¼)	NA
CIRCLING	560-1 689 (700-1)		560-2 689 (700-2)	NA

MIRL Rwy 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC IPL 115.9 Chan 106	APP CRS 345°	Rwy Idg N/A TDZE N/A Apt Elev -129

VOR/DME-A

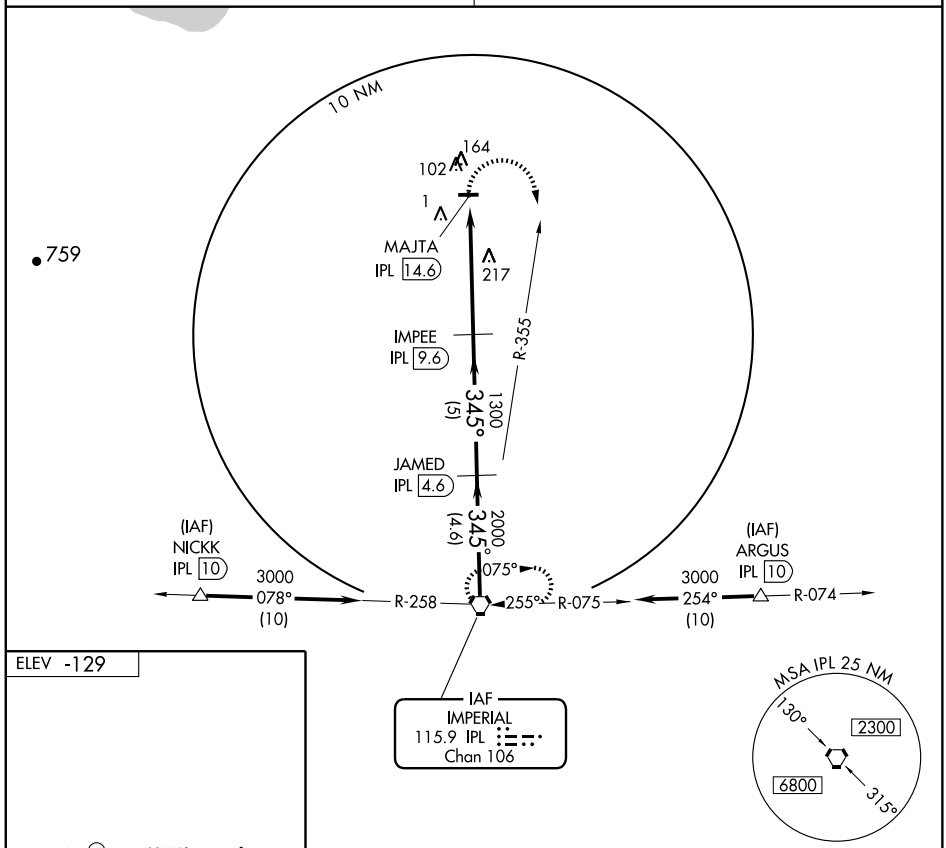
BRAWLEY MUNI (BWC)

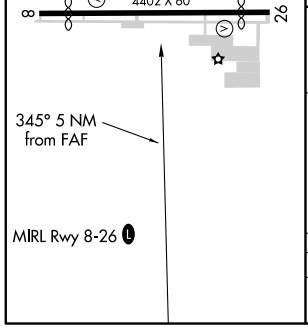
NA

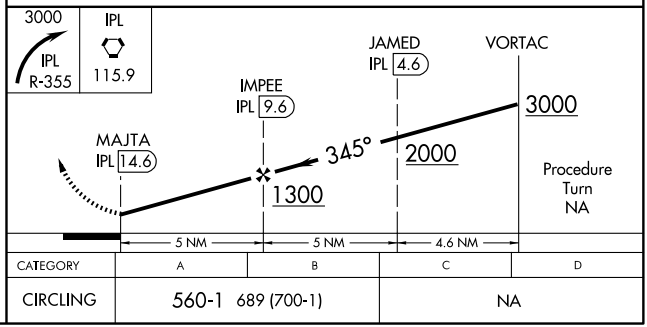
Use Imperial County altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 via IPL R-355 to IPL VORTAC and hold.

LOS ANGELES CENTER	CTAF
128.6 291.7	122.9 L







CATEGORY	A	B	C	D
CIRCLING	560-1 689 (700-1)		NA	

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC IPL 115.9 Chan 106	APP CRS 165°	Rwy Idg N/A TDZE N/A Apt Elev -129

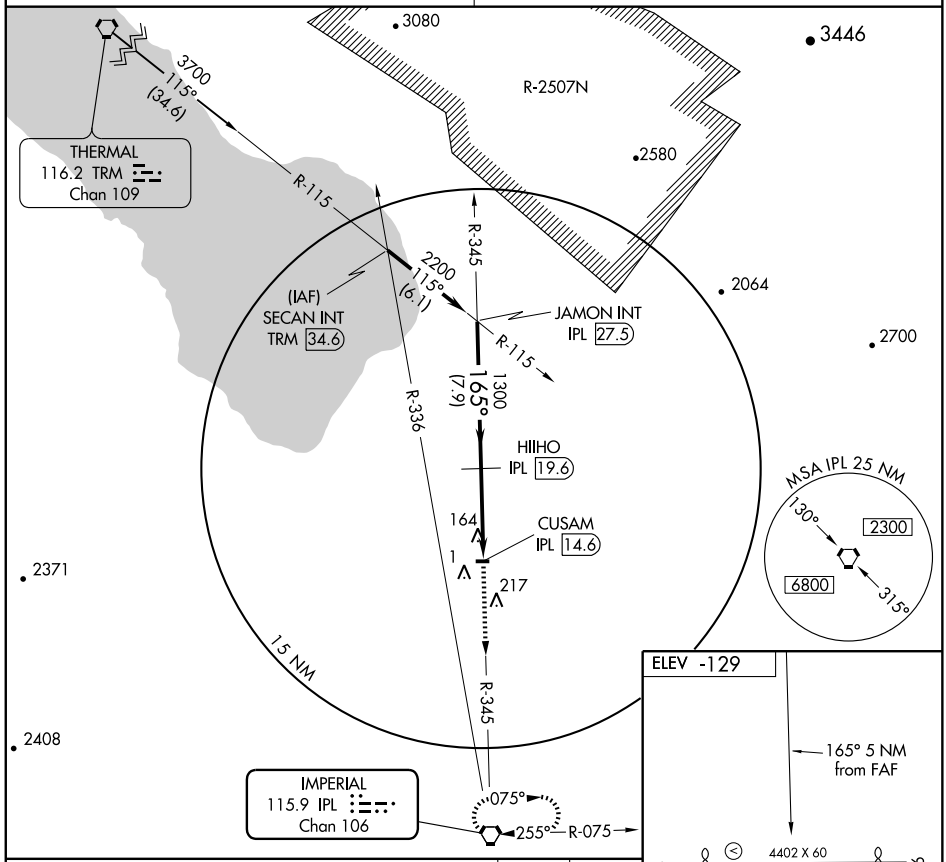
VOR/DME-B
BRAWLEY MUNI (BWC)

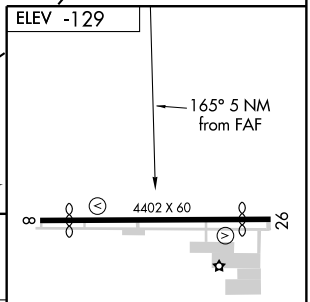
NA

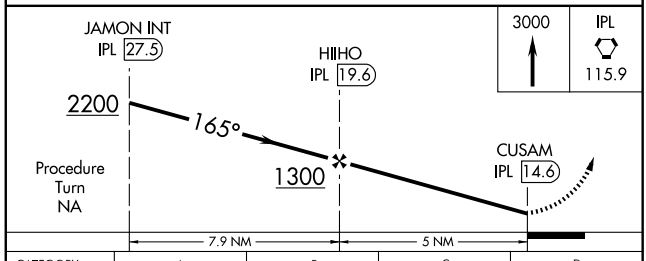
Use Imperial County altimeter setting.

MISSED APPROACH: Climb to 3000 direct IPL VORTAC and hold.

LOS ANGELES CENTER	CTAF
128.6 291.7	122.9 L







CATEGORY	A	B	C	D
CIRCLING	560-1 689 (700-1)		NA	

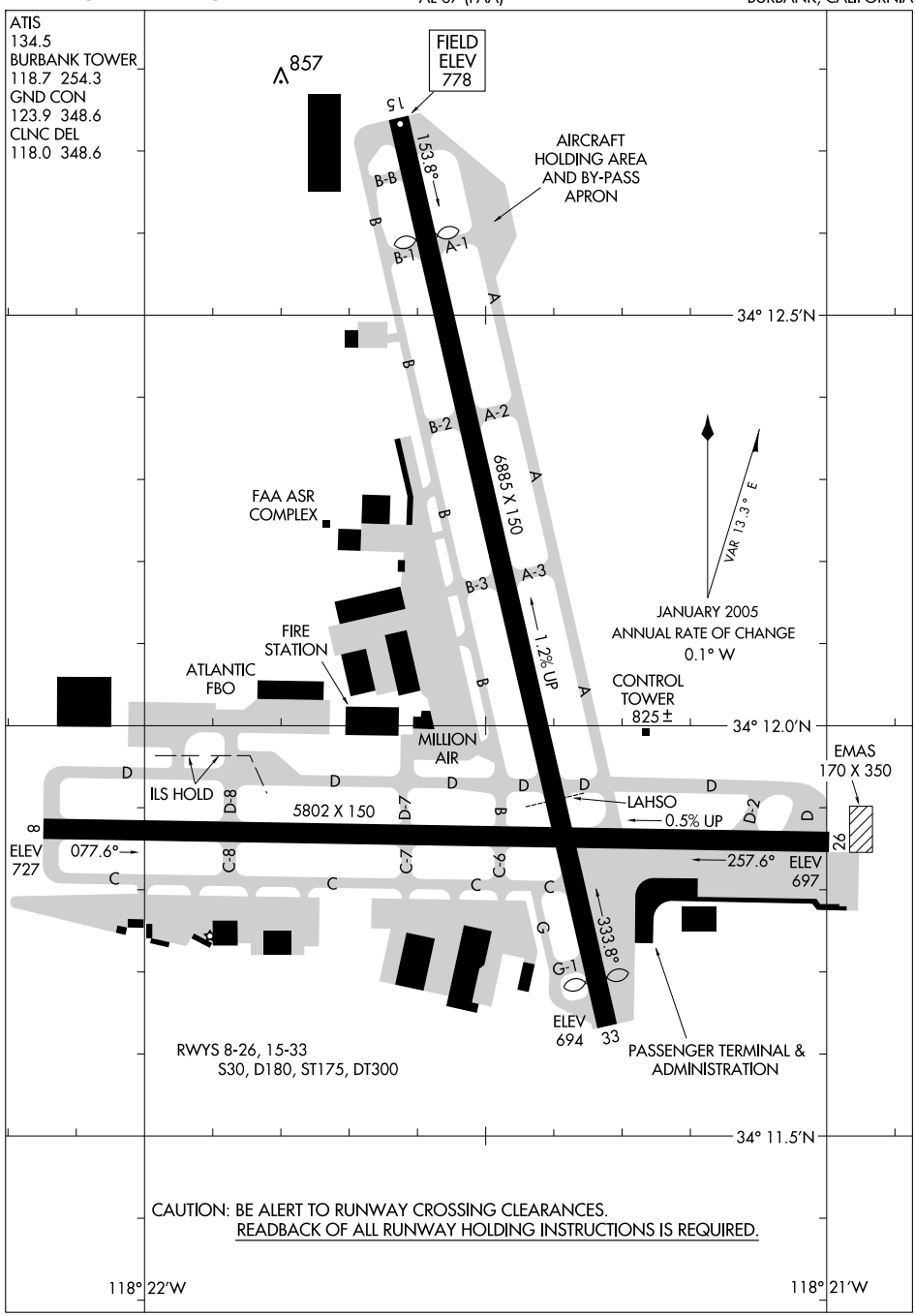
MIRL Rwy 8-26 L

09239

AIRPORT DIAGRAM

AL-67 (FAA)

BURBANK/ BOB HOPE (BUR)
BURBANK, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

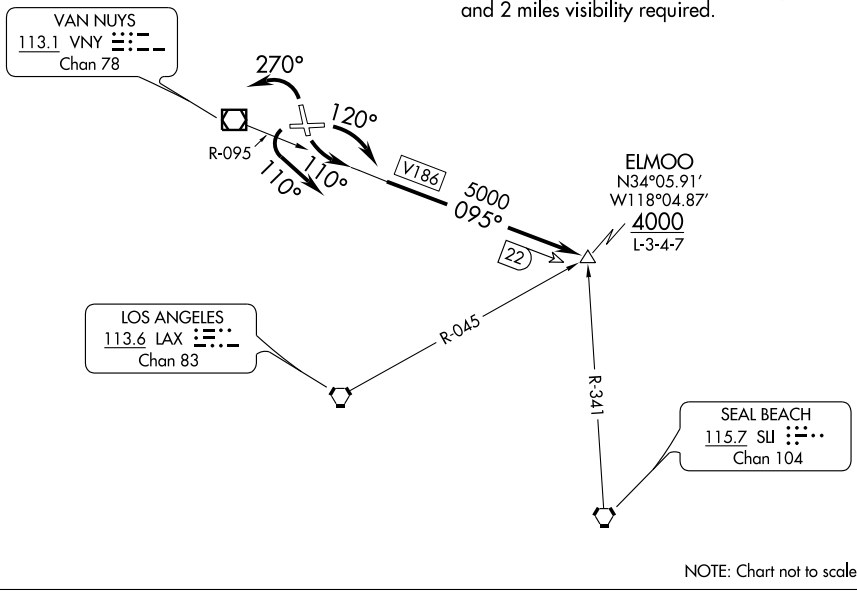
ELMOO FIVE DEPARTURE

ATIS 134.5
CLNC DEL
118.0 348.6
GND CON
123.9 348.6
SOCAL DEP CON
135.05 317.5

NOTE: This SID requires a minimum climb rate to MEA as follows:

Take-offs Rwy 8, Cats A and B, 480′ per NM.
Cats C and D, 650′ per NM.
Take-offs Rwy 15, 340′ per NM.
Take-offs Rwy 26, 250′ per NM.
Take-offs Rwy 33, 390′ per NM.

NOTE: For Runway 8 departures, 2100 ceiling and 2 miles visibility required.



NOTE: Chart not to scale.

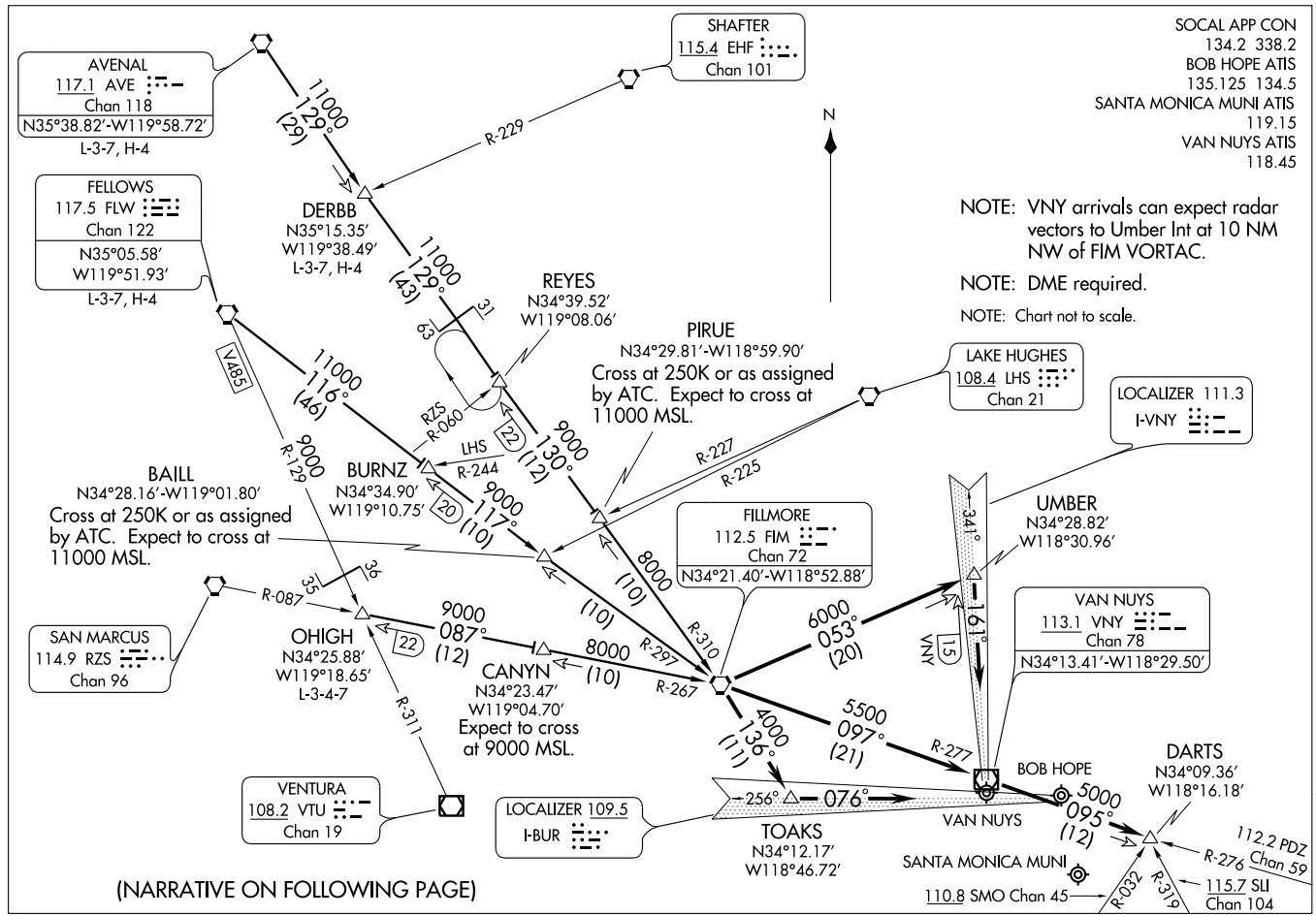
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Turn right heading 120° as soon as practicable after take-off, intercept and proceed via VNY R-095 to ELMOO INT. Then via (assigned route).

TAKE-OFF RUNWAY 15: Turn left heading 110° as soon as practicable after take-off, intercept and proceed via VNY R-095 to ELMOO INT. Then via (assigned route).

TAKE-OFF RUNWAY 26: Turn left heading 110° as soon as practicable after take-off for vector to VNY R-095. Then via VNY R-095 to ELMOO INT. Then via (assigned route).

TAKE-OFF RUNWAY 33: Turn left heading 270° as soon as practicable after take-off for vector to VNY R-095. Then via VNY R-095 to ELMOO INT. Then via (assigned route).


(FIM.FERN5) 08269
FERNANDO FIVE ARRIVAL
ST-67 (FAA)
BURBANK, CALIFORNIA
SOCAL APP CON
134.2 338.2
BOB HOPE ATIS
135.125 134.5
SANTA MONICA MUNI ATIS
119.15
VAN NUYS ATIS
118.45
NOTE: VNY arrivals can expect radar vectors to Umber Int at 10 NM NW of FIM VORTAC.
NOTE: DME required.
NOTE: Chart not to scale.
N
AVENAL
117.1 AVE
Chan 118
N35°38.82'-W119°58.72'
L-3-7, H-4
SHAFTER
115.4 EHF
Chan 101
FELLOWS
117.5 FLW
Chan 122
N35°05.58'
W119°51.93'
L-3-7, H-4
DERBB
N35°15.35'
W119°38.49'
L-3-7, H-4
REYES
N34°39.52'
W119°08.06'
PIRUE
N34°29.81'-W118°59.90'
Cross at 250K or as assigned by ATC. Expect to cross at 11000 MSL.
LAKE HUGHES
108.4 LHS
Chan 21
LOCALIZER 111.3
I-VNY
BAILL
N34°28.16'-W119°01.80'
Cross at 250K or as assigned by ATC. Expect to cross at 11000 MSL.
BURNZ
N34°34.90'
W119°10.75'
FILLMORE
112.5 FIM
Chan 72
N34°21.40'-W118°52.88'
UMBER
N34°28.82'
W118°30.96'
VAN NUYS
113.1 VNY
Chan 78
N34°13.41'-W118°29.50'
SAN MARCUS
114.9 RZS
Chan 96
OHIGH
N34°25.88'
W119°18.65'
L-3-4-7
CANYN
N34°23.47'
W119°04.70'
Expect to cross at 9000 MSL.
VENTURA
108.2 VTU
Chan 19
LOCALIZER 109.5
I-BUR
TOAKS
N34°12.17'
W118°46.72'
BOB HOPE
VAN NUYS
DARTS
N34°09.36'
W118°16.18'
SANTA MONICA MUNI
110.8 SMO Chan 45
112.2 PDZ
Chan 59
115.7 SLI
Chan 104
11000 129° (29)
11000 129° (43)
11000 116° (46)
9000 130° (112)
9000 117° (110)
8000 (10)
9000 087° (12)
8000 (10)
6000 053° (20)
5500 097° (21)
4000 136° (111)
5000 095° (12)
R-229
R-227
R-225
R-129
R-244
R-087
R-297
R-310
R-267
R-311
R-277
R-276
R-032
R-319
V485
RZS R-080
LHS
341°
161°
256°
076°
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

AVENAL TRANSITION (AVE.FERN5): From over AVE VORTAC via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

DERBB TRANSITION (DERBB.FERN5): From over DERBB INT via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

FELLOWS TRANSITION (FLW.FERN5): From over FLW VORTAC via FLW R-116 and FIM R-297 to FIM VORTAC. Thence....

OHIGH TRANSITION (OHIGH.FERN5): From over OHIGH INT via FIM R-267 to FIM VORTAC. Thence....

....From over FIM VORTAC:

LANDING BOB HOPE: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect ILS RWY 8.

LANDING SANTA MONICA MUNI: Via FIM R-097 and VNY R-277 to VNY VOR/DME; then via VNY R-095 to DARTS INT. Expect VOR-A approach.

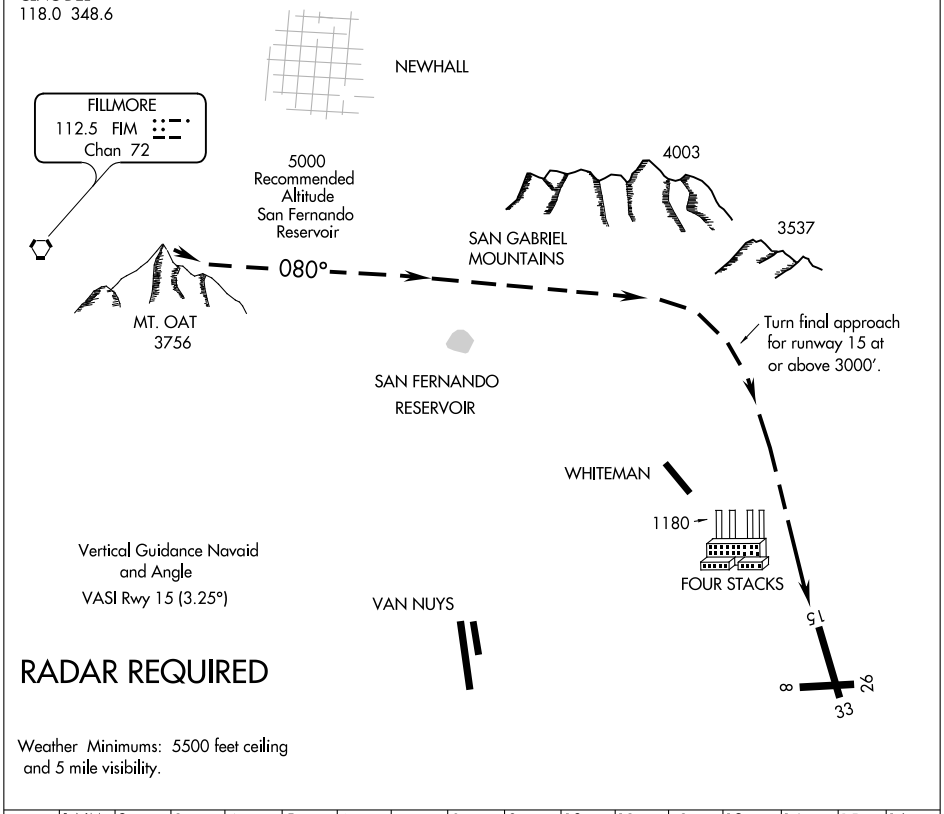
LANDING VAN NUYS RWY 16: Via FIM R-053 to UMBER INT, then via I-VNY localizer. Expect ILS RWY 16R.

LANDING VAN NUYS RWY 34: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect LDA-C; circle to land RWY 34L.

SW-3, 22 OCT 2009 to 19 NOV 2009

FOUR STACKS VISUAL RWY 15

ATIS 134.5
SOCAL APP CON
134.2 338.2
BURBANK TOWER
118.7 254.3
GND CON
123.9 348.6
CLNC DEL
118.0 348.6



Weather Minimums: 5500 feet ceiling and 5 mile visibility.

1 NM | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16

FOUR STACKS VISUAL APPROACH RWY 15

When Visual Approaches to Runway 15 are in progress, clearances will be given to aircraft from the Northwest thru Northeast utilizing the following phraseology:

"(IDENT) CLEARED FOR FOUR STACKS VISUAL APPROACH TO RUNWAY 15."

APP CRS	Rwy Idg	N/A
121°	TDZE	N/A
	Apt Elev	775

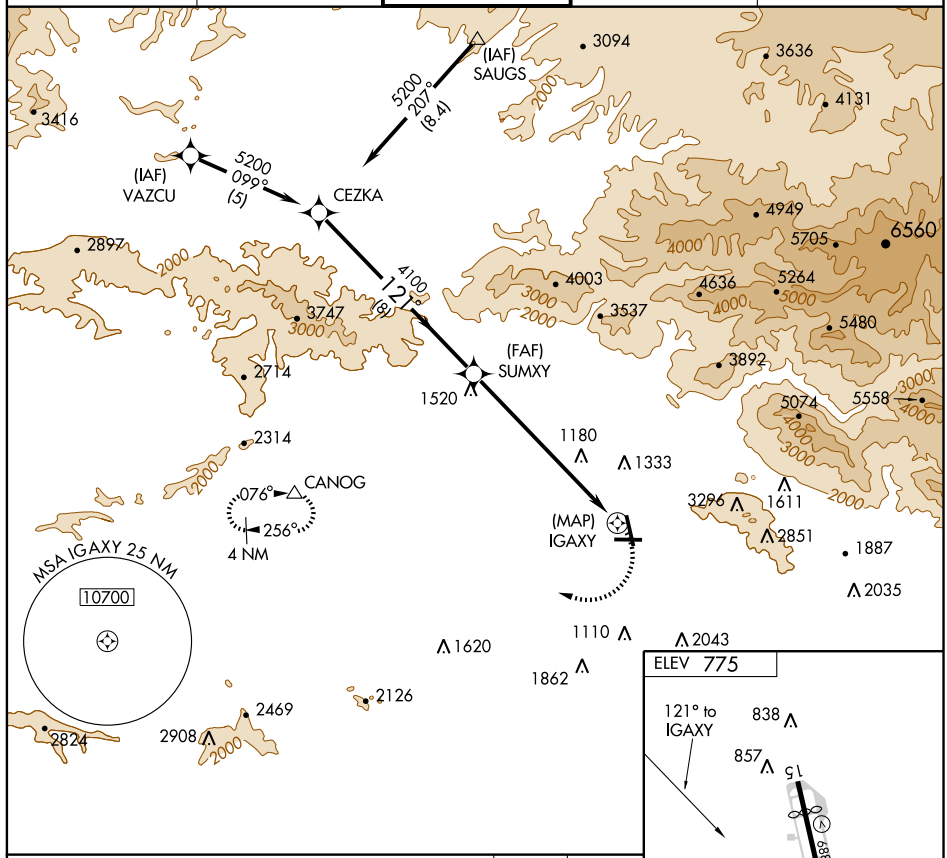
GPS-A

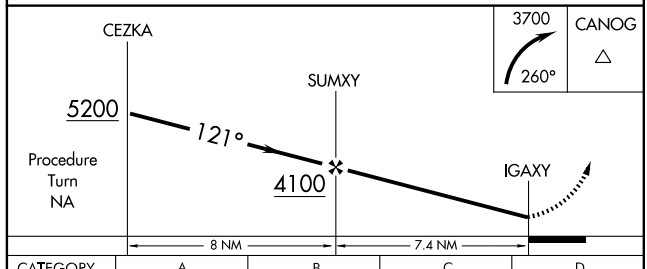
BURBANK/BOB HOPE (BUR)

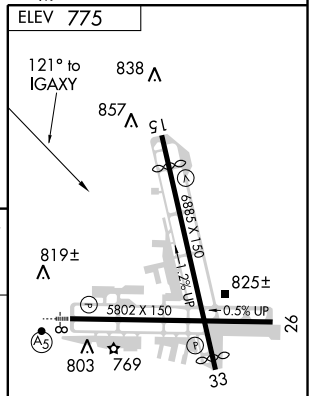
NA Circling not authorized NE of Rwys 15 and 26.

MISSED APPROACH: Climbing right turn to 3700 via course 260° to CANOG WP and hold.

ATIS	SOCAL APP CON	BURBANK TOWER	GND CON	CLNC DEL
134.5	134.2 338.2	118.7 254.3	123.9 348.6	118.0 348.6







CATEGORY	A	B	C	D
CIRCLING	1660-1¼ 885 (900-1¼)		1660-2¾ 885 (900-2¾)	1660-3 885 (900-3)

MIRL Rwy 15-33
HIRL Rwy 8-26
REIL Rwys 15, 26 and 33

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-BUR	APP CRS	Rwy Idg	5802
109.5	076°	TDZE	727
		Apt Elev	778

ILS or LOC Z RWY 8

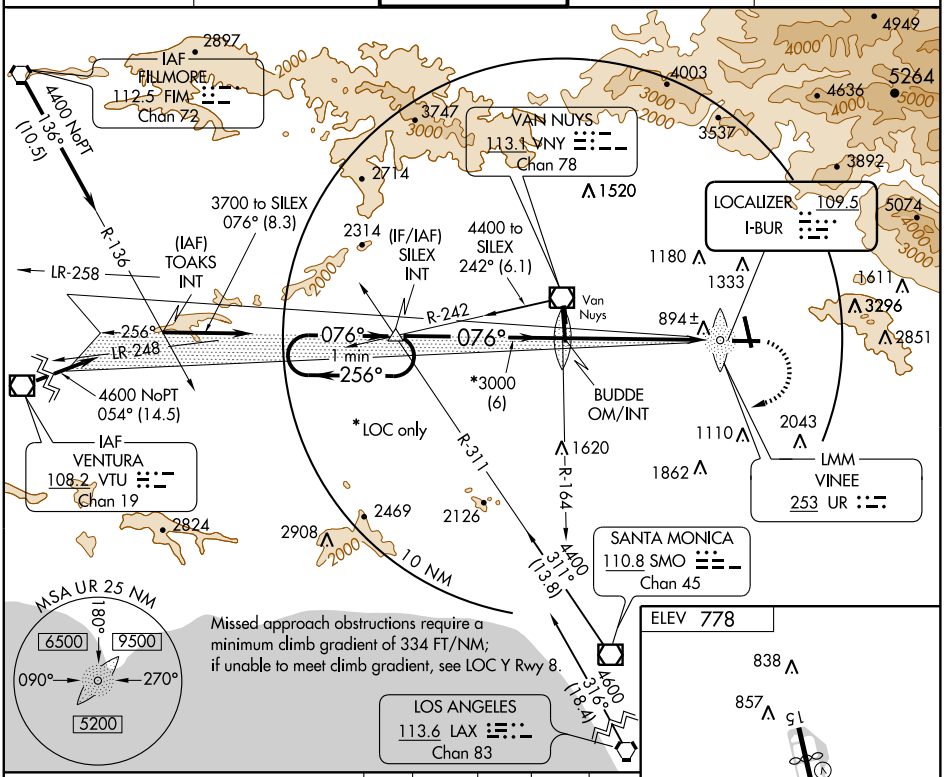
BURBANK/BOB HOPE (BUR)

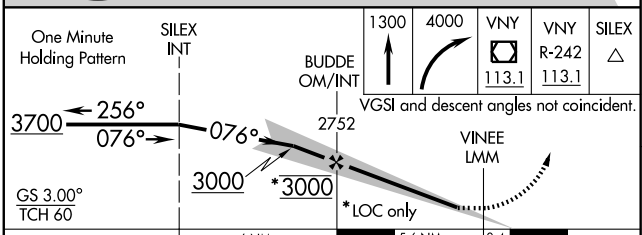
Visibility reduction by helicopters NA. Circling NA northeast Rwys 15 and 26.
For inoperative MALSR, increase S-LOC 8 Cats C,D visibility to RVR 6000. Inoperative table does not apply to S-ILS 8 all Cats. Inoperative table does not apply to S-LOC 8 Cats A,B. ILS unusable from VINEE LMM inbound. Autopilot coupled approach not authorized below 977 MSL.

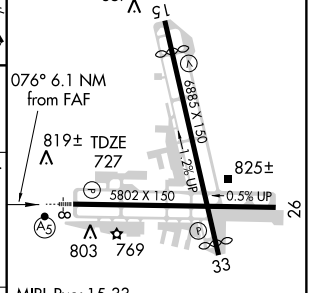
MALSR

MISSED APPROACH: Climb to 1300 then climbing right turn to 4000 direct VNY VOR/DME then via VNY VOR/DME R-242 to SILEX Int and hold.

ATIS	SOCAL APP CON	BURBANK TOWER	GND CON	CLNC DEL
134.5	134.2 338.2	118.7 254.3	123.9 348.6	118.0 348.6







MIRL Rwy 15-33
HIRL Rwy 8-26
REIL Rwys 15, 26 and 33

CATEGORY	A	B	C	D
S-ILS 8	977/50	250 (200-1)		
S-LOC 8	1140/50	413 (400-1)		
CIRCLING	1240-1	462 (500-1)	1280-1½ 502 (600-1½)	1440-2 662 (700-2)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-BUR	APP CRS	Rwy Idg	5802
109.5	076°	TDZE	727
		Apt Elev	778

LOC Y RWY 8

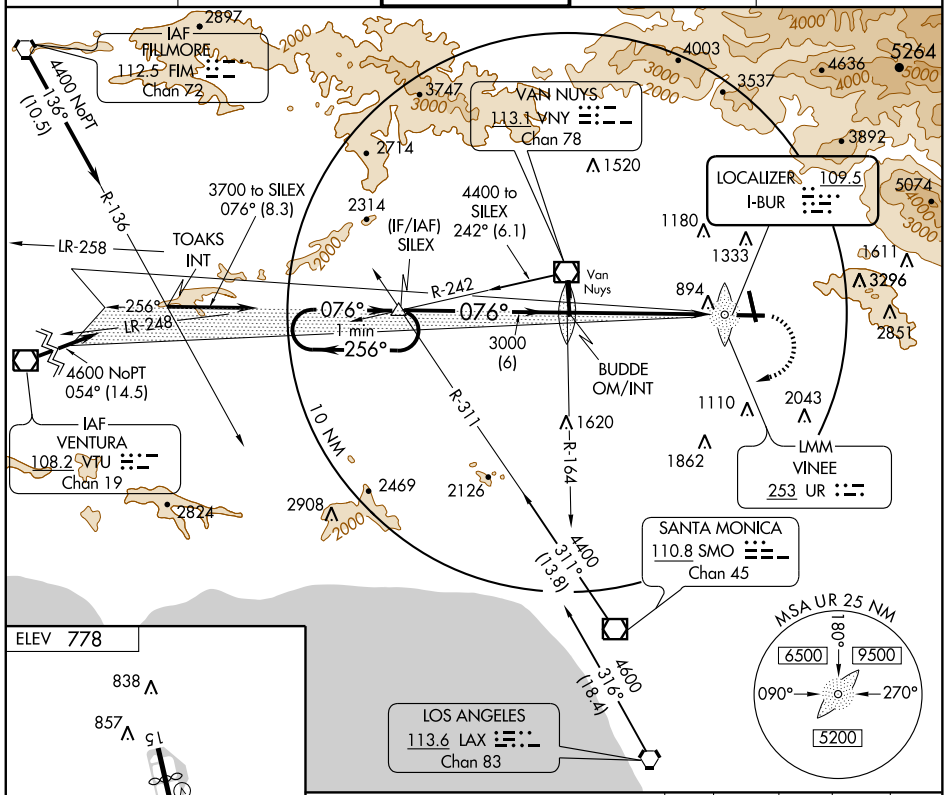
BURBANK/BOB HOPE (BUR)

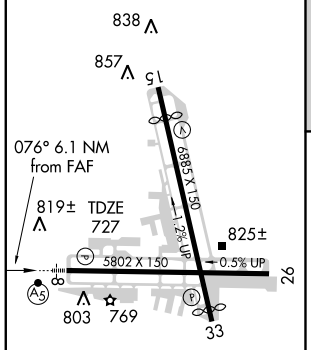
Visibility reduction by helicopters not authorized.
Circling not authorized northeast of Rwys 15 and 26.
Inoperative table does not apply to S-8 Cat A.
For inoperative MALSR, increase S-8 Cat B visibility to RVR 6000. LOC unusable from VINEE LMM inbound.

MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 4000 direct VNY VOR/DME, then via VNY VOR/DME R-242 to SILEX Int and hold.

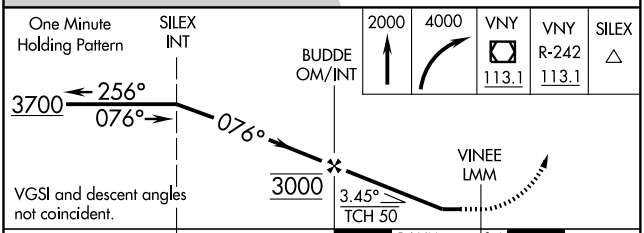
ATIS	SOCAL APP CON	BURBANK TOWER	GND CON	CLNC DEL
134.5	134.2 338.2	118.7 254.3	123.9 348.6	118.0 348.6





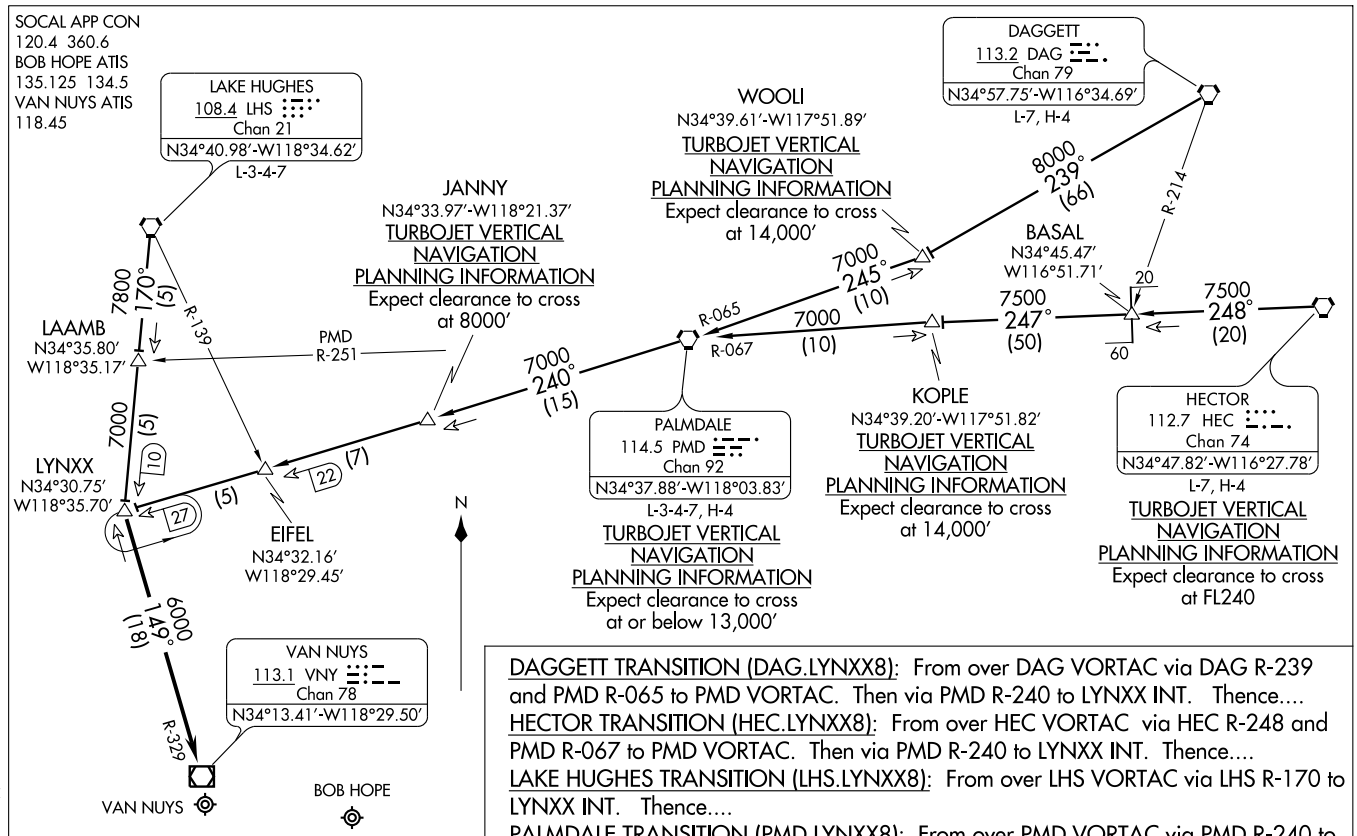
MIRL Rwy 15-33
HIRL Rwy 8-26
REIL Rwys 15, 26 and 33

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-8	1600/50	873 (900-1)	1600-2 873 (900-2)	1600-2¼ 873 (900-2¼)
CIRCLING	1600-1 822 (900-1)	1600-1¼ 822 (900-1¼)	1600-2½ 822 (900-2½)	1600-2¾ 822 (900-2¾)

SW-3, 22 OCT 2009 to 19 NOV 2009



DAGGETT TRANSITION (DAG.LYNXX8): From over DAG VORTAC via DAG R-239 and PMD R-065 to PMD VORTAC. Then via PMD R-240 to LYNXX INT. Thence....

HECTOR TRANSITION (HEC.LYNXX8): From over HEC VORTAC via HEC R-248 and PMD R-067 to PMD VORTAC. Then via PMD R-240 to LYNXX INT. Thence....

LAKE HUGHES TRANSITION (LHS.LYNXX8): From over LHS VORTAC via LHS R-170 to LYNXX INT. Thence....

PALMDALE TRANSITION (PMD.LYNXX8): From over PMD VORTAC via PMD R-240 to LYNXX INT. Thence....

....From over LYNXX INT via VNY R-329 to VNY VOR/DME. Expect radar vectors to final approach course after VNY VOR/DME.

NOTE: DME required for DAGGETT, HECTOR, and PALMDALE TRANSITIONS.

NOTE: Chart not to scale.

APP CRS	Rwy Idg	5802
076°	TDZE	727
	Apt Elev	778

RNAV (GPS) Y RWY 8

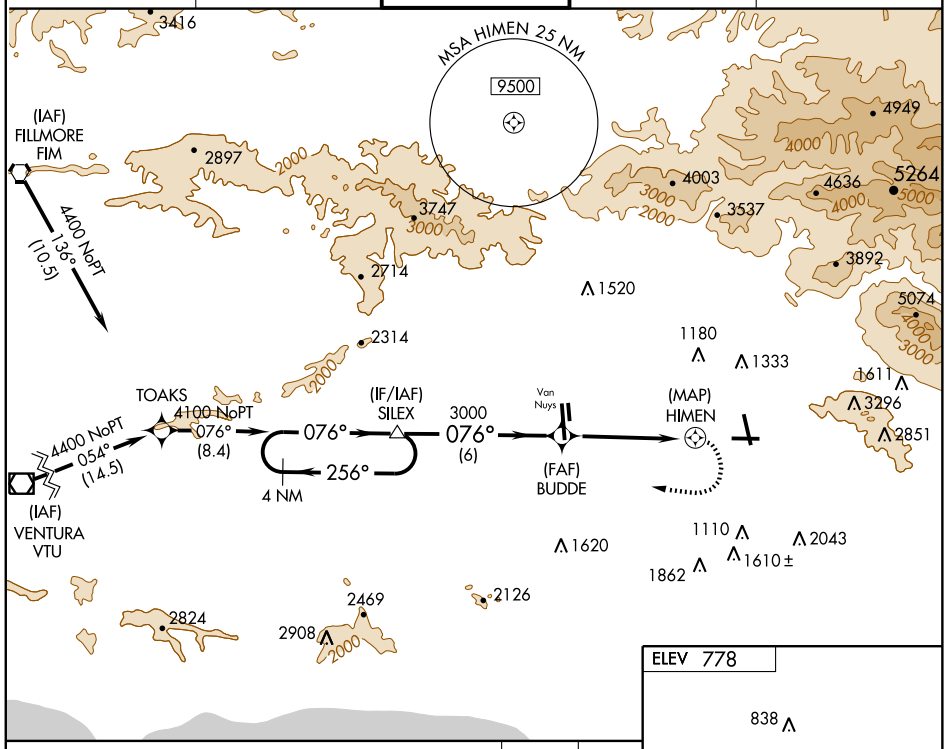
BURBANK/BOB HOPE (BUR)

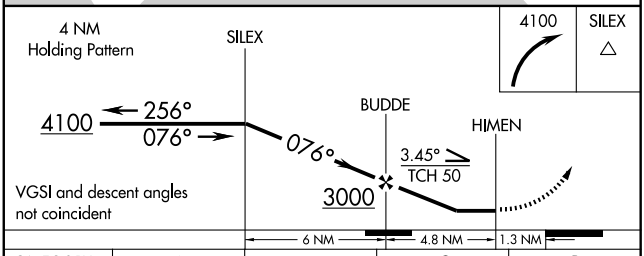
Circling not authorized northeast of Rwys 15 and 26.
Visibility reduction by helicopters NA.
DME/DME RNP- 0.3 NA.

MALSR

MISSED APPROACH: Climbing right turn to 4100 direct SILEX WP and hold.

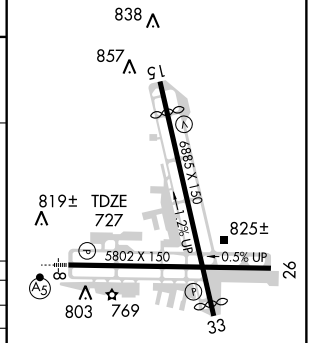
ATIS	SOCAL APP CON	BURBANK TOWER	GND CON	CLNC DEL
134.5	134.2 338.2	118.7 254.3	123.9 348.6	118.0 348.6





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	NA			
LNAV MDA	1600/50 873 (900-1)		1600-2 873 (900-2)	1600-2¼ 873 (900-2¼)
CIRCLING	1600-1½ 822 (900-1½)		1600-2½ 822 (900-2½)	1600-2¾ 822 (900-2¾)

ELEV 778



MIRL Rwy 15-33
HIRL Rwy 8-26
REIL Rwys 15, 26 and 33

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5802
076°	TDZE	727
	Apt Elev	778

RNAV (RNP) Z RWY 8

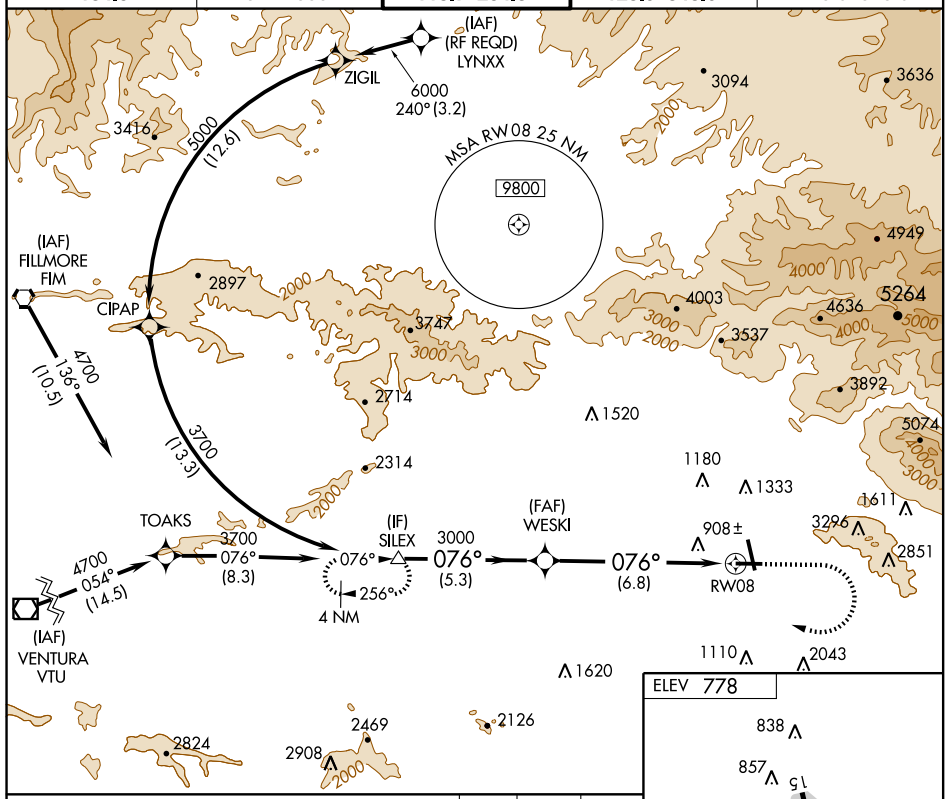
BURBANK/BOB HOPE (BUR)

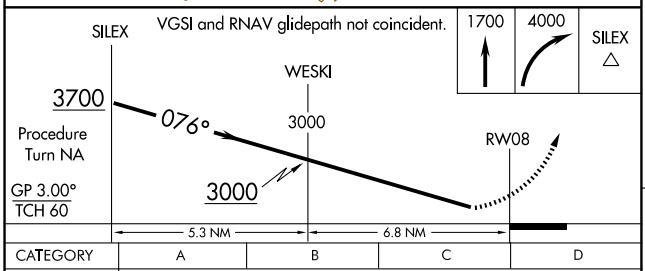
GPS required. For uncompensated Baro-VNAV systems, procedure NA below 1°C (33°F) or above 47°C (117°F). Visibility reduction by helicopters NA. For inoperative MALSR, increase RNP 0.30 all Cats visibility to 1¾ mile. *Missed approach requires minimum climb of 391 feet per NM to 2700 if unable see RNAV (GPS) Y Rwy 8.

MALSR

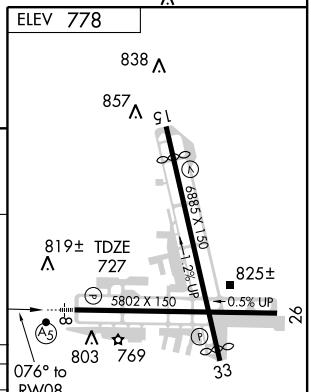
MISSED APPROACH: Climb to 1700 then climbing right turn to 4000 direct SILEX and hold.

ATIS	SOCAL APP CON	BURBANK TOWER	GND CON	CLNC DEL
134.5	134.2 338.2	118.7 254.3	123.9 348.6	118.0 348.6





SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

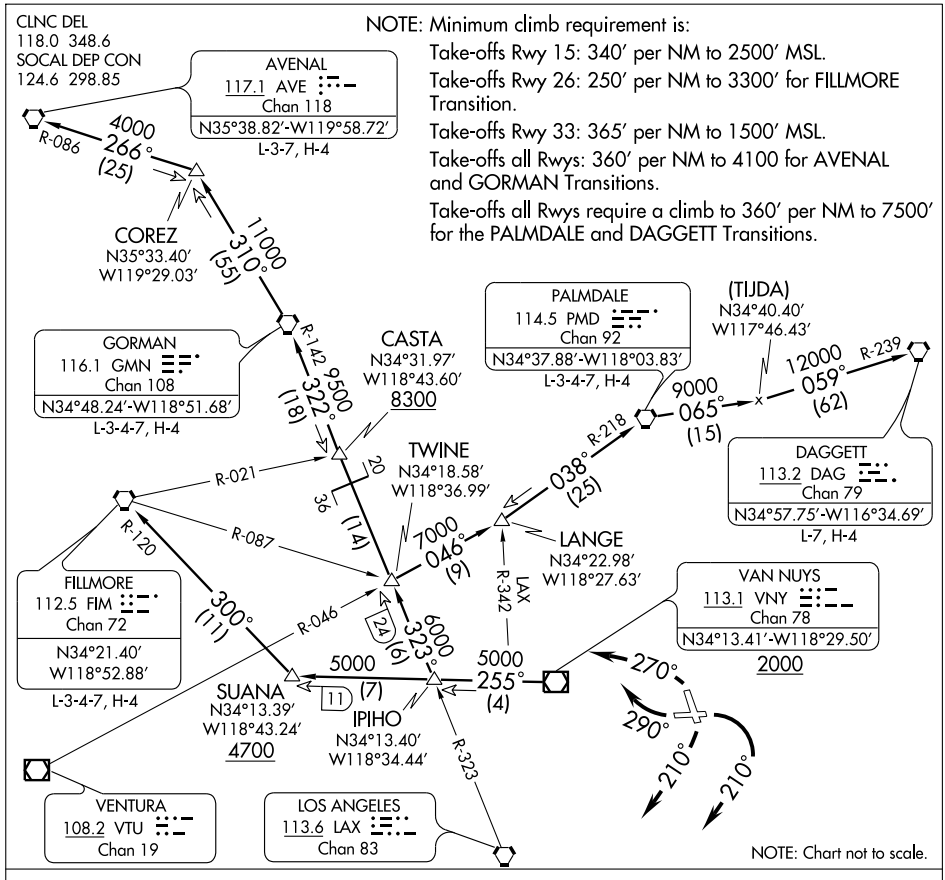


MIRL Rwy 15-33
HIRL Rwy 8-26
REIL Rwys 15, 26 and 33

SW-3, 22 OCT 2009 to 19 NOV 2009

VAN NUYS SEVEN DEPARTURE

SL-67 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Turn right heading 210° as soon as practicable after take-off. Expect vector to VNY VOR/DME. Thence via (transition) or (assigned route).

NOTE: Runway 8 departures not authorized when weather conditions are less than 2100′ ceiling and 3 miles prevailing visibility.

TAKE-OFF RUNWAY 15: Turn right heading 210° as soon as practicable after take-off. Expect vector to VNY VOR/DME, then via (transition) or (assigned route).

TAKE-OFF RUNWAY 26: Turn right heading 290° as soon as practicable after take-off for vector to VNY VOR/DME, then via (transition) or (assigned route).

TAKE-OFF RUNWAY 33: Turn left heading 270° as soon as practicable after take-off for vector to VNY VOR/DME, then via (transition) of (assigned route).

AVENAL TRANSITION (VNY7.AVE)

DAGGETT TRANSITION (VNY7.DAG)

FILLMORE TRANSITION (VNY7.FIM)

GORMAN TRANSITION (VNY7.GMN)

PALMDALE TRANSITION (VNY7.PMD)

VOR/DME VNY	APP CRS	Rwy Idg	5802
113.1	089°	TDZE	727
Chan 78		Apt Elev	778

VOR RWY 8

BURBANK/BOB HOPE (BUR)

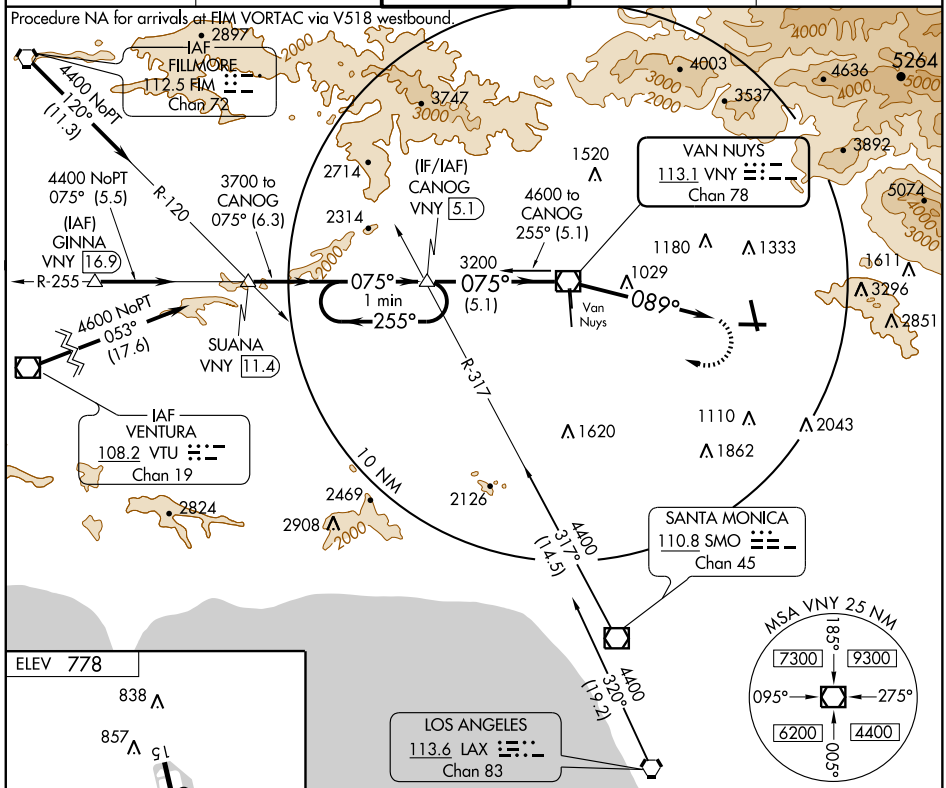
Circling not authorized northeast of Rwys 15 and 26.
Inoperative table does not apply.
Visibility reduction by helicopters not authorized.

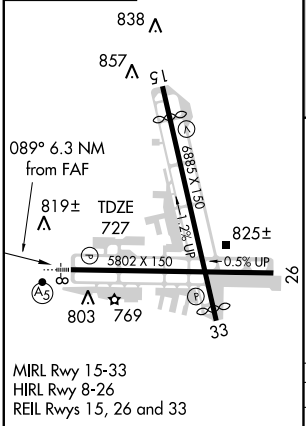
MALSR

MISSED APPROACH: Climbing right turn to 3700 direct VNY VOR/DME, then via VNY VOR/DME R-255 to CANOG INT/VNY 5.1 DME and hold.

ATIS	SOCAL APP CON	BURBANK TOWER	GND CON	CLNC DEL
134.5	134.2 338.2	118.7 254.3	123.9 348.6	118.0 348.6

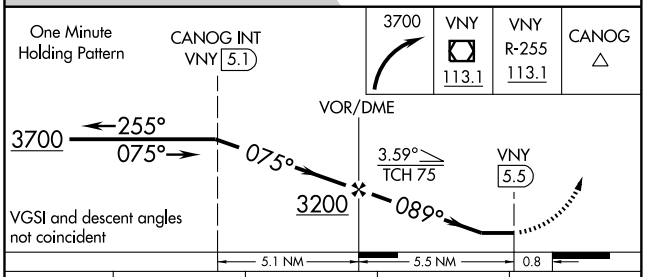
Procedure NA for arrivals at FIM VORTAC via V518 westbound.





MIRL Rwy 15-33
HIRL Rwy 8-26
REIL Rwys 15, 26 and 33

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-8	1340/50	613 (600-1)	1340-1¾ 613 (600-1¾)	1660-3 933 (900-3)
CIRCLING	1340-1	562 (600-1)	1340-1¾ 562 (600-1¾)	1660-3 882 (900-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	4500
CH 65902	300°	TDZE	55
W30A		Apt Elev	79

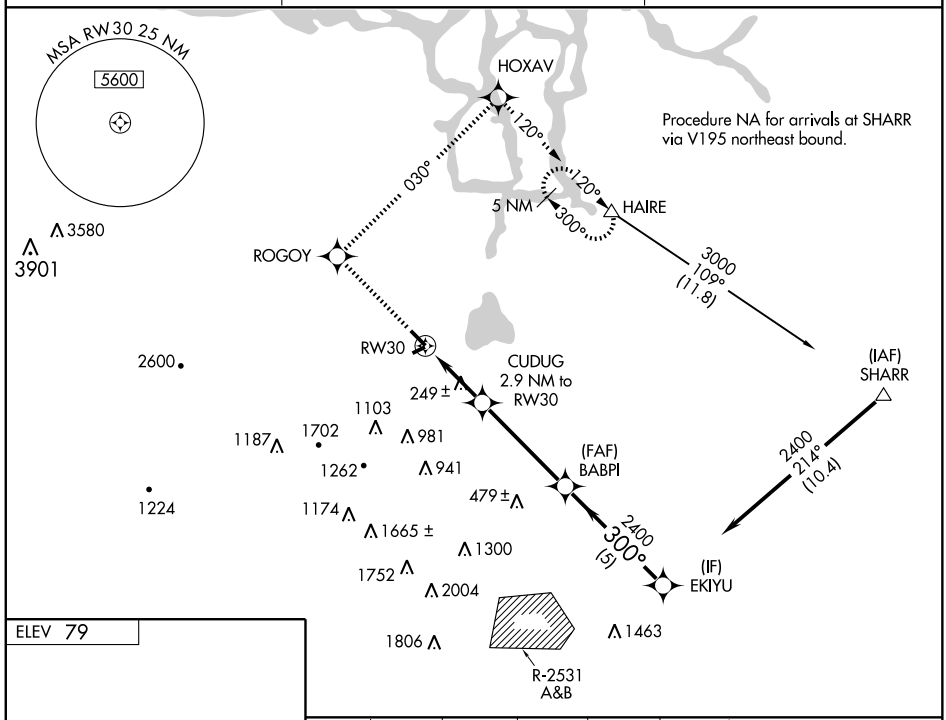
RNAV (GPS) RWY 30
BYRON (C83)

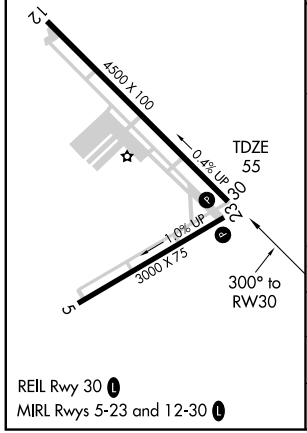
T NA W

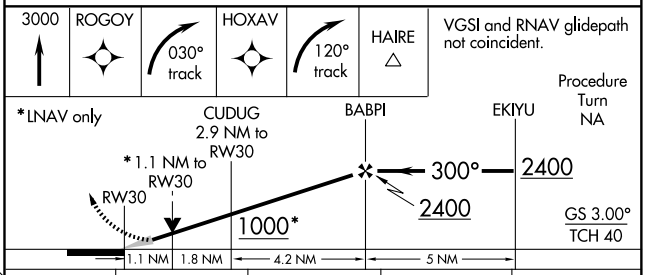
Circling to Rwy 5, 12 NA at night. Circling NA SW of Rwy 12-30.
If local altimeter setting not received, use Stockton Metropolitan altimeter setting and increase all DA/MDAs 60 feet.
DME/DME RNP-0.3 NA.
VDP NA when using Stockton Metropolitan altimeter setting.

MISSED APPROACH: Climb to 3000 direct ROGOY and right turn via 030° track to HOXAV and right turn via 120° track to HAIRE and hold, continue climb-in-hold to 3000.

AWOS-3	NORCAL APP CON	UNICOM
123.775	123.85 278.3	123.05 (CTAF) L





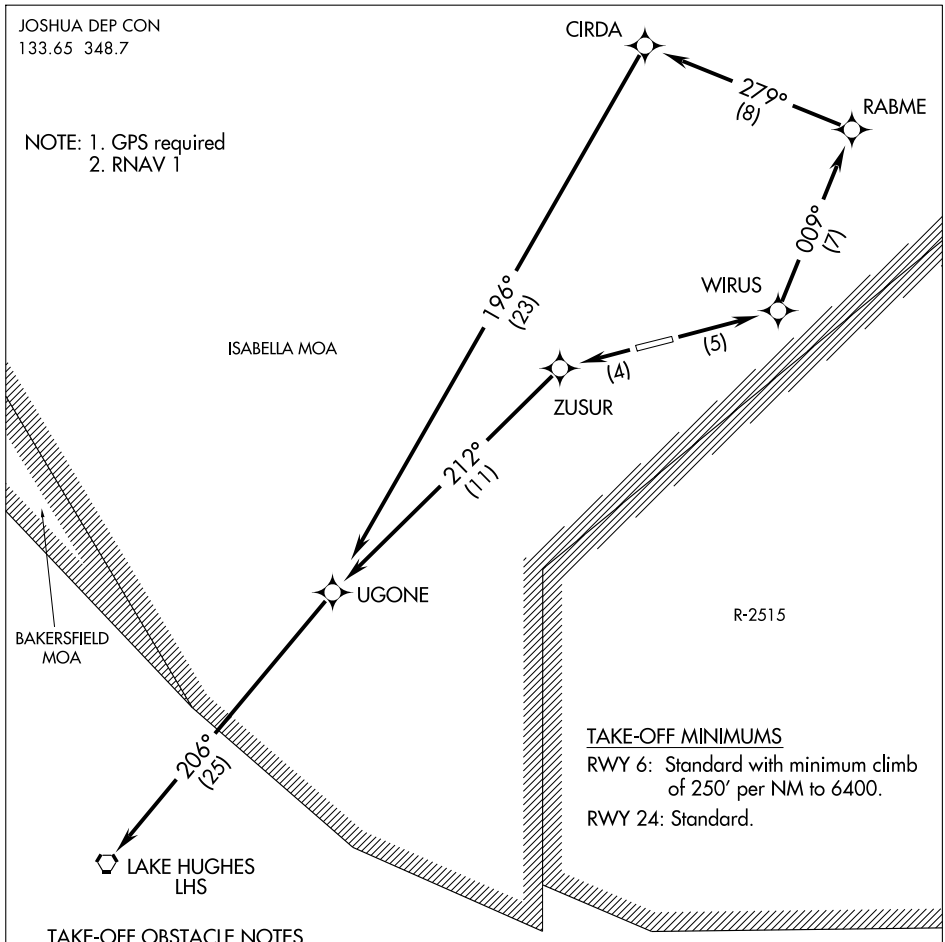


CATEGORY	A	B	C	D
LPV DA	305-1 250 (300-1)		NA	
LNAV MDA	500-1 445 (500-1)		NA	
CIRCLING	520-1 441 (500-1)	540-1 461 (500-1)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

CALIFORNIA CITY ONE DEPARTURE (RNAV) (OBSTACLE)

CALIFORNIA CITY, CALIFORNIA



TAKE-OFF MINIMUMS

RWY 6: Standard with minimum climb of 250′ per NM to 6400.

RWY 24: Standard.

TAKE-OFF OBSTACLE NOTES

Rwy 6: Ground 37′ from departure end of runway, 408′ right of centerline, 0′ AGL/2406′ MSL.

Rwy 24: Windsock 8′ from departure end of runway, 159′ right of centerline, 25′ AGL/2476′ MSL.
Bush 220′ from departure end of runway 456′ left of centerline, 9′ AGL/2467′ MSL.
Bush 550′ from departure end of runway, 447′ left of centerline, 16′ AGL/2474′ MSL.
Bush 365′ from departure end of runway, 299′ left of centerline, 8′ AGL/2469′ MSL.
Bush 245′ from departure end of runway, 449′ left of centerline, 8′ AGL/2466′ MSL.
Bush 422′ from departure end of runway, 454′ left of centerline, 12′ AGL/2470′ MSL.
Bush 355′ from departure end of runway, 106′ left of centerline, 6′ AGL/2467′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 6: Climb direct WIRUS, then via depicted route to LHS VORTAC. Maintain 9000.

TAKE-OFF RUNWAY 24: Climb direct ZUSUR, then via depicted route to LHS VORTAC. Maintain 9000.

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6027
047°	TDZE	2454
	Apt Elev	2454

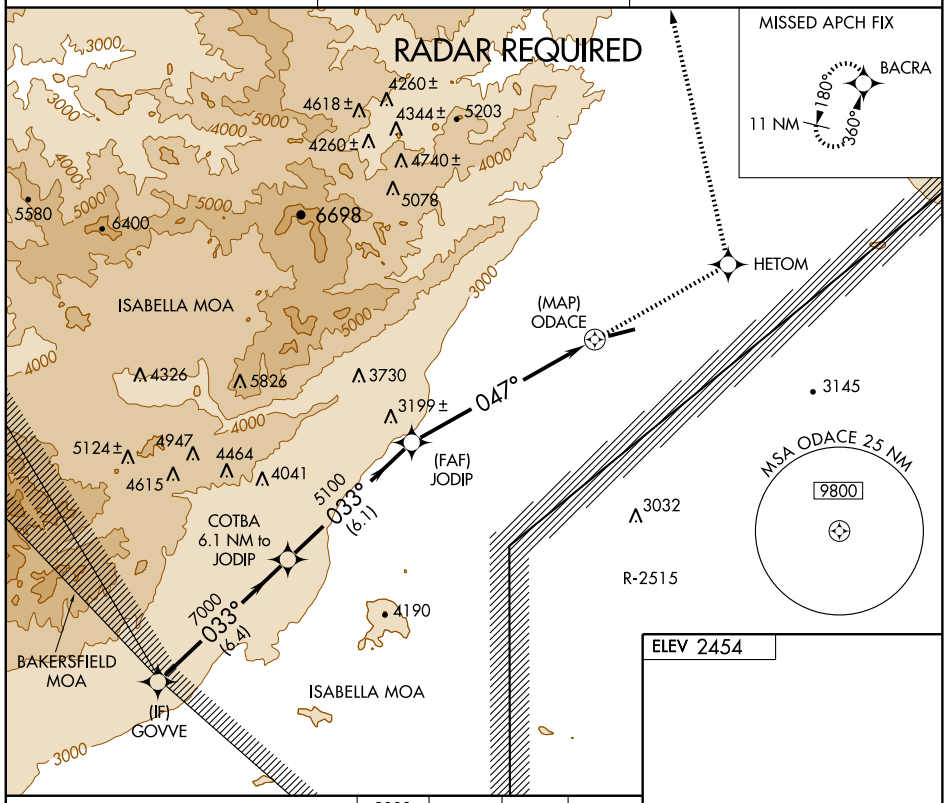
RNAV (GPS) RWY 6

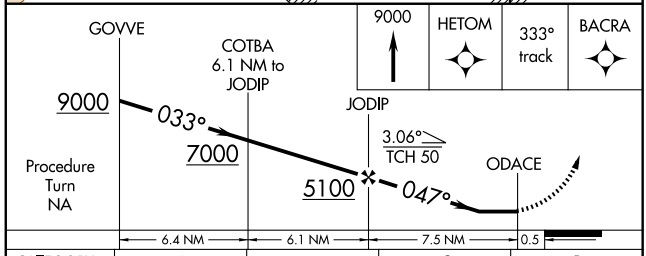
CALIFORNIA CITY MUNI (L71)

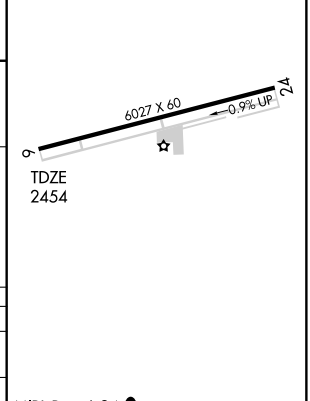
DME/DME RNP -0.3 NA.
NA If local altimeter setting not received, use Edwards AFB altimeter setting and increase all MDAs 60 feet; if neither received, procedure not authorized. Procedure not authorized at night.

MISSED APPROACH: Climb to 9000 direct HETOM and via 333° track to BACRA and hold, continue climb-in-hold to 9000.

AWOS-1	JOSHUA APP CON	UNICOM
120.875	133.65 348.7	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3660-1¼ 1206 (1300-1¼)	3660-1½ 1206 (1300-1½)	3660-3 1206 (1300-3)	NA
CIRCLING	3660-1¼ 1206 (1300-1¼)	3660-1½ 1206 (1300-1½)	3660-3 1206 (1300-3)	NA

MIRL Rwy 6-24 L

SW-3, 22 OCT 2009 to 19 NOV 2009

CALIFORNIA CITY, CALIFORNIA AL-9440 (FAA)

APP CRS		
227°	Rwy Idg	6027
	TDZE	2429
	Apt Elev	2454

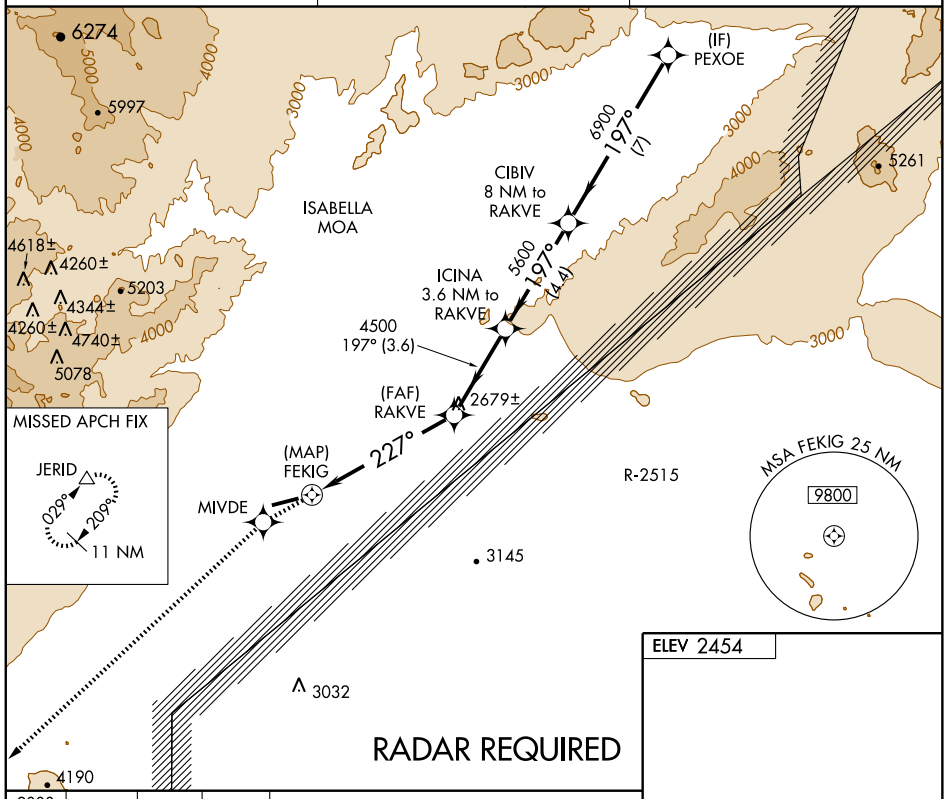
RNAV (GPS) RWY 24

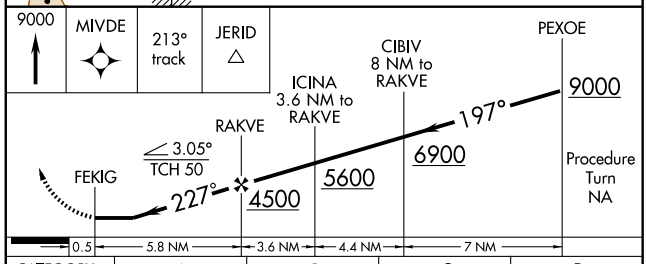
CALIFORNIA CITY MUNI (L71)

DME/DME RNP -0.3 NA.
NA If local altimeter setting not received, use Edwards AFB altimeter setting and increase all MDAs 60 feet; if neither received, procedure not authorized. Procedure not authorized at night.

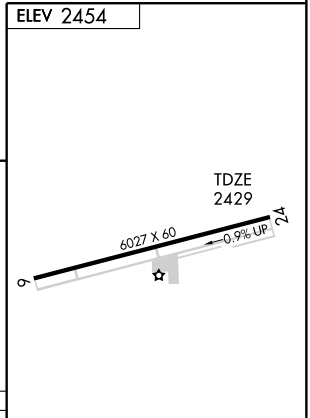
MISSED APPROACH: Climb to 9000 direct MIVDE and via 213° track to JERID and hold, continue climb-in-hold to 9000.

AWOS-1	JOSHUA APP CON	UNICOM
120.875	133.65 348.7	122.7 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2820-1 391 (400-1)			NA
CIRCLING	2940-1 486 (500-1)	2960-1 506 (600-1)	3080-1¾ 626 (700-1¾)	NA



MIRL Rwy 6-24 L

SW-3, 22 OCT 2009 to 19 NOV 2009

CALIPATRIA, CALIFORNIA AL-9486 (FAA)

APP CRS	Rwy Idg	3303
078°	TDZE	-182
	Apt Elev	-182

RNAV (GPS) RWY 8

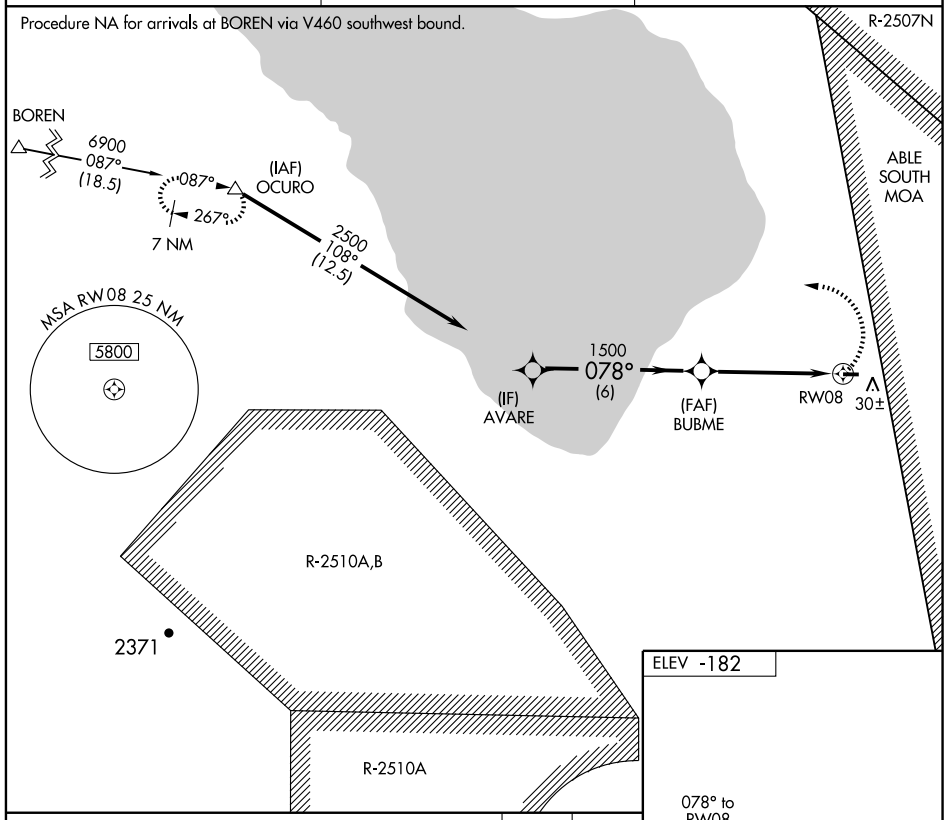
CALIPATRIA/CLIFF HATFIELD MEMORIAL (CLR)

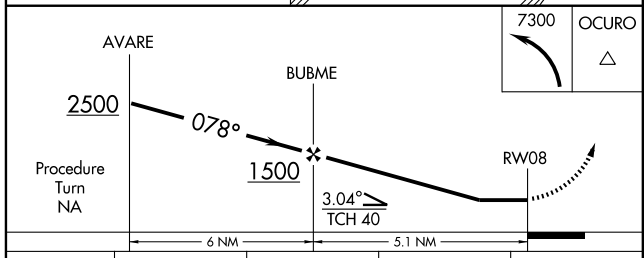
DME/DME RNP-0.3 NA. Procedure NA at night.
Visibility reduction by helicopters NA.
NA Use Imperial altimeter setting, when not received, procedure NA.

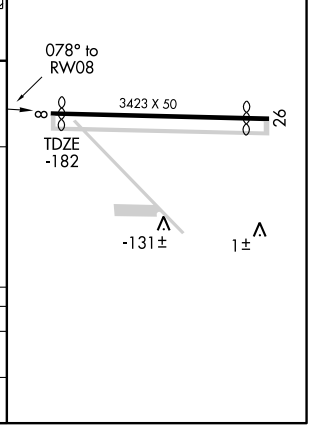
MISSED APPROACH: Climbing left turn to 7300 direct OCURO and hold, continue climb-in-hold to 7300.

IMPERIAL ASOS	LOS ANGELES CENTER	CTAF
132.175	128.6 291.7	122.9

Procedure NA for arrivals at BOREN via V460 southwest bound.







CATEGORY	A	B	C	D
LNAV MDA	300-1 482 (500-1)		300-1¼ 482 (500-1¼)	NA
CIRCLING	440-1 622 (700-1)		440-1¾ 622 (700-1¾)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

ATIS 126.025
CAMARILLO TOWER ★
128.2 269.4
GND CON
121.8
CLNC DEL
121.8
POINT MUGU CLNC DEL
120.75 279.55

Rwy 8-26
S50, D80, ST82, DT125

VAR 13.4° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

34°13'N

ELEV
63

FIELD
ELEV
77

077.2°
6013 X 150
257.2°
8
26

E
D
C
B
A
F
G3
G
F
G2
G1

Ultra-Light
Operating Area

HANGAR
CONTROL
TOWER
HANGAR

34°12.5'N

CAUTION: READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

119°06'W
119°05.5'W
119°05'W
119°04.5'W

CAMARILLO (CMA)
CAMARILLO, CALIFORNIA

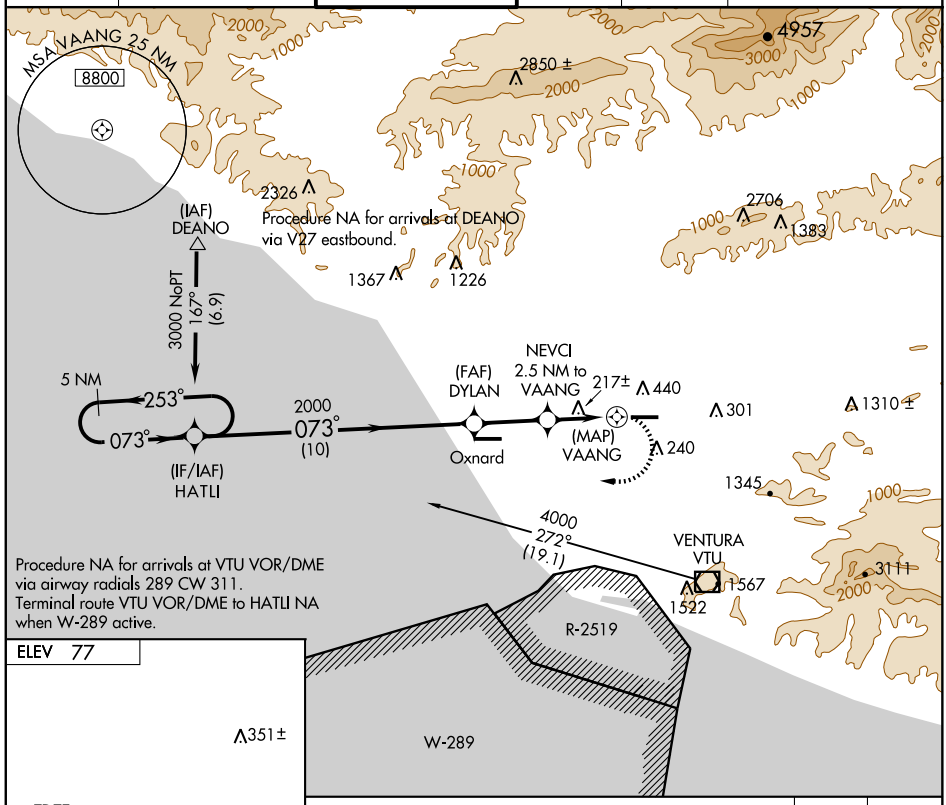
APP CRS	Rwy Idg	6013
073°	TDZE	68
	Apt Elev	77

RNAV (GPS) RWY 8
CAMARILLO (CMA)

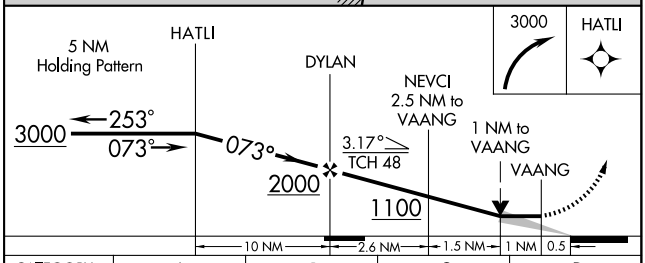
Circling NA north of Rwy 8-26. DME/DME RNP-0.3 NA. If local altimeter setting not received, use Oxnard altimeter setting and increase all MDAs 20 feet. VDP NA when using Oxnard altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 direct HATLI and hold.

ATIS	POINT MUGU APP CON ★	CAMARILLO TOWER ★	GND CON	CLNC DEL	POINT MUGU CLNC DEL
126.025	124.7 335.5	128.2 (CTAF) L 269.4	121.8	121.8	120.75 279.55



ELEV 77



CATEGORY	A	B	C	D
LNAV MDA	600-1 532 (600-1)		600-1½ 532 (600-1½)	600-1¾ 532 (600-1¾)
CIRCLING	600-1 523 (600-1)		600-1½ 523 (600-1½)	640-2 563 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

CAMARILLO, CALIFORNIA AL-680 (FAA)

APP CRS	Rwy Idg	6013
252°	TDZE	77
	Apt Elev	77

RNAV (GPS) Y RWY 26

CAMARILLO (CMA)

Circling NA north of Rwy 8-26. DME/DME RNP-0.3 NA. If local altimeter setting not received, use Oxnard altimeter setting and increase all MDAs 20 feet. VDP NA when using Oxnard altimeter setting.

MISSED APPROACH: Climb to 3000 direct LECIK and via 254° track to HATLI and hold.

ATIS	POINT MUGU APP CON ★	CAMARILLO TOWER ★	GND CON	CLNC DEL	POINT MUGU CLNC DEL
126.025	124.7 335.5	128.2 (CTAF) L 269.4	121.8	121.8	120.75 279.55

MISSED APCH FIX

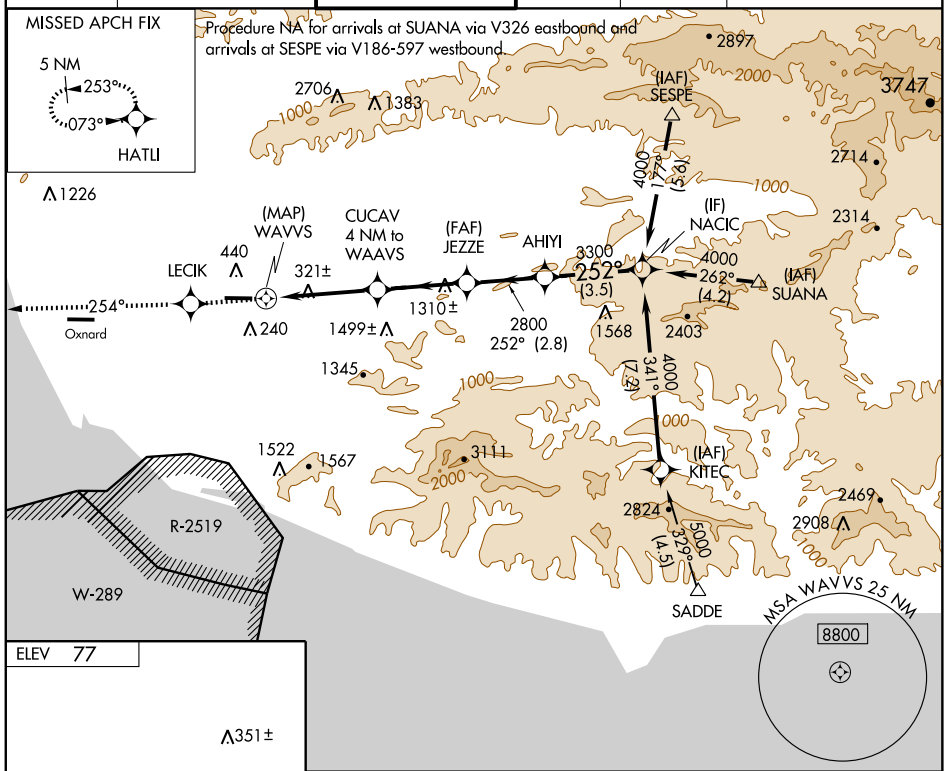
5 NM

253°

073°

HATLI

Procedure NA for arrivals at SUANA via V326 eastbound and arrivals at SESPE via V186-597 westbound.



ELEV 77

351±

252° to WAVVS

TDZE 77

6013 X 150

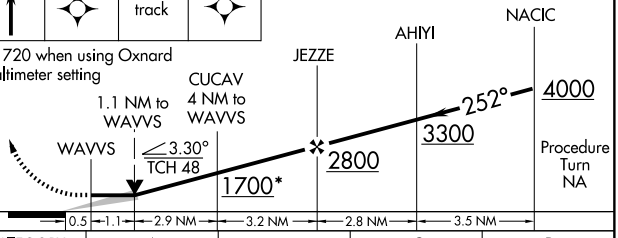
26

Ultralight Operating Area

3000	LECIK	254° track	HATLI

VGSI and descent angles not coincident.

*1720 when using Oxnard altimeter setting



CATEGORY	A	B	C	D
LNAV MDA	620-1 543 (600-1)		620-1½ 543 (600-1½)	620-1¾ 543 (600-1¾)
CIRCLING	620-1 543 (600-1)		620-1½ 543 (600-1½)	640-2 563 (600-2)

REIL Rwys 8 and 26 L

MIRL Rwy 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

CAMARILLO, CALIFORNIA AL-680 (FAA)

WAAS	APP CRS	Rwy Idg	6013
CH 58202	257°	TDZE	77
W26A		Apt Elev	77

RNAV (GPS) Z RWY 26
CAMARILLO (CMA)

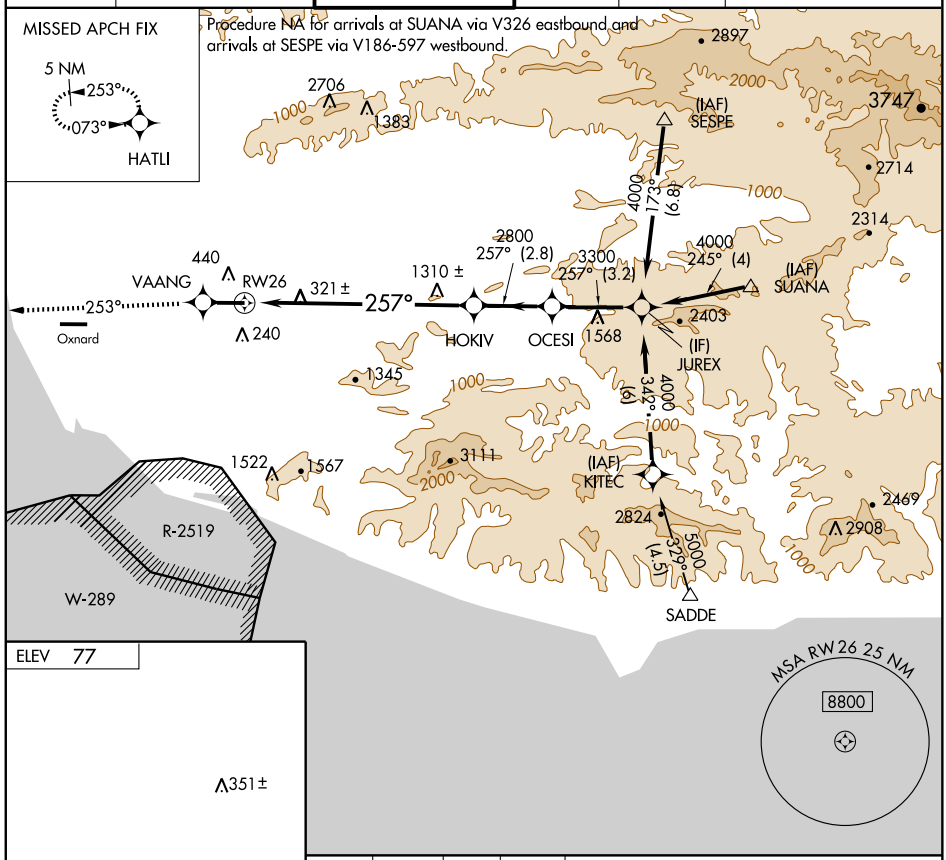
DME/DME RNP -0.3 NA.
If local altimeter setting not received, use Oxnard altimeter setting and increase DA 18 feet.

MISSED APPROACH: Climb to 3000 direct VAANG and via 253° track to HATLI and hold.

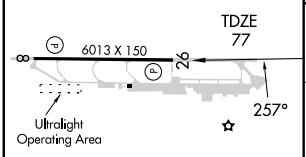
ATIS	POINT MUGU APP CON ★	CAMARILLO TOWER ★	GND CON	CLNC DEL	POINT MUGU CLNC DEL
126.025	124.7 335.5	128.2 (CTAF) L 269.4	121.8	121.8	120.75 279.55

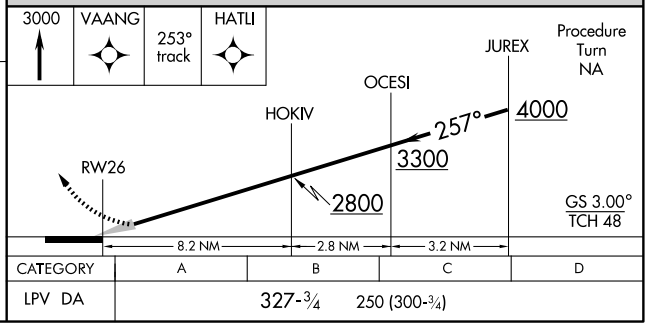
MISSED APCH FIX
5 NM
253°
073°
HATLI

Procedure NA for arrivals at SUANA via V326 eastbound and arrivals at SESPE via V186-597 westbound.



ELEV 77





CATEGORY	A	B	C	D
LPV DA	327-¾	250 (300-¾)		

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

CAMARILLO, CALIFORNIA

AL-680 (FAA)

VOR/DME CMA 115.8 Chan 105	APP CRS 247°	Rwy Idg 6013 TDZE 77 Apt Elev 77

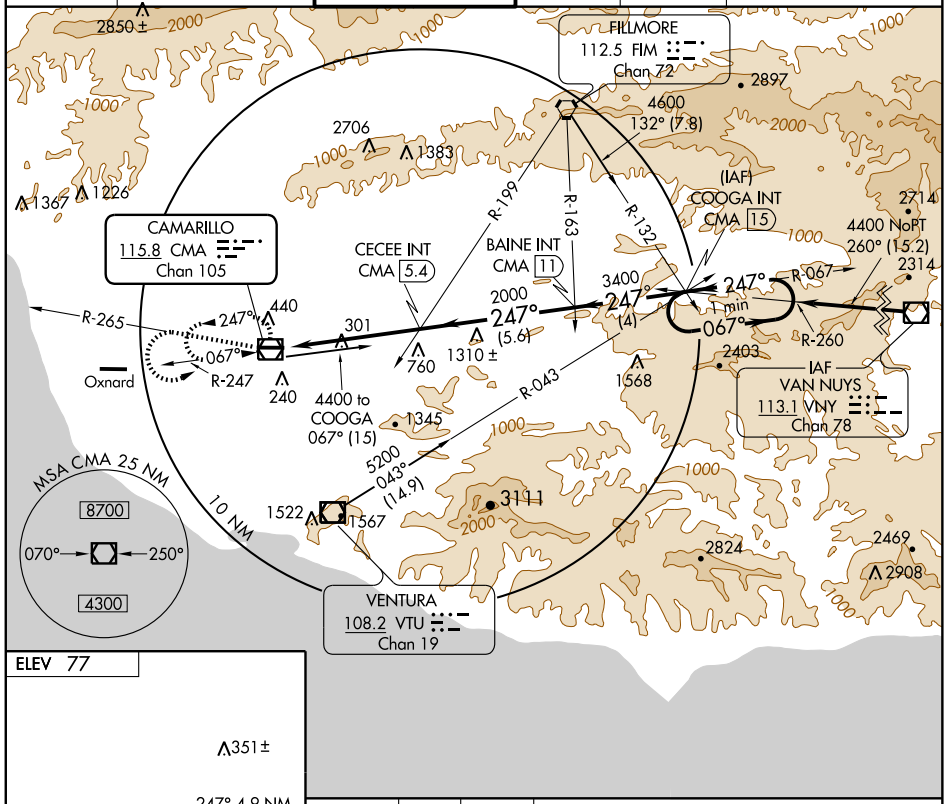
VOR RWY 26

CAMARILLO (CMA)

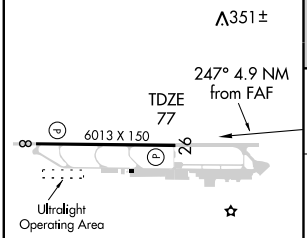
Circling not authorized north of Rwy 8/26.

MISSED APPROACH: Climb to 2000 via CMA R-265 then climbing left turn to 4400 direct CMA VOR/DME and hold.

ATIS	POINT MUGU APP CON ★	CAMARILLO TOWER ★	GND CON	CLNC DEL	POINT MUGU CLNC DEL
126.025	124.7 335.5	128.2 (CTAF) L 269.4	121.8	121.8	120.75 279.55



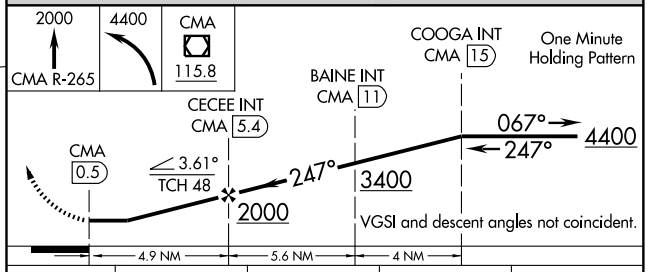
ELEV 77



MIRL Rwy 8-26 L

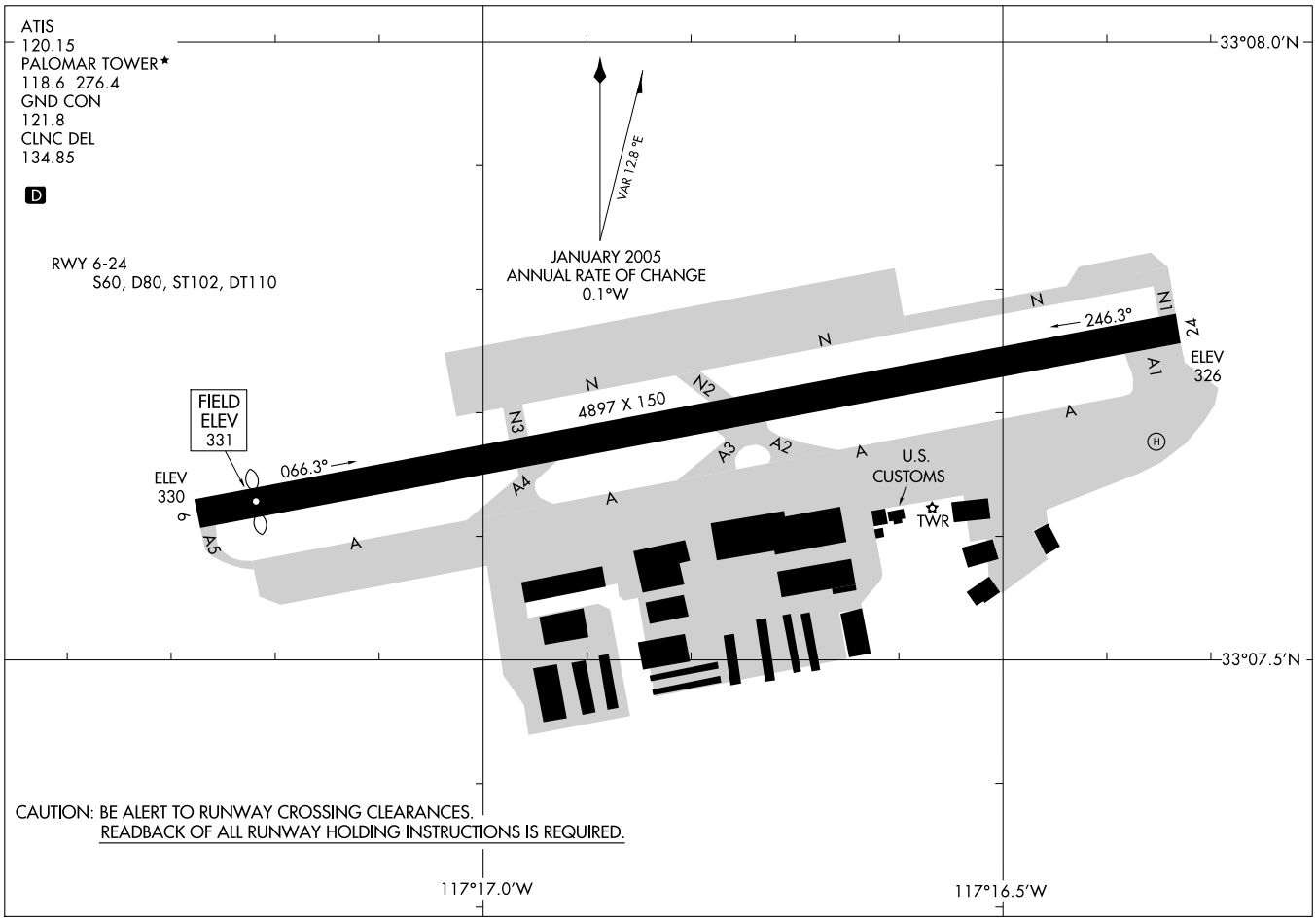
REIL Rwys 8 and 26 L

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-26	1100-1¼ 1023 (1100-1¼)	1100-1½ 1023 (1100-1½)	1100-3 1023 (1100-3)	NA
CIRCLING	1100-1¼ 1023 (1100-1¼)	1100-1½ 1023 (1100-1½)	1100-3 1023 (1100-3)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-5310 (FAA)

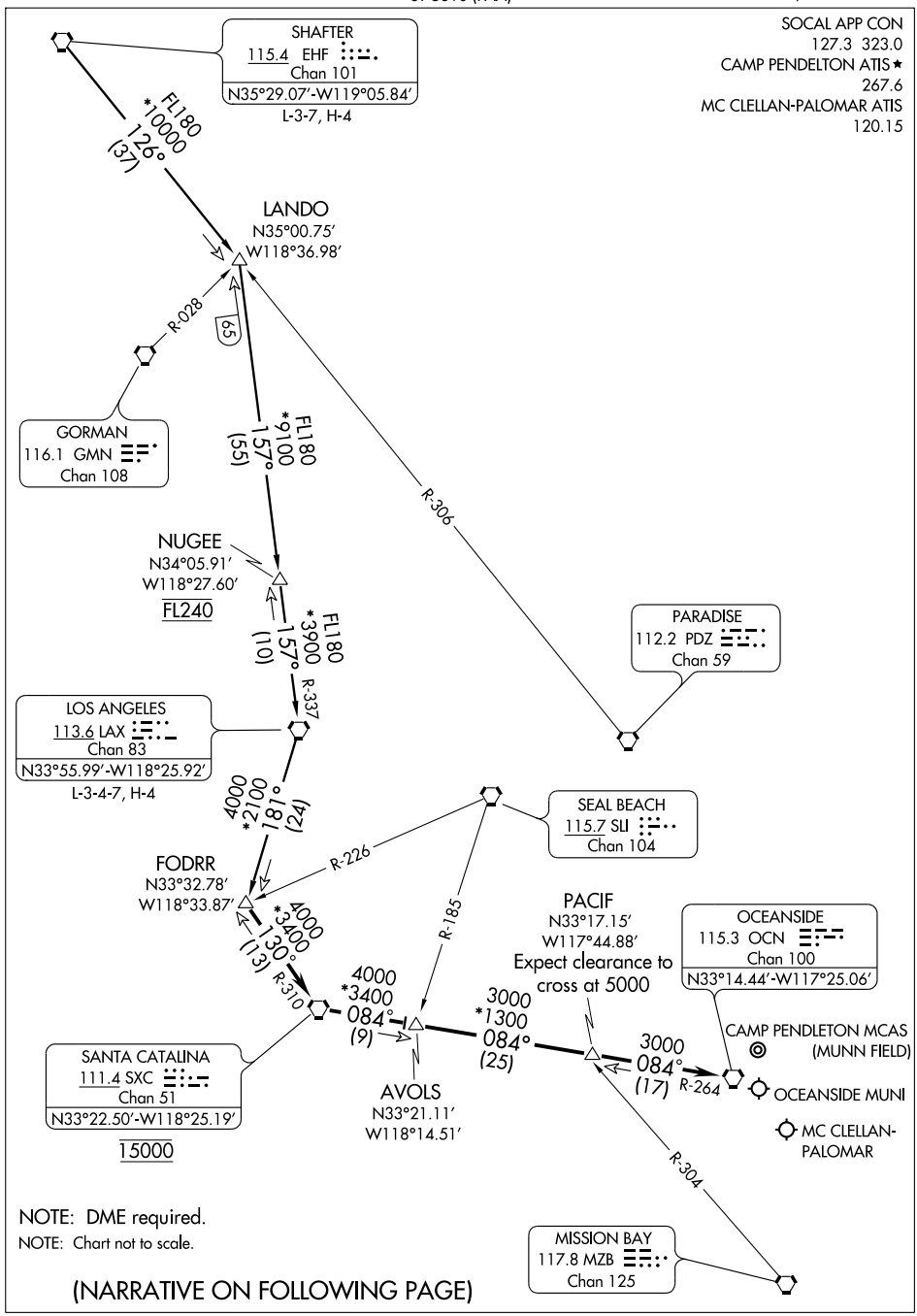
CARLSBAD/MC CLELLAN-PALOMAR (CRQ)

CARLSBAD, CALIFORNIA

FODRR ONE ARRIVAL

ST-5310 (FAA)

CARLSBAD, CALIFORNIA



NOTE: DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-3, 22 OCT 2009 to 19 NOV 2009

ARRIVAL ROUTE DESCRIPTION

LOS ANGELES TRANSITION (LAX.FODRR1): From over LAX VORTAC via LAX R-181 to FODRR INT/DME FIX. Thence....
SHAFTER TRANSITION (EHF.FODRR1): From over EHF VORTAC via EHF R-126 and LAX R-337 to LAX VORTAC, then via LAX R-181 to FODRR INT/DME FIX. Thence....

....From over FODRR INT/DME FIX via SXC R-310 to SXC VORTAC, cross SXC VORTAC at 15000, then via SXC R-084 to AVOLS INT/DME FIX, then via SXC R-084 and OCN R-264 to PACIF INT/DME FIX, then via OCN R-264 to OCN VORTAC. Thence....

....LANDING CARLSBAD/MC CLELLAN-PALOMAR: From over OCN VORTAC expect the ILS or LOC RWY 24 approach.
....LANDING CAMP PENDLETON MCAS (MUNN FIELD): From over OCN VORTAC expect the VOR/DME or TACAN RWY 21 approach.
....LANDING OCEANSIDE MUNI: From over OCN VORTAC expect the VOR-A approach.

SW-3, 22 OCT 2009 to 19 NOV 2009

CARLSBAD, CALIFORNIA

AL-5310 (FAA)

LOC I-CRQ	APP CRS	Rwy Idg	4897
108.7	245°	TDZE	326
		Apt Elev	331

ILS or LOC RWY 24

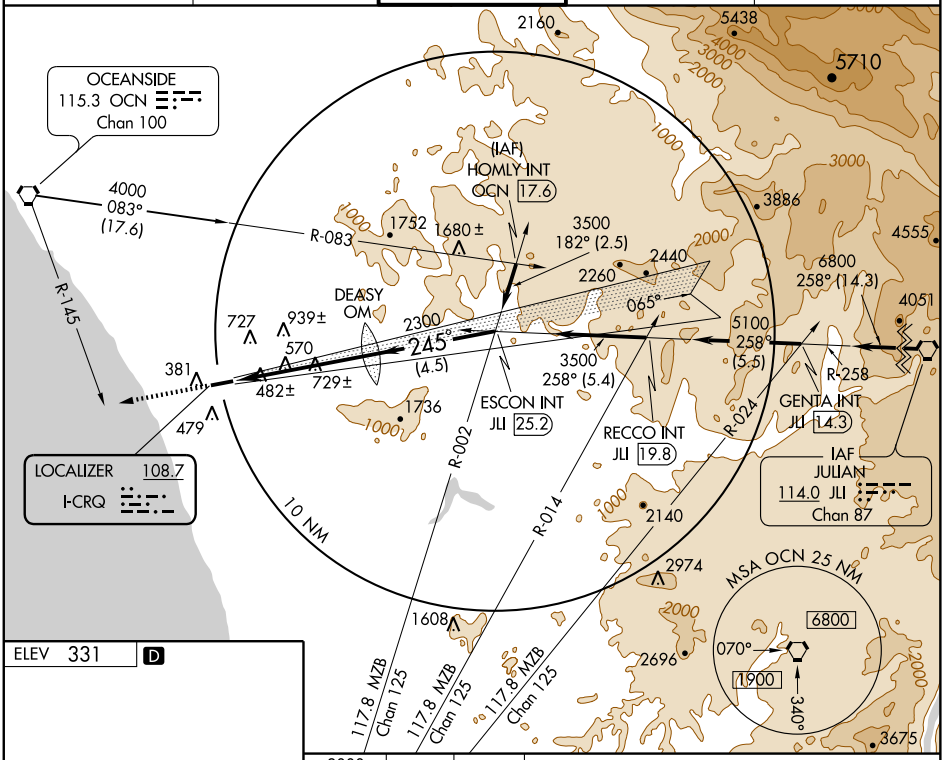
CARLSBAD/MC CLELLAN-PALOMAR (CRQ)

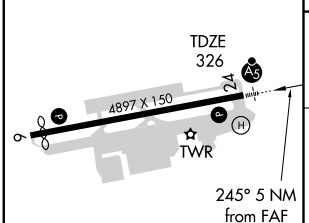
Inoperative table does not apply to S-ILS 24.
For inoperative MALSR increase S-ILS 24 Cat C visibility to RVR 5000. Increase S-LOC 24 Cat A/B visibility to RVR 5000.

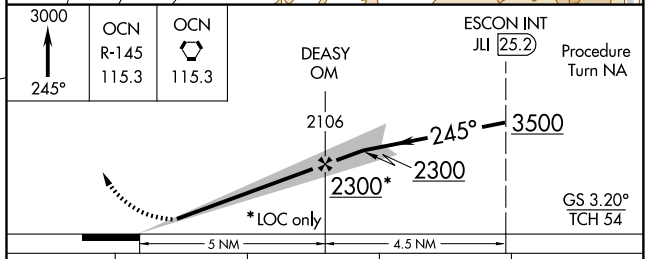
MALSR

MISSED APPROACH: Climb to 3000 via heading 245° and OCN R-145 to OCN VORTAC.

ATIS	SOCAL APP CON	PALOMAR TOWER★	GND CON	CLNC DEL
120.15	127.3 323.0	118.6 (CTAF) L 276.4	121.8	134.85







CATEGORY	A	B	C	D
S-ILS 24	526/40	200 (200-¾)	576/40 250 (300-¾)	NA
S-LOC 24	1000/40	674 (700-¾)	1000-1½ 674 (700-1½)	NA
CIRCLING	1000-1	669 (700-1)	1080-2¼ 749 (800-2¼)	NA

REIL Rwy 24 L
HIRL Rwy 6-24 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-3, 22 OCT 2009 to 19 NOV 2009

CARLSBAD, CALIFORNIA

AL-5310 (FAA)

WAAS	APP CRS	Rwy Idg	4897
CH 65603	245°	TDZE	326
W24A		Apt Elev	331

RNAV (GPS) RWY 24

CARLSBAD/MC CLELLAN-PALOMAR (CRQ)

DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).

MALSR

MISSED APPROACH: Climb to 2000 direct IBUGE WP and hold.

ATIS	SOCAL APP CON	PALOMAR TOWER★	GND CON	CLNC DEL
120.15	127.3 323.0	118.6 (CTAF) L 276.4	121.8	134.85

Procedure NA for arrivals at Oceanside (OCN) VORTAC on V 208-458 westbound.
Procedure NA for arrivals at Mission Bay (MZB) VORTAC on V 66-460 westbound.

OCEANSIDE
OCN
4700
073°
(20)

IBUGE
065°
245°
4 NM

ZUXAX
2.5 NM to
RW24

GUGEC
4.9 NM to
RW24

(IAF)
GAYGE
4100
155° (2.5)

FEBVI
2.5 NM to
KANEC

3800
155° (2.5)

(IF)
KANEC

3100
245°
(6)

(FAF)
JABAL

(IAF)
ICUGA
3800
335°
(5)

RW24
727
381
420±
570
600±
834±
798±
1239±
479
1680±
1635±
1752
1736
2160
5438
3886
2260
2440
2140
2974
2696
1608

MSA RW24 25 NM
7400

5000
019°
(22.1)

MISSION BAY
MZB

ELEV 331 D

245° to
RW24

4897 X 150
TDZE
326
TWR

2000 | IBUGE

*LNAV only

*ZUXAX
2.5 NM to
RW24

*GUGEC
4.9 NM to
RW24

JABAL

KANEC
3800
Procedure
Turn
NA
GS 3.20°
TCH 52

245°
3100

RW24
2060
1240

2.5 NM | 2.4 NM | 3 NM | 6 NM

CATEGORY	A	B	C	D
LPV DA	737/40 411 (500-¾)			NA
LNAV/VNAV DA	1387-2 1061 (1100-2)		1387-3 1061 (1100-3)	NA
LNAV MDA	1100/40 774 (800-¾)		1100-1¾ 774 (800-1¾)	NA
CIRCLING	1100-1 769 (800-1)	1100-1¼ 769 (800-1¼)	1100-2¼ 769 (800-2¼)	NA

REIL Rwy 24 L
HIRL Rwy 6-24 L

SW-3, 22 OCT 2009 to 19 NOV 2009

CARLSBAD, CALIFORNIA

AL-5310 (FAA)

VORTAC OCN 115.3 Chan 100	APP CRS 120°	Rwy Idg N/A TDZE N/A Apt Elev 331

VOR-A

CARLSBAD/MC CLELLAN-PALOMAR (CRQ)

MISSED APPROACH: Climbing right turn to 3000 via heading 180° and MZB R-326 to MZB VORTAC.

ATIS	SOCAL APP CON	PALOMAR TOWER★	GND CON	CLNC DEL
120.15	127.3 323.0	118.6 (CTAF) L 276.4	121.8	134.85

NoPT for arrival on OCN VORTAC airway radial 301.

IAF
OCEANSIDE
115.3 OCN
Chan 100

R-301
R-270
090°
1 min
270°
120°
15 NM
R-326

OCN 7

MSA OCN 25 NM
6800
070°
1900
340°

MISSION BAY
117.8 MZB
Chan 125

3189 2416 4360 4779 5680 5438 2160 1752 1680± 2260 2440 3886 727 570 381 547± 479 1736 2140 2974 1608 2696

ELEV 331 D

120° 9.4 NM from FAF

4897 X 150
TWR

3000 180°	MZB R-326 117.8	MZB 117.8

One Minute Holding Pattern

VORTAC

3000 270° 090° 120° 1300

OCN 7

OCN 9.4

7 NM 2.4 NM

CATEGORY	A	B	C	D
CIRCLING	1300-1¼ 969 (1000-1¼)	1300-1½ 969 (1000-1½)	1300-3 969 (1000-3)	NA
DME MINIMUMS				
CIRCLING	860-1 529 (600-1)	1000-1 669 (700-1)	1080-2¼ 749 (800-2¼)	NA

REIL Rwy 24 L
HIRL Rwy 6-24 L

FAF to MAP 9.4 NM

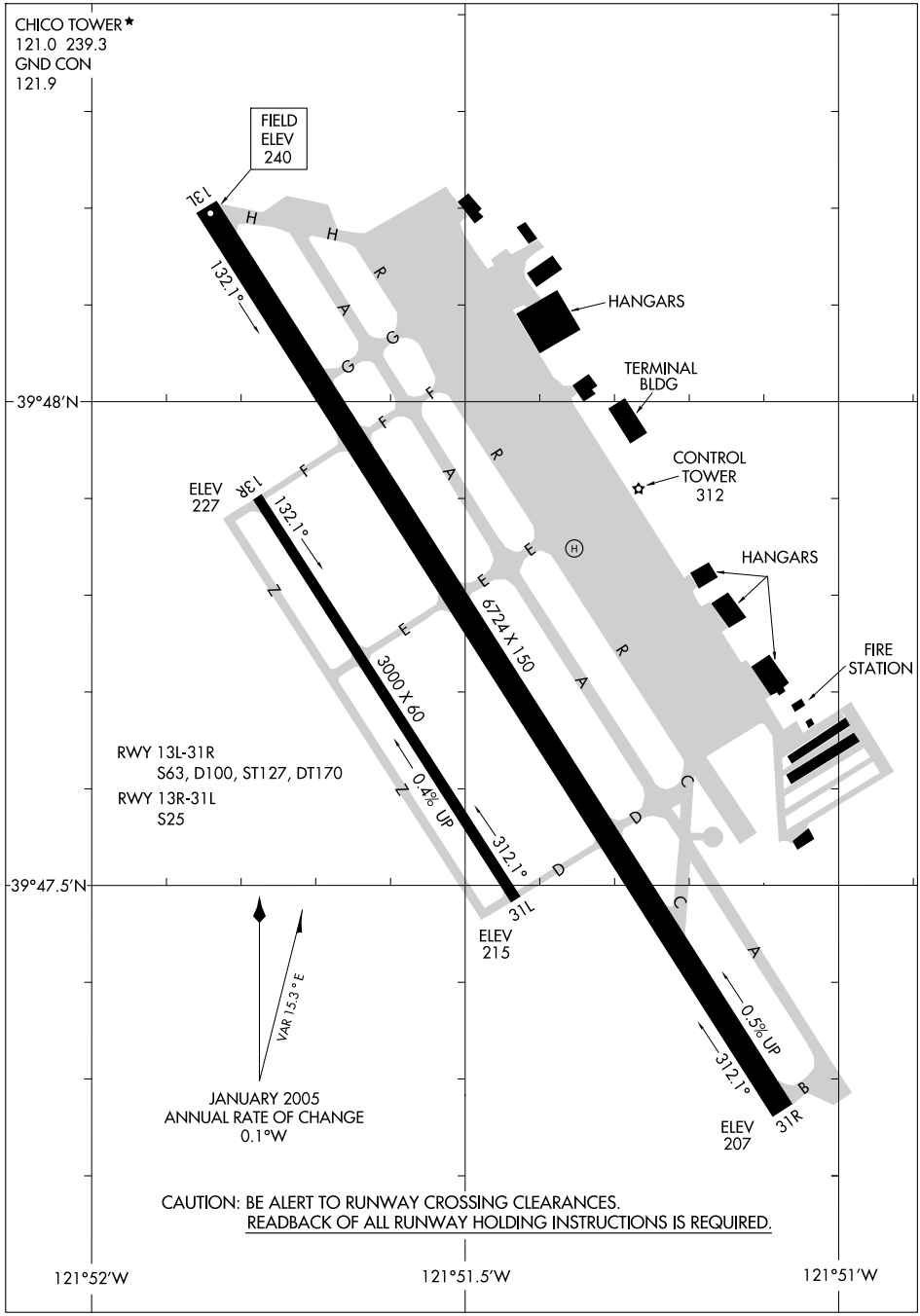
Knots	60	90	120	150	180
Min:Sec	9:24	6:16	4:42	3:46	3:08

SW-3, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-557 (FAA)

CHICO MUNI (CIC)
CHICO, CALIFORNIA

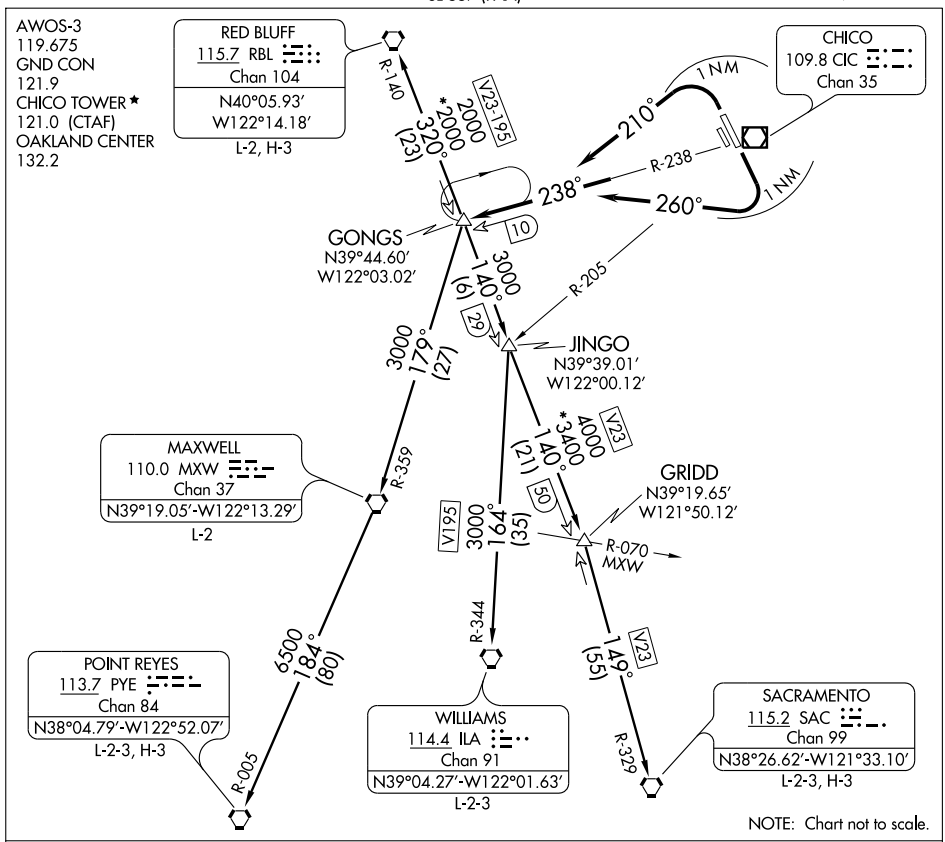


SW-2, 22 OCT 2009 to 19 NOV 2009

GONGS ONE DEPARTURE

SL-557 (FAA)

CHICO MUNI (CIC)
CHICO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13L/R: Turn right heading 260° within 1 NM of take-off; intercept CIC R-238 to GONGS INT. Thence....

TAKE-OFF RUNWAYS 31L/R: Turn left heading 210° within 1 NM of take-off; intercept CIC R-238 to GONGS INT. Thence....

....via (transition) or (assigned route).

MAXWELL TRANSITION (GONGS1.MXW): From over GONGS INT via MXW R-359 to MXW VORTAC.

POINT REYES TRANSITION (GONGS1.PYE): From over GONGS INT via MXW R-359 to MXW VORTAC; then via MXW R-184 and PYE R-005 to PYE VORTAC.

RED BLUFF TRANSITION (GONGS1.RBL): From over GONGS INT via RBL R-140 to RBL VORTAC.

SACRAMENTO TRANSITION (GONGS1.SAC): From over GONGS INT via V23 and SAC R-329 to SAC VORTAC.

WILLIAMS TRANSITION (GONGS1.ILA): From over GONGS INT via RBL R-140 and V195 to ILA VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-CIC	APP CRS	Rwy Idg	6724
111.3	131°	TDZE	240
		Apt Elev	240

ILS or LOC/DME RWY 13L

CHICO MUNI (CIC)

Circling NA east of Rwy 13L/31R. DME from CIC VOR/DME. Simultaneous reception of I-CIC and CIC DME required. Visibility reduction by helicopters NA. When local altimeter setting not received, use Red Bluff Muni altimeter setting and increase all DA 81 feet and all MDA 100 feet. Inoperative table does not apply when using Chico Muni altimeter setting. For inoperative MALSR, when using Red Bluff Muni altimeter setting S-LOC R13L Cat A/B inoperative table does not apply, for Cat C increase visibility ¼ mile.

MALSR

MISSED APPROACH: Climb to 3600 via CIC VOR/DME R-133 to UNJED/ CIC 11.4 DME and hold, continue climb-in-hold.

AWOS-3	OAKLAND CENTER	CHICO TOWER ★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95

Procedure NA for arrivals on Red Bluff VORTAC airway radials 122 CW 161.

IAF RED BLUFF 115.7 RBL Chan 104

3000 NoPT 105° (11.8)

311°

(IF) ZOTWY CIC 14.6 RBL 11.8

R-105

086° 266°

2700 131° (6.1)

131°

(IAF) NORDE CIC 8.5

CUBUN CIC 3.6

3600 to NORDE 310° (8.5)

324±

CHICO 109.8 CIC Chan 35

LOCALIZER 111.3 I-CIC

15 NM

MSA CIC 25 NM 130° 310° 8300 2600

R-133

3600 (11.4) 313° 133° 313°

UNJED CIC 11.4

R-133

DME REQUIRED

7087 6040 5080 5778 3995 2150 2961 4340± 1815 1688 1353 3005

1000 3000 5000

ELEV 240

286±

131° 7.4 NM from FAF

TDZE 240

13L 13R

TWR 312

6724 X 150

3000 X 60

0.4% UP

0.5% UP

31L 31R

Remain within 10 NM

NORDE CIC 8.5

311°

3600

131°

2700

CUBUN CIC 3.6

CIC 1.1

2700

*1080

GS 3.00° TCH 52

4.9 NM 2.5 NM

3600 CIC R-133

UNJED CIC 11.4

* LOC only

CATEGORY	A	B	C	D
S-ILS 13L	490-1 250 (300-1)			
S-LOC 13L	580-1 340 (400-1)			
CIRCLING	640-1 400 (400-1)	700-1 460 (500-1)	700-1½ 460 (500-1½)	800-2 560 (600-2)

REIL Rwy 31R

HIRL Rwy 13L-31R L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 65912 W13A	APP CRS 131°	Rwy Idg 6724 TDZE 240 Apt Elev 240

RNAV (GPS) RWY 13L

CHICO MUNI (CIC)

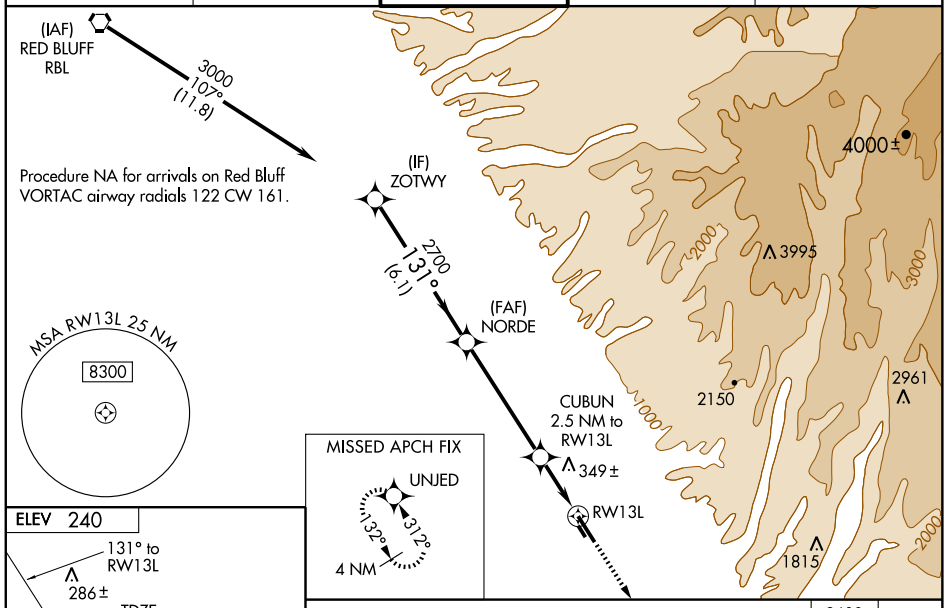
T NA

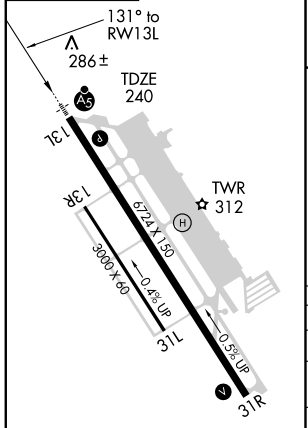
Inoperative table does not apply to LPV and LNAV Cats A/B/C. For inoperative MALSR, increase LNAV Cat D visibility to 1¼. Circling NA east of Rwy 13L/31R. Baro-VNAV NA when using Red Bluff altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Red Bluff Muni altimeter setting and increase all DA 81 feet, and all MDA 100 feet, increase LNAV/VNAV all Cats visibility ¼ mile. For inoperative MALSR when using Red Bluff altimeter setting, LNAV Cats A/B inoperative table does not apply, increase Cat C visibility ¼ mile.

MALSR

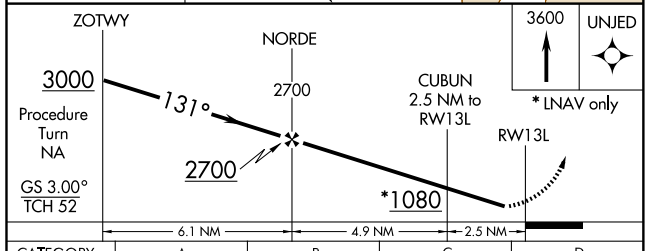
MISSED APPROACH: Climb to 3600 direct UNJED and hold, continue climb-in-hold to 3600.

AWOS-3	OAKLAND CENTER	CHICO TOWER ★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95





REIL Rwy 31R
HIRL Rwy 13L-31R L



CATEGORY	A	B	C	D
LPV DA	536-1	296 (300-1)		
LNAV/VNAV DA	648-1	408 (500-1)		
LNAV MDA	600-1	360 (400-1)		
CIRCLING	640-1 400 (500-1)	700-1 460 (500-1)	700-1½ 460 (500-1½)	800-2 560 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	6724
CH 77912	311°	TDZE	226
W31A		Apt Elev	240

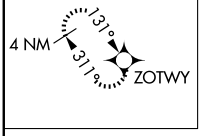
RNAV (GPS) RWY 31R
CHICO MUNI (CIC)

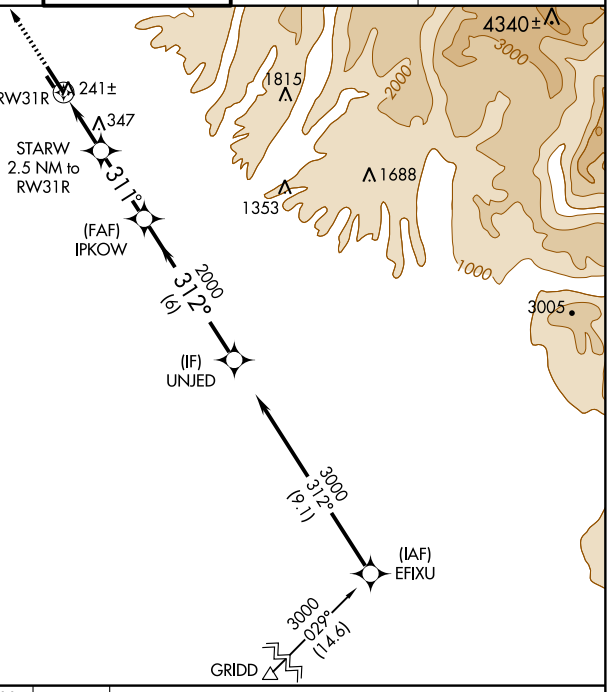
Circling NA east of Rwy 13L/31R. Baro-VNAV NA when using Red Bluff altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Red Bluff altimeter setting and increase all DA 81 feet and MDA 100 feet and increase LPV visibility all Cats ¼ mile, visibility LNAV/VNAV all Cats ½ mile and visibility LNAV Cats C/D ¼ mile. VDP NA when using Red Bluff altimeter setting.

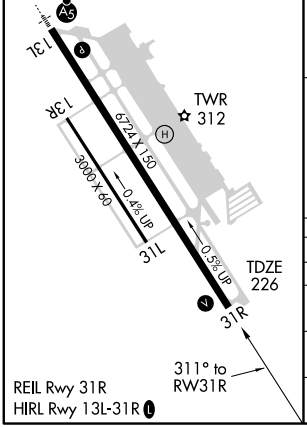
MISSED APPROACH: Climb to 3000 direct ZOTWY and hold.

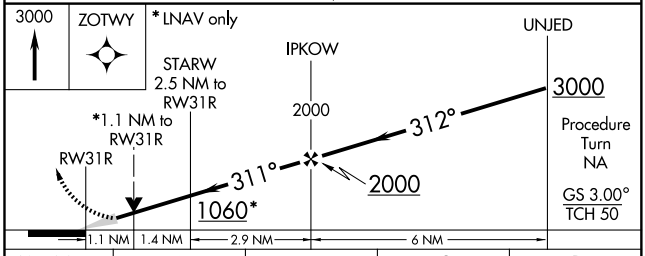
AWOS-3	OAKLAND CENTER	CHICO TOWER★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95

MISSED APCH FIX









CATEGORY	A	B	C	D
LPV DA	476-1 250 (300-1)			
LNAV/VNAV DA	733-1¾ 507 (500-1¾)			
LNAV MDA	600-1 374 (400-1)			600-1¼ 374 (400-1¼)
CIRCLING	640-1 400 (400-1)	700-1 460 (500-1)	700-1½ 460 (500-1½)	800-2 560 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME CIC	APP CRS	Rwy Idg	6724
109.8	122°	TDZE	238
Chan 35		Apt Elev	238

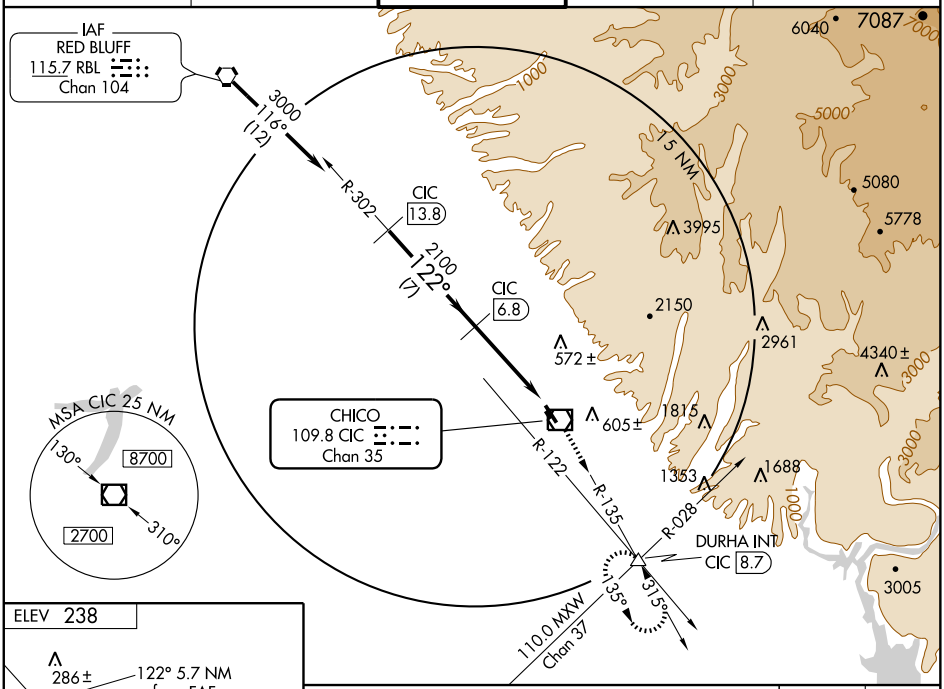
VOR/DME RWY 13L
CHICO MUNI (CIC)

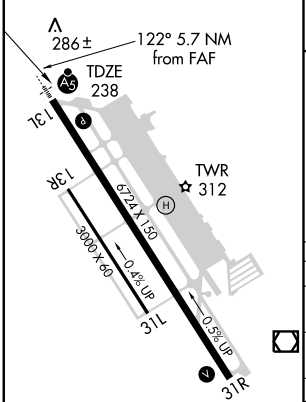
Circling not authorized east of Rwy 13L-31R.
When control tower closed, except for operators with approved weather reporting service, use Red Bluff altimeter setting.
Local altimeter setting minimums: for inoperative MALSR, increase S-13L Cat. D visibility to 1¼ .
VDP NA when using Red Bluff altimeter setting.

MALSR

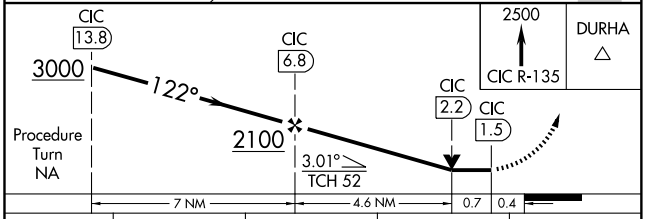
MISSED APPROACH: Climb to 2500 via CIC R-135 to DURHA INT/CIC 8.7 DME and hold.

AWOS-3	OAKLAND CENTER	CHICO TOWER ★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95





REIL Rwy 31R
HIRL Rwy 13L-31R L



CATEGORY	A	B	C	D
S-13L	640-½ 402 (500-½)		640-¾ 402 (500-¾)	640-1 402 (500-1)
CIRCLING	640-1 402 (500-1)	700-1 462 (500-1)	700-1½ 462 (500-1½)	800-2 562 (600-2)
RED BLUFF ALTIMETER SETTING MINIMUMS				
S-13L	780-½ 542 (600-½)		780-1 542 (600-1)	780-1¼ 542 (600-1¼)
CIRCLING	780-1 542 (600-1)		780-1½ 542 (600-1½)	800-2 562 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

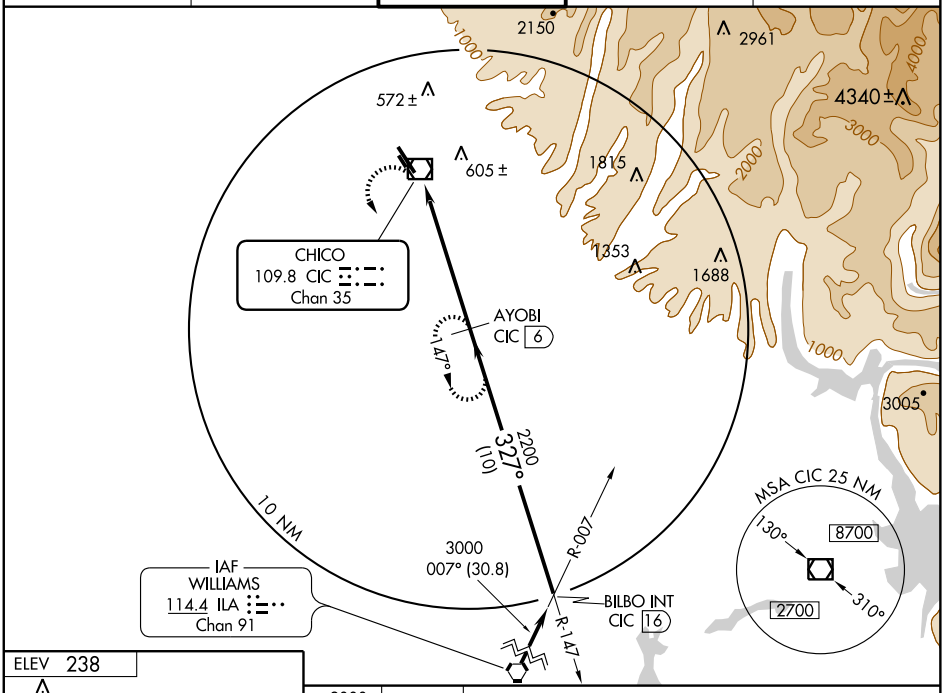
VOR/DME CIC	APP CRS	Rwy Idg	6724
109.8	327°	TDZE	224
Chan 35		Apt Elev	238

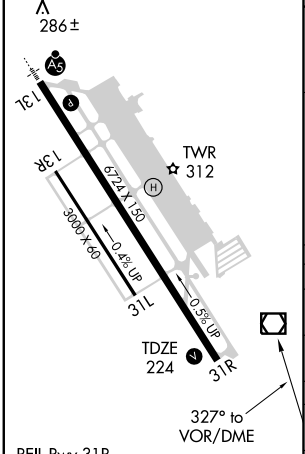
VOR/DME RWY 31R
CHICO MUNI (CIC)

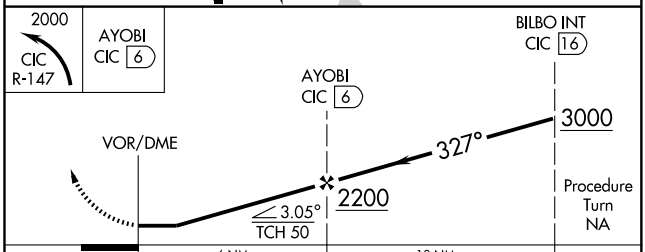
Circling not authorized east of Rwy 13L-31R.
When control tower closed, except for operators with approved weather reporting service, use Red Bluff altimeter setting.

MISSED APPROACH: Climbing left turn to 2000 via CIC R-147 to AYOBI/6 DME and hold.

AWOS-3	OAKLAND CENTER	CHICO TOWER ★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95







CATEGORY	A	B	C	D
S-31R	760-1	536 (600-1)	760-1½ 536 (600-1½)	760-1¾ 536 (600-1¾)
CIRCLING	760-1	522 (600-1)	760-1½ 522 (600-1½)	800-2 562 (600-2)
RED BLUFF ALTIMETER SETTING MINIMUMS				
S-31R	840-1	616 (700-1)	840-1¾ 616 (700-1¾)	840-2 616 (700-2)
CIRCLING	840-1	602 (700-1)	840-1¾ 602 (700-1¾)	840-2 602 (700-2)

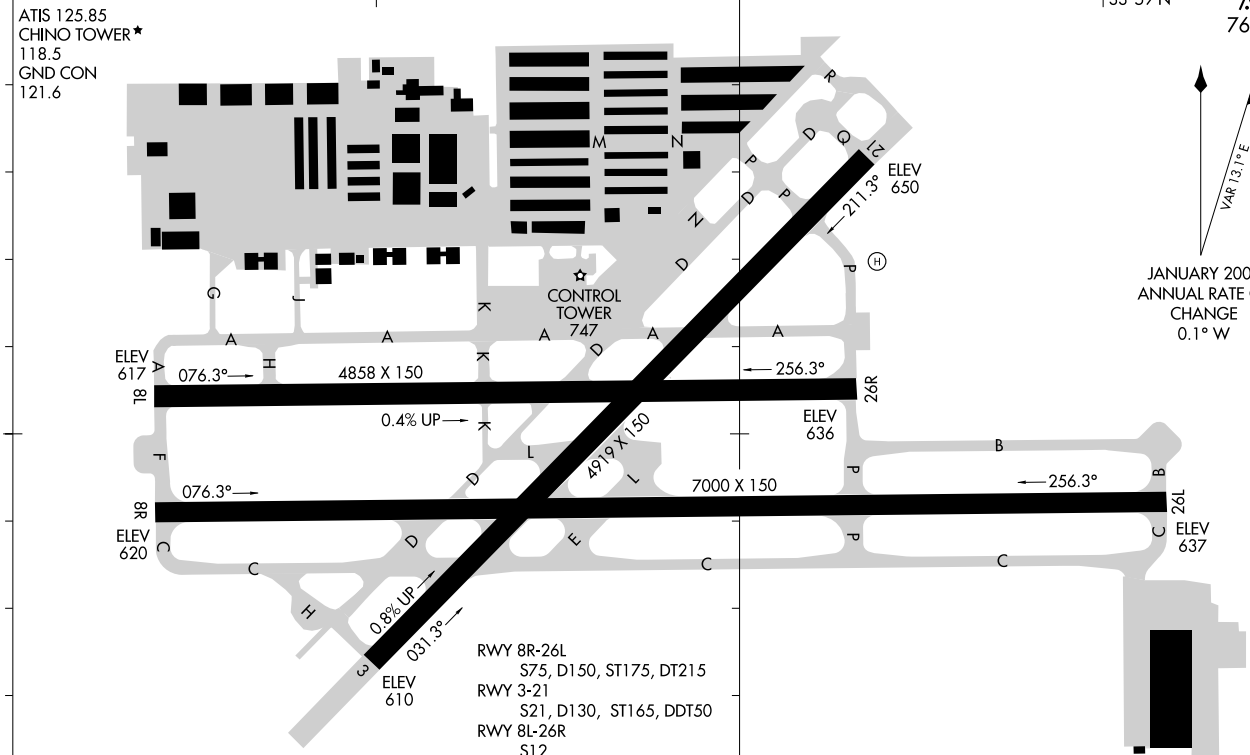
SW-2, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-5599 (FAA)

CHINO (CNO)

CHINO, CALIFORNIA

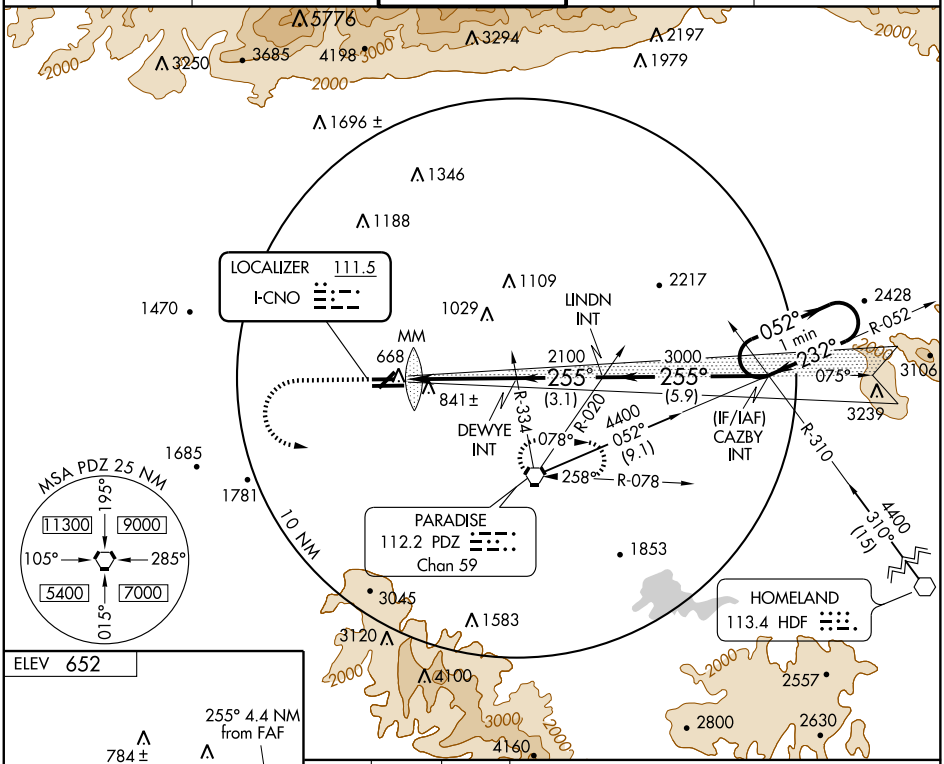


LOC I-CNO	APP CRS	Rwy Idg	4858
111.5	255°	TDZE	636
		Apt Elev	652

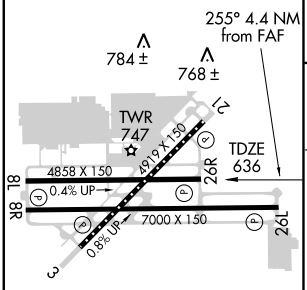
ILS or LOC RWY 26R
CHINO (CNO)

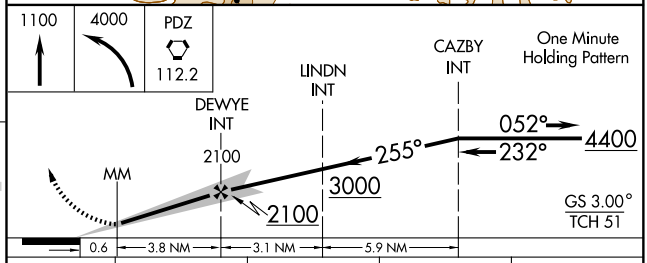
MISSED APPROACH: Climb to 1100 then climbing left turn to 4000 direct PDZ VORTAC and hold.

ATIS	SOCAL APP CON	CHINO TOWER ★	GND CON	UNICOM
125.85	135.4 377.125	118.5 (CTAF)	121.6	122.95



ELEV 652





REIL Rwys 3 and 21
MIRL Rwys 3-21 and 8R-26L
HIRL Rwy 8L-26R

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

CATEGORY	A	B	C	D
S-ILS 26R	886-¾ 250 (300-¾)			
S-LOC 26R	1060-1 424 (500-1)		1060-1¼ 424 (500-1¼)	
CIRCLING	1180-1 528 (600-1)		1180-1½ 528 (600-1½)	1220-2 568 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS CH 97320 W26A	APP CRS 255°	Rwy Idg 4858 TDZE 636 Apt Elev 652

RNAV (GPS) RWY 26R
CHINO (CNO)

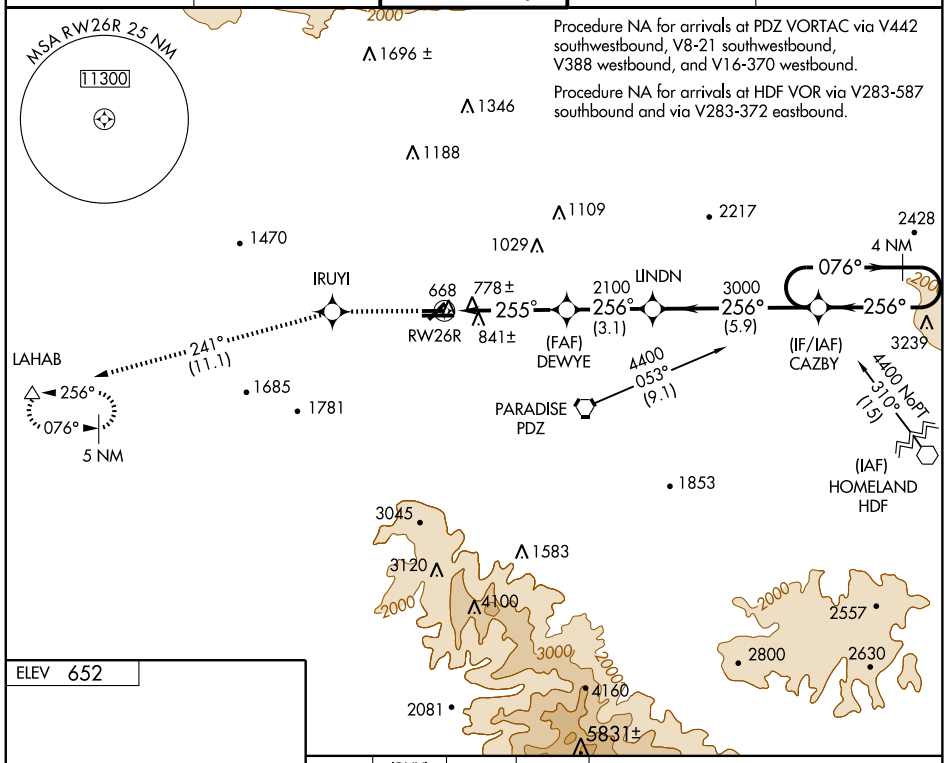
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP- 0.3 NA.

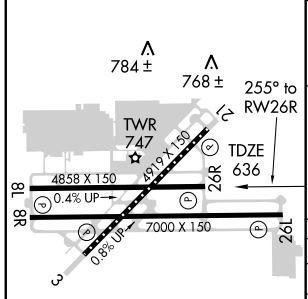
MISSED APPROACH: Climb to 4000 direct IRUYI and via 241° track to LAHAB and hold.

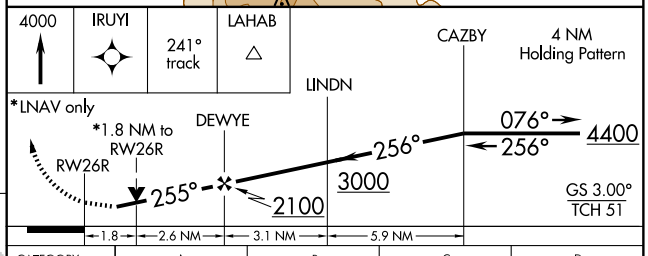
ATIS	SOCAL APP CON	CHINO TOWER★	GND CON	UNICOM
125.85	135.4 377.125	118.5 (CTAF) L	121.6	122.95

Procedure NA for arrivals at PDZ VORTAC via V442 southwestbound, V8-21 southwestbound, V388 westbound, and V16-370 westbound.

Procedure NA for arrivals at HDF VOR via V283-587 southbound and via V283-372 eastbound.



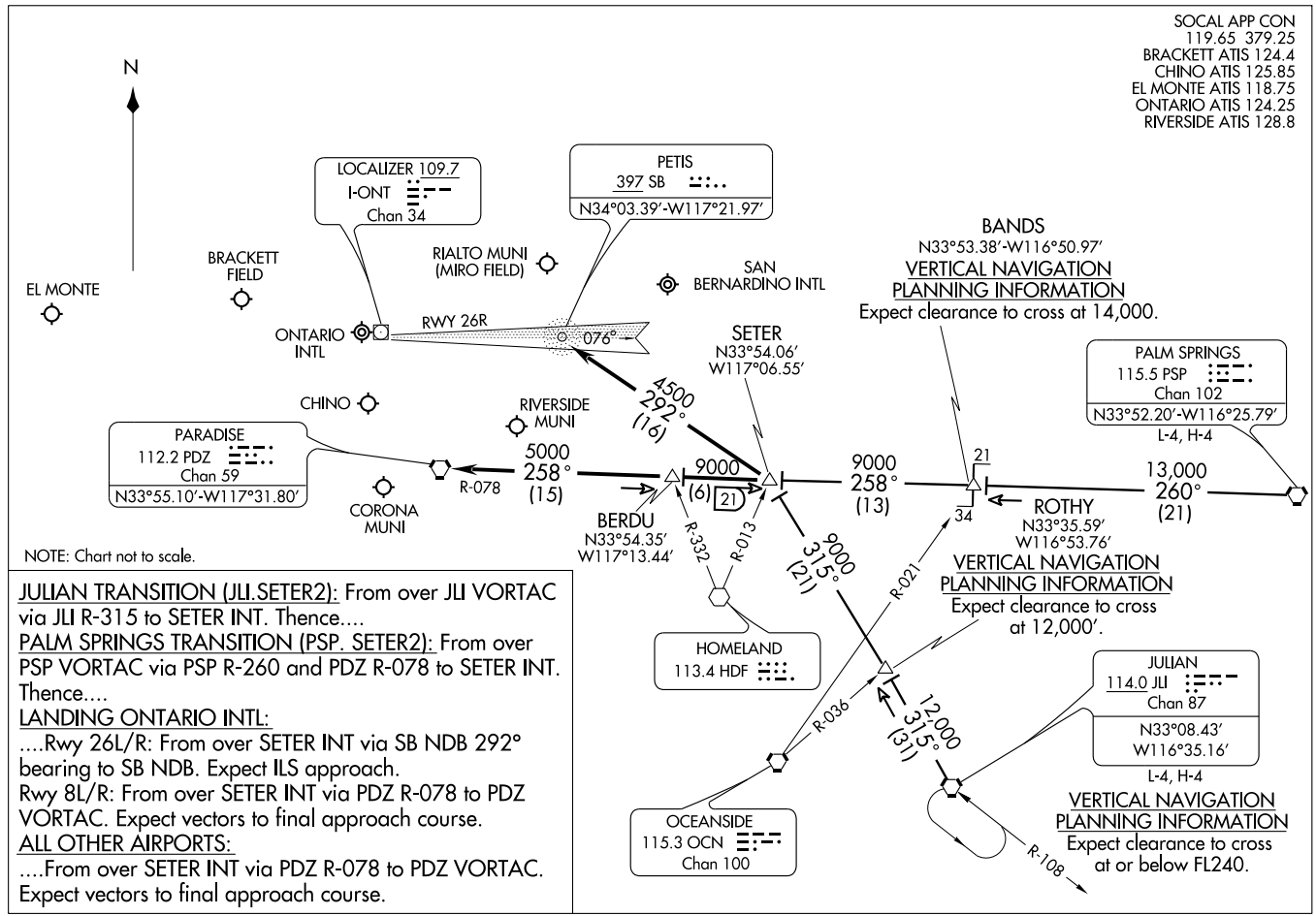




CATEGORY	A	B	C	D
LPV DA	1030-1¼ 394 (400-1¼)			
LNAV/VNAV DA	1117-2 541 (600-2)			
LNAV MDA	1260-1 624 (700-1)		1260-1¾ 624 (700-1¾)	1260-2 624 (700-2)
CIRCLING	1260-1¾ 608 (700-1¾)			1260-2 608 (700-2)

REIL Rwys 3 and 21
MIRL Rwys 3-21 and 8R-26L
HIRL Rwy 8L-26R

SW-3, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

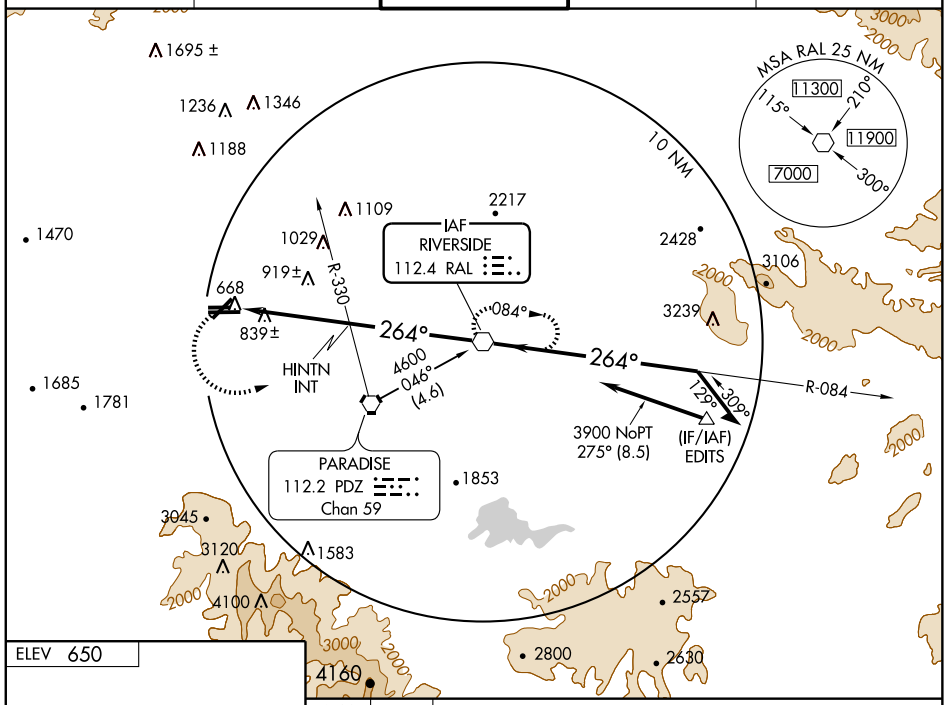
VOR RWY 26R
CHINO (CNO)

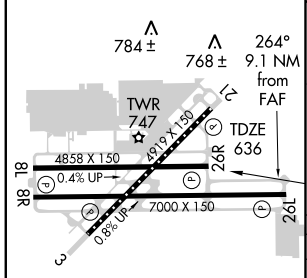
VOR RAL	APP CRS	Rwy Idg	4858
112.4	264°	TDZE	636
		Apt Elev	650

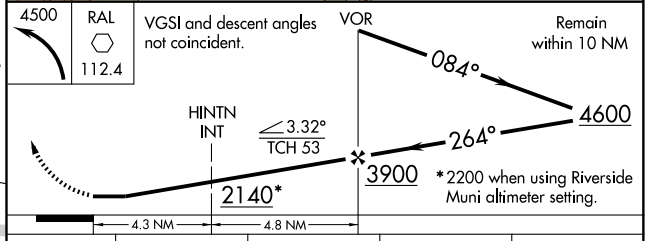
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Riverside Muni altimeter setting and increase all MDA 60 feet, increase HINTN FIX minimums S-26R and circling Cat B, C, and D visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 4500 direct RAL VOR and hold, continue climb-in-hold to 4500.

ATIS	SOCAL APP CON	CHINO TOWER★	GND CON	UNICOM
125.85	135.4 377.125	118.5 (CTAF)	121.6	122.95







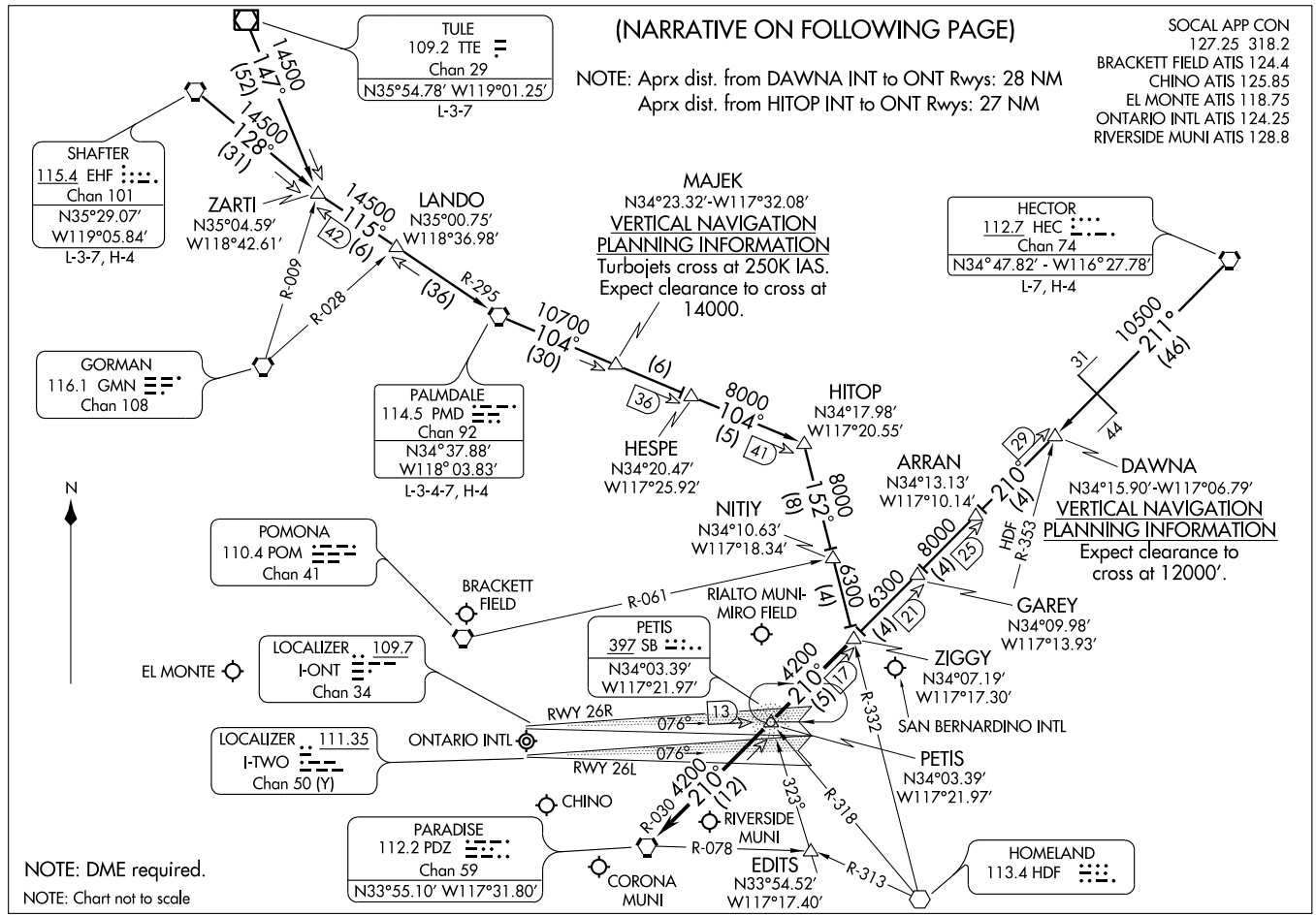
REIL Rwys 3 and 21
MIRL Rwys 3-21 and 8R-26L
HIRL Rwy 8L-26R

FAF to MAP 9.1 NM

Knots	60	90	120	150	180
Min:Sec	9:06	6:04	4:33	3:38	3:02

CATEGORY	A	B	C	D
S-26R	2140-1¼ 1504 (1500-1¼)	2140-1½ 1504 (1500-1½)	2140-3 1504 (1500-3)	
CIRCLING	2140-1¼ 1490 (1500-1¼)	2140-1½ 1490 (1500-1½)	2140-3 1490 (1500-3)	
HINTN FIX MINIMUMS				
S-26R	1320-1 684 (700-1)		1320-2 684 (700-2)	1320-2¼ 684 (700-2¼)
CIRCLING	1320-1 670 (700-1)		1320-2 670 (700-2)	1320-2¼ 670 (700-2¼)

SW-3, 22 OCT 2009 to 19 NOV 2009



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009

CLOVERDALE, CALIFORNIA

AL-9503 (FAA)

RNAV (GPS) RWY 32

CLOVERDALE MUNI (O60)

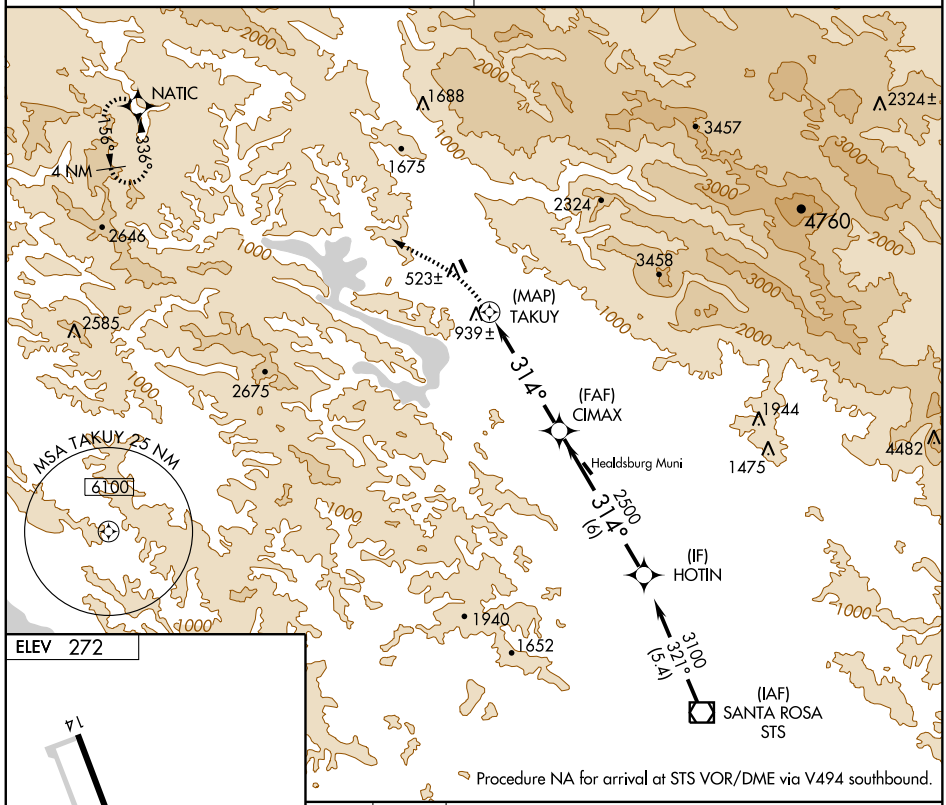
APP CRS	Rwy Idg	2645
314°	TDZE	271
	Apt Elev	272

Use Santa Rosa/Charles M. Schulz-Sonoma Co. altimeter setting; when not received procedure NA.
Procedure NA at night. Circling NA east of Rwy 14-32
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

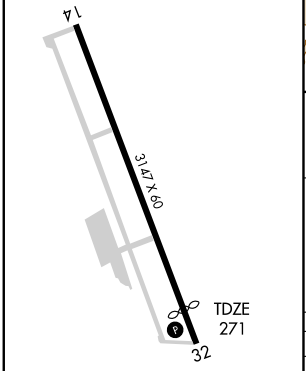
NA

MISSED APPROACH: Climbing left turn to 6000 direct NATIC WP and hold.

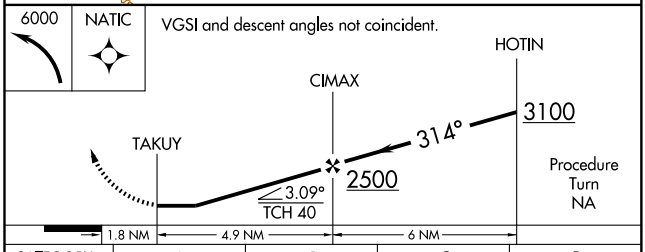
OAKLAND CENTER	UNICOM
127.8 353.5	122.8 (CTAF) L



ELEV 272



MIRL Rwy 14-32 L

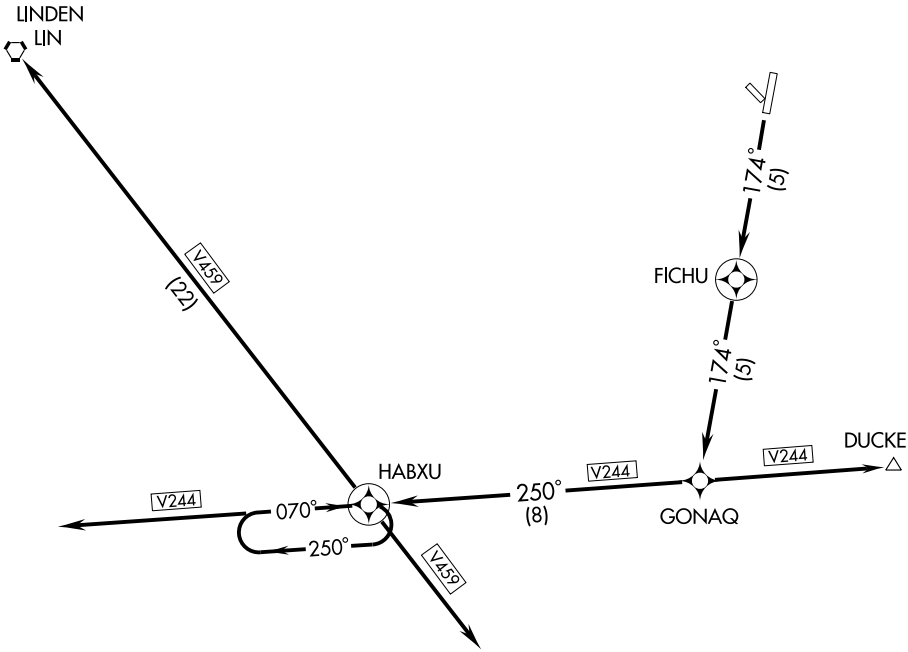


CATEGORY	A	B	C	D
LNAV MDA	1440-2	1169 (1200-2)	1440-3 1169 (1200-3)	NA
CIRCLING	1440-2	1168 (1200-2)	1640-3 1368 (1400-3)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

FICHU ONE DEPARTURE (RNAV) (OBSTACLE)

NORCAL DEP CON
(N) 123.7 338.25
(W) 125.1 363.2
OAKLAND CENTER
(E) 126.85 322.55
RANCHO MURIETA RADIO
122.3



NOTE: Runway 17: 300-1 with a climb rate of 300' per NM to 3000'.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Climb to 4000 via 174° course to FICHU WP, 174° course to GONAQ WP, 250° course to HABXU WP; Aircraft V-459 southeast, northwest and V-244 westbound proceed on course; Aircraft departing V-244 eastbound climb in HABXU WP holding pattern to 8000, Then proceed on course.

TAKE-OFF RUNWAY 35: Not authorized.

SW-2, 22 OCT 2009 to 19 NOV 2009

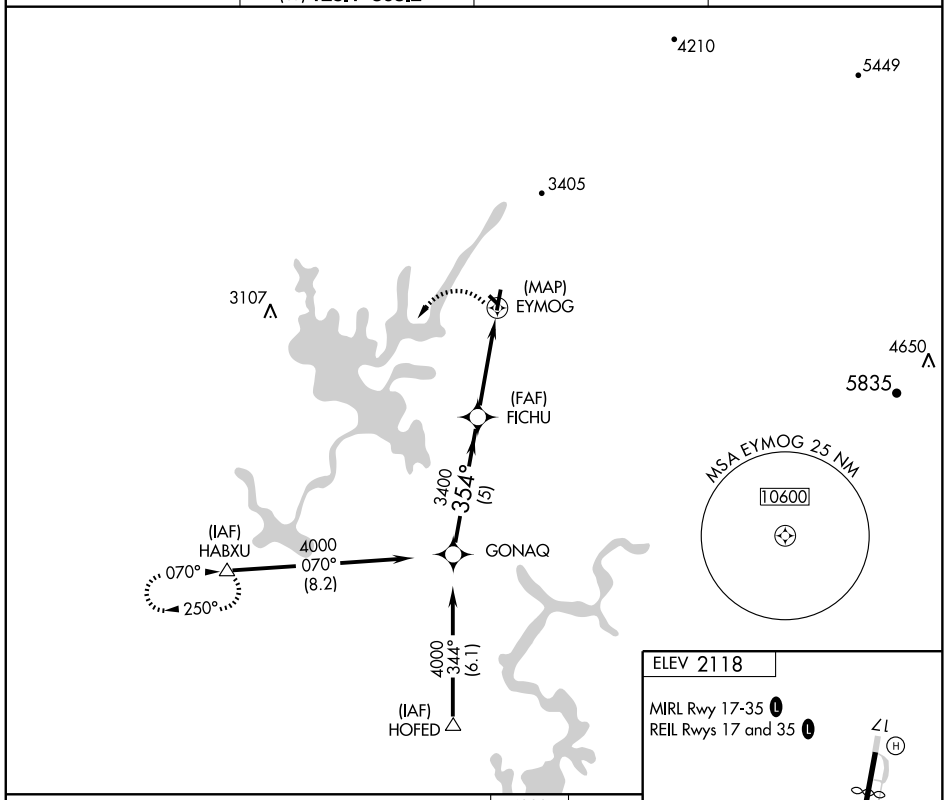
APP CRS		
354°	Rwy Idg	4286
	TDZE	2103
	Apt Elev	2118

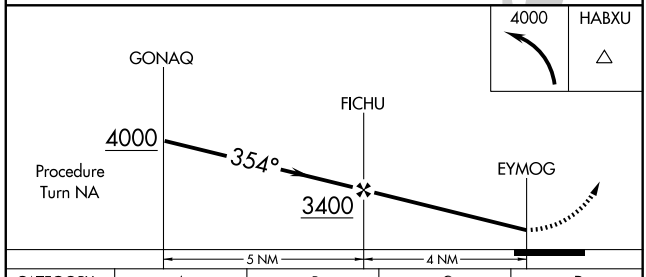
GPS RWY 35
COLUMBIA (O22)

T
NA If local altimeter setting not received, procedure not authorized. Circling not authorized east of Rwy 17-35.

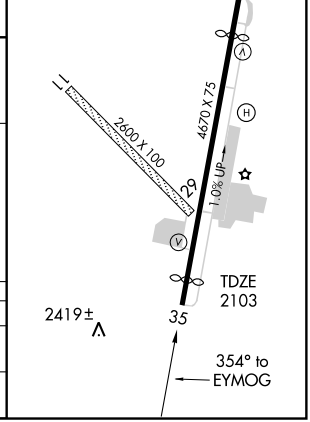
MISSED APPROACH: Climbing left turn to 4000 direct HABXU WP and hold.

AWOS-3	NORCAL APP CON	OAKLAND CENTER	UNICOM
124.65	(N) 123.7 338.25 (W) 125.1 363.2	(E) 126.85 322.55	122.975 (CTAF) L





CATEGORY	A	B	C	D
S-35	2800-1 697 (700-1)		2800-2 697 (700-2)	NA
CIRCLING	2800-1 682 (700-1)	2840-1 722 (800-1)	2840-2 722 (800-2)	NA



SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3035
134°	TDZE	50
	Apt Elev	50

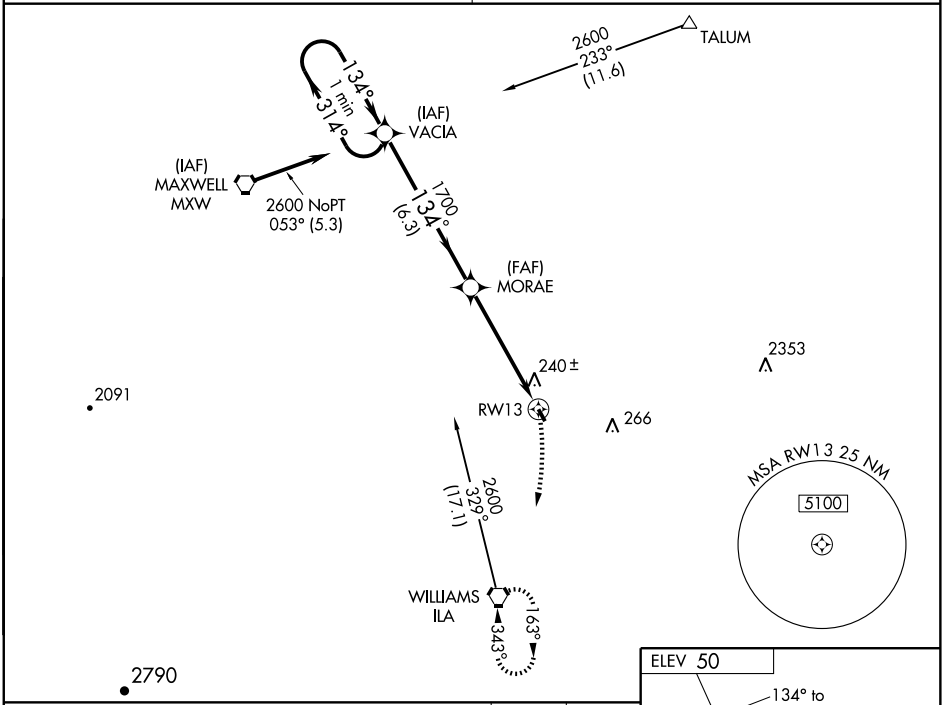
GPS RWY 13
COLUSA COUNTY (0Ø8)

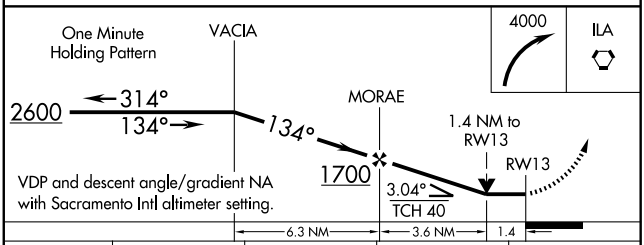
T
NA

Obtain local altimeter setting on CTAF; when not received, use Sacramento Intl altimeter setting.

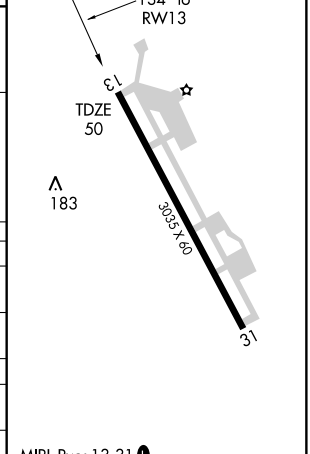
MISSED APPROACH: Climbing right turn to 4000 direct ILA VORTAC and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	**122.8** (CTAF) L





CATEGORY	A	B	C	D
S-13	540-1	490 (500-1)	540-1¼ 490 (500-1¼)	NA
CIRCLING	600-1	550 (600-1)	600-1½ 550 (600-1½)	NA
SACRAMENTO ALTIMETER SETTING MINIMUMS				
S-13	640-1	590 (600-1)	640-1½ 590 (600-1½)	NA
CIRCLING	680-1	630 (700-1)	680-1¾ 630 (700-1¾)	NA



MIRL Rwy 13-31 L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3035
314°	TDZE	50
	Apt Elev	50

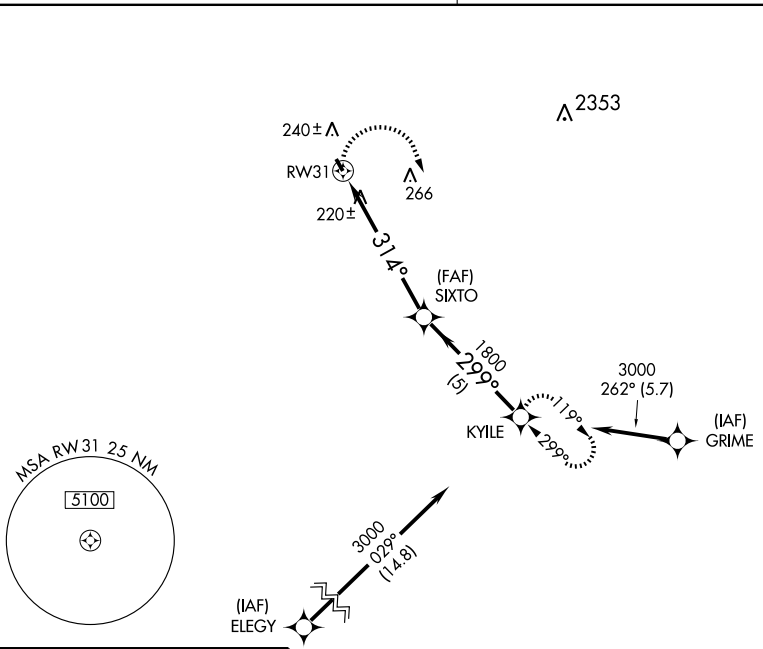
GPS RWY 31
COLUSA COUNTY (0Ø8)

T
A NA

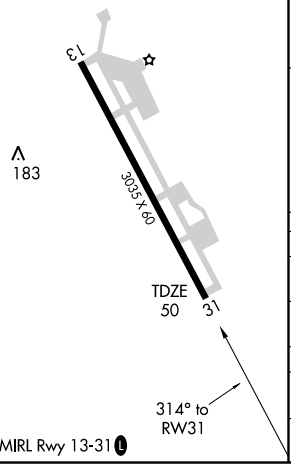
Obtain local altimeter setting on CTAF; when not received, use Sacramento Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 4000 direct to KYILE WP and hold.

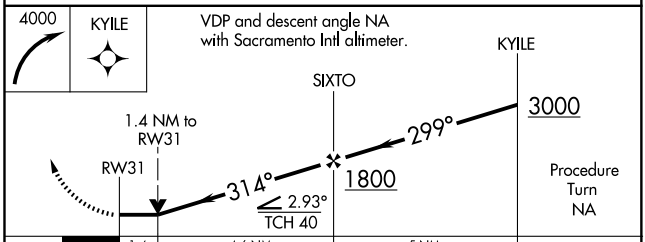
OAKLAND CENTER	UNICOM
132.2 350.3	**122.8** (CTAF) L



ELEV 50



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-31	520-1	470 (500-1)	520-1¼ 470 (500-1¼)	NA
CIRCLING	600-1	550 (600-1)	600-1½ 550 (600-1½)	NA
SACRAMENTO INTL ALTIMETER SETTING MINIMUMS				
S-31	620-1	580 (600-1)	620-1½ 580 (600-1½)	NA
CIRCLING	680-1	630 (700-1)	680-1¾ 630 (700-1¾)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC ILA	APP CRS	Rwy Idg	N/A
114.4	356°	TDZE	N/A
Chan 91		Apt Elev	50

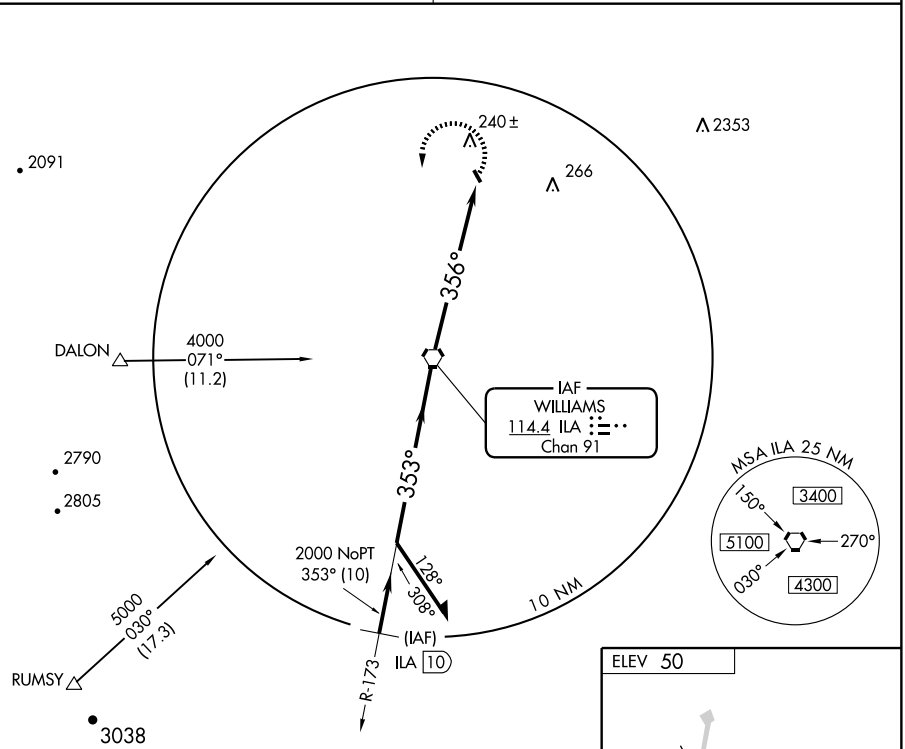
VOR-A
COLUSA COUNTY (Ø08)

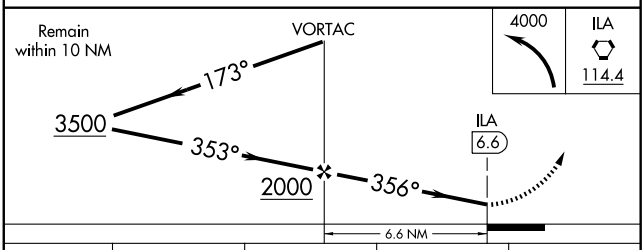
NA

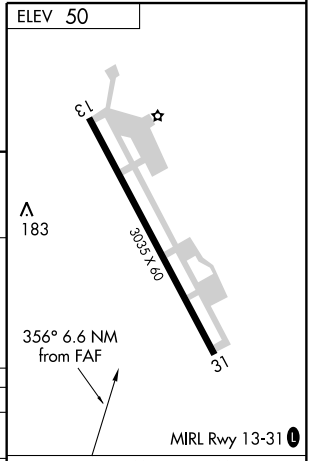
Obtain local altimeter setting on CTAF; when not received, use Sacramento Intl altimeter setting.

MISSED APPROACH: Climbing left turn to 4000 direct ILA VORTAC.

OAKLAND CENTER	UNICOM
132.2 350.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	600-1 550 (600-1)		NA	

SACRAMENTO INTL ALTIMETER SETTING MINIMUMS

CIRCLING	680-1 630 (700-1)	NA

FAF to MAP 6.6 NM

Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

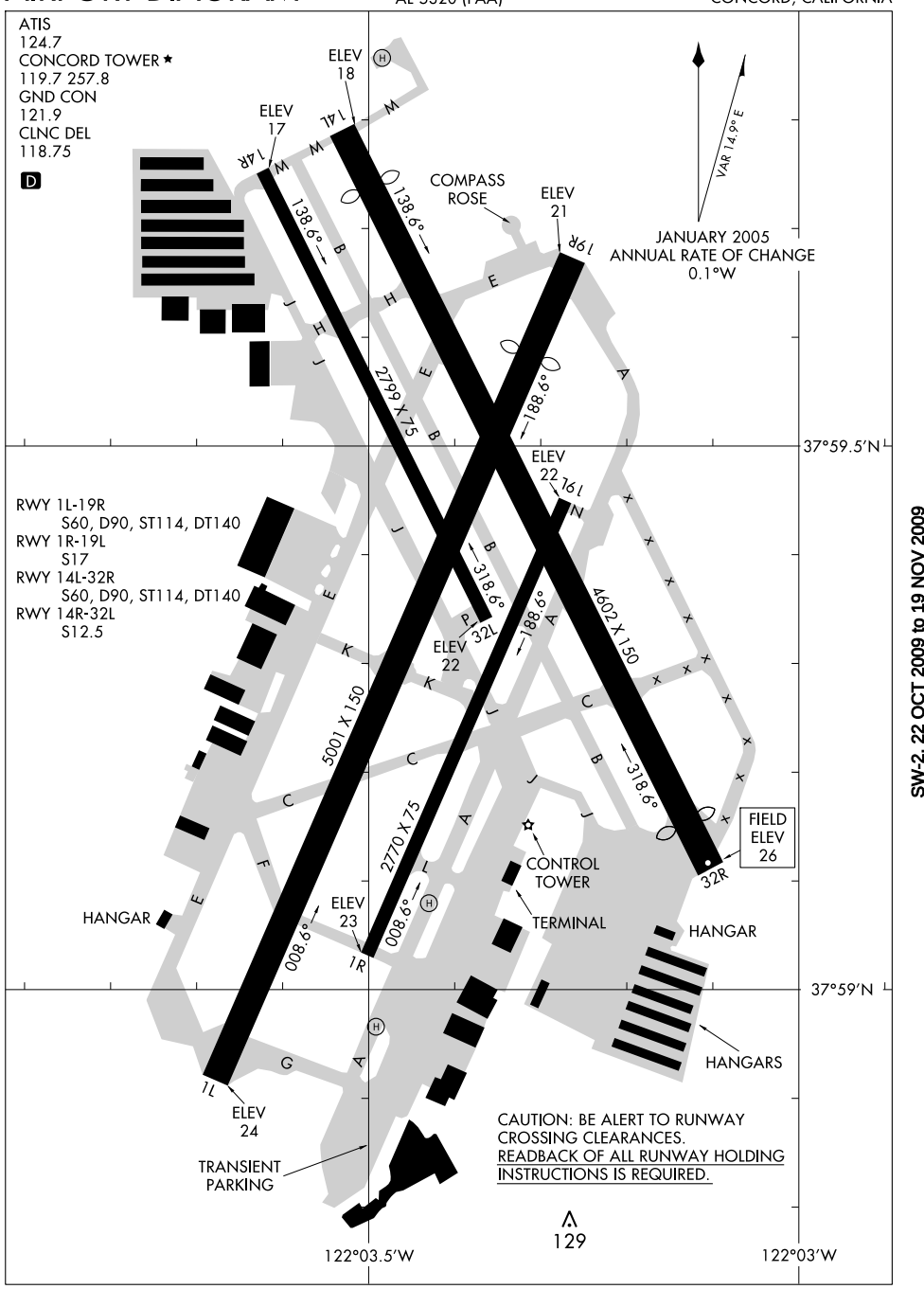
SW-2, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-5320 (FAA)

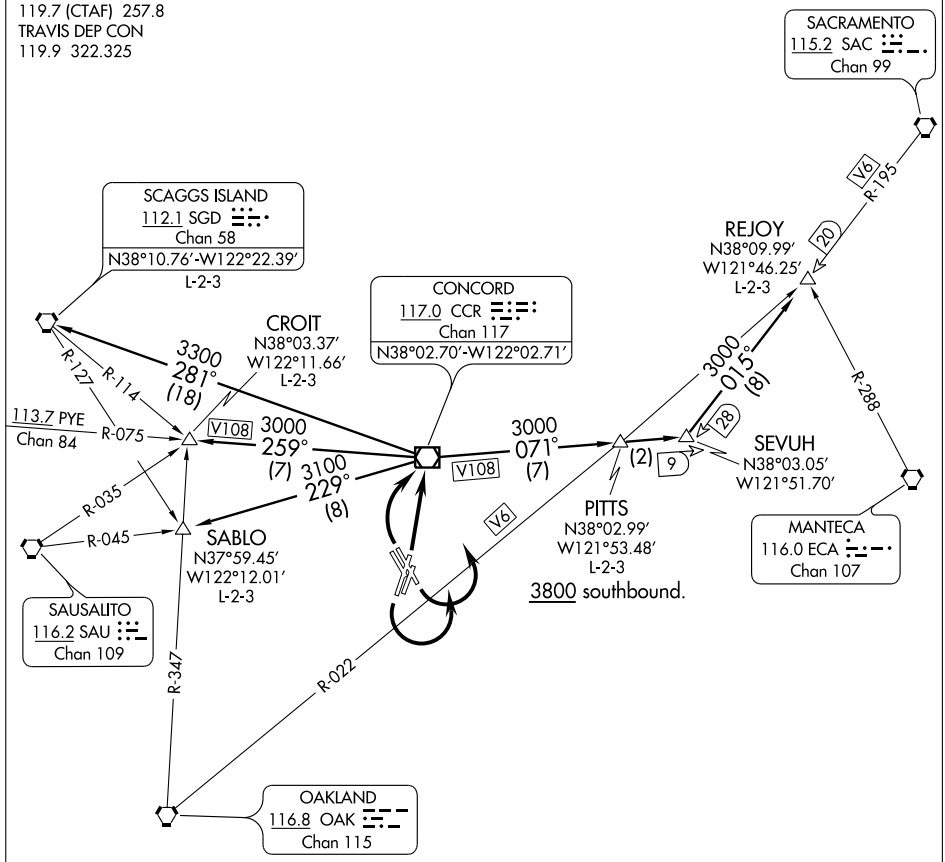
CONCORD/BUCHANAN FIELD (CCR)
CONCORD, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

BUCHANAN NINE DEPARTURE

GND CON
121.9
CONCORD TOWER ★
119.7 (CTAF) 257.8
TRAVIS DEP CON
119.9 322.325



TAKE-OFF MINIMUMS

Rwys 1L, 14L, 19R, 32R: Standard with the following minimum climb requirements:
Rwy 1L: Obstacle climb of 360′ per NM to 1100 (3800 for PITTS Transition).
ATC climb of 360′ per NM to 3000.
Rwy 14L: Obstacle climb of 420′ per NM to 2700 (3800 for PITTS Transition).
ATC climb of 420′ per NM to 3000.
Rwy 19R: Obstacle climb of 490′ per NM to 4000.
Rwy 32R: Obstacle climb of 360′ per NM to 500 (3800 for PITTS Transition).
ATC climb of 320′ per NM to 3000.
Rwys 1R, 14R, 19L, 32L: NA-air traffic.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L: Climb direct CCR VOR/DME . Thence ....
TAKE-OFF RUNWAY 14L: Climbing left turn direct CCR VOR/DME. Thence ....
TAKE-OFF RUNWAY 19R: Climbing left turn direct CCR VOR/DME. Thence ....
TAKE-OFF RUNWAY 32R: Climbing right turn direct CCR VOR/DME. Thence ....

....via (transition) or (assigned route).

CROIT TRANSITION (BCHN9.CROIT): From over CCR VOR/DME via CCR R-259 to CROIT INT.

PITTS TRANSITION (BCHN9.PITTS): From over CCR VOR/DME via CCR R-071 to PITTS INT.

REJOY TRANSITION (BCHN9.REJOY): From over CCR VOR/DME via CCR R-071 and SAC R-195 to REJOY INT.

SABLO TRANSITION (BCHN9.SABLO): From over CCR VOR/DME via CCR R-229 to SABLO INT.

SCAGGS ISLAND TRANSITION (BCHN9.SGD): From over CCR VOR/DME via CCR R-281 to SGD VORTAC.

TAKE-OFF OBSTACLE NOTES

Rwy 1L: Multiple trees and bushes beginning 675' from DER, 9' left of centerline, up to 48' AGL/98' MSL.
Multiple poles, light poles and antennas on buildings beginning 639' from DER, 120' left of centerline, up to 50' AGL/72' MSL.
Fence 117' from DER, 2' right of centerline, 12' AGL/29' MSL.
Sign 1996' from DER, 812' left of centerline, 45' AGL/78' MSL.
Flagpole 1520' from DER, 753' left of centerline, 40' AGL/71' MSL.

Rwy 14L: Multiple trees beginning 841' from DER, 61' left of centerline, up to 78' AGL/102' MSL.
Building 1071' from DER, 35' left of centerline, 30' AGL/58' MSL.
Fence 225' from DER, 29' left of centerline, 12' AGL/33' MSL.

Rwy 19R: Multiple trees beginning 604' from DER, 82' left of centerline, up to 70' AGL/108' MSL.
Light pole 1392' from DER, 749' right of centerline, 51' AGL/71' MSL.
OL on building 2451' from DER, 911' left of centerline, 73' AGL/97' MSL.
Fence 123' from DER, 503' left of centerline, 6' AGL/30' MSL.

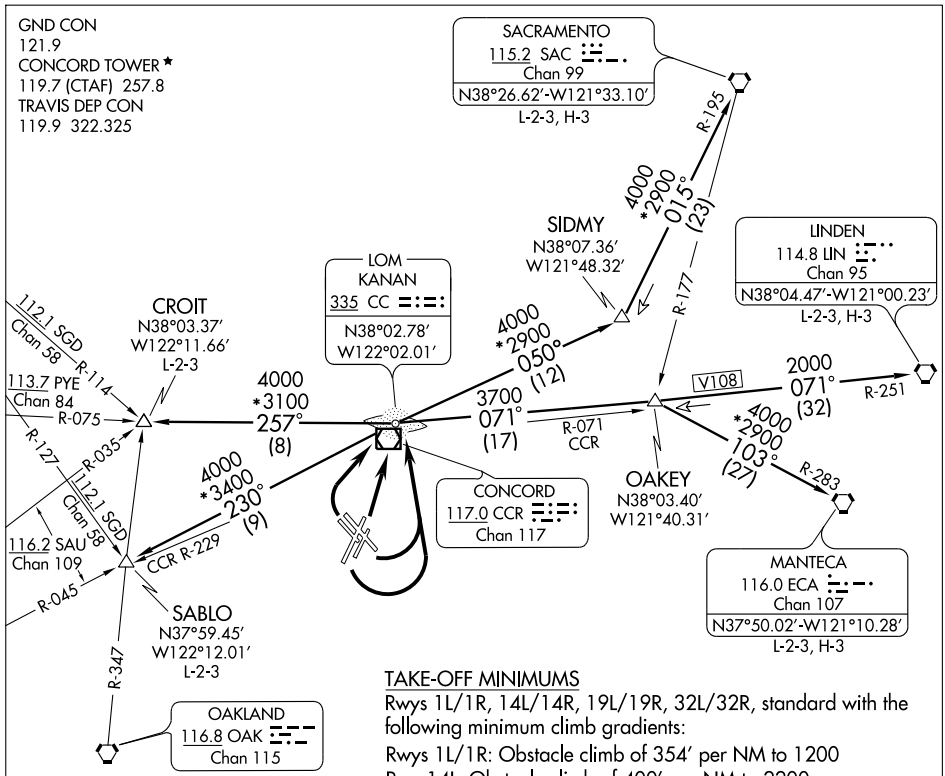
Rwy 32R: Train 1 NM from DER, 1948' left of centerline, 23' AGL/102' MSL.
OL on hopper 2110' from DER, 601' right of centerline, 79' AGL/99' MSL.
OL on tank 1.1 NM from DER, 1426' right of centerline, 193' AGL/213' MSL.
Flagpole 655' from DER, 300' right of centerline, 35' AGL/43' MSL.
Sign 697' from DER, 248' right of centerline, 25' AGL/41' MSL.
Road/vehicle 561' from DER, on centerline, 15' AGL/49' MSL.
Building 633' from DER, 246' left of centerline, 20' AGL/35' MSL.
Tree 825' from DER, 635' left of centerline, 25' AGL/40' MSL.
TRMSN tower 6015' from DER, 1839' left of centerline, 145' AGL/173' MSL.

SW-2, 22 OCT 2009 to 19 NOV 2009

KANAN TWO DEPARTURE

SL-5320 (FAA)

CONCORD/ BUCHANAN FIELD (CCR)
CONCORD, CALIFORNIA



TAKE-OFF MINIMUMS

Rwys 1L/1R, 14L/14R, 19L/19R, 32L/32R, standard with the following minimum climb gradients:
Rwys 1L/1R: Obstacle climb of 354' per NM to 1200
Rwy 14L: Obstacle climb of 400' per NM to 2200.
Rwy 14R: Obstacle climb of 380' per NM to 2200.
Rwys 19L/19R: Obstacle climb of 470' per NM to 3700.
Rwys 32L/32R: Obstacle climb of 360' per NM to 1200.

TAKE-OFF OBSTACLE NOTES

Rwy 1L: Fence 117' from DER, on centerline, 12' AGL/29' MSL.
Antenna on building 639' from DER, 382' right of centerline, 30'AGL/48' MSL.
Multiple trees and bushes beginning 675' from DER, 97' left of centerline, up to 60' AGL/83' MSL.
Light pole 1362' from DER, 390' right of centerline, 40' AGL/65' MSL
Camera 2962' from DER, 48' right of centerline, 75' AGL/96' MSL.
Multiple trees and bushes beginning 1261' from DER, 100' right of centerline, up to 60' AGL/78' MSL.
Flagpole 1520' from DER, 753' left of centerline, 40' AGL/71' MSL.
Sign 1996' from DER, 812' left of centerline, 45' AGL/78' MSL.
Pole 1907' from DER, 120' left of centerline, 50' AGL/72' MSL.
Rwy 1R: Tree 1927' from DER, 483' right of centerline, 65' AGL/131' MSL.
Tree 1948' from DER, 222' right of centerline, 65' AGL/104' MSL.
Pole 1552' from DER, 98' right of centerline, 25' AGL/67' MSL.
Pole 1865' from DER, 358' right of centerline, 45' AGL/96' MSL.

(NOTES CONTINUED ON THE FOLLOWING PAGE)

NOTE: ADF Required

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

KANAN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb direct CC LOM. Thence....

TAKE-OFF RUNWAYS 14L/R: Climbing left turn direct CC LOM. Thence....

TAKE-OFF RUNWAYS 19L/R: Climbing left turn direct CC LOM. Thence....

TAKE-OFF RUNWAYS 32L/R: Climbing right turn direct CC LOM. Thence....

....via (transition) or (assigned route).

CROIT TRANSITION (KANA2.CROIT): From over CC LOM via CC 257° bearing to CROIT INT.

LINDEN TRANSITION (KANA2.LIN): From over CC LOM via CC 071° bearing and LIN R-251 to LIN VORTAC.

MANTECA TRANSITION (KANA2.ECA): From over CC LOM via CC 071° bearing and ECA R-283 to ECA VORTAC.

SABLO TRANSITION (KANA2.SABLO): From over CC LOM via CC 230° bearing to SABLO INT.

SACRAMENTO TRANSITION (KANA2.SAC): From over CC LOM via CC 050° bearing and SAC R-195 to SAC VORTAC.

TAKE-OFF OBSTACLE NOTES (CONT)

Rwy 14L: Tree 1637′ from DER, 328′ right of centerline, 50′ AGL/82′ MSL.
Tree 1496′ from DER, 474′ right of centerline, 55′ AGL/84′ MSL.
Pole 1367′ from DER, 275′ right of centerline, 40′ AGL/71′ MSL.
Tree 1332′ from DER, 61′ left of centerline, 65′ AGL/81′ MSL.
Building 1071′ from DER, 35′ left of centerline, 30′ AGL/58′ MSL.
Building 5548′ from DER, 1870′ left of centerline, 110′ AGL/176′ MSL.
Obst light on building 5414′ from DER, 100′ left of centerline, 120′ AGL/177′ MSL.
Tree 942′ from DER, 388′ left of centerline, 50′ AGL/102′ MSL.
Tree 841′ from DER, 177′ left of centerline, 65′ AGL/77′ MSL.
Fence 225′ from DER, 29′ left of centerline, 12′ AGL/33′ MSL.

Rwy 14R: Obst light on airport beacon 1140′ from DER, 315′ right of centerline, 70′ AGL/98′ MSL.
Antenna 3254′ from DER, 1096′ right of centerline, 110′ AGL/136′ MSL.
Obst light on windsock 412′ from DER, 451′ right of centerline, 35′ AGL/51′ MSL.
Light 1281′ from DER, 167′ right of centerline, 45′ AGL/69′ MSL.
Tree 2745′ from DER, 887′ left of centerline, 65′ AGL/102′ MSL.
Building 3240′ from DER, 1088′ right of centerline, 55′ AGL/129′ MSL.

Rwy 19L: Tree 2257′ from DER, 28′ left of centerline, 70′ AGL/97′ MSL.
Tree 2132′ from DER, 377′ left of centerline, 70′ AGL/90′ MSL.
Tree 3112′ from DER, 946′ right of centerline, 70′ AGL/106′ MSL.
Tree 2544′ from DER, 384′ right of centerline, 60′ AGL/87′ MSL.

Rwy 19R: Fence 123′ from DER, 503′ left of centerline, 12′ AGL/30′ MSL.
Multiple trees beginning 604′ from DER, 489′ right of centerline, up to 70′ AGL/106′ MSL.
Light pole 1392′ from DER, 749′ right of centerline, 35′ AGL/71′ MSL.
Obst light 2451′ from DER, 911′ left of centerline, 77′ AGL/97′ MSL.
Multiple trees beginning 1276′ from DER, 527′ left of centerline, up to 70′ AGL/108′ MSL.

Rwy 32L: Multiple lighted stacks/towers beginning 6617′ from DER, 1926′ right of centerline, up to 250′ AGL/378′ MSL.
Hangar 259′ from DER, 300′ left of centerline, 25′ AGL/37′ MSL.
Transmission tower 6015′ from DER, 1338′ left of centerline, 145′ AGL/173′ MSL.
Road /vehicle 561′ from DER, 504′ right of centerline, 15′ AGL/49′ MSL.
Building 633′ from DER, 254′ right of centerline, 15′ AGL/35′ MSL.
Tree 825′ from DER, 136′ left of centerline, 25′ AGL/40′ MSL.

Rwy 32R: Multiple lighted stacks and buildings beginning 6617′ from DER, 1426′ right of centerline, up to 355′ AGL/378′ MSL.
Flagpole 665′ from DER, 300′ right of centerline, 35′ AGL/43′ MSL.
Building 633′ from DER, 246′ left of centerline, 20′ AGL/35′ MSL.
Tree 825′ from DER, 635′ left of centerline, 25′ AGL/40′ MSL.
Transmission tower 6015′ from DER, 1839′ left of centerline, 145′ AGL/173′ MSL.
Obst light on hopper 2110′ from DER, 601′ right of centerline, 79′ AGL/99′ MSL.
Sign 697′ from DER, 248′ right of centerline, 25′ AGL/41′ MSL.
Road/vehicle 561′ from DER, on centerline, 15′ AGL/49′ MSL.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-CCR	APP CRS	Rwy Idg	4410
108.5	181°	TDZE	20
		Apt Elev	23

LDA RWY 19R

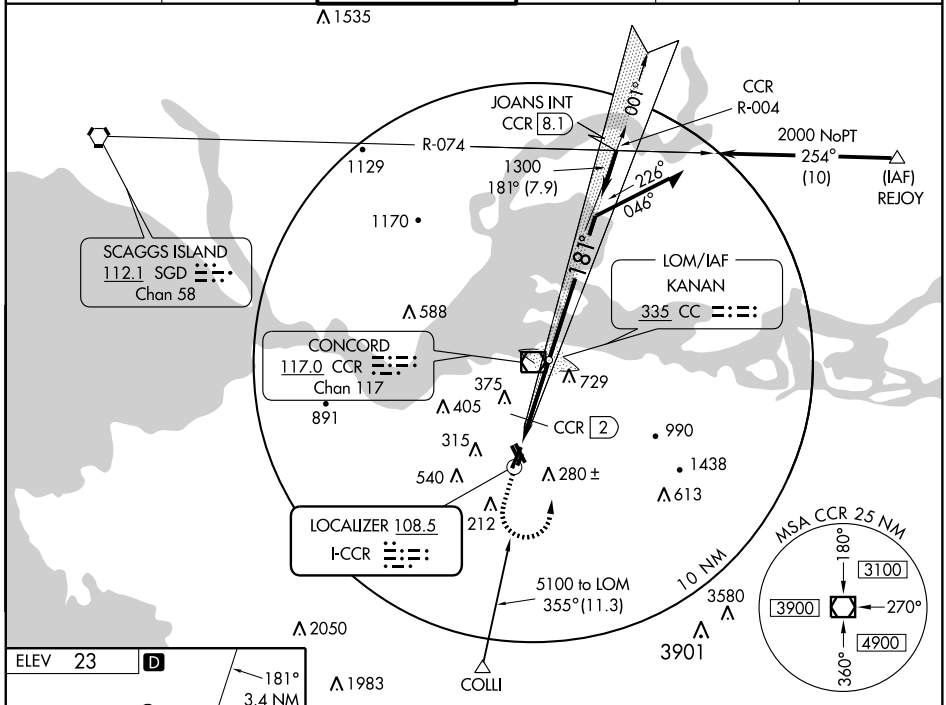
CONCORD/BUCHANAN FIELD (CCR)

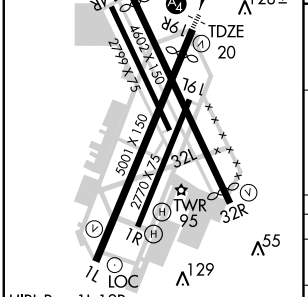
Circling not authorized west of Rwy 1L-19R.
†Inoperative table does not apply to Cat C.

MALS

MISSED APPROACH: Climb to 900 then climbing left turn to 3500 direct CCR VOR/DME.

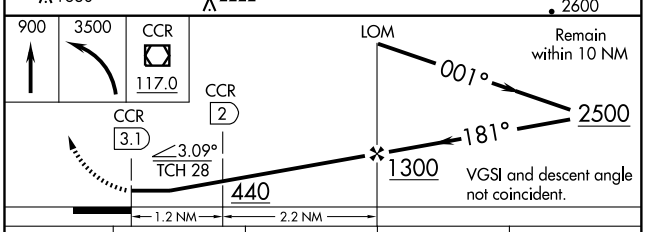
ATIS	TRAVIS APP CON	CONCORD TOWER★	GND CON	CLNC DEL	UNICOM
124.7	119.9 322.325	119.7 (CTAF) L 257.8	121.9	118.75	122.95





HIRL Rwy 1L-19R
REIL Rwy 1L and 32R
MIRL Rwy 14L-32R

FAF to MAP 3.4 NM					
Knots	60	90	120	150	180
Min:Sec	3:24	2:16	1:42	1:22	1:08



CATEGORY	A	B	C	D
S-19R†	440-¾ 420 (500-¾)		440-1¼ 420 (500-1¼)	NA
CIRCLING	580-1 557 (600-1)	680-1 657 (700-1)	680-1¾ 657 (700-1¾)	NA
DME MINIMUMS				
S-19R	380-¾ 360 (400-¾)			NA
CIRCLING	580-1 557 (600-1)	680-1 657 (700-1)	680-1¾ 657 (700-1¾)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

CONCORD, CALIFORNIA

AL-5320 (FAA)

APP CRS	Rwy Idg	4410
187°	TDZE	23
	Apt Elev	26

RNAV (GPS) RWY 19R

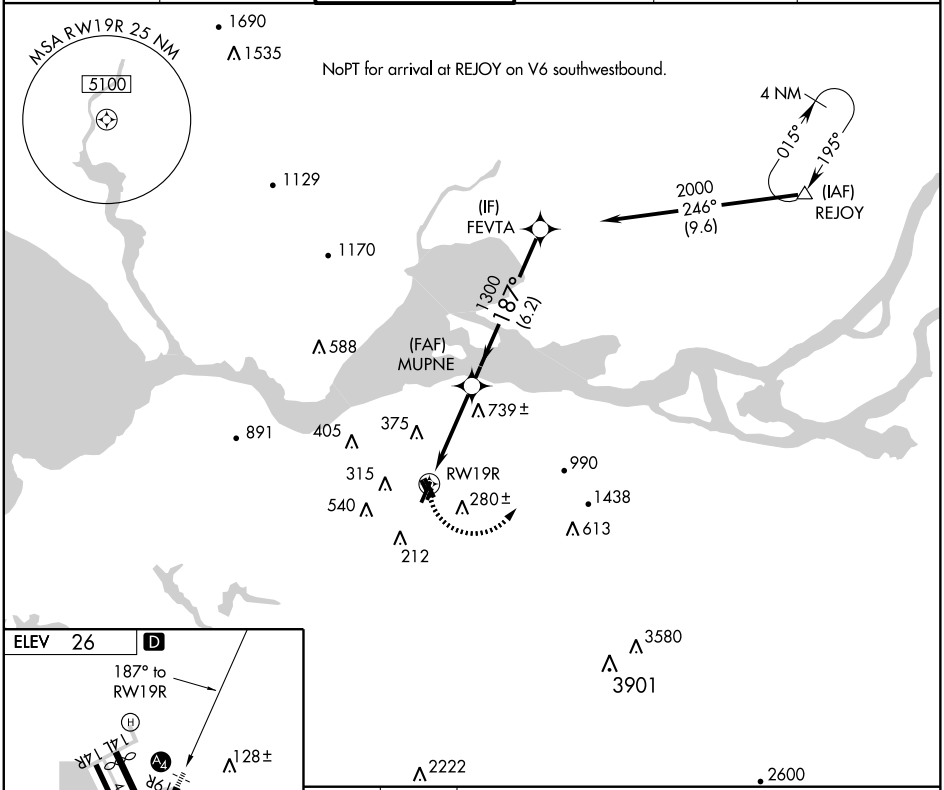
CONCORD/ BUCHANAN FIELD (CCR)

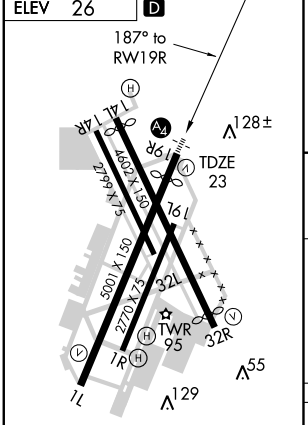
Circling NA west of Rwy 1L-19R.
When VGSI inoperative, circling Rwy 1L and 32R NA at night.
DME/DME RNP-0.3 NA.
Inoperative table does not apply.

MALS

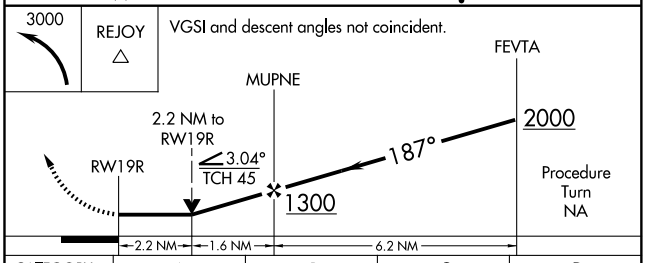
MISSED APPROACH: Climbing left turn to 3000 direct REJOY and hold.

ATIS	TRAVIS APP CON	CONCORD TOWER★	GND CON	CLNC DEL	UNICOM
124.7	119.9 322.325	119.7 (CTAF) 257.8	121.9	118.75	122.95





HIRL Rwy 1L-19R
REIL Rwys 1L and 32R
MIRL Rwy 14L-32R



CATEGORY	A	B	C	D
LNAV MDA	1000-1¼ 977 (1000-1¼)	1000-1½ 977 (1000-1½)	1000-3 977 (1000-3)	
CIRCLING	1000-1¼ 974 (1000-1¼)	1000-1½ 974 (1000-1½)	1000-3 974 (1000-3)	

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME CCR	APP CRS	Rwy Idg	4410
117.0	171°	TDZE	20
Chan 117		Apt Elev	23

VOR RWY 19R

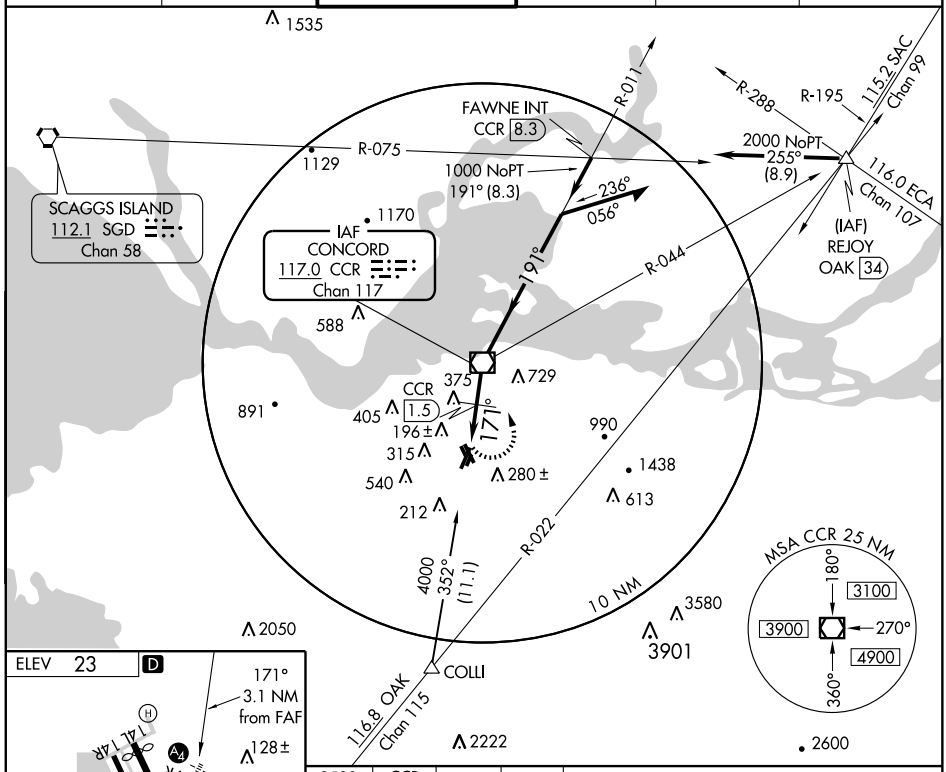
CONCORD/BUCHANAN FIELD (CCR)

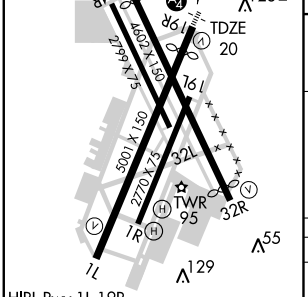
Circling NA west of Rwys 1L and 14R. Inoperative table does not apply to Cat C.

MALS

MISSED APPROACH: Climbing left turn to 2500 direct CCR VOR/DME then via CCR R-044 to REJOY Int.

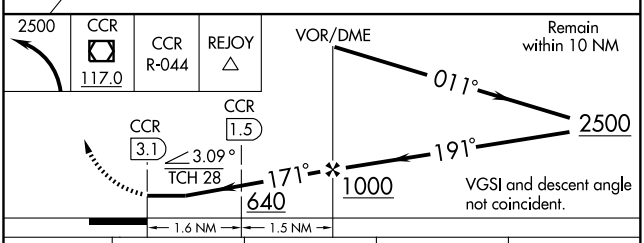
ATIS	TRAVIS APP CON	CONCORD TOWER*	GND CON	CLNC DEL	UNICOM
124.7	119.9 322.325	119.7 (CTAF) L 257.8	121.9	118.75	122.95





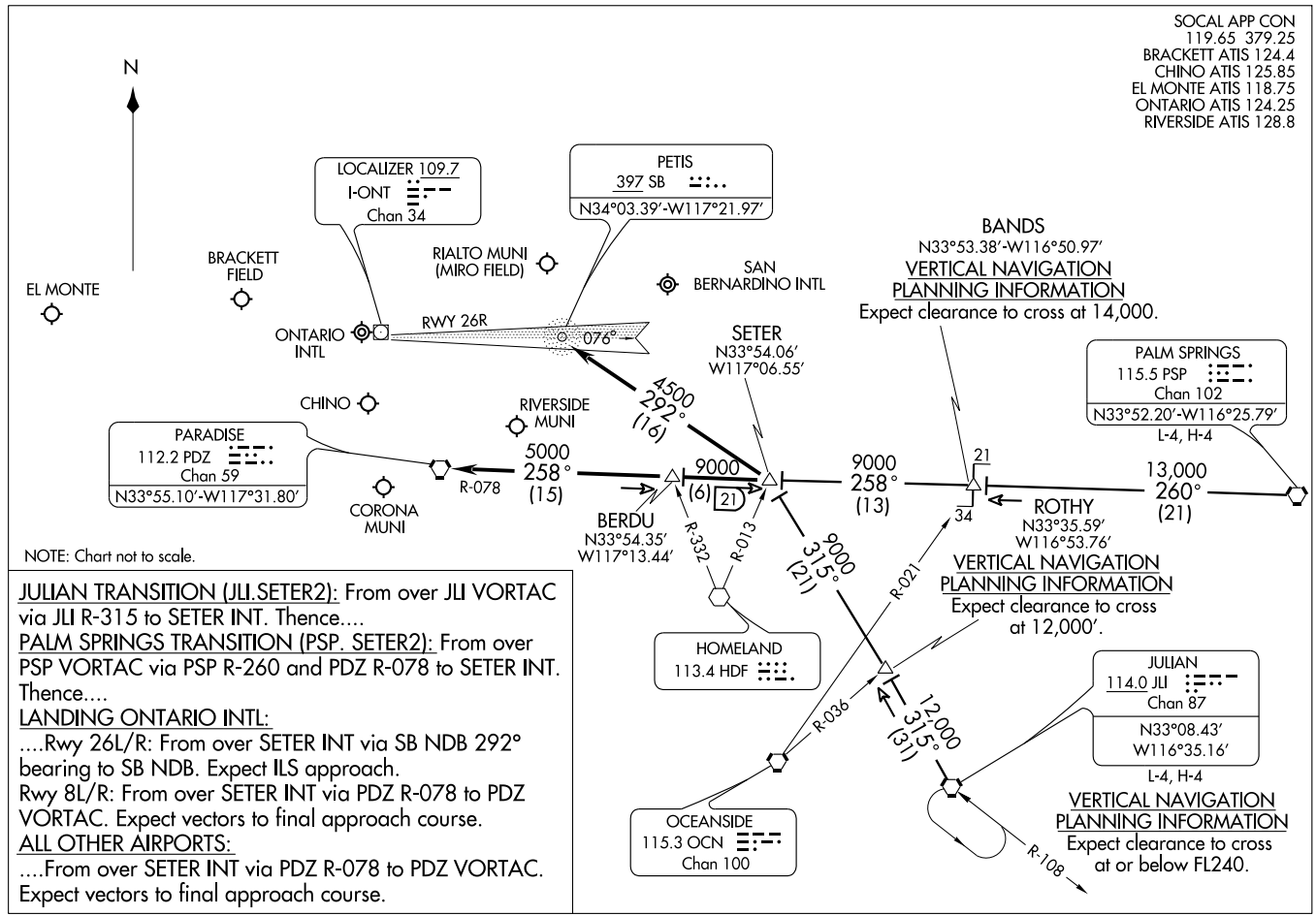
HIRL Rwy 1L-19R
REIL Rwy 1L and 32R
MIRL Rwy 14L-32R

FAF to MAP 3.1 NM					
Knots	60	90	120	150	180
Min:Sec	3:06	2:04	1:33	1:14	1:02



CATEGORY	A	B	C	D
S-19R	640-¾ 620 (700-¾)		640-1¾ 620 (700-1¾)	NA
CIRCLING	640-1 617 (700-1)	680-1 657 (700-1)	680-1¾ 657 (700-1¾)	NA
DME MINIMUMS				
S-19R	460-¾ 440 (500-¾)		460-1¼ 440 (500-1¼)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

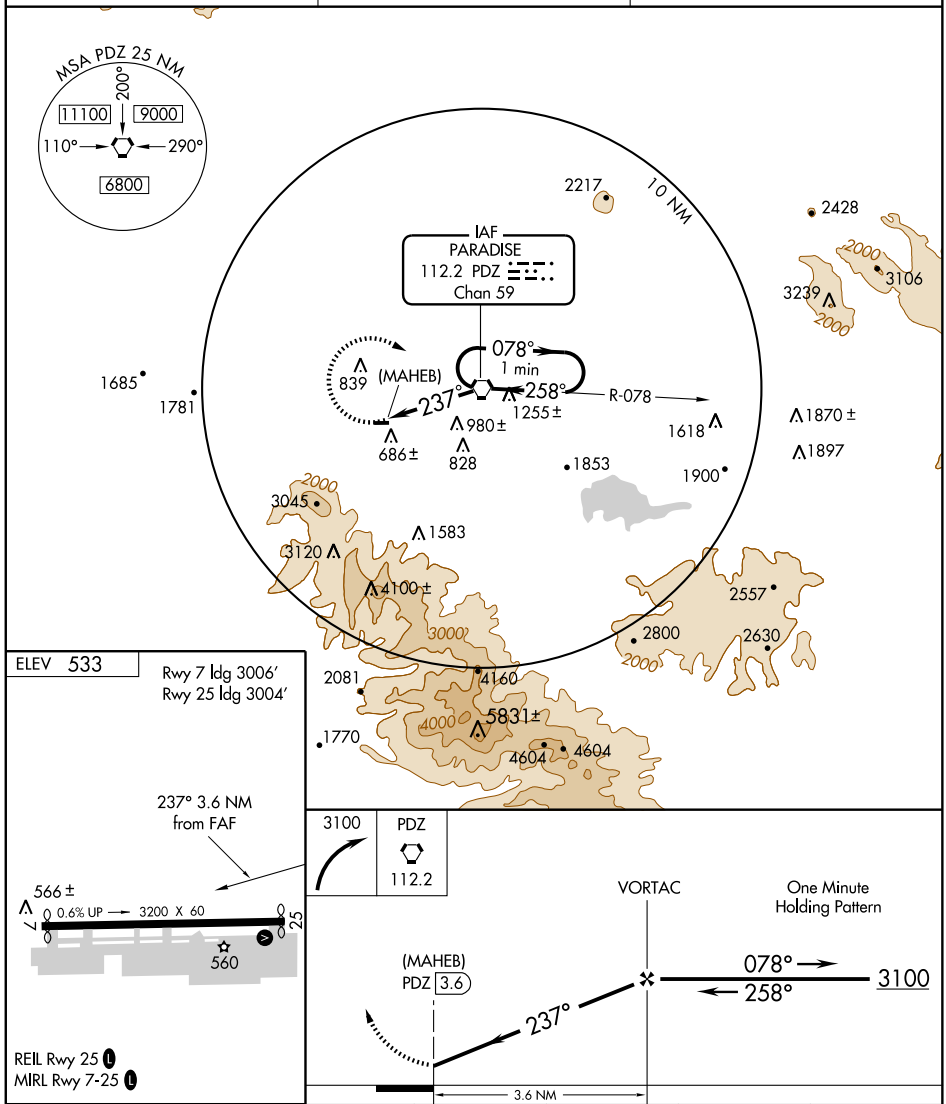
VORTAC PDZ	APP CRS	Rwy Idg	N/A
112.2	237°	TDZE	N/A
Chan 59		Apt Elev	533

VOR or GPS-A
CORONA MUNI (AJO)

T NA When local altimeter setting not received, use Ontario Intl altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climbing right turn to 3100 direct PDZ VORTAC and hold, continue climb in hold to 3100.

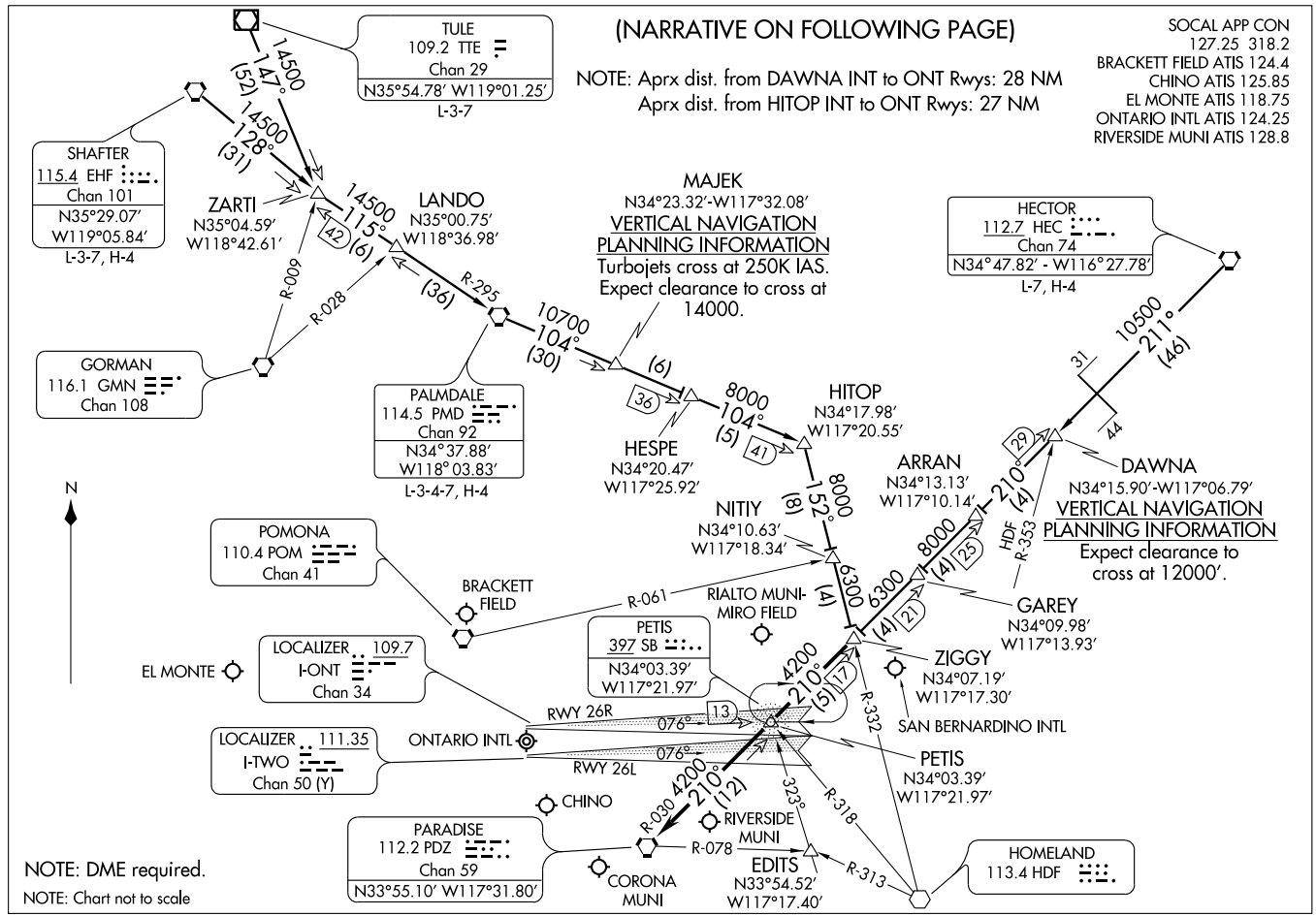
ASOS	SOCAL APP CON	UNICOM
132.175	135.4 377.125	122.7 (CTAF) L



FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

CATEGORY	A	B	C	D
CIRCLING	1660-1¼ 1127 (1200-1¼)	1660-1½ 1127 (1200-1½)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5002
354°	TDZE	56
	Apt Elev	57

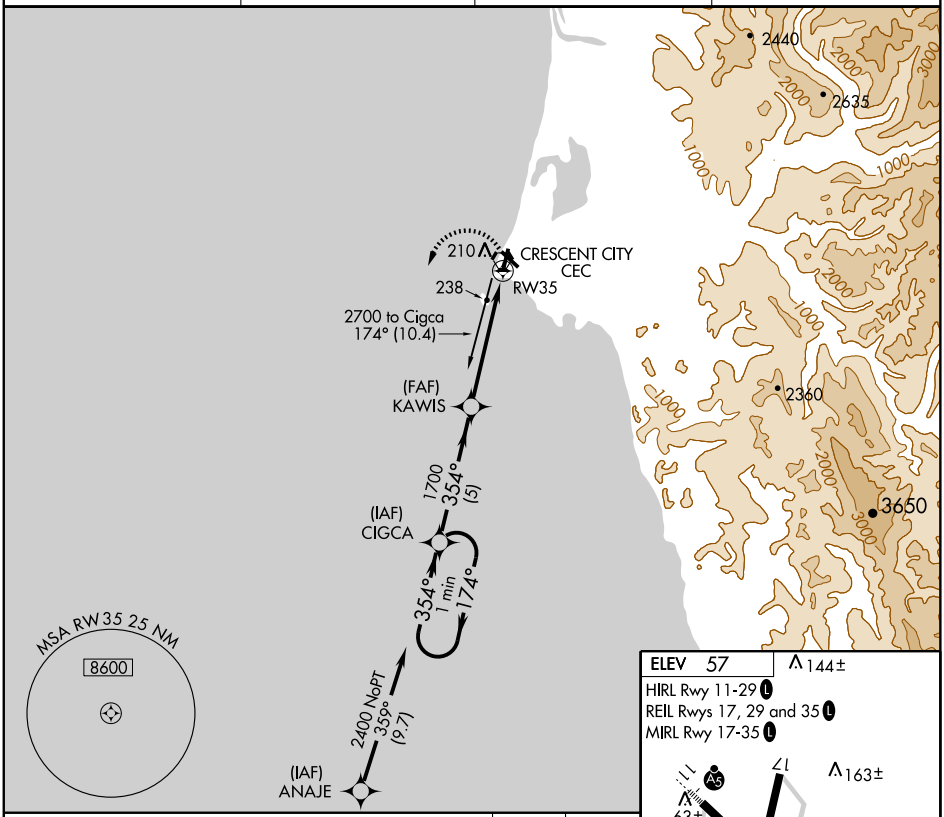
GPS RWY 35

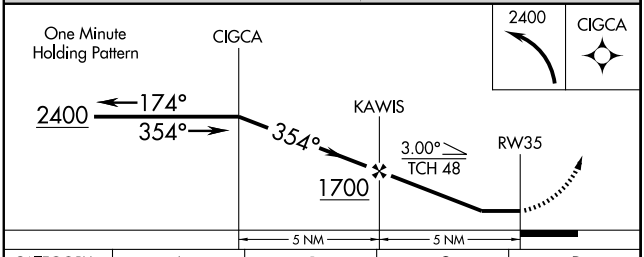
CRESCENT CITY/ JACK MC NAMARA FIELD (CEC)

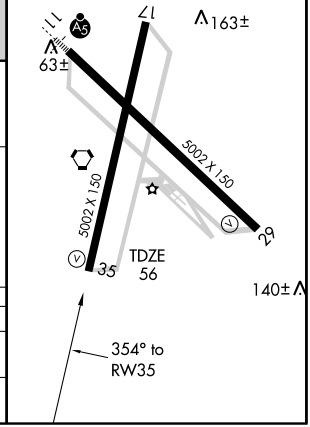
T
A NA

MISSED APPROACH: Climbing left turn to 2400 direct CIGCA WP and hold.

ASOS	SEATTLE CENTER	OAKLAND RADIO	UNICOM
119.925	124.85 306.3	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-35	500-1	444 (500-1)	500-1¼ 444 (500-1¼)	500-1½ 444 (500-1½)
CIRCLING	540-1	483 (500-1)	540-1½ 483 (500-1½)	640-2 583 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-CEC	APP CRS	Rwy Idg	5002
108.7	114°	TDZE	57
		Apt Elev	57

ILS/DME RWY 11

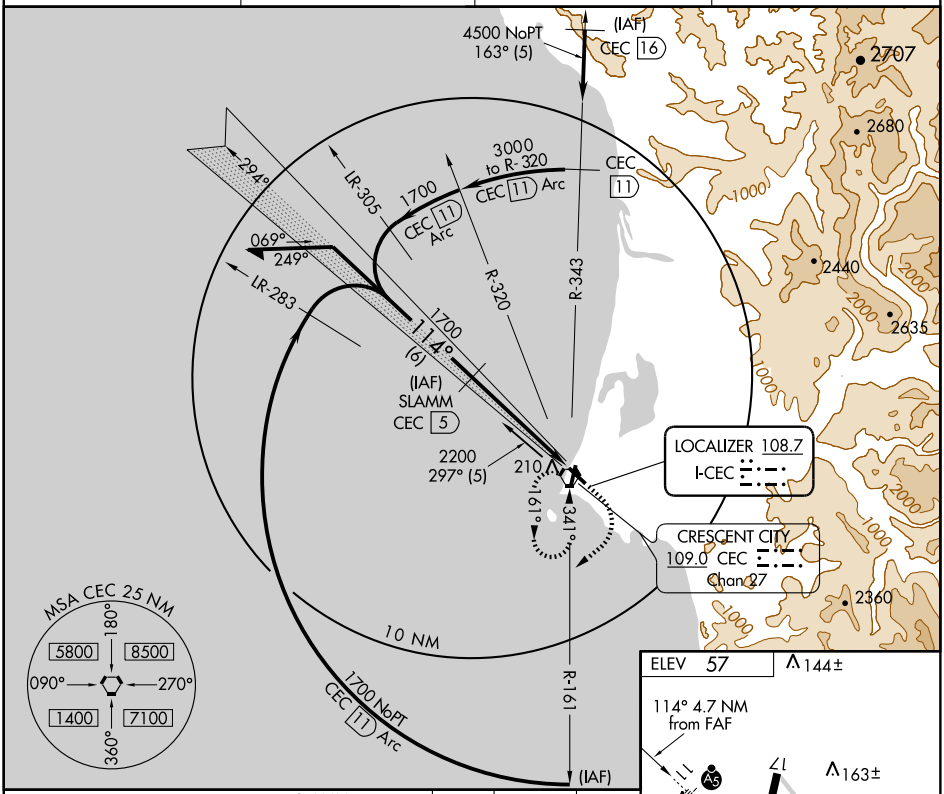
CRESCENT CITY/ JACK MC NAMARA FIELD (CEC)

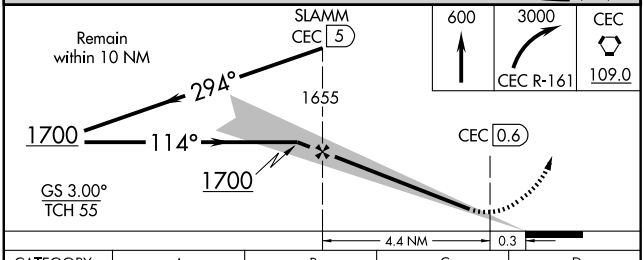
DME from CEC VORTAC. Simultaneous reception of I-CEC and CEC DME required. Inoperative table does not apply to S-LOC 11 Cat D.

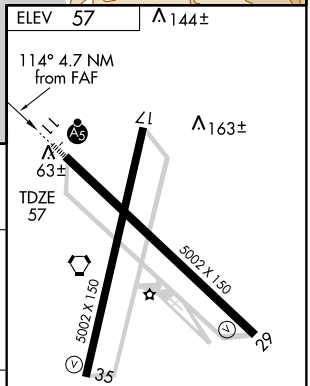
MALSR

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 via CEC R-161, then direct CEC VORTAC and hold.

ASOS	SEATTLE CENTER	OAKLAND RADIO	UNICOM
119.925	124.85 306.3	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 11	257-½ 200 (200-½)			
S-LOC 11	320-½ 263 (300-½)			320-1 263 (300-1)
CIRCLING	540-1 483 (500-1)		540-1½ 483 (500-1½)	640-2 583 (600-2)

HIRL Rwy 11-29 L
REIL Rwys 17, 29 and 35 L
MIRL Rwy 17-35 L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	5002
CH 90310	114°	TDZE	57
W11A		Apt Elev	57

RNAV (GPS) RWY 11

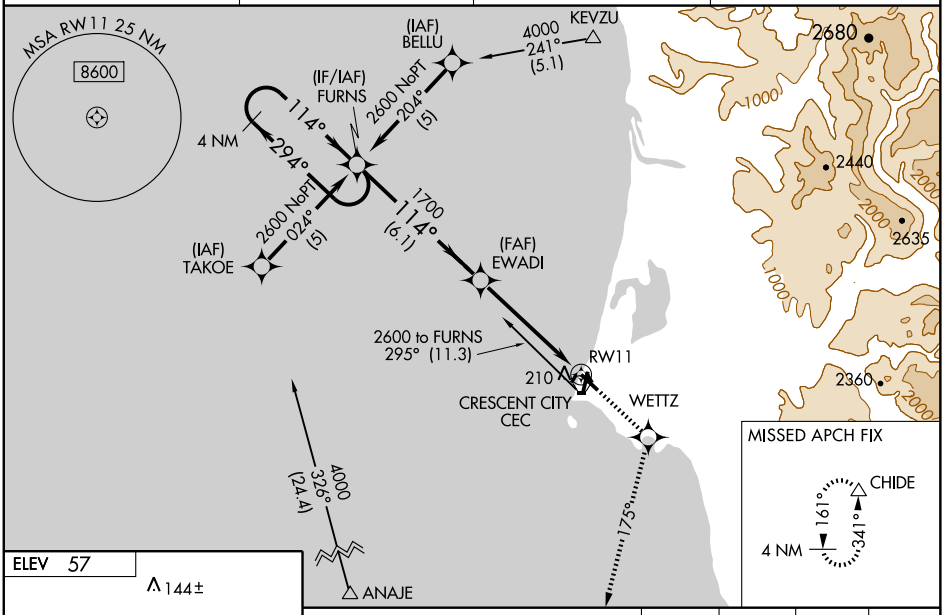
CRESCENT CITY/ JACK MC NAMARA FIELD (CEC)

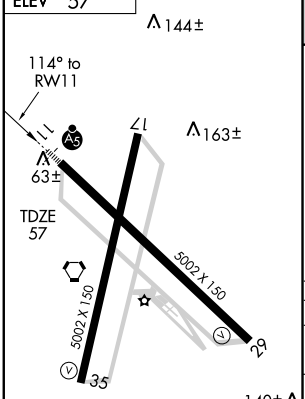
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use Brookings altimeter setting and increase all DA 98 feet and all MDA 100 feet. Increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat C and D ¼ mile, and Circling Cat C and D ¼ mile. VDP and Baro-VNAV NA when using Brookings altimeter setting. For inoperative MALSR, increase LNAV Cat D visibility to 1¼ mile. For inoperative MALSR when using Brookings altimeter setting, increase LPV all Cats visibility to 1¼ mile.

MALSR

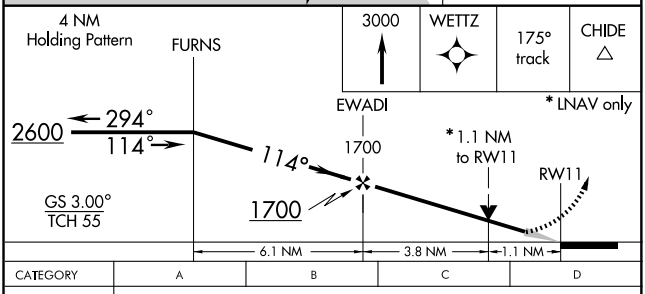
MISSED APPROACH: Climb to 3000 direct WETTZ and via 175° track to CHIDE and hold, continue climb-in-hold to 3000.

ASOS	SEATTLE CENTER	OAKLAND RADIO	UNICOM
119.925	124.85 306.3	122.3	122.8 (CTAF) L





HIRL Rwy 11-29 L
REIL Rwys 17, 29 and 35 L
MIRL Rwy 17-35 L



CATEGORY	A	B	C	D
LPV DA	307-½	250 (300-½)		
LNAV/VNAV DA	556-1¼	499 (500-1¼)		
LNAV MDA	460-½	403 (500-½)	460-¾ 403 (500-¾)	460-1 403 (500-1)
CIRCLING	540-1	483 (500-1)	540-1½ 483 (500-1½)	640-2 583 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC CEC	APP CRS	Rwy Idg	5002
109.0	126°	TDZE	60
Chan 27		Apt Elev	61

VOR/DME RWY 11

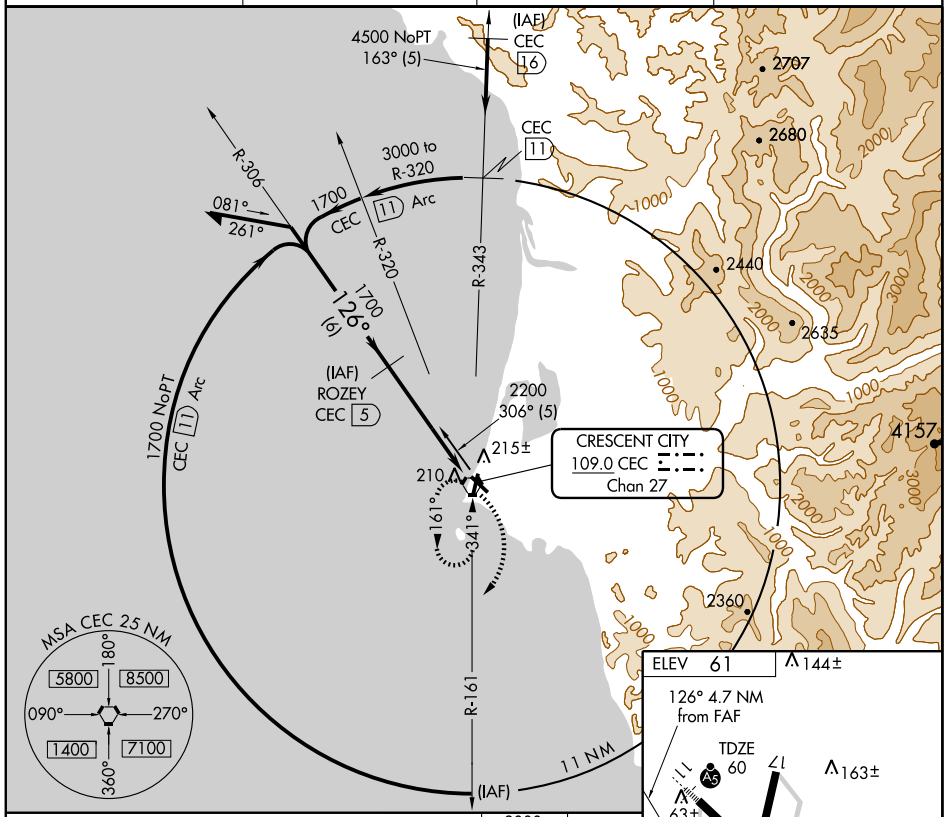
CRESCENT CITY/JACK MC NAMARA FIELD (CEC)

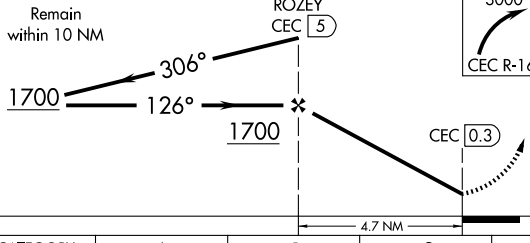
Inoperative table does not apply to Cat D.

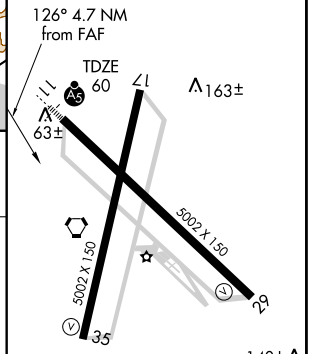
MALSR

MISSED APPROACH: Climbing right turn to 3000 via CEC R-161 then direct CEC VORTAC and hold.

ASOS	SEATTLE CENTER	OAKLAND RADIO	UNICOM
119.925	124.85 306.3	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-11	480-½	420 (500-½)	480-¾ 420 (500-¾)	480-1¼ 420 (500-1¼)
CIRCLING	540-1	479 (500-1)	540-1½ 479 (500-1½)	640-2 579 (600-2)

HIRL Rwy 11-29 L
REIL Rwys 17, 29 and 35 L
MIRL Rwy 17-35 L

SW-2, 22 OCT 2009 to 19 NOV 2009

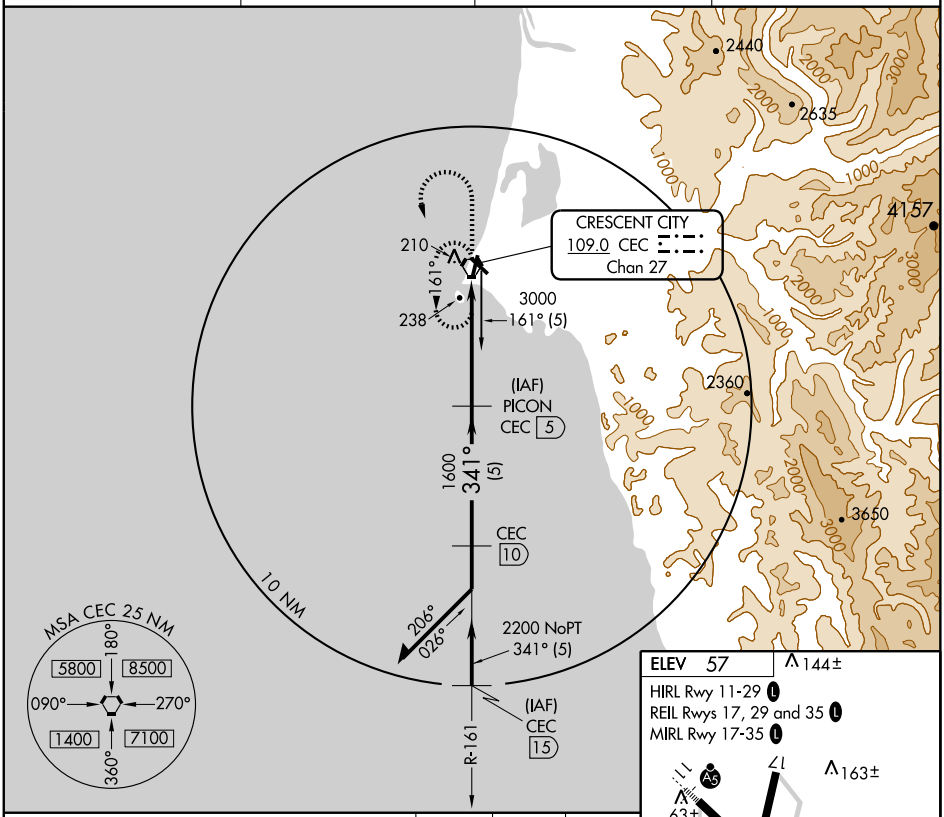
VORTAC CEC	APP CRS	Rwy Idg	5002
109.0	341°	TDZE	56
Chan 27		Apt Elev	57

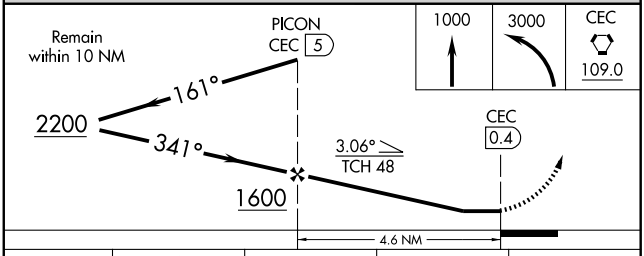
VOR/DME RWY 35

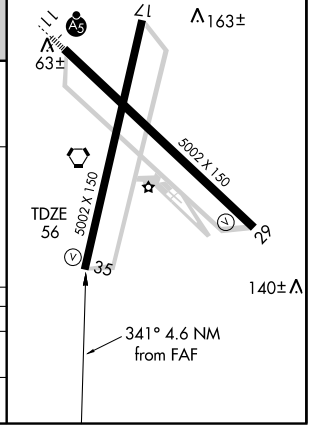
CRESCENT CITY/JACK MC NAMARA FIELD (CEC)

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 direct CEC VORTAC and hold.

ASOS	SEATTLE CENTER	OAKLAND RADIO	UNICOM
119.925	124.85 306.3	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-35	500-1	444 (500-1)	500-1¼ 444 (500-1¼)	500-1½ 444 (500-1½)
CIRCLING	540-1	483 (500-1)	540-1½ 483 (500-1½)	640-2 583 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC CEC	APP CRS	Rwy Idg	5002
109.0	126°	TDZE	57
Chan 27		Apt Elev	57

VOR RWY 11

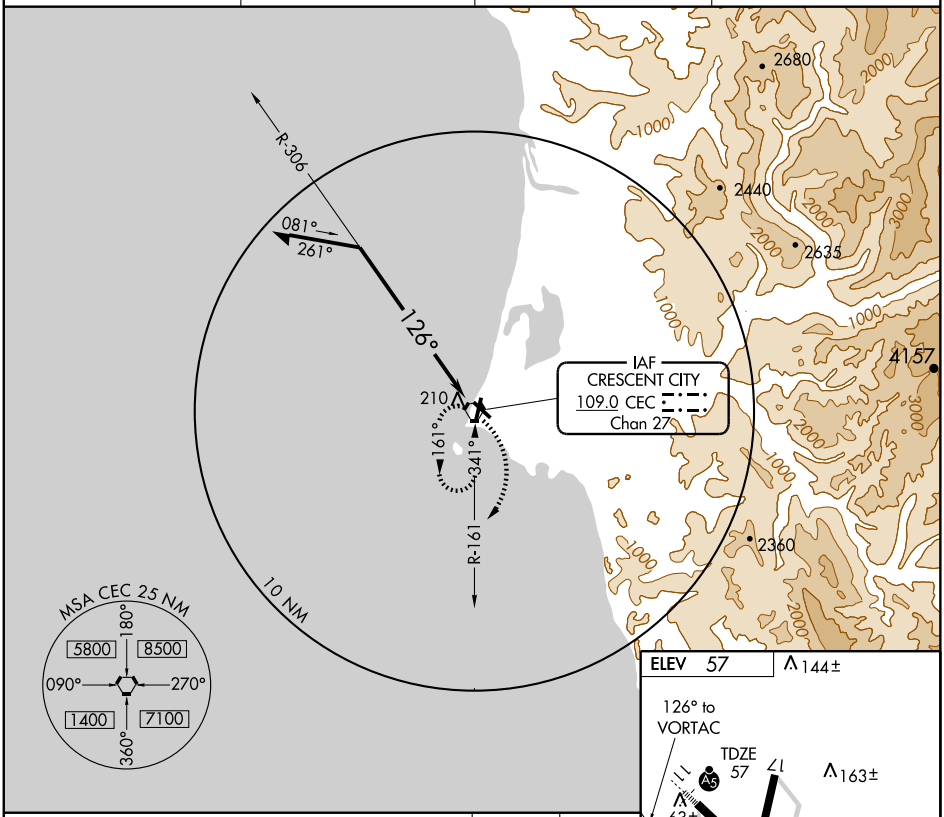
CRESCENT CITY/ JACK MC NAMARA FIELD (CEC)

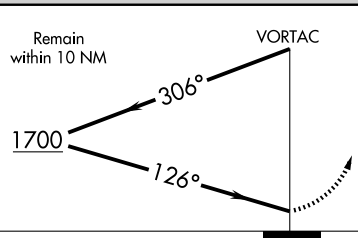
T Inoperative table does not apply to Cat D.

MALSR

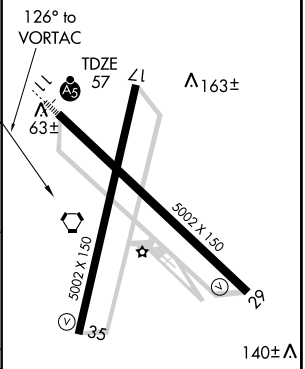
MISSED APPROACH: Climbing right turn to 3000 via CEC R-161 then direct CEC VORTAC and hold.

ASOS	SEATTLE CENTER	OAKLAND RADIO	UNICOM
119.925	124.85 306.3	122.3	122.8 (CTAF) L





3000	CEC
CEC R-161	109.0



CATEGORY	A	B	C	D
S-11	520-½ 463 (500-½)		520-¾ 463 (500-¾)	520-1½ 463 (500-1½)
CIRCLING	540-1 483 (500-1)		540-1½ 483 (500-1½)	640-2 583 (600-2)

HIRL Rwy 11-29 L
MIRL Rwy 17-35 L
REIL Rwys 17, 29 and 35 L

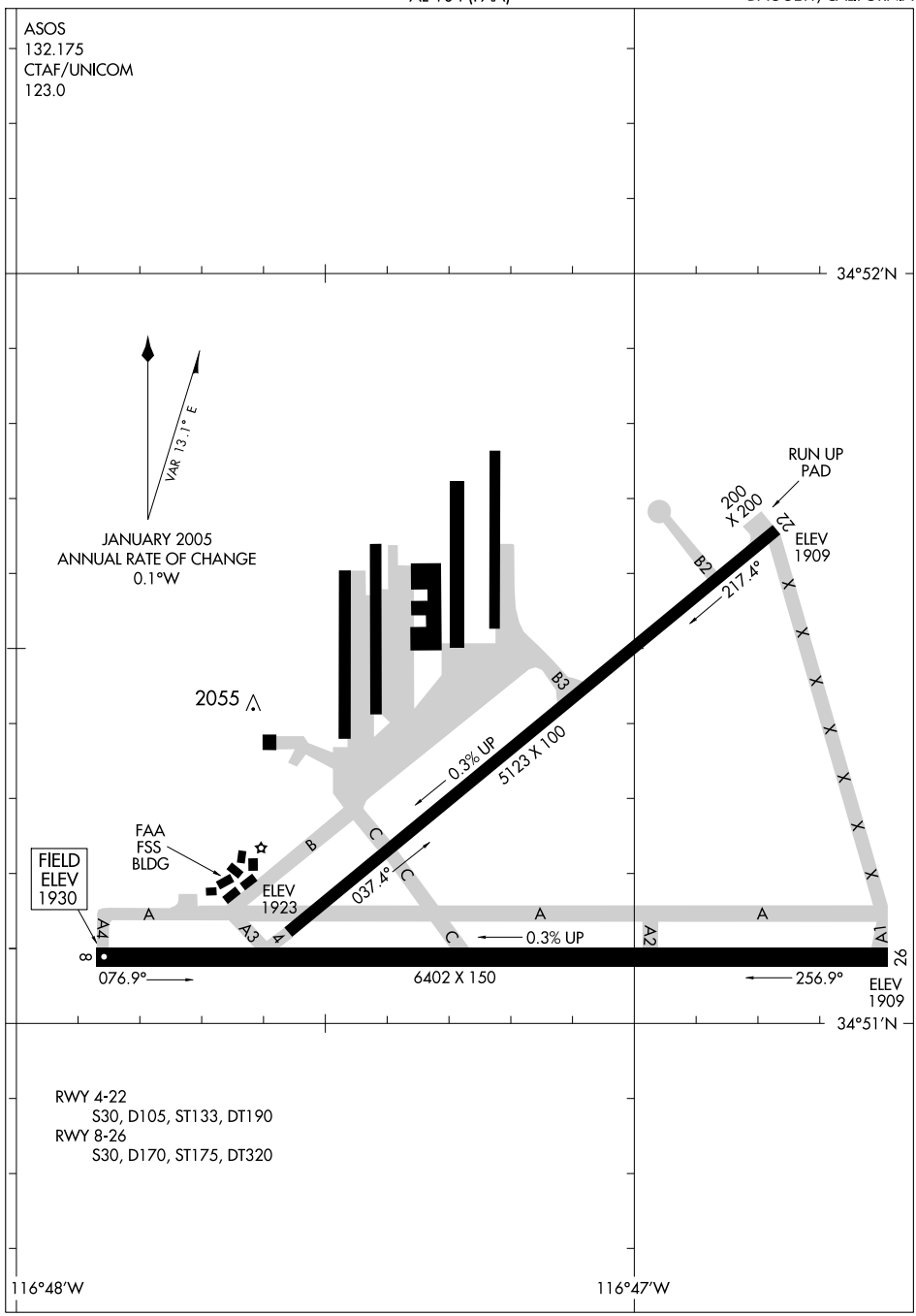
SW-2, 22 OCT 2009 to 19 NOV 2009

09239

AIRPORT DIAGRAM

AL-104 (FAA)

DAGGETT/BARSTOW-DAGGETT (DAG)
DAGGETT, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5123
216°	TDZE	1918
	Apt Elev	1930

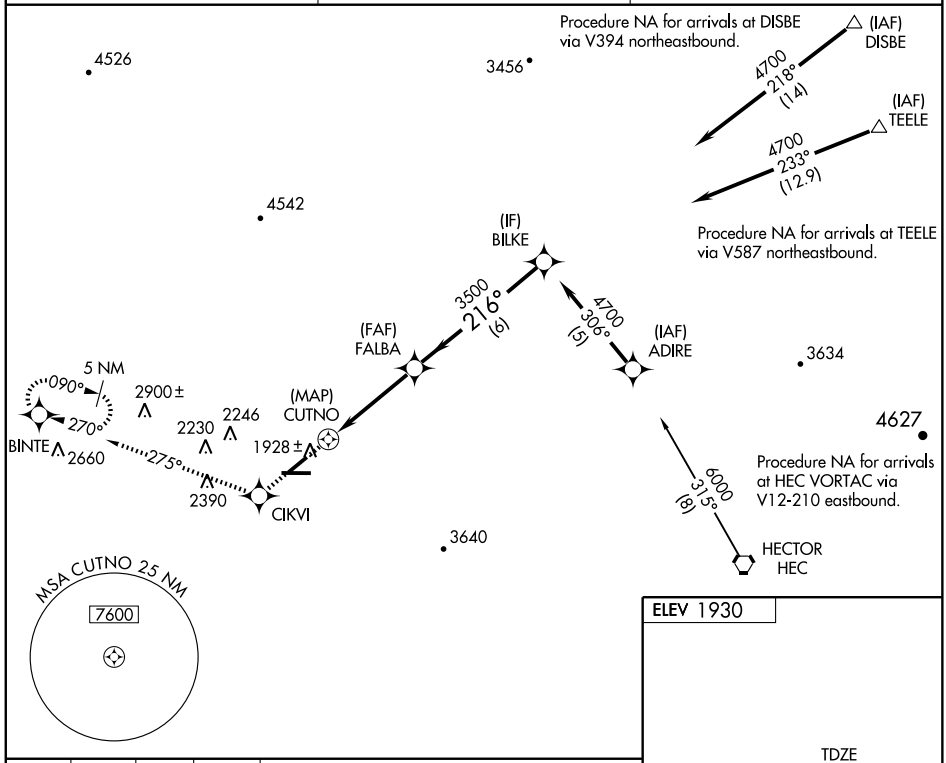
RNAV (GPS) RWY 22

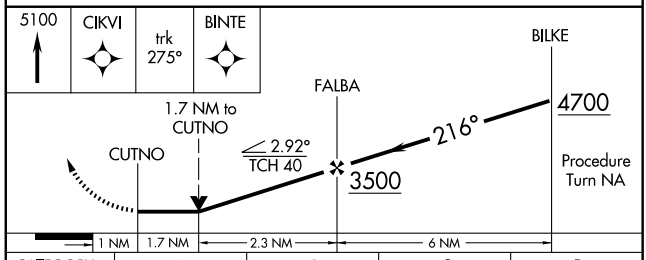
DAGGETT/BARSTOW-DAGGETT (DAG)

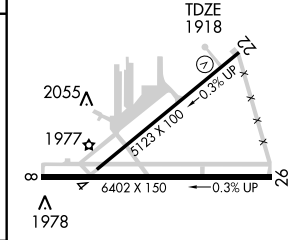
Circling NA for Cat D south of Rwy 8-26. DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Victorville altimeter setting and increase all MDAs 220 feet. Increase LNAV and Circling Cat B/C visibility ¼ mile.
VDP NA when using Victorville altimeter setting.

MISSED APPROACH: Climb to 5100 direct CIKVI and via track 275° to BINTE and hold, continue climb-in-hold to 5100.

ASOS	LOS ANGELES CENTER	UNICOM
132.175	132.5 284.7	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	2800-1¼	882 (900-1¼)	2800-2¾ 882 (900-2¾)	2800-3 882 (900-3)
CIRCLING	2800-1¼	870 (900-1¼)	2860-2¾ 930 (1000-2¾)	2860-3 930 (1000-3)

MIRL Rwys 4-22 and 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	6402
CH 72813	255°	TDZE	1918
W26A		Apt Elev	1930

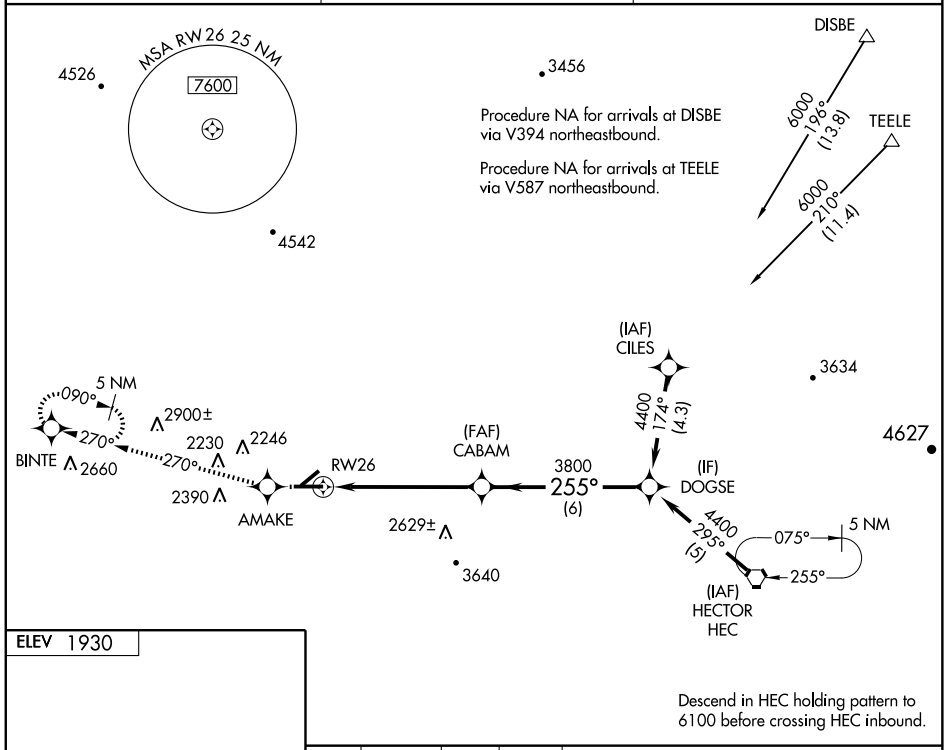
RNAV (GPS) RWY 26

DAGGETT/ BARSTOW-DAGGETT (DAG)

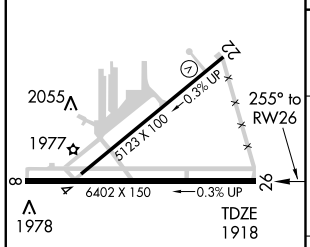
Circling NA for Cat D south of Rwy 8-26. DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA. VDP NA when using Victorville altimeter setting.
When local altimeter setting not received, use Victorville altimeter setting and increase all DAs 211 feet and all MDAs 220 feet. Increase LPV all Cats visibility ¾ mile, LNAV Cat A/B ¼ mile, Cat C ¾ mile, Cat D ½ mile, Circling Cats A/B/C ¼ mile.

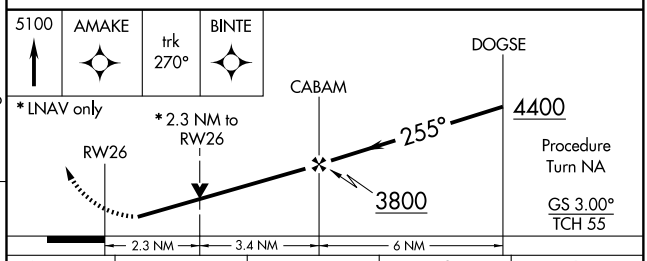
MISSED APPROACH: Climb to 5100 direct AMAKE and via track 270° to BINTE and hold, continue climb-in-hold to 5100.

ASOS	LOS ANGELES CENTER	UNICOM
132.175	132.5 284.7	123.0 (CTAF) L



Descend in HEC holding pattern to 6100 before crossing HEC inbound.





CATEGORY	A	B	C	D
LPV DA	2217-1 299 (300-1)			
LNAV MDA	2700-1 782 (800-1)	2700-1¼ 782 (800-1¼)	2700-2¼ 782 (800-2¼)	2700-2½ 782 (800-2½)
CIRCLING	2700-1 770 (800-1)	2780-1¼ 850 (900-1¼)	2860-2¾ 930 (1000-2¾)	2860-3 930 (1000-3)

MIRL Rwys 4-22 and 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC DAG	APP CRS	Rwy Idg	5123
113.2	224°	TDZE	1918
Chan 79		Apt Elev	1930

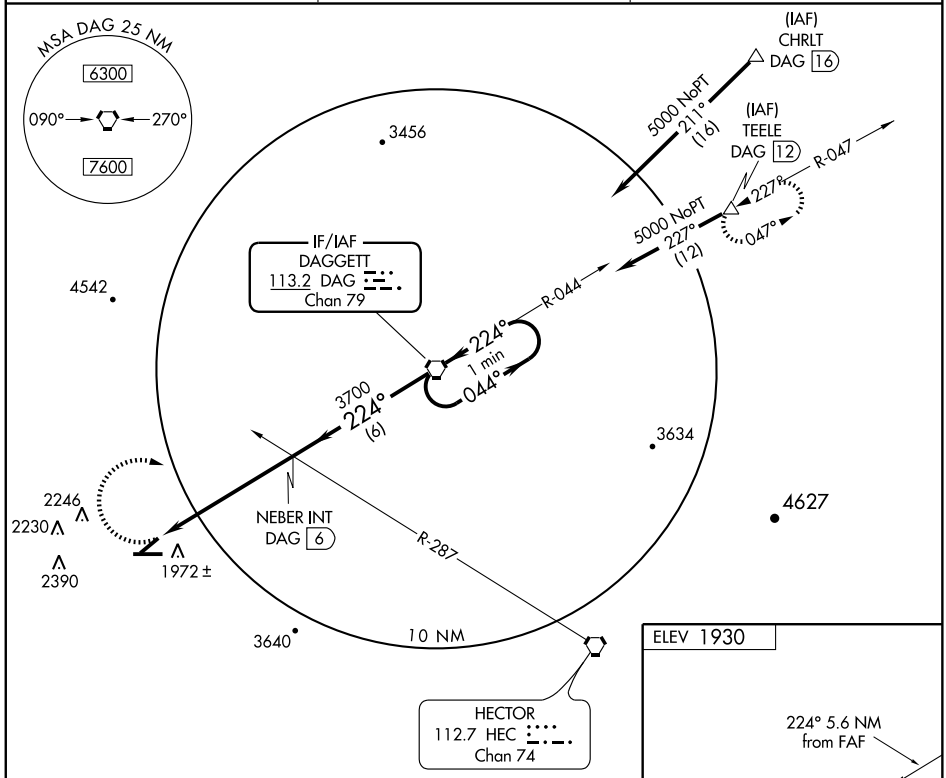
VOR or TACAN RWY 22

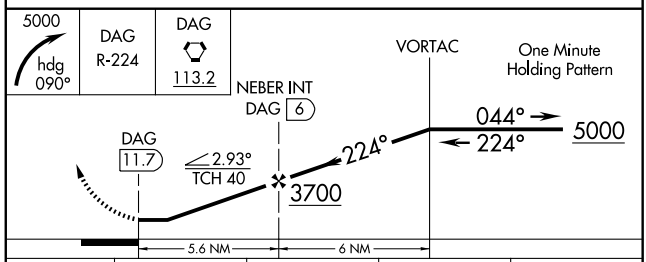
DAGGETT/BARSTOW-DAGGETT (DAG)

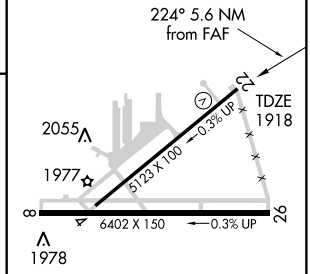
Circling NA for Cat D south of Rwy 8-26. Visibility reduction by helicopters NA. When local altimeter setting not received, use Victorville altimeter setting and increase all MDAs 220 feet.

MISSED APPROACH: Climbing right turn to 5000 via heading 090° and DAG VORTAC R-224 to DAG VORTAC and hold, continue climb-in-hold to 7500 (TACAN aircraft continue via DAG VORTAC R-047 to TEELE/12 DME and hold, continue climb-in-hold to 7500, hold NE, LT, 227° inbound).

ASOS	LOS ANGELES CENTER	UNICOM
132.175	132.5 284.7	123.0 (CTAF)







CATEGORY	A	B	C	D
S-22	3160-1¼ 1242 (1300-1¼)	3420-1½ 1502 (1500-1½)	3420-3 1502 (1500-3)	3540-3 1622 (1700-3)
CIRCLING	3160-1¼ 1230 (1300-1¼)	3420-1½ 1490 (1500-1½)	3420-3 1490 (1500-3)	3540-3 1610 (1700-3)

MIRL Rwys 4-22 and 8-26 C

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3176
167°	TDZE	64
	Apt Elev	69

RNAV (GPS) RWY 17

DAVIS/UNIVERSITY (EDU)

DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Travis AFB altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climbing right turn to 2000 direct CODRU and hold.

AWOS-3	TRAVIS APP CON	UNICOM
119.025	126.6 291.0	123.075 (CTAF)

Procedure NA for arrivals at ILA VORTAC via V195 northbound.

(IAF)
WILLIAMS
ILA

2000 NoPT
39° (25.6)

4 NM

347° 167°

(IF/IAF)
CODRU

1400
167° (5.2)

(FAF)
HAPAX

573

RW17 227

368

MSA RW17 25 NM
4300

2000
309° (18.3)
SACRAMENTO
SAC

Procedure NA for arrivals on SAC VORTAC airway radials 257 CW 329.

2000 to CODRU
338° (38.3)

662
OAKEY

ELEV 69
167° to RW17
17
TDZE 64
3176 X 50
35

MIRL Rwy 16-34

2000 CODRU

VGSI and descent angles not coincident.

CODRU

4 NM Holding Pattern

HAPAX

347° 2000
167°

RW17 3.04° TCH 40

167°

1400

4 NM 5.2 NM

CATEGORY	A	B	C	D
LNAV MDA	520-1 456 (500-1)		NA	
CIRCLING	580-1 511 (600-1)		NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6000
149°	TDZE	97
	Apt Elev	98

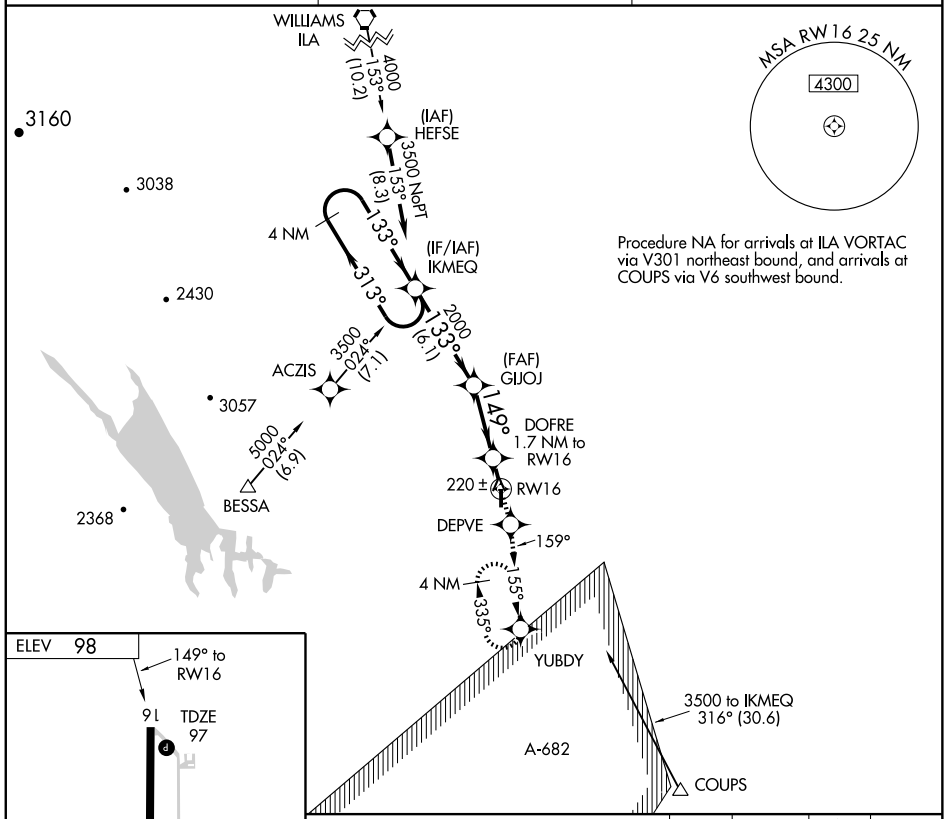
RNAV (GPS) RWY 16

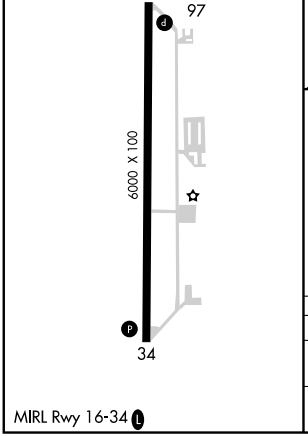
DAVIS/WOODLAND/WINTERS/ YOLO COUNTY (DWA)

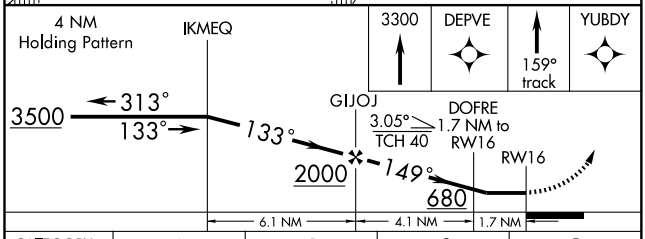
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Travis AFB altimeter setting and increase all MDA 60 feet, and increase LNAV Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3300 direct DEPVE and via 159° track to YUBDY and hold, continue climb-in-hold to 3300.

AWOS-3	TRAVIS APP CON	UNICOM
125.775	126.6 291.0	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	540-1	443 (500-1)	540-1¼ 443 (500-1¼)	540-1½ 443 (500-1½)
CIRCLING	580-1	482 (500-1)	580-1½ 482 (500-1½)	660-2 562 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6000
334°	TDZE	98
	Apt Elev	98

RNAV (GPS) RWY 34

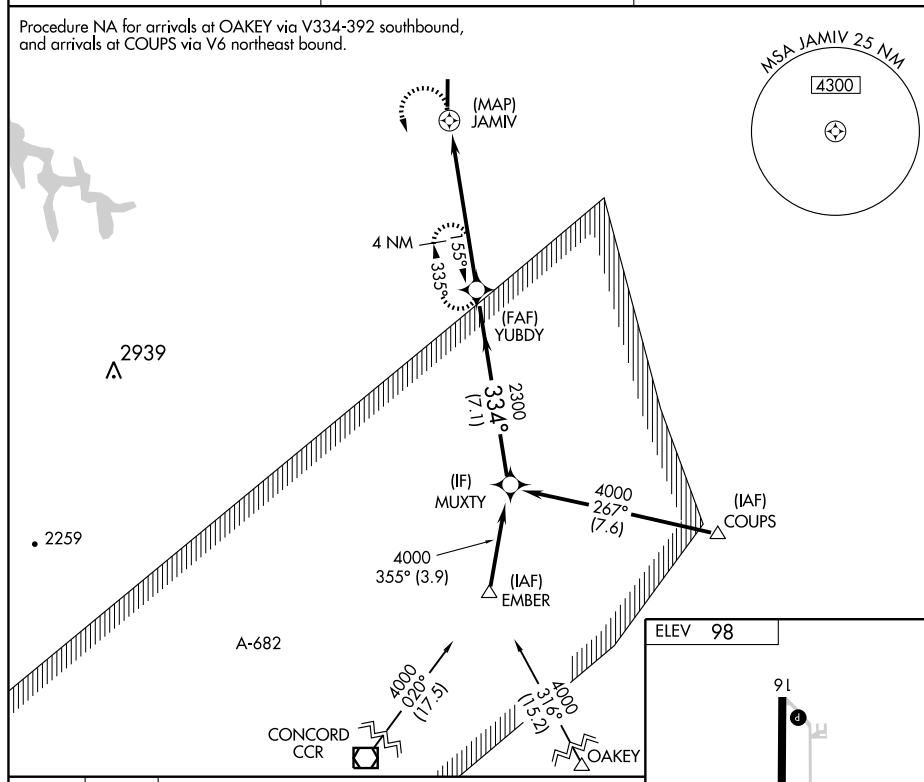
DAVIS/WOODLAND/WINTERS/ YOLO COUNTY (DWA)

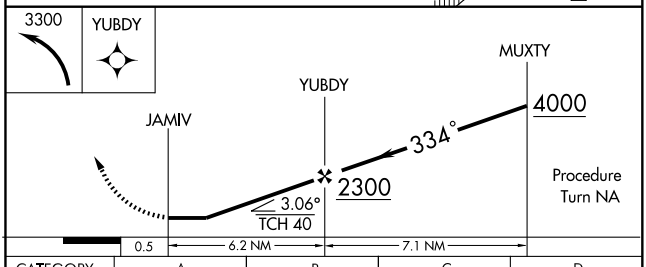
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Travis AFB altimeter setting and increase all MDA 60 feet, and increase LNAV Cats C and D visibility ¼ mile.

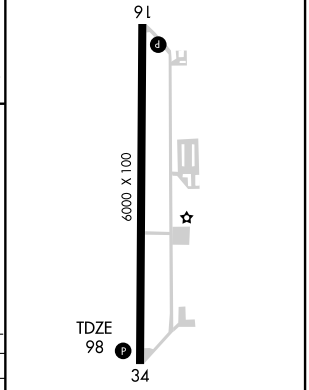
MISSED APPROACH: Climbing left turn to 3300 direct YUBDY and hold, continue climb-in-hold to 3300.

AWOS-3	TRAVIS APP CON	UNICOM
125.775	126.6 291.0	123.0 (CTAF) L

Procedure NA for arrivals at OAKEY via V334-392 southbound, and arrivals at COUPS via V6 northeast bound.







CATEGORY	A	B	C	D
LNAV MDA	580-1	482 (500-1)	580-1¼ 482 (500-1¼)	580-1½ 482 (500-1½)
CIRCLING	580-1	482 (500-1)	580-1½ 482 (500-1½)	660-2 562 (600-2)

MIRL Rwy 16-34 L

SW-2, 22 OCT 2009 to 19 NOV 2009

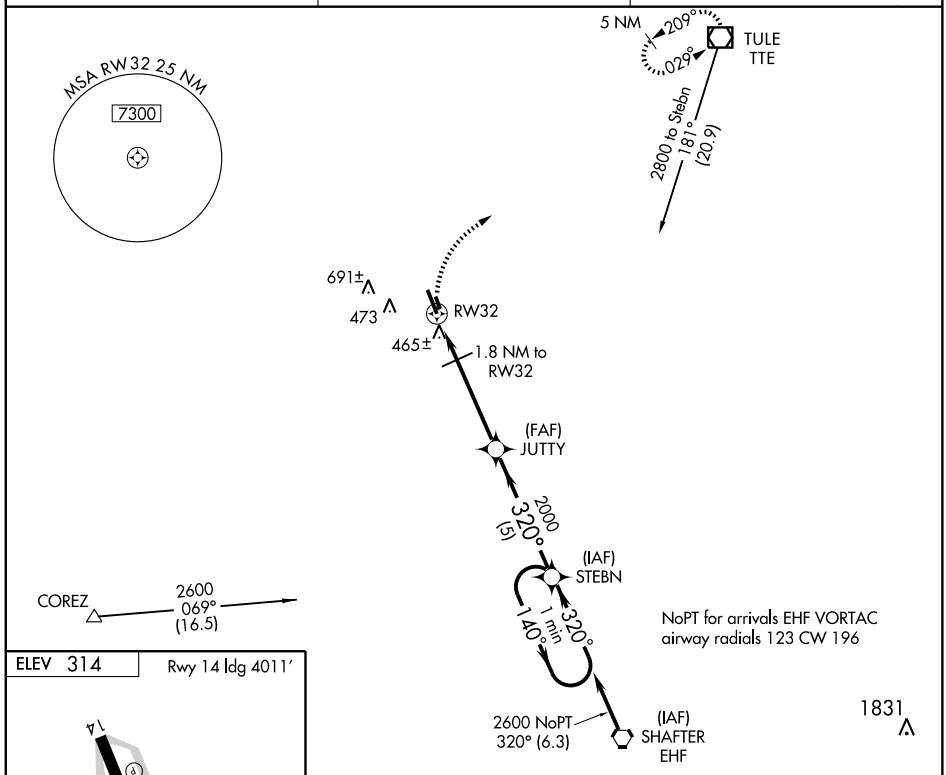
APP CRS	Rwy Idg	5651
320°	TDZE	313
	Apt Elev	314

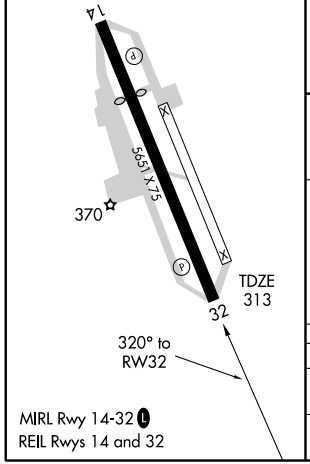
GPS RWY 32
DELANO MUNI (DLO)

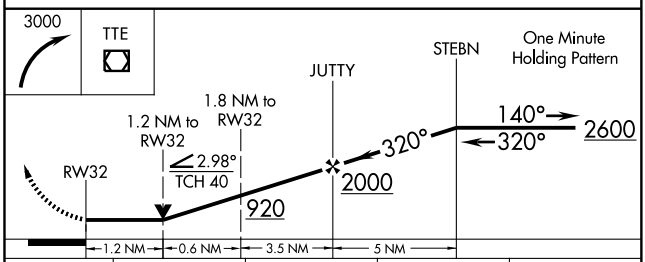
Circling not authorized Southwest of Rwy 14-32.

MISSED APPROACH: Climbing right turn to 3000 direct TTE VOR/DME and hold.

AWOS-3	BAKERSFIELD APP CON ★	UNICOM
119.55	118.9	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-32	720-1 407 (500-1)		720-1¼ 407 (500-1¼)	
CIRCLING	760-1 446 (500-1)	780-1 466 (500-1)	780-1½ 466 (500-1½)	880-2 566 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

DELANO, CALIFORNIA AL-6173 (FAA)

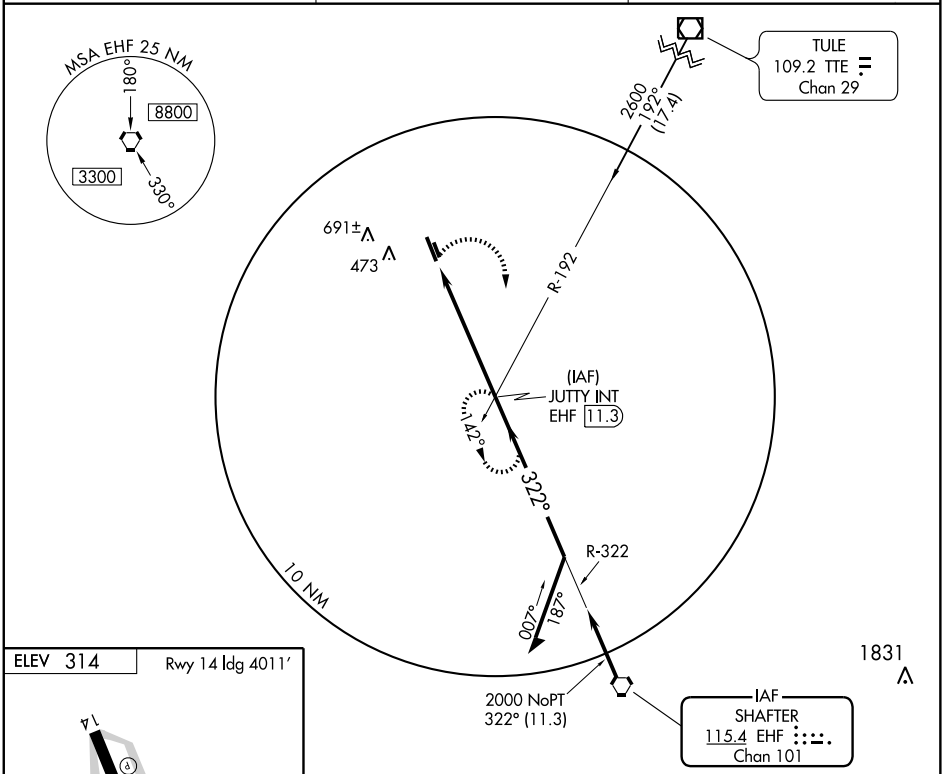
VORTAC EHF	APP CRS	Rwy Idg	5651
115.4	322°	TDZE	313
Chan 101		Apt Elev	314

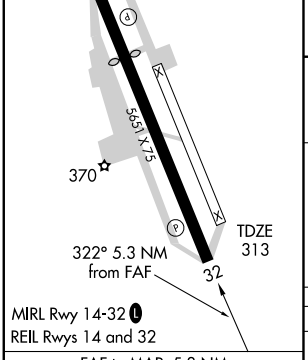
VOR RWY 32
DELANO MUNI (DLO)

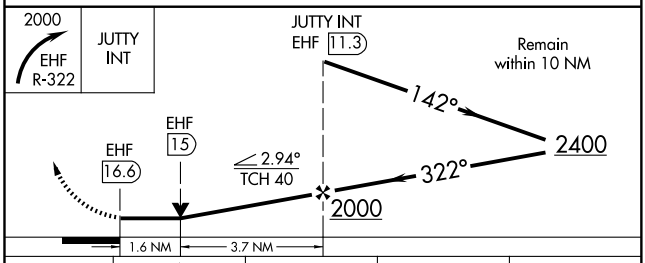
Circling not authorized Southwest of Rwy 14-32.

MISSED APPROACH: Climbing right turn to 2000 via EHF R-322 to JUTTY Int and hold.

AWOS-3	BAKERSFIELD APP CON ★	UNICOM
119.55	118.9	122.8 (CTAF)





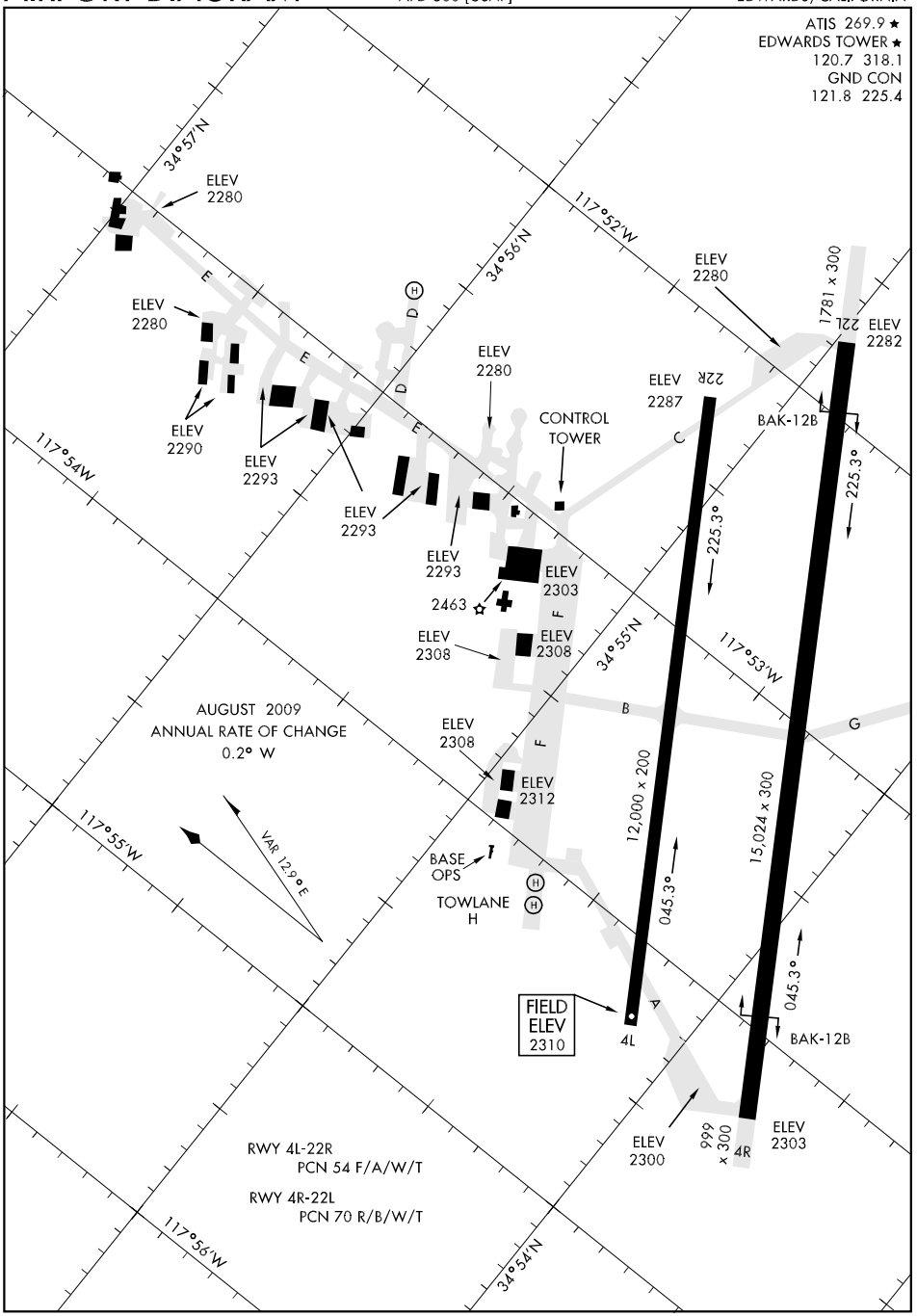


FAF to MAP 5.3 NM

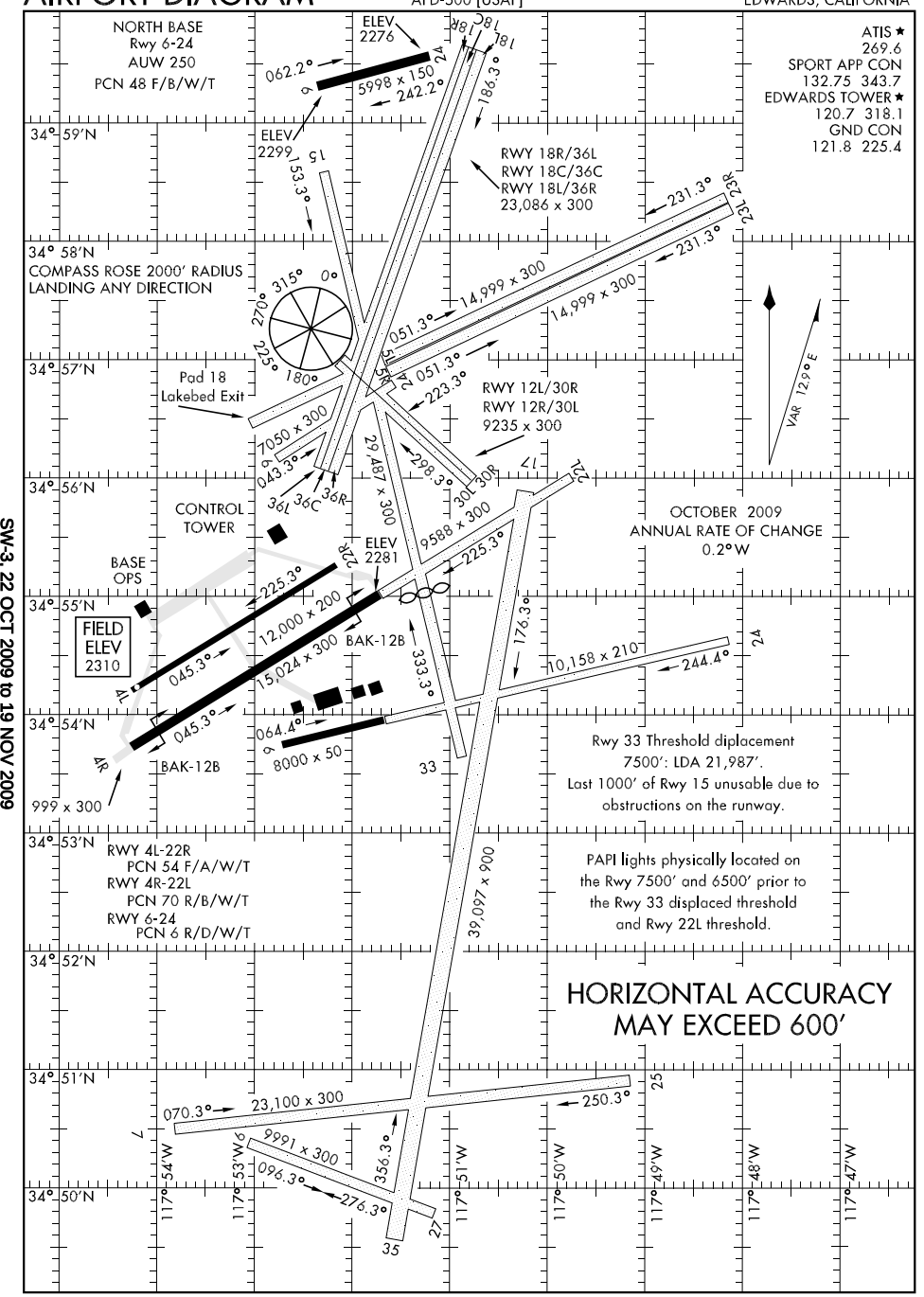
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-32	860-1 547 (600-1)		860-1½ 547 (600-1½)	860-1¾ 547 (600-1¾)
CIRCLING	860-1 546 (600-1)		860-1½ 546 (600-1½)	880-2 566 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

HI-ILS RWY 22L

EDWARDS AFB (KEDW)

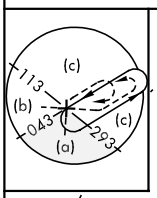
LOC I-EDW	APCH CRS	Rwy ldg 15,024 TDZE 2285 Arpt Elev 2310
110.1	224°	

JAL-500 [USAF]

* Circling not authorized NW of Rwy 4R-22L.

MISSED APPROACH: Track EDW VORTAC R-223 outbound. At 12 DME turn right direct EDW R-043/20 DME (COOLS) and hold. Maintain 11,000.

ATIS *	SPORT APP CON	EDWARDS TOWER *	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4



CAUTION: Do not mistake South Base Rwy 24 for Rwy 22L.

RADAR REQUIRED FOR HOLDING

(IAF) COOLS EDW

4584

20

R-043

EDW 30

223°

044°

043°

Max holding alt FL180

Min holding alt 11,000

3087

224°

EDWARDS 116.4 EDW Chan 111

EDW 6 /RADAR

LOCALIZER 110.1 I-EDW

272° (42)

DAGGETT

2650

3407

EDW 4 /RADAR

2416

EDW 12 /RADAR

R-223

4120

20 NM

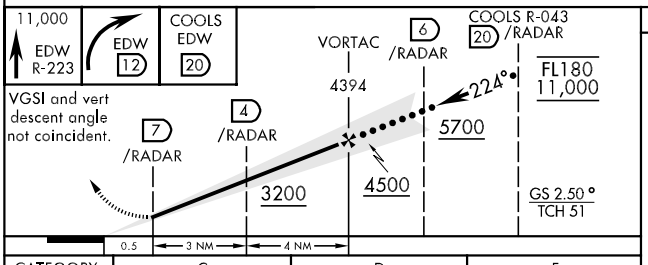
MSA EDW 25 NM

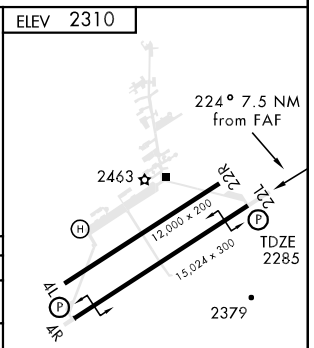
7800

RADAR or DME REQUIRED FOR LOCALIZER

HIGH ALTITUDE FACILITIES

EMERG SAFE ALT 100 NM 16,800





CATEGORY	C	D	E
S-ILS 22L	2485- ¾	200	(200-¾)
S-LOC 22L	2540-1	255	(300-1)
CIRCLING *	2880-1½ 578 (600-1½)	2880-2 578 (600-2)	3000-2½ 698 (700-2½)

VORTAC EDW 116.4 Chan 111	APCH CRS 043°	Rwy Idg 15,024 TDZE 2298 Arpt Elev 2310

HI-VOR/DME or TACAN RWY 4R

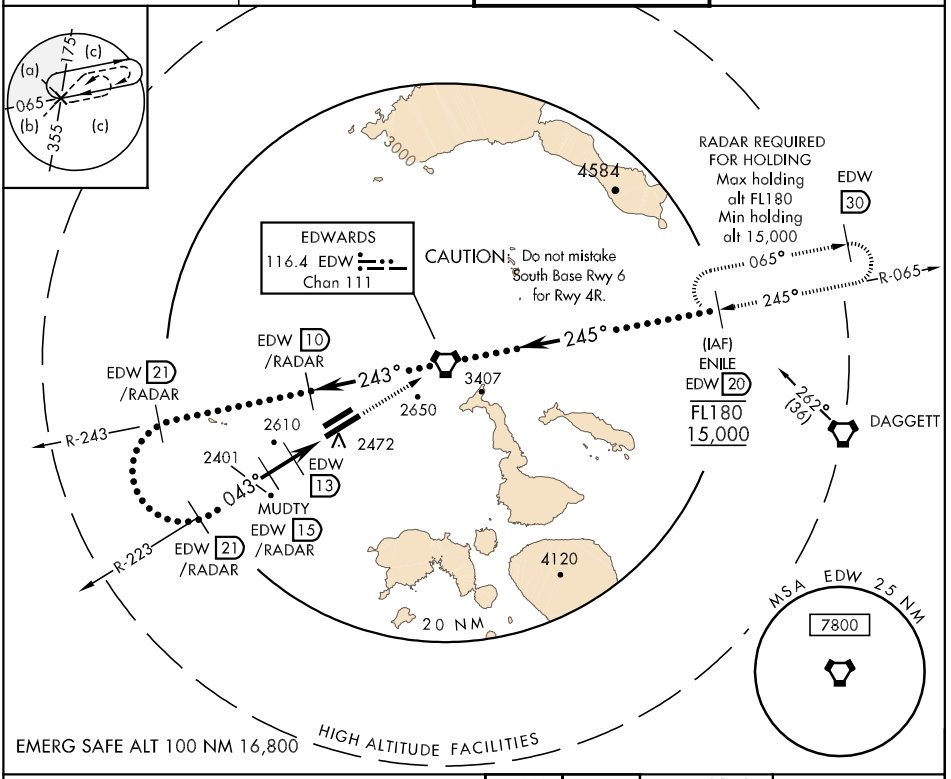
JAL-500 [USAF]

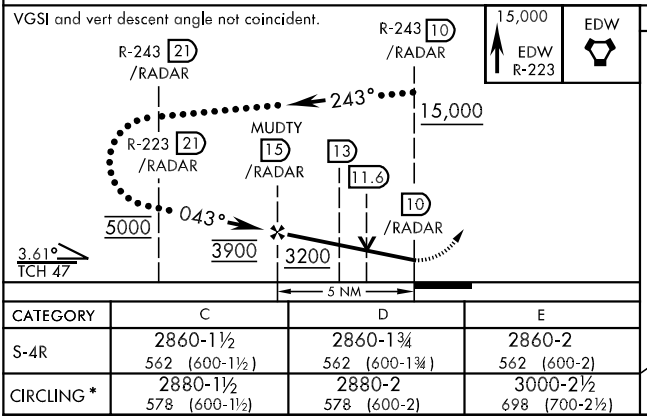
EDWARDS AFB (KEDW)

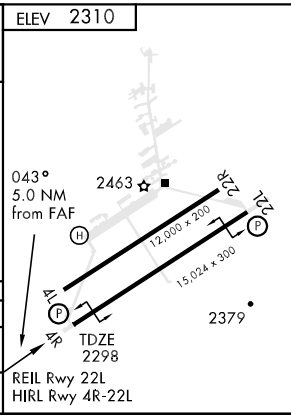
* Circling not authorized NW of Rwy 4R-22L.

MISSED APPROACH: Track EDW VORTAC R-223 to EDW. Intercept EDW R-065 to 20 DME and hold. Maintain 15,000.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4







CATEGORY	C	D	E
S-4R	2860-1½ 562 (600-1½)	2860-1¾ 562 (600-1¾)	2860-2 562 (600-2)
CIRCLING *	2880-1½ 578 (600-1½)	2880-2 578 (600-2)	3000-2½ 698 (700-2½)

VORTAC EDW	APCH CRS	Rwy Idg 15,024
116.4	223°	TDZE 2285
Chan 111		Arpt Elev 2310

HI-VOR/DME or TACAN RWY 22L

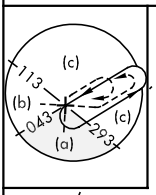
JAL-500 [USAF]

EDWARDS AFB (KEDW)

▼ * Circling not authorized NW of Rwy 4R-22L.

MISSED APPROACH: Track EDW VORTAC R-223 outbound. At 12 DME turn right direct EDW R-043/20 DME (COOLS) and hold. Maintain 11,000.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4



CAUTION: Do not mistake South Base Rwy 24 for Rwy 22L.

RADAR REQUIRED FOR HOLDING Max holding alt FL180

(IAF) COOLS EDW Min holding alt 11,000

R-043

223°

043°

EDW 30

4584

3087

EDWARDS 116.4 EDW Chan 111

EDW 6 /RADAR

223°

272° (42)

DAGGETT

2650

3407

EDW 4 /RADAR

2416

EDW 12 /RADAR

R-223

4120

20 NM

MSA EDW 25 NM

7800

RADAR or DME REQUIRED

HIGH ALTITUDE FACILITIES

EMERG SAFE ALT 100 NM 16,800

11,000 EDW R-223

EDW 12

COOLS EDW 20

VORTAC

6 /RADAR

COOLS R-043 20 /RADAR

223°

FL180 11,000

5800

4500

4 /RADAR

6.4

7 /RADAR

3200

0.5 3 NM 4 NM

ELEV 2310

223° 7.5 NM from FAF

2463

22R

22L

H

P

12,000 x 200

15,024 x 300

TDZE 2285

2379

4L

4R

CATEGORY	C	D	E
S-22L	2640-1 355 (400-1)	2640-1¼ 355 (400-1¼)	
CIRCLING *	2880-1½ 578 (600-1½)	2880-2 578 (600-2)	3000-2½ 698 (700-2½)

REIL Rwy 22L
HIRL Rwy 4R-22L

SW-3, 22 OCT 2009 to 19 NOV 2009

ILS RWY 22L

LOC I-EDW	APCH CRS	Rwy ldg	TDZE	Arpt Elev
110.1	224°	15,024	2285	2310

AL-500 [USAF]

EDWARDS AFB (KEDW)

* Circling not authorized NW of Rwy 4R-22L.

MISSED APPROACH: Track EDW VORTAC R-223 outbound. At 12 DME turn right direct EDW R-043/15 DME and hold. Maintain 7400.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4

RADAR or DME REQUIRED FOR LOCALIZER

EDWARDS 116.4 EDW Chan 111

LOCALIZER 110.1 I-EDW

(IAF) MORRI EDW 15 /RADAR 4584

R-043

223°

043°

224°

044°

EDW 25

RADAR REQUIRED FOR HOLDING Max holding alt 10,000 Min holding alt 7400

EDW 6 /RADAR

2650 3407

2610

2472

EDW 4 /RADAR

2755

EDW 12 /RADAR 2401

R-223

4120

20 NM

CAUTION: Do not mistake South Base Rwy 24 for Rwy 22L.

MSA EDW 25 NM 7800

EMERG SAFE ALT 100 NM 16,800

7400 EDW R-223

EDW 12

MORRI

MORRI R-043 15 /RADAR

6 /RADAR

EDW VORTAC 4394

4 /RADAR

7 /RADAR

224°

10,000 7400

5700

VGSI and vert descent angle not coincident.

GS 2.50° TCH 51

3200

4500

0.5 NM 3 NM 4 NM

ELEV 2310

224° 7.5 NM from FAF

2463

22R 22L

12,000 x 200

15,024 x 300

TDZE 2285

2379

4L 4R

REIL Rwy 22L

HIRL Rwy 4R-22L

CATEGORY	A	B	C	D	E
S-ILS 22L	2485-¾		200	(200-¾)	
S-LOC 22L	2540-1		255	(300-1)	
CIRCLING *	2880-1	578 (600-1)	2880-1½ 578(600-1½)	2880-2 578 (600-2)	3000-2½ 698(700-2½)

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 4R

APCH CRS	Rwy ldg	15,024
044°	TDZE	2298
	Arpt Elev	2310

AL-500 [USAF]

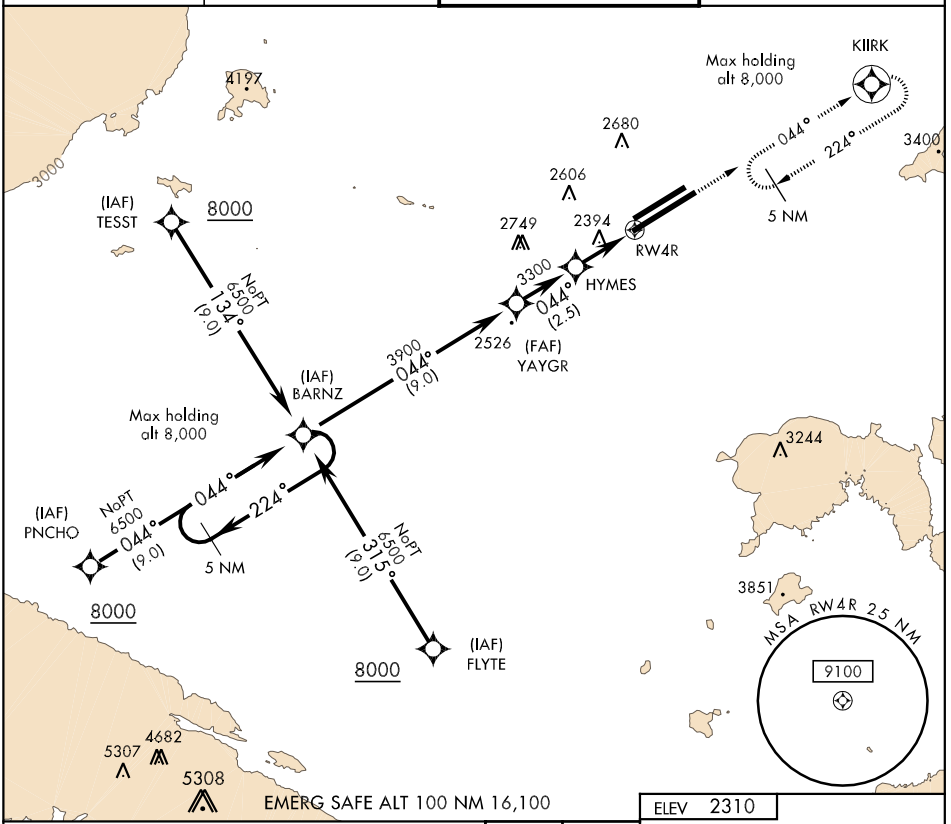
EDWARDS AFB (KEDW)

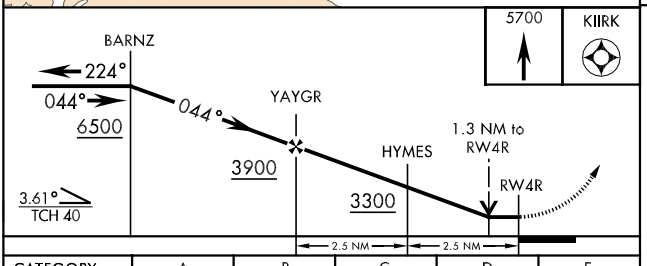
▼ * Circling not authorized NW of Rwy 4R-22L.

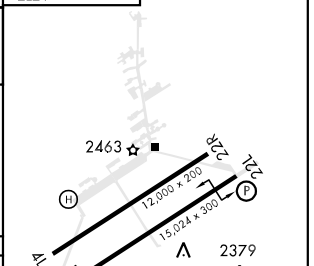
DME/DME RNP-0.3 NA

MISSED APPROACH: Proceed direct to KIIRK waypoint and hold. Maintain 5700.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4







CATEGORY	A	B	C	D	E
LNAV MDA	2840-1 542 (600-1)		2840-1¼ 542 (600-1¼)	2840-1½ 542 (600-1½)	2840-1¾ 542 (600-1¾)
CIRCLING *	2880-1 568 600-1)		2880-1½ 568(600-1½)	2880-2 568 (600-2)	3000-2½ 688(700-2½)

RNAV (GPS) RWY 22L

APCH CRS	Rwy ldg	15,024
224°	TDZE	2285
	Arpt Elev	2310

AL-500 [USAF]

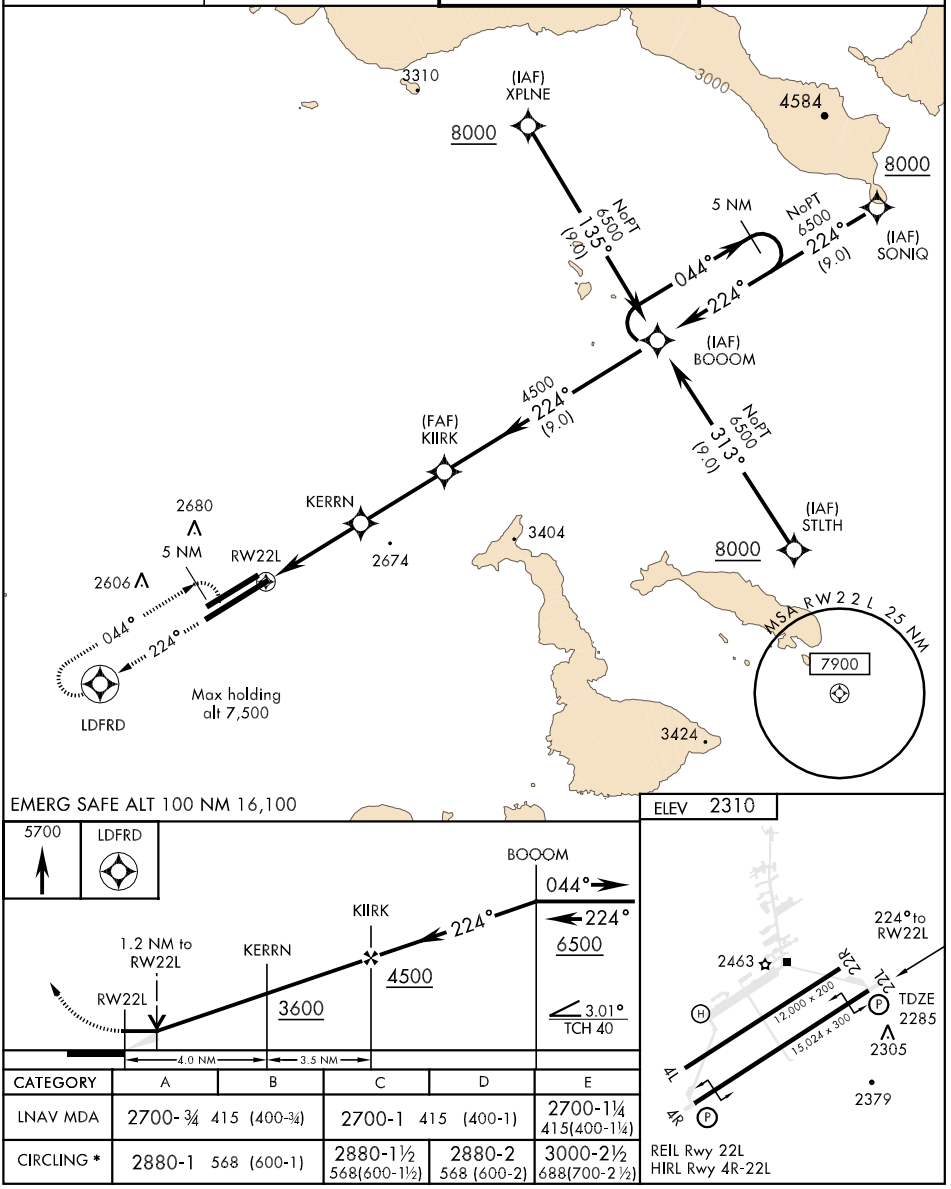
EDWARDS AFB (KEDW)

* Circling not authorized NW of Rwy 4R-22L.

DME/DME RNP-0.3 NA

MISSED APPROACH: Proceed direct to LDFRD waypoint and hold. Maintain 5700.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4



CATEGORY	A	B	C	D	E
LNAV MDA	2700- ¾ 415 (400-¾)		2700-1 415 (400-1)		2700-1¼ 415(400-1¼)
CIRCLING *	2880-1 568 (600-1)		2880-1½ 568(600-1½)	2880-2 568 (600-2)	3000-2½ 688(700-2½)

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME or TACAN RWY 4L

VORTAC EDW	APCH CRS	Rwy Idg	12,000
116.4	046°	TDZE	2312
Chan 111		Arpt Elev	2310

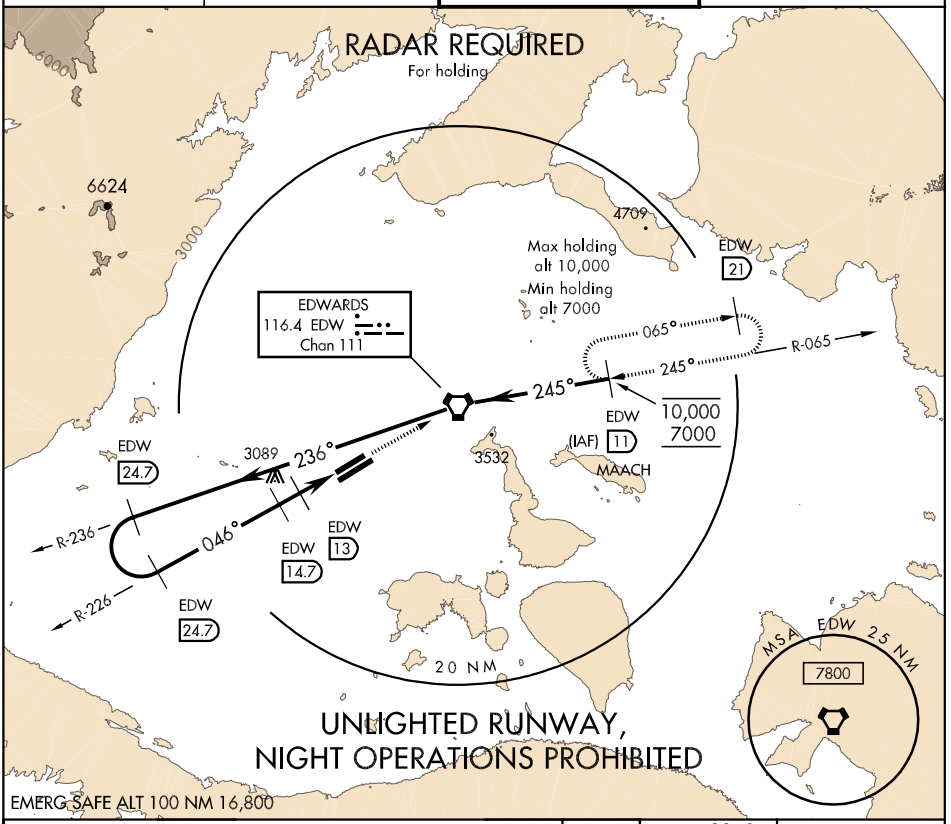
AL-500 [USAF]

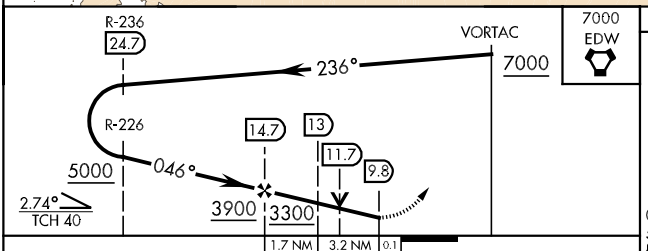
EDWARDS AFB (KEDW)

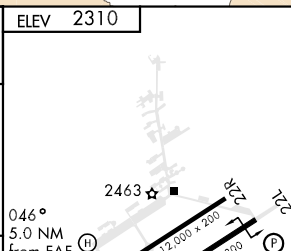
* Circling not authorized NW of Rwy 4L-22R. Circling NA at night to Rwy 22R.

MISSED APPROACH: Proceed direct EDW VORTAC, then intercept EDW R-065 to EDW 11 DME and hold. Maintain 7000.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4







CATEGORY	A	B	C	D	E
S-4L	2980-1	668 (700-1)	2980-1¾ 668 (700-1¾)	2980-2 668 (700-2)	2980-2¼ 668 (700-2¼)
CIRCLING*	2980-1	678 (700-1)	2980-2 678 (700-2)	2980-2¼ 678 (700-2¼)	3000-2½ 698 (700-2½)

VOR/DME or TACAN RWY 4R

VORTAC EDW 116.4 Chan 111	APCH CRS 043°	Rwy Idg 15,024 TDZE 2298 Arpt Elev 2310

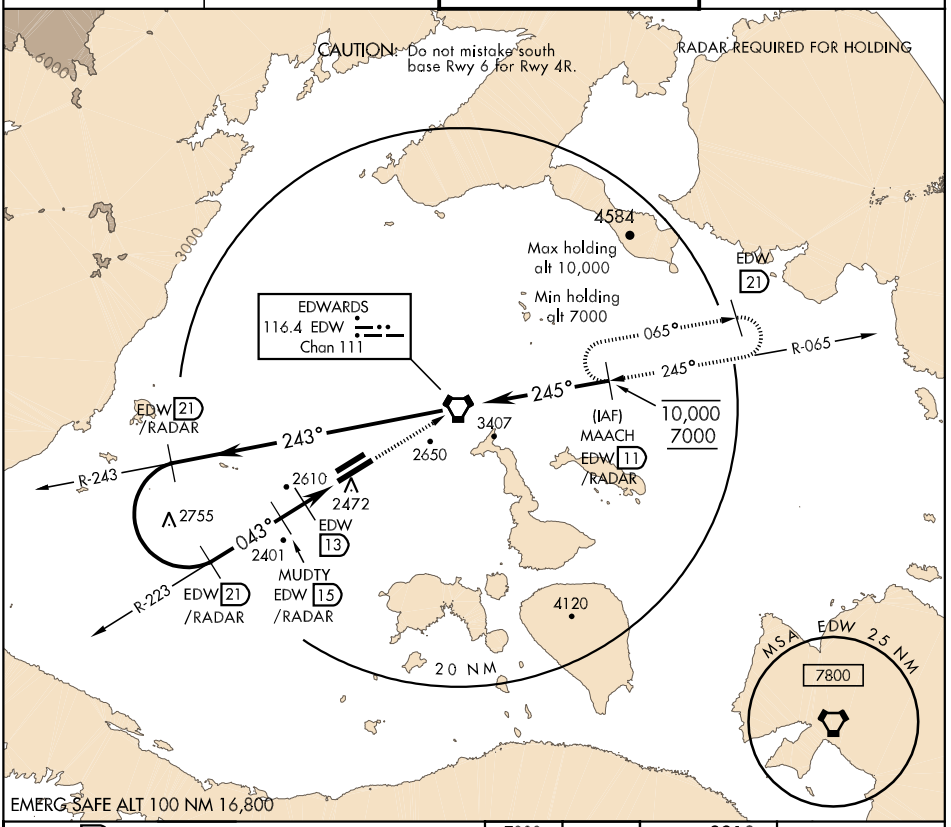
AL-500 [USAF]

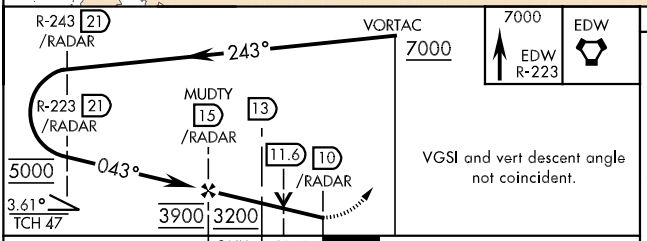
EDWARDS AFB (KEDW)

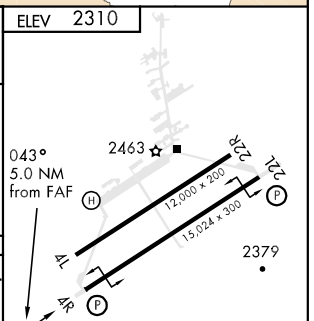
* Circling not authorized NW of Rwy 4R-22L.

MISSED APPROACH: Track EDW VORTAC R-223 to EDW. Intercept EDW R-065 to 11 DME and hold. Maintain 7000.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4







CATEGORY	A	B	C	D	E
S-4R	2860-1 562 (600-1)		2860-1½ 562 (600-1½)	2860-1¾ 562 (600-1¾)	2860-2 562 (600-2)
CIRCLING*	2880-1 578 (600-1)		2880-1½ 578 (600-1½)	2880-2 578 (600-2)	3000-2½ 698 (700-2½)

VOR/DME or TACAN RWY 22L

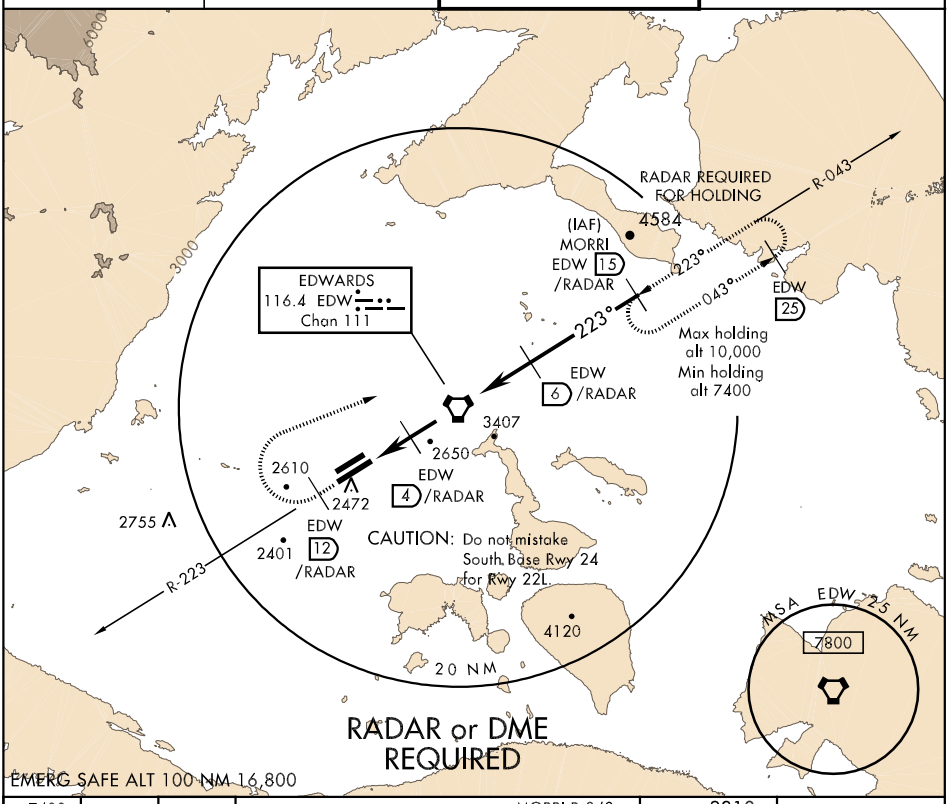
VORTAC EDW 116.4 Chan 111	APCH CRS 223°	Rwy ldg 15,024 TDZE 2285 Arpt Elev 2310

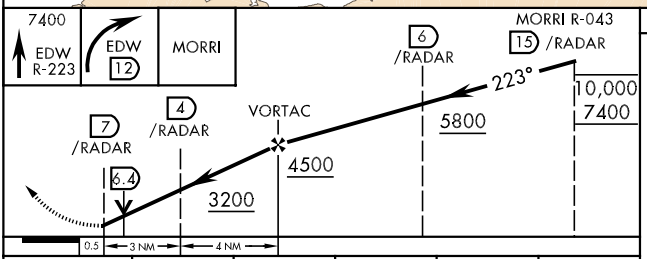
AL-500 [USAF] — EDWARDS AFB (KEDW)

* Circling not authorized NW of Rwy 4R-22L.

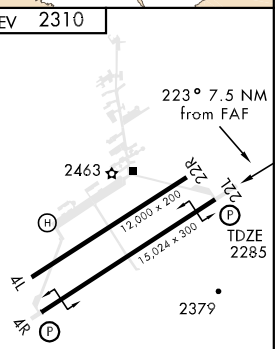
MISSED APPROACH: Track EDW VORTAC R-223 outbound. At 12 DME turn right direct EDW R-043/15 DME and hold. Maintain 7400.

ATIS ★	SPORT APP CON	EDWARDS TOWER ★	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4





ELEV 2310



CATEGORY	A	B	C	D	E
S-22L	2640-1 355 (400-1)			2640-1¼ 355 (400-1¼)	
CIRCLING *	2880-1 578 (600-1)		2880-1½ 578(600-1½)	2880-2 578 (600-2)	3000-2½ 698(700-2½)

VOR/DME or TACAN RWY 22R

VORTAC EDW	APCH CRS	Rwy Idg 12,000
116.4	226°	TDZE 2292
Chan 111		Arpt Elev 2310

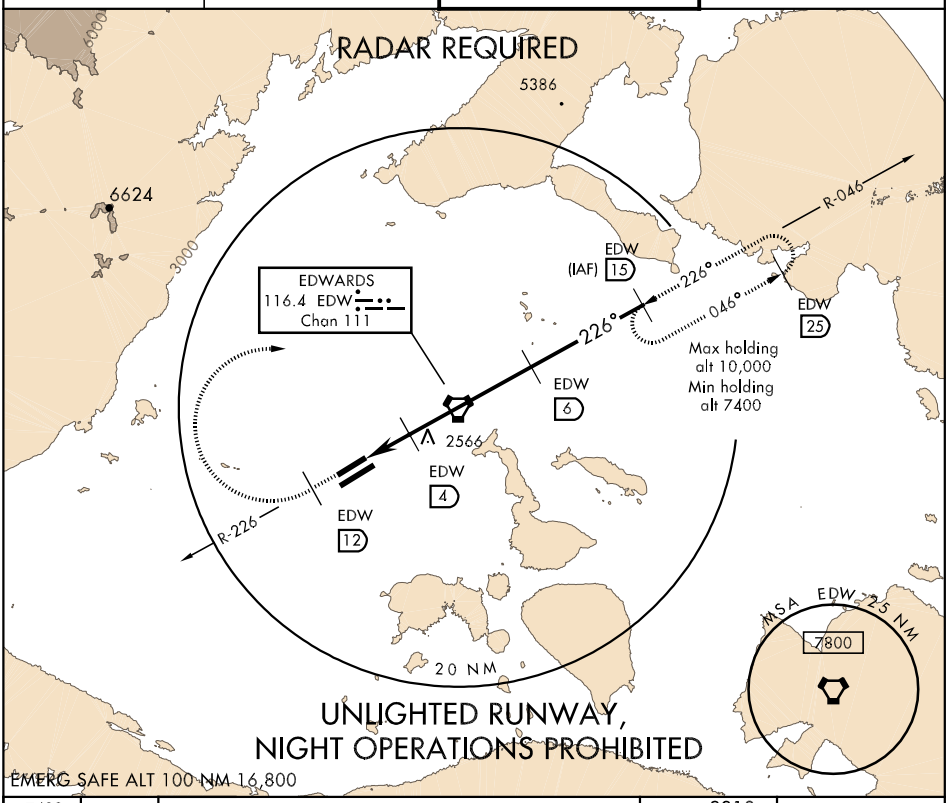
AL-500 [USAF]

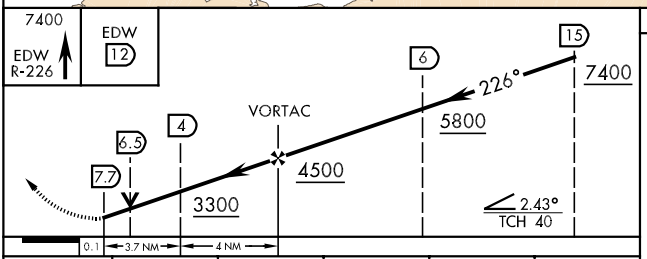
EDWARDS AFB (KEDW)

* Circling not authorized NW of Rwy 4L-22R. Circling NA at night to Rwy 4L.

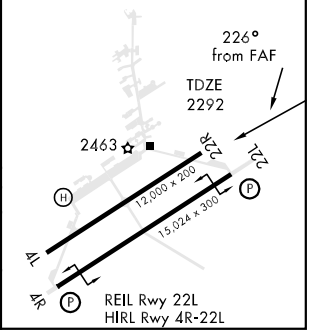
MISSED APPROACH: Track EDW VORTAC R-226 outbound. At EDW 12 DME turn right direct EDW R-046/15 DME and hold. Maintain 7400.

ATIS *	SPORT APP CON	EDWARDS TOWER *	GND CON
269.9	132.75 343.7	120.7 318.1	121.8 225.4

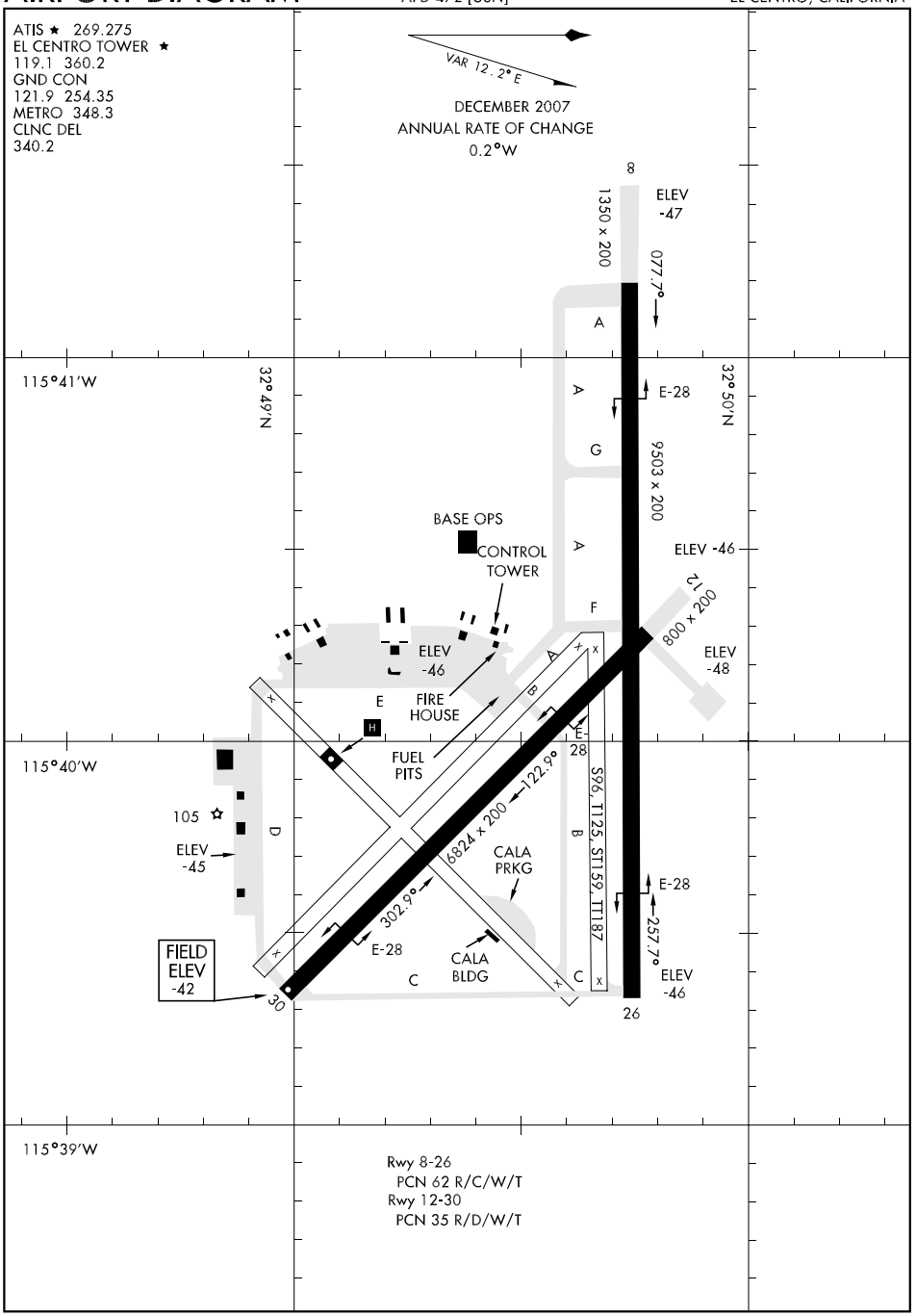




ELEV 2310



CATEGORY	A	B	C	D	E
S-22R	2740-1 448 (500-1)		2740-1¼ 448 (500-1¼)	2740-1½ 448 (500-1½)	
CIRCLING *	2880-1 578 (600-1)		2880-1½ 578(600-1½)	2900-2 598 (600-2)	3000-2½ 698(700-2½)



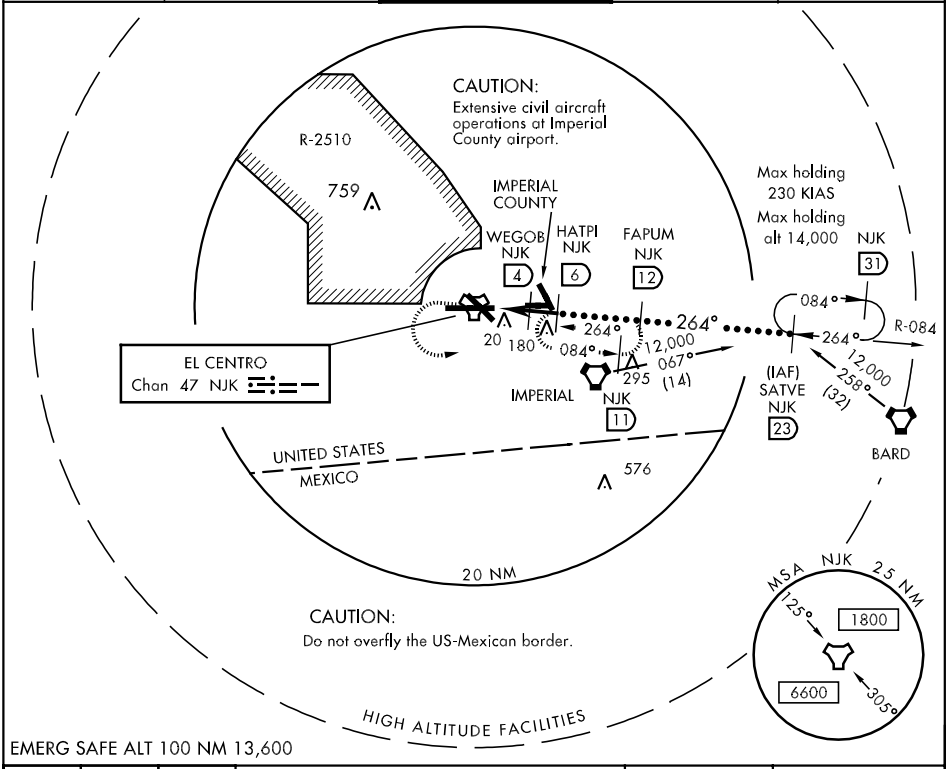
SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 26

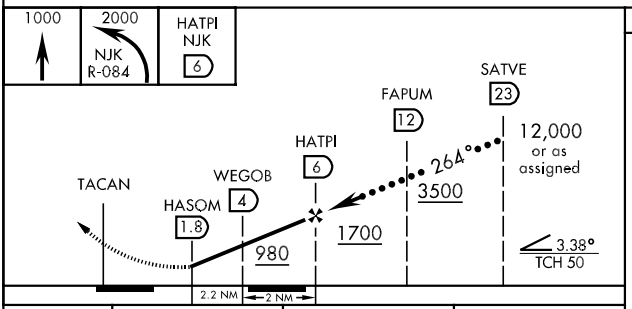
TACAN NJK Chan 47	APCH CRS 264°	Rwy ldg 9503 TDZE -45 Arpt Elev -42	JAL-472 [USN]	EL CENTRO NAF (KNJK)

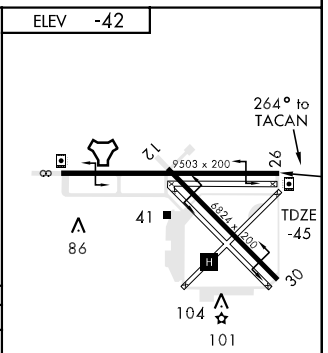
MISSED APPROACH: Climb to 1000, then climbing left turn to 2000, intercept NJK TACAN R-084 to HATPI and hold.

ATIS ★	LOS ANGELES CENTER	EL CENTRO TOWER ★	GND CON	CLNC DEL
269.275	128.6 291.7	119.1 360.2	121.9 254.35	340.2



EMERG SAFE ALT 100 NM 13,600





CATEGORY	C	D	E
S-26	280-1 325 (400-1)		280-1¼ 325 (400-1¼)
CIRCLING	420-1½ 462 (500-1½)	520-2 562 (600-2)	

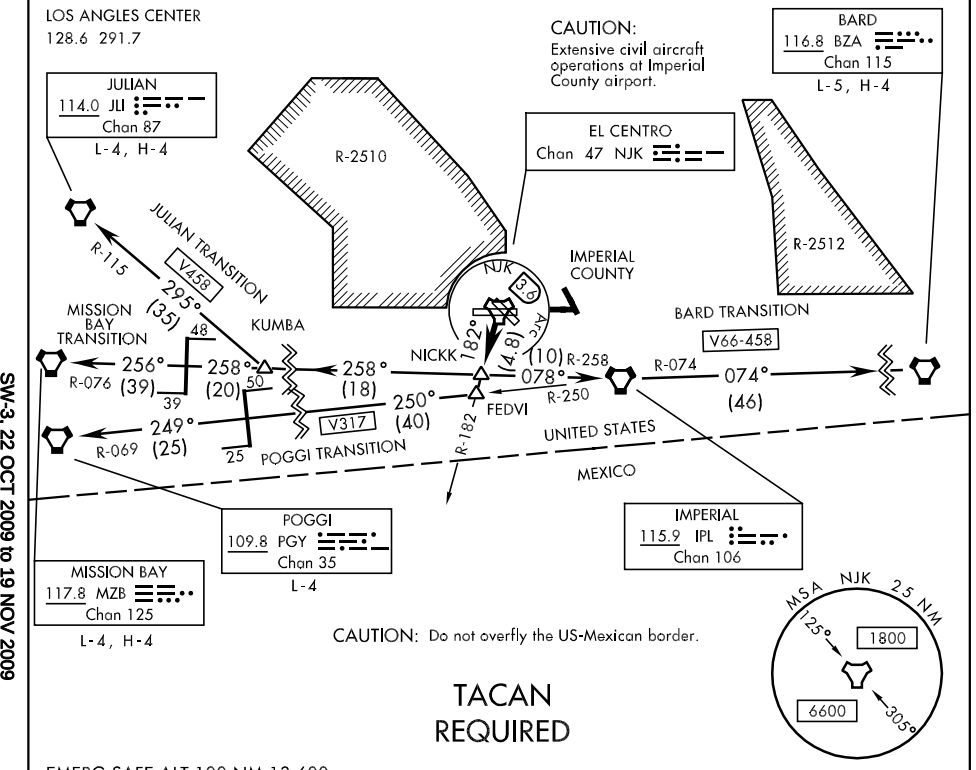
HIRL Rwys 8-26, 12-30

ATIS ★ 269.275
CLNC DEL 340.2
GND CON
121.9 254.35
EL CENTRO TOWER ★
119.1 360.2
LOS ANGLES CENTER
128.6 291.7

This SID requires 2100 ft ceiling and 2½ miles visibility for climb in visual conditions.

Minimum Climb Rate of 360 ft/NM for Eastbound departures.

Minimum Climb Rate of 440 ft/NM for Westbound departures.



CAUTION: Do not overfly the US-Mexican border.

TACAN REQUIRED

EMERG SAFE ALT 100 NM 13,600

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb in visual conditions within 3.6 DME of NJK TACAN to cross NJK TACAN Southbound at or above 2000, then climb on NJK R-182 to NICKK. Then via assigned transition or route. Expect filed altitude 10 minutes after departure. Cross NICKK at or below 7000.

BARD TRANSITION (NICKK1•BZA): Via IPL VORTAC R-258 to IPL, then via IPL R-074 to BARD VORTAC.

JULIAN TRANSITION (NICKK1•JLI): From over NICKK via IPL VORTAC R-258 to KUMBA, then via JLI VORTAC R-115 to JLI. Cross KUMBA at or above 5600 climbing to 7700.

MISSION BAY TRANSITION (NICKK1•MZB): From over NICKK via IPL VORTAC R-258 and MZB VORTAC R-076 to MZB. Cross KUMBA at or above 6700 climbing to 8000.

POGGI TRANSITION (NICKK1•PGY): From over NICKK continue climb to 7000 via NJK R-182 to FEDVI, then via IPL VORTAC R-250 and PGY VORTAC R-069 to PGY.

RNAV (GPS) RWY 26

APCH CRS	Rwy ldg	9503
257°	TDZE	-45
	Arpt Elev	-42

AL-472 [USN]

EL CENTRO NAF (KNJK)

For uncompensated Baro VNAV systems, LNAV/VNAV NA below -14°C(6°F) or above 39°C(103°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 500, then climbing left turn to 2000 direct ZIPAS and hold.

ATIS ★	LOS ANGELS CENTER	EL CENTRO TOWER ★	GND CON	CLNC DEL
269.275	128.6 291.7	119.1 360.2	121.9 254.35	340.2

CAUTION: Extensive civil aircraft operations at Imperial County airport.

Max speed all segments 200 KIAS

R-2510

IMPERIAL COUNTY

RW26

257°

1100

272° (4)

FOMTU

294

(FAF) CUNSA

1500

306° (4.9)

Max holding alt 4000

Max holding 200 KIAS

4 NM

075°

295

295

255°

3700

254° (7)

343

ARGUS

IMPERIAL

3700

074° (3)

(IAF) ZIPAS

UNITED STATES

MEXICO

576

CAUTION:

Do not overfly the US-Mexican border.

M.S.A RW26 25 NM

6600

EMERG SAFE ALT 100 NM 13,600

500 | 2000 | ZIPAS

* LNAV only

* .8 NM to RW26

RW26

257°

CUNSA

1100

FOMTU

1500

306°

272°

ZIPAS

2000

GS 3.03°

TCH 50

3.4 NM

ELEV -42

257° to RW26

TDZE -45

9503 x 200

12

26

8

41

86

6824 x 200

H

30

104

101

CATEGORY	A	B	C	D
LNAV/ VNAV DA	280-1	325	(400-1)	
LNAV MDA	260-1	305	(400-1)	
CIRCLING	420-1 462 (500-1)		420-1½ 462 (500-1½)	520-2 562 (600-2)

HIRL Rwys 8-26, 12-30

RNAV (GPS) RWY 30

WAAS Chan 60099 W30A	APCH CRS 302°	Rwy ldg 6824 TDZE -42 Arpt Elev -42

AL-472 [USN]

EL CENTRO NAF (KNJK)

For uncompensated Baro VNAV systems, LNAV/VNAV NA below -14°C(6°F) or above 42°C(108°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 500, then climbing left turn to 2000 direct ZIPAS and hold.

ATIS ★	LOS ANGELS CENTER	EL CENTRO TOWER ★	GND CON	CLNC DEL
269.275	128.6 291.7	119.1 360.2	121.9 254.35	340.2

CAUTION: Extensive civil aircraft operations at Imperial County airport.

Max speed all segments 200 KIAS

R-2510

IMPERIAL COUNTY

RW30

Max holding alt 4000

Max holding 200 KIAS

302°

238

3700

074°

(3)

4 NM

343

075°

295

295

3700

254°

(7)

ARGUS

1100

287°

(4)

(FAF)

LAMAW

IMPERIAL

255°

NORWE

1500

251°

(4.6)

(IAF)

ZIPAS

UNITED STATES

MEXICO

MSA RW30 25 NM

6600

CAUTION:

Do not overfly the US-Mexican border.

576

EMERG SAFE ALT 100 NM 13,600

500 | 2000 | ZIPAS

* LNAV only

* 1.1 NM to RW30

RW30

302°

LAMAW

1100

287°

NORWE

1500

251°

ZIPAS

2000

GS 3.00°

TCH 50

3.4 NM

ELEV -42

9503 x 200

12

26

8

41

86

6821 x 200

30

104

101

302° to RW30

TDZE -42

HIRL Rwys 8-26, 12-30

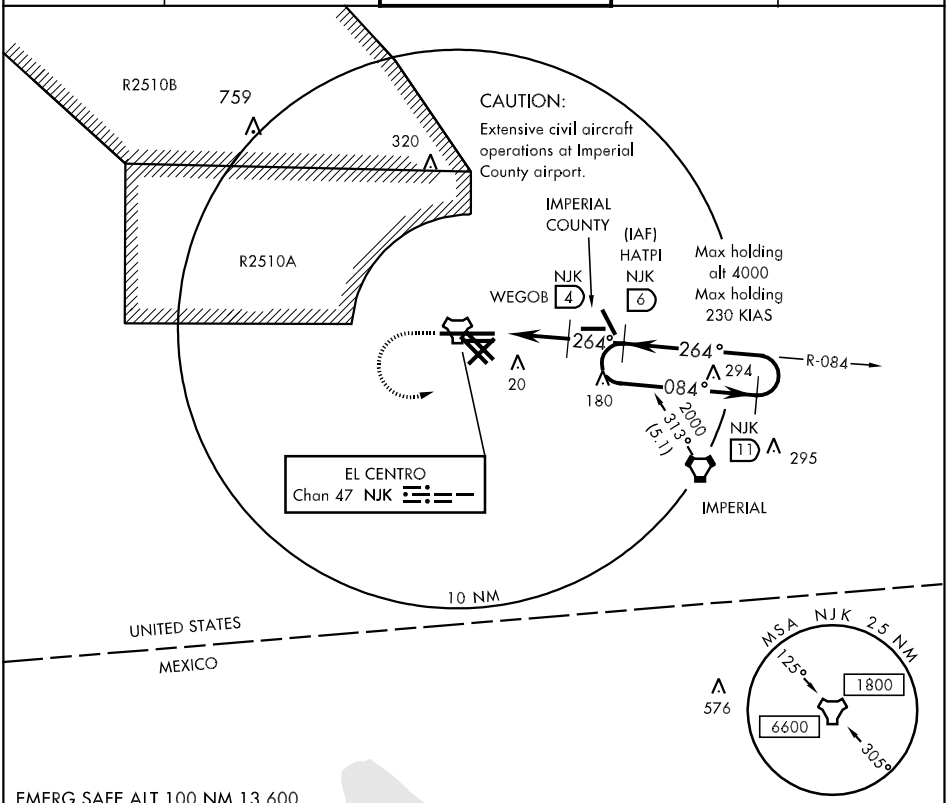
CATEGORY	A	B	C	D
LPV DA	158-¾	200	(200-¾)	
LNAV/VNAV DA	280-1	322	(400-1)	
LNAV MDA	360-1	402	(500-1)	
CIRCLING	420-1 462 (500-1)	420-1½ 462 (500-1½)	520-2 562 (600-2)	

TACAN RWY 26

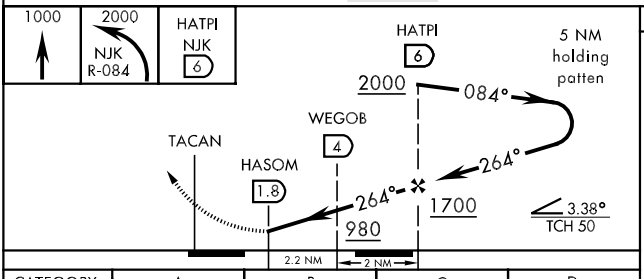
TACAN NJK Chan 47	APCH CRS 264°	Rwy ldg 9503 TDZE -45 Arpt Elev -42	AL-472 [USN]	EL CENTRO NAF (KNJK)

MISSED APPROACH: Climb to 1000, then climbing left turn to 2000, intercept NJK TACAN R-084 to HATPI and hold.

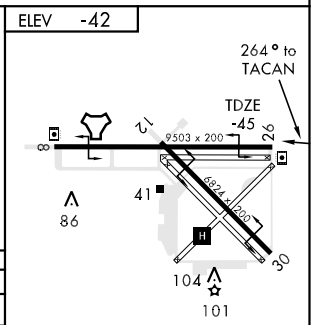
ATIS ★	LOS ANGELES CENTER	EL CENTRO TOWER ★	GND CON	CLNC DEL
269.275	128.6 291.7	119.1 360.2	121.9 254.35	340.2



EMERG SAFE ALT 100 NM 13,600



CATEGORY	A	B	C	D
S-26	280-1		325 (400-1)	
CIRCLING	420-1 462 (500-1)		420-1½ 462 (500-1½)	520-2 562 (600-2)



HIRL Rwys 8-26, 12-30

VOR/DME or TACAN RWY 30

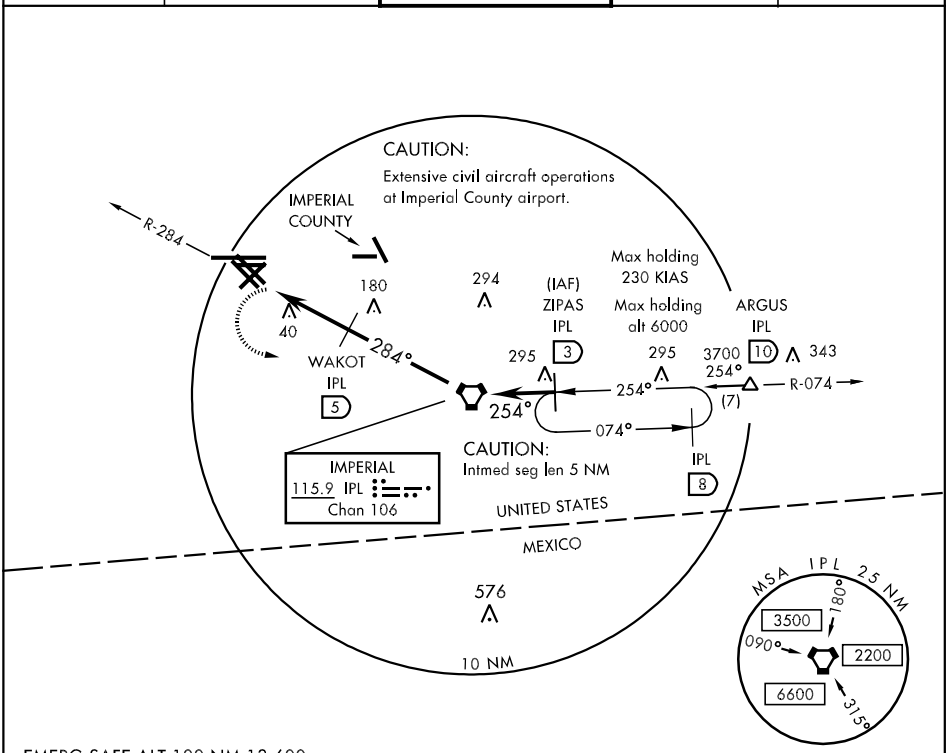
VORTAC IPL	APCH CRS	Rwy ldg	6824
115.9	284°	TDZE	-42
Chan 106		Arpt Elev	-42

AL-472 [USN]

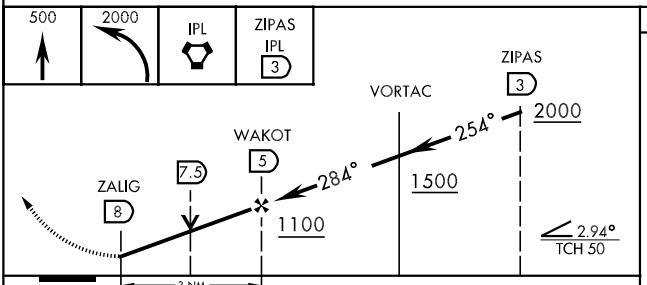
EL CENTRO NAF (KNJK)

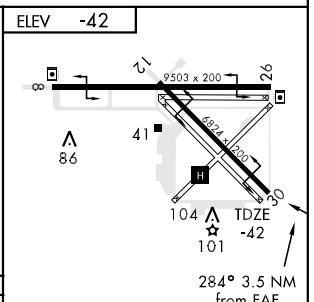
MISSED APPROACH: Climb to 500, then climbing left turn to 2000, direct IPL VORTAC, then via IPL R-074 to ZIPAS and hold.

ATIS ★	LOS ANGELS CENTER	EL CENTRO TOWER ★	GND CON	CLNC DEL
269.275	128.6 291.7	119.1 360.2	121.9 254.35	340.2



EMERG SAFE ALT 100 NM 13,600





CATEGORY	A	B	C	D
S-30	300-1 342 (400-1)			300-1¼ 342 (400-1¼)
CIRCLING	420-1 462 (500-1)		420-1½ 462 (500-1½)	520-2 562 (600-2)

HIRL Rwys 8-26, 12-30

FAF to MAP 3.0 NM

Knots	60	90	120	150	180
Min:Sec	3:00	2:00	1:30	1:12	1:00

09071

AIRPORT DIAGRAM

AL-5639 (FAA)

EL MONTE (EMT)
EL MONTE, CALIFORNIA

ATIS
118.75
EL MONTE TOWER★
121.2
GND CON
125.9

D

338

FIELD ELEV 296

34°05.5′N

19

192.2°

RWY 1-19
S12.5

HANGARS

CONTROL TOWER
364

HANGARS

VAR 13.2°E

JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

3995 X 75

0.4% UP

354

34°05′N

012.2°

HANGARS

ELEV 282

1

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

118°02.5′W

118°02′W

SW-3, 22 OCT 2009 to 19 NOV 2009

NDB EMT	APP CRS	Rwy Idg	N/A
359	258°	TDZE	N/A
		Apt Elev	296

NDB or GPS-C
EL MONTE (EMT)

When local altimeter setting not received, use Ontario Intl altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via heading 070° and PDZ R-278 to ADAMM Int, then continue climb to 4000 to PDZ VORTAC.

ATIS	SOCAL APP CON	EL MONTE TOWER ★	GND CON	UNICOM
118.75	125.5 349.0	121.2 (CTAF) L	125.9	122.95

EL MONTE 359 EMT
SELAW INT POM 6.3
2900 via EMT 258° (3.2)
FLYIN INT POM 3.1
3700 via EMT 258° (3.1)
IAF POMONA 110.4 POM Chan 41
IAF PARADISE 112.2 PDZ Chan 59
POM R-257
EMT 258°
292° 1 min 112°
R-112
R-278
R-006
R-015
R-187
ADAMM PDZ 15.5
4000 NoPT 292° (16)
4000 NoPT 292° (19.3)
115.7 SLI Chan 104
115.7 SLI Chan 104
10 NM
(IAF) PRADO POM 9.3
MSA EMT 25 NM
11200
090° 270°
5200
6164 5558 5000 4654 5111 5826 8007 9000 10064
6161 6631 3000 6812 7000 8859
2435 ± 1880 ± 5409 4539 3754 3000 5796 5776 5000 3294
978 ± 1063 1060 1000 3720 3250 3685 4198
755 695 455 1332 1375 1394 783 783 1388 1549 1455
1000

ELEV 296 D
338 364 354 313 ±
3995 X 75
258° to NDB
REIL Rwy 19 L
MIRL Rwy 1-19 L

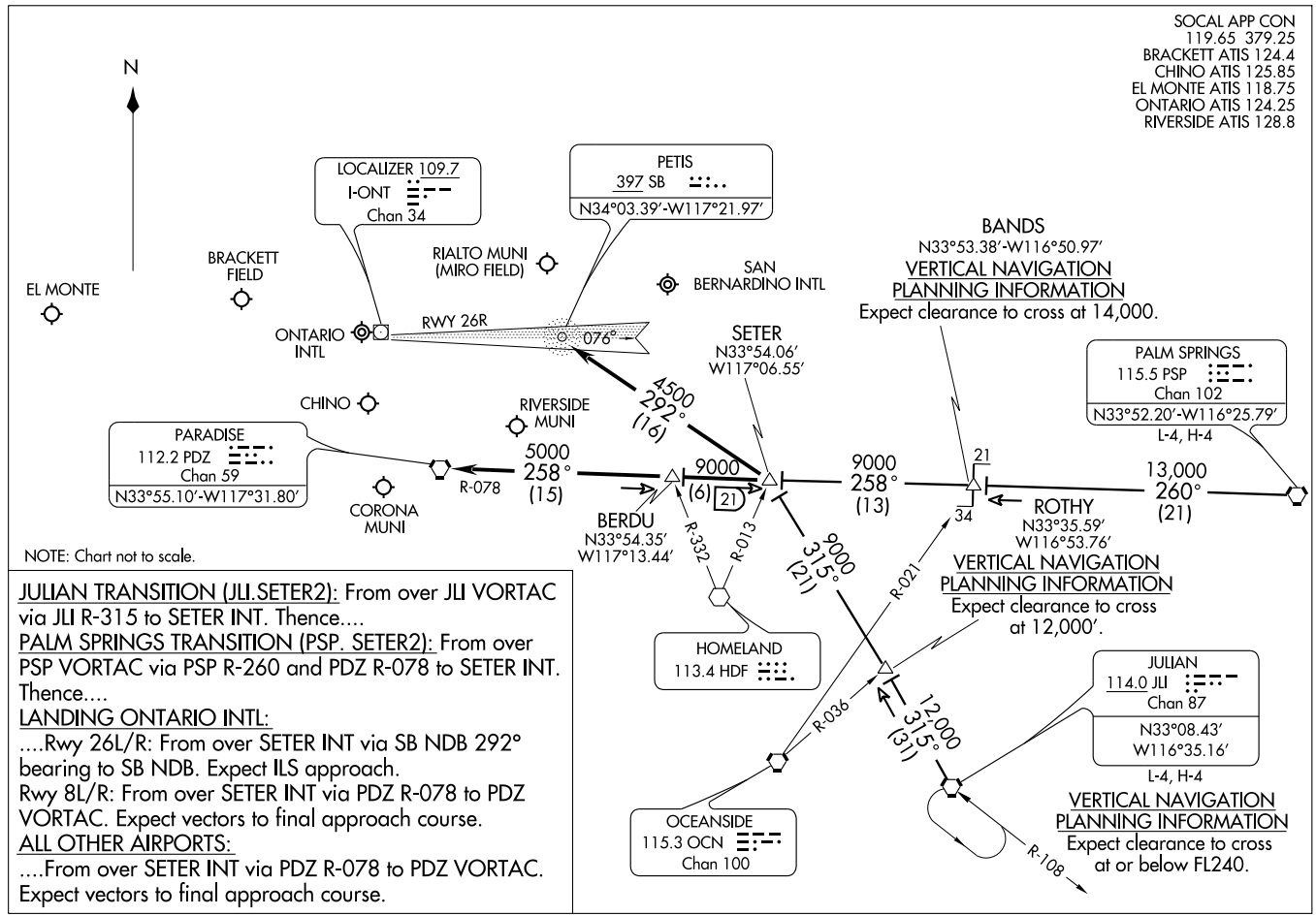
2500 070°	PDZ R-278	ADAMM	4000	PDZ 112.2

One Minute Holding Pattern

POM VORTAC
FLYIN INT POM 3.1
SELAW INT POM 6.3
EMT 258°
112° 4000
292°
NDB
2900
3700
5.9 NM 3.2 NM 3.1 NM

CATEGORY	A	B	C	D
CIRCLING	1200-1¼ 904 (1000-1¼)		NA	
ONTARIO INTL ALTIMETER SETTING MINIMUMS				
CIRCLING	1340-1¼ 1044 (1100-1¼)	1340-1½ 1044 (1100-1½)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

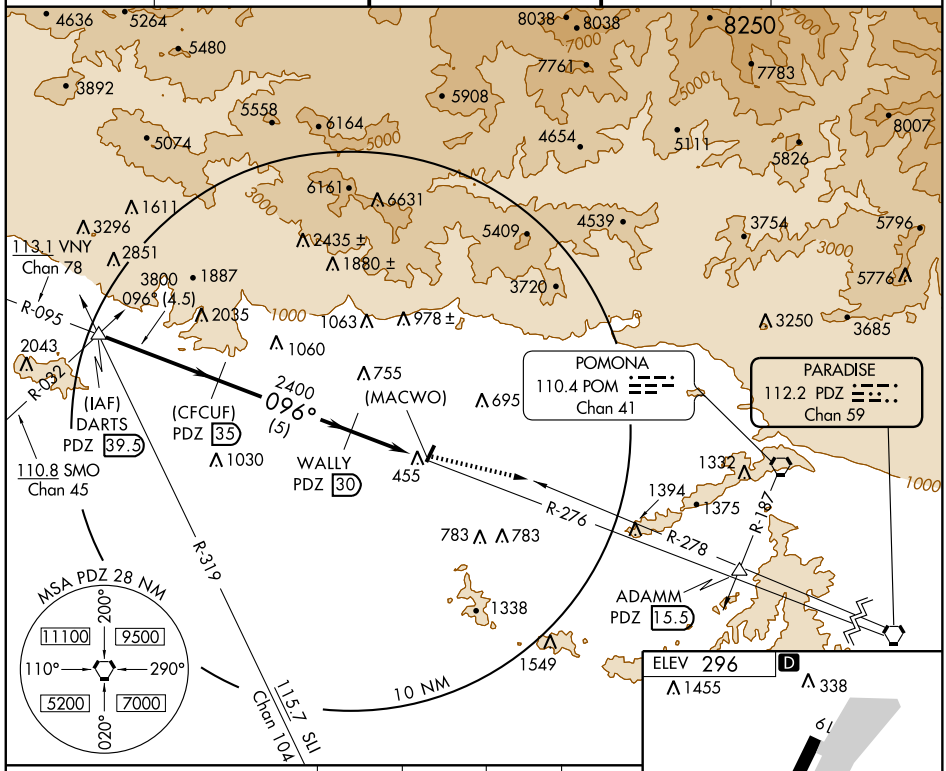
VORTAC PDZ	APP CRS	Rwy Idg	N/A
112.2	096°	TDZE	N/A
Chan 59		Apt Elev	296

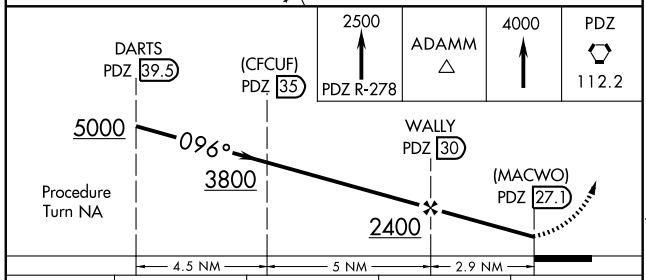
VOR/DME or GPS-B
EL MONTE (EMT)

When local altimeter setting not received, use Ontario Intl altimeter setting.

MISSED APPROACH: Climb to 2500 via PDZ R-278 to ADAMM Int, then continue climb to 4000 to PDZ VORTAC.

ATIS	SOCAL APP CON	EL MONTE TOWER ★	GND CON	UNICOM
118.75	125.5 349.0	121.2 (CTAF) L	125.9	122.95





CATEGORY	A	B	C	D
CIRCLING	1340-1¼ 1044 (1100-1¼)	1340-1½ 1044 (1100-1½)	NA	
ONTARIO INTL ALTIMETER SETTING MINIMUMS				
CIRCLING	1500-1¼ 1204 (1300-1¼)	1500-1½ 1204 (1300-1½)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009

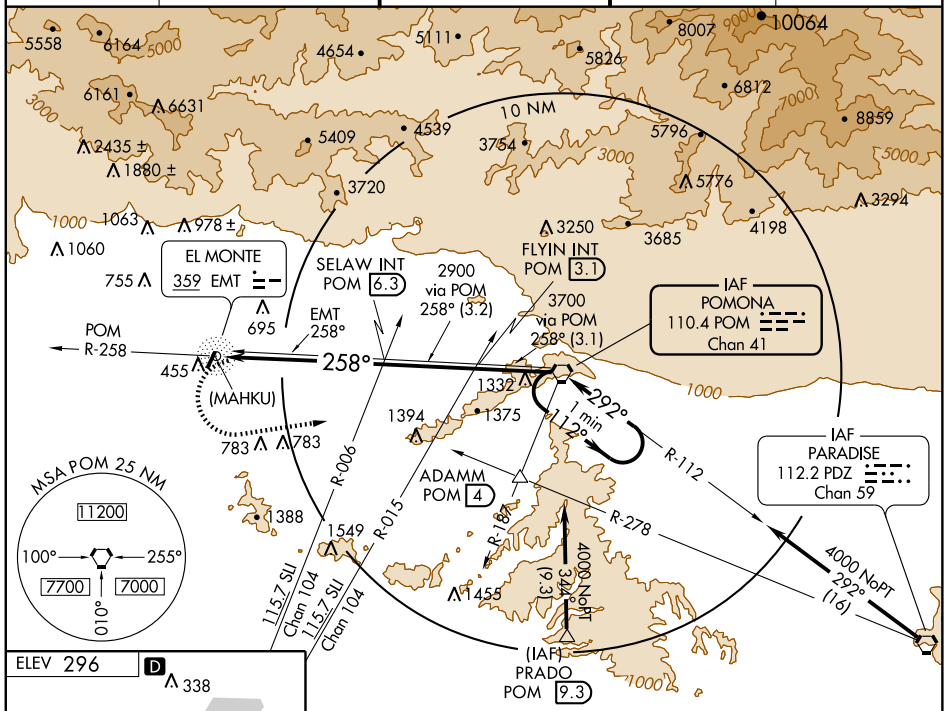
VORTAC POM 110.4 Chan 41	APP CRS 258°	Rwy Idg N/A TDZE N/A Apt Elev 296

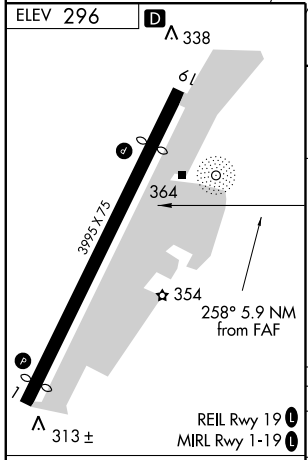
VOR or GPS-A
EL MONTE (EMT)

When local altimeter setting not received, use Ontario Intl altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via heading 070° and PDZ R-278 to ADAMM Int, then continue climb to 4000 to PDZ VORTAC.

ATIS	SOCAL APP CON	EL MONTE TOWER ★	GND CON	UNICOM
118.75	125.5 349.0	121.2 (CTAF) L	125.9	122.95

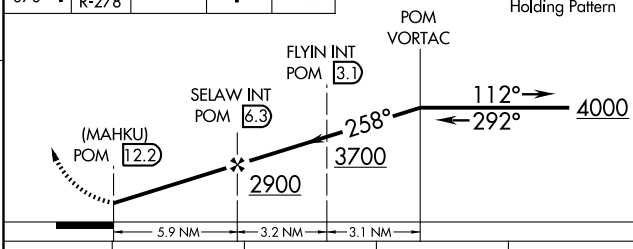




FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

2500 070°	PDZ R-278	ADAMM △	4000	PDZ 112.2

One Minute Holding Pattern

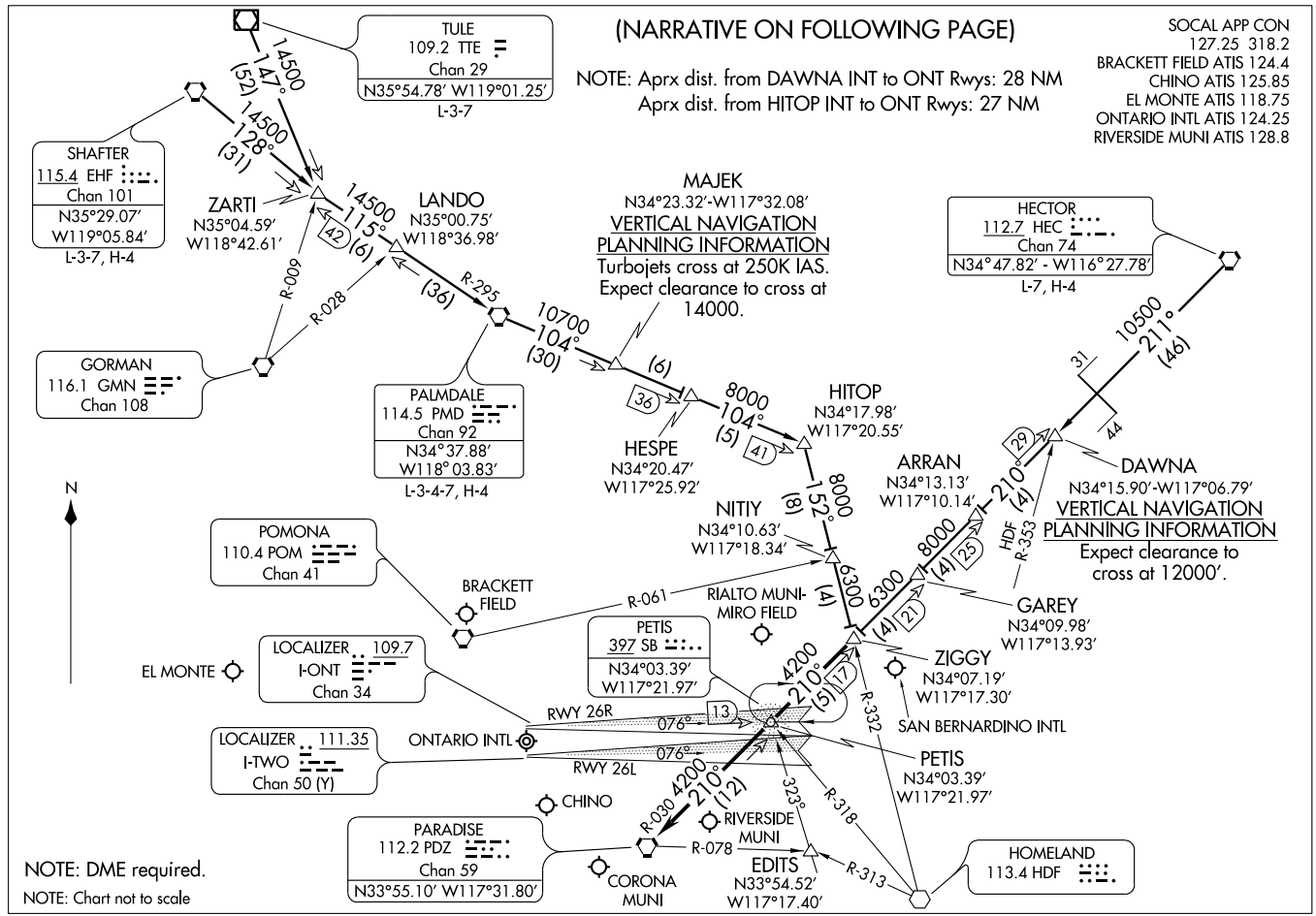


CATEGORY	A	B	C	D
CIRCLING	1260-1¼ 964 (1000-1¼)	1260-1½ 964 (1000-1½)	NA	

ONTARIO INTL ALTIMETER SETTING MINIMUMS

CIRCLING	1400-1¼ 1104 (1200-1¼)	1400-1½ 1104 (1200-1½)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
020°	TDZE	N/A
	Apt Elev	7

RNAV (GPS)-B

EUREKA/MURRAY FIELD (EKA)

DME/DME RNP -0.3 NA.
Use Arcata altimeter setting when not received, use Crescent City altimeter setting and increase all MDA 100 feet.

MISSED APPROACH: Climbing left turn to 3000 direct FOT VORTAC and hold.

SEATTLE CENTER	UNICOM
124.85 306.3	122.7 (CTAF)

882 3404 1934 2386 3049 3049 3729 2340 2544

285 (MAP) MABFI
1700 (3) 689± (FAF) SHUKS
2300 (3.6) 755 CIRTO
200° 020° 4 NM (IF/IAF) FOTURNA FOT
320° (4) 3000 NoPT (IAF) TUNGS

MSA MABFI 25 NM
7200

ELEV 7
86±
12 30 3000 X 75
59
47± 020° to MABFI
MIRL Rwy 12-30

4 NM Holding Pattern
VORTAC CIRTO SHUKS MABFI
3000 200° 020° 020° 2300 1700
3000 FOT
3.6 NM 3 NM 3 NM

CATEGORY	A	B	C	D
CIRCLING	980-1¼ 973 (1000-1¼)	980-1½ 973 (1000-1½)	1060-3 1053 (1100-3)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3000
115°	TDZE	7
	Apt Elev	7

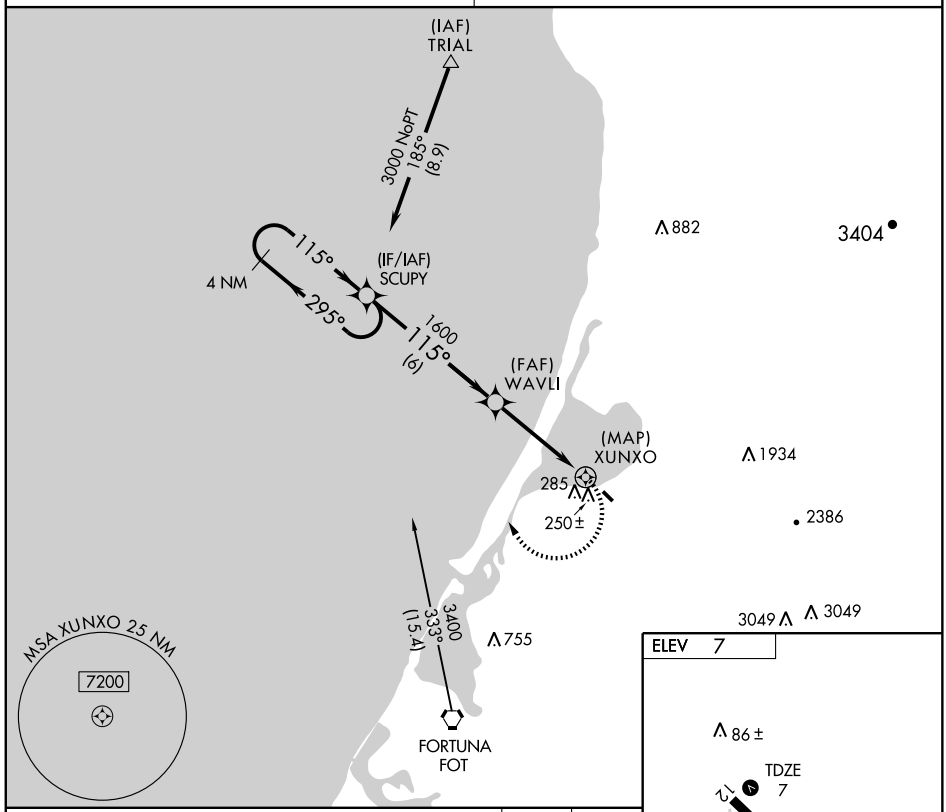
RNAV (GPS) RWY 12

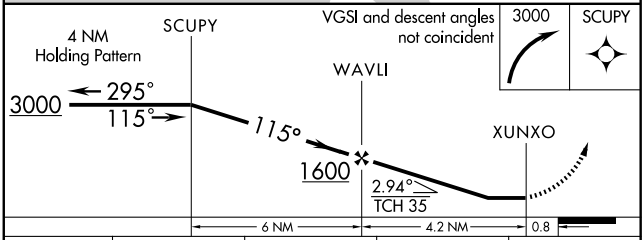
EUREKA/MURRAY FIELD (EKA)

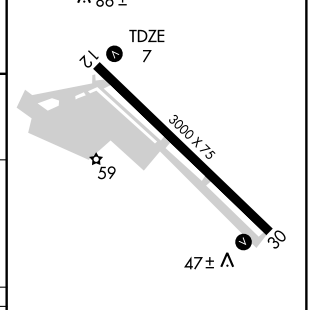
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. Use Arcata altimeter setting, when not received, use Crescent City altimeter setting and increase all MDA 100 feet and increase LNAV Cat C and circling Cat B visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 direct SCUPY and hold.

SEATTLE CENTER	UNICOM
124.85 306.3	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	760-1 753 (800-1)	760-1¼ 753 (800-1¼)	760-2¼ 753 (800-2¼)	NA
CIRCLING	760-1 753 (800-1)	880-1¼ 873 (900-1¼)	1060-3 1053 (1100-3)	NA

MIRL Rwy 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC FOT	APP CRS	Rwy Idg	N/A
114.0	016°	TDZE	N/A
Chan 87		Apt Elev	7

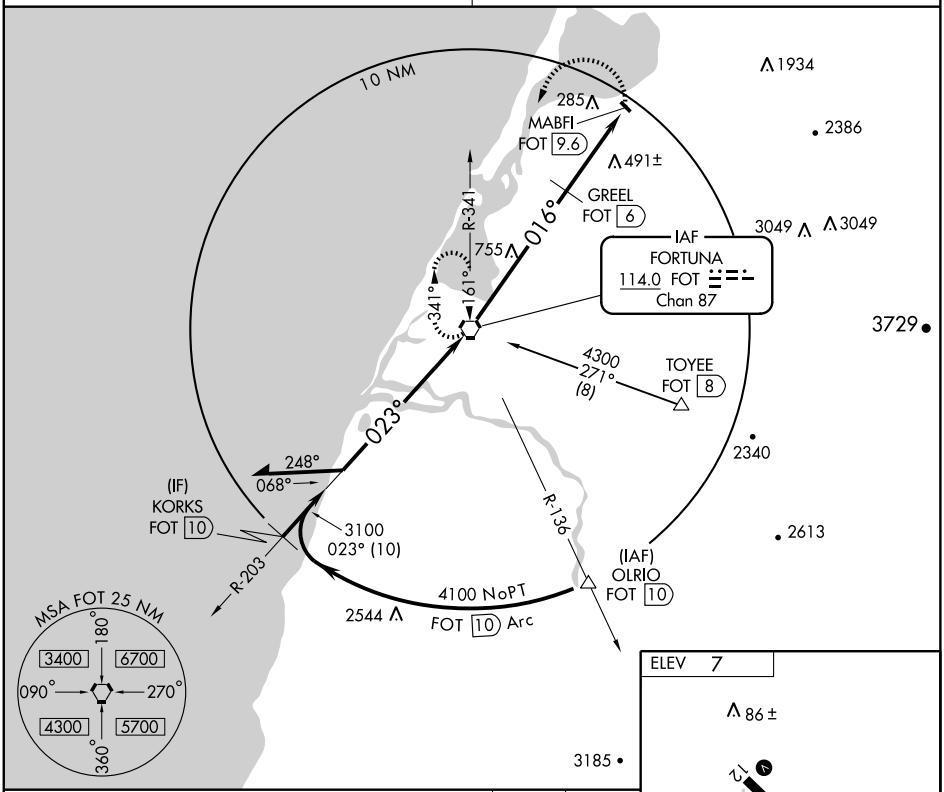
VOR-A

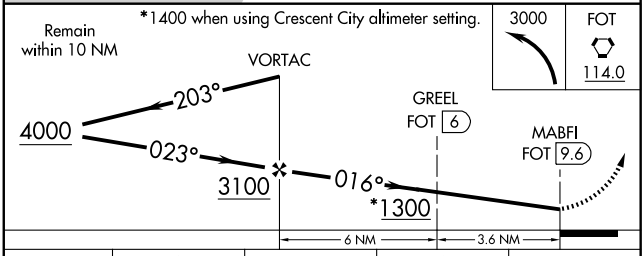
EUREKA/MURRAY FIELD (EKA)

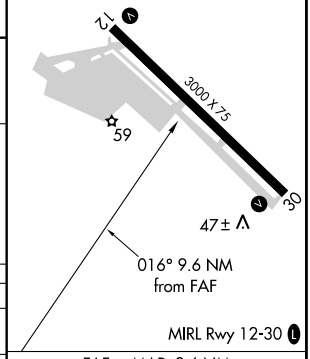
Use Arcata altimeter setting; when not received, use Crescent City altimeter setting and increase all MDA 100 feet and increase GREEL fix minimums visibility Cats. A and B ¼ mile.

MISSED APPROACH: Climbing left turn to 3000 direct FOT VORTAC and hold.

SEATTLE CENTER	UNICOM
124.85 306.3	122.7 (CTAF)





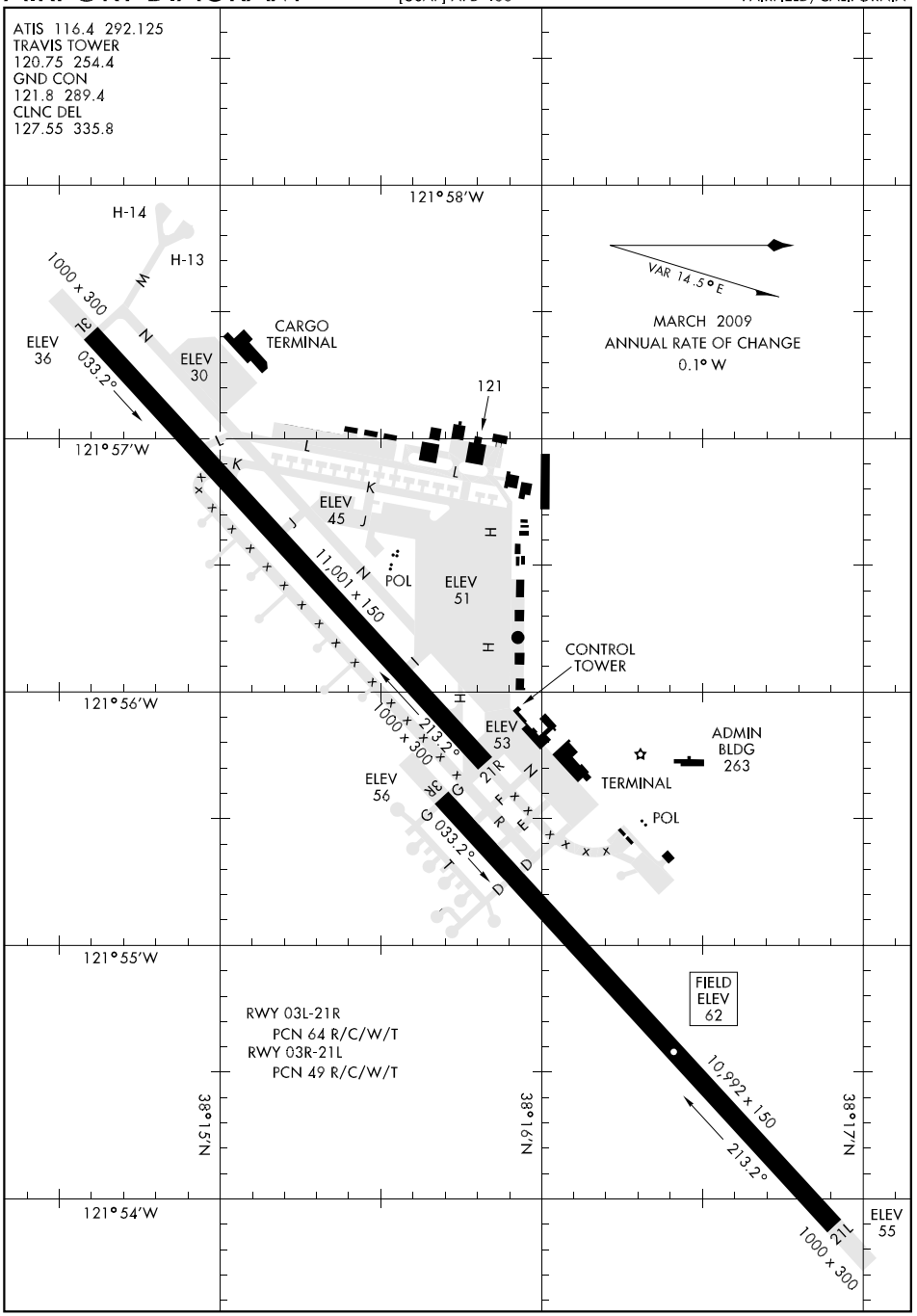


CATEGORY	A	B	C	D
CIRCLING	1300-1¼ 1293 (1300-1¼)	1300-1½ 1293 (1300-1½)	1300-3 1293 (1300-3)	NA
GREEL FIX MINIMUMS				
CIRCLING	860-1 853 (900-1)	880-1¼ 873 (900-1¼)	1060-3 1053 (1100-3)	NA

FAF to MAP 9.6 NM

Knots	60	90	120	150	180
Min:Sec	9:36	6:24	4:48	3:50	3:12

SW-2, 22 OCT 2009 to 19 NOV 2009



SW-2, 22 OCT 2009 to 19 NOV 2009

ILS or LOC RWY 3L

LOC I-TXV 108.35	APCH CRS 032°	Rwy ldg 11,001 TDZE 36 Arpt Elev 62

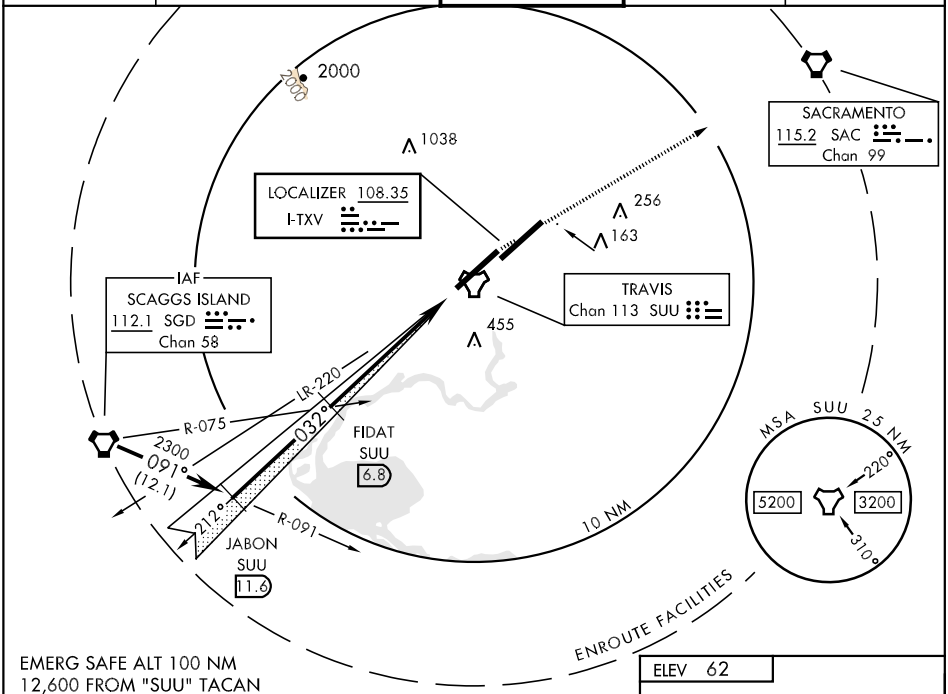
AL-488 [USAF]

TRAVIS AFB (KSUU)

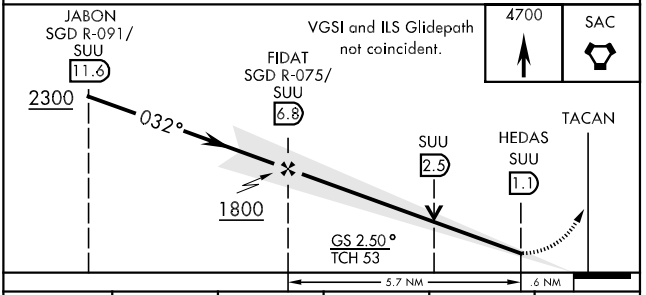
* Circling not authorized NW of Rwy 3L-21R.
** VDP NA for sidestep maneuver to Rwy 3R.

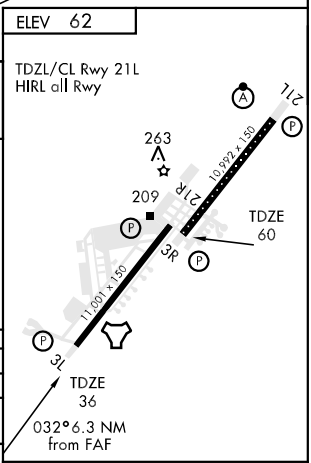
MISSED APPROACH: Climb to 4700 direct SAC VORTAC. Prior to reaching SAC expect further clearance from ATC.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8



EMERG SAFE ALT 100 NM
12,600 FROM "SUU" TACAN





CATEGORY	A	B	C	D	E
S-ILS 3L	236/40		200	(200-¾)	
S-LOC 3L	620/50	584 (600-1)	620-1½ 584 (600-1½)	620-1¾ 584 (600-1¾)	620-2 584 (600-2)
SIDESTEP ** RWY 3R	760/50	700 (700-1)	760-2 700 (700-2)	760-2¼ 700 (700-2¼)	760-2½ 700 (700-2½)
CIRCLING *	620-1	558 (600-1)	620-1½ 558 (600-1½)	800-2¼ 738 (800-2¼)	1440-3 1378(1400-3)

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

SW-2, 22 OCT 2009 to 19 NOV 2009

ILS or LOC RWY 21L

LOC I-SUU	APCH CRS	Rwy ldg 10,992 TDZE 58 Arpt Elev 62	AL-488 [USAF]	TRAVIS AFB (KSUU)
110.1	212°			

* When ALS inop, increase RVR to 40 and vis to ¾ mile. When TDZL/CL inop, increase CAT AB RVR to 24.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ mile, and CAT DE vis to 1½ mile.

ALSF-2

MISSED APPROACH: Climb to 3500 via TZZ VOR R-212 to HISEL, then left turn direct TZZ and hold, continue climb in hold to 3500.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8

*** Circling not authorized NW of Rwys 3L-21R.

IAF SACRAMENTO 115.2 SAC Chan 99

(IAF) SEATO SUU 5000 14

Max holding alt 6000

159° 339° R-339

2500 SUU 14 Arc

SUU LR-022 SUU LR-034

032° 237° R-237 2500

Max holding alt 3500

662

212° 211° 031°

WADEN SUU 14

10 NM

ENROUTE FACILITIES

SCAGGS ISLAND 112.1 SGD Chan 58

1038

163

WEDAL SUU 7.7

TRAVIS 116.4 TZZ

MSA SUU 25 NM 220° 310° 5200 3200

HISEL SUU 2

LOCALIZER 110.1 I-SUU

R-064

TZZ R-212

455

TRAVIS Chan 113 SUU

536

EMERG SAFE ALT 100 NM
12,600 FROM "SUU" TACAN

3500 TZZ R-212 SUU 2 TZZ

VGSI and ILS Glidepath not coincident.

WADEN SUU 14

WEDAL SUU 7.7

2500

212°

TACAN

TUVOY SUU 3.6

4.4

1500

GS 2.80° TCH 56

0.5 NM 4.1 NM

ELEV 62

212° 4.6 NM from FAF

TDZE 58 TZ

263

TDZE 53 209

21R 10,992 x 150

3R 11,001 x 150

3L

TDZL/CL Rwy 21L
HIRL all Rwy

CATEGORY	A	B	C	D	E
S-ILS 21L *	258/18 200 (200-½)		258/24 200 (200-½)		
S-LOC 21L**	500/24 442 (500-½)		500/40 442 (500-¾)	500/50 442 (500-1)	
SIDESTEP RWY 21R	520-2¾		467 (500-2¾)		
CIRCLING ***	520-1 458 (500-1)		520-1½ 458 (500-1½)	800-2¼ 738 (800-2¼)	1440-3 1378(1400-3)

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

SW-2, 22 OCT 2009 to 19 NOV 2009

ILS or LOC RWY 21R

LOC I-MZP	APCH CRS	Rwy ldg / TDZE / Arpt Elev
108.35	212°	11,001 / 53 / 62

AL-488 [USAF]

TRAVIS AFB (KSUU)

* Circling not authorized NW of Rwys 3L-21R.

MISSED APPROACH: Climb to 3200 direct SGD VORTAC. Prior to reaching SGD expect further clearance from ATC.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8

RADAR or DME REQUIRED

Max holding alt 6000

(IAF) SEATO SUU 14

IAF SACRAMENTO 115.2 SAC Chan 99

5000

159° 339°

2500 SUU 14 ARC

309

LR-033 2500 238° (8.7)

R-238

2500

LR-021

032°

662

ZEBAN SUU 14

ZIMIL SUU 6.6

212°

R-339

2431

1214

2939

2000

2392

197

LOCALIZER 108.35 I-MZP

SCAGGS ISLAND 112.1 SGD Chan 58

TRAVIS Chan 113 SUU

10 NM

MSA SUU 25 NM

220°

5200

3200

310°

EMERG SAFE ALT 100 NM
12,600 FROM "SUU" TACAN

3200 SGD

VGSI and ILS Glidepath not coincident

ZEBAN Intcp LOC 14

ZIMIL RADAR 6.6

TACAN

ZAMOS 1.4

212°

2500

1800

3.00° TCH 49

0.1 NM 5.2 NM

ELEV 62

212° 5.3 NM from FAF

TDZE 53

263

209

252

2L 10,992 x 150

3R 11,001 x 150

21L

TDZL/CL Rwy 21L HIRL all Rwy

CATEGORY	A	B	C	D	E
S-ILS 21R	303/50 250 (300-1)				
S-LOC 21R	500/50 447 (500-1)		500/60 447 (500-1¼)	500-1½ 447 (500-1½)	
CIRCLING *	500-1 438 (500-1)	520-1 458 (500-1)	520-1½ 458 (500-1½)	800-2 ¼ 738 (800-2¼)	1440-3 1378(1400-3)

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

SW-2, 22 OCT 2009 to 19 NOV 2009

ILS RWY 21L (CAT II)

TRAVIS AFB (KSUU)

LOC I-SUU 110.1	APCH CRS 212°	Rwy ldg 10,992 TDZE 58 Arpt Elev 62

AL-488 [USAF]

ALSF-2

MISSED APPROACH: Climb to 3500 via TZZ VOR R-212 to HISEL, then turn left direct TZZ and hold, continue climb in holding to 3500.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8

CATEGORY II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

IAF SACRAMENTO 115.2 SAC Chan 99

(IAF) SEATO SUU 14 5000

Max holding alt 6000

159° 339°

2500 SUU 14 Arc

SUU LR-022

SUU LR-034

032° 237° R-237

2500

R-339

WADEN SUU 14

212°

662

Max holding alt 3500

211°

037°

1038

SCAGGS ISLAND 112.1 SGD Chan 58

IM 163

WEDAL SUU 7.7

TRAVIS 116.4 TZZ

10 NM

ENROUTE FACILITIES

HISEL SUU 2

LOCALIZER 110.1 I-SUU

R-064

TZZ R-212

455

TRAVIS Chan 113 SUU

536

MSA SUU 25 NM

220° 310°

5200 3200

EMERG SAFE ALT 100 NM
12,600 FROM "SUU" TACAN

ELEV 62

212° 4.6 NM from 7.7 DME

TDZE 58

263

209

10,992 x 150

21R 3R 3L

11,001 x 150

3500 TZZ R-212 | SUU 2 | TZZ

VGSI and ILS Glidepath not coincident.

TACAN

WEDAL 7.7

WADEN 14

2500

212°

IM

DH (RA 114)

58 MSL 55 MSL

1500

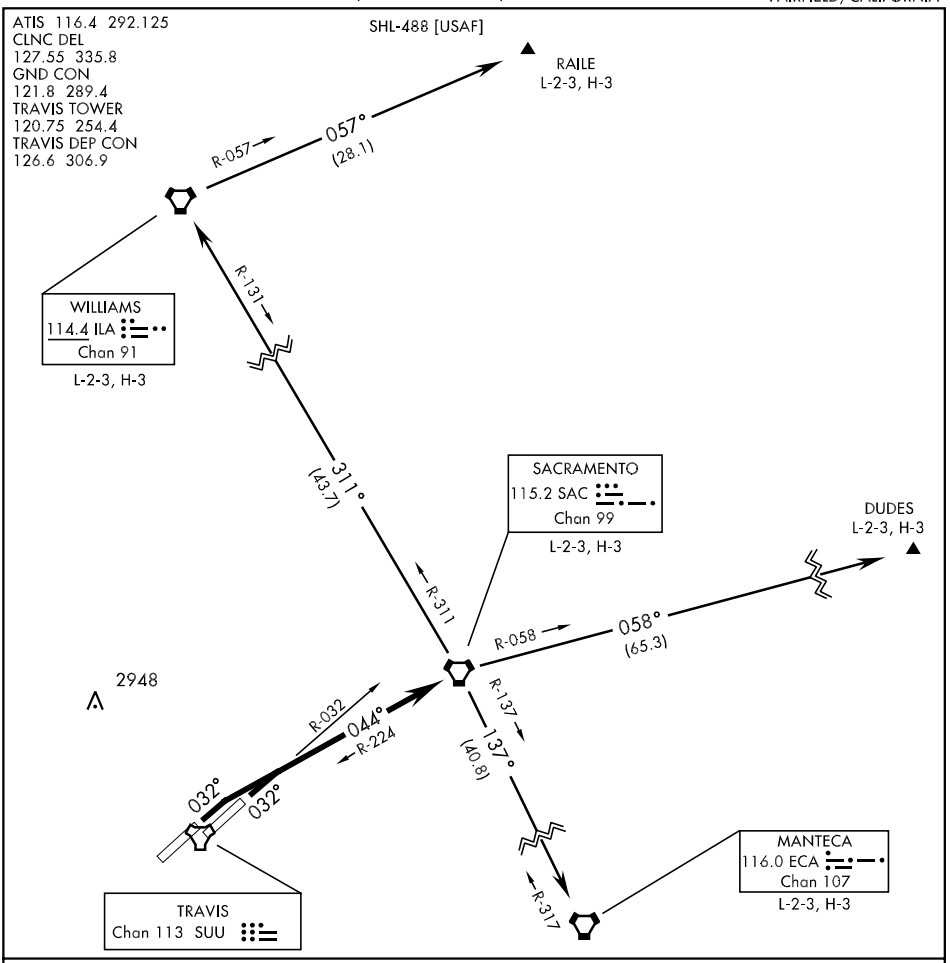
GS 2.80°
TCH 56

1132' 1009' 165' 4.4 NM 6.3 NM

CATEGORY	A	B	C	D	E
S-ILS 21L	160/12	102	(RA 114)		

TDZL/CL Rwy 21L
HIRL all Rwy

SW-2, 22 OCT 2009 to 19 NOV 2009



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L/R: Climb via heading 032° to intercept and fly SAC VORTAC R-224 to SAC. Then via assigned transition.

DUDES TRANSITION (MENTO1• DUDES): Turn right intercept and fly SAC R-058 to 65.3 DME (DUDES).

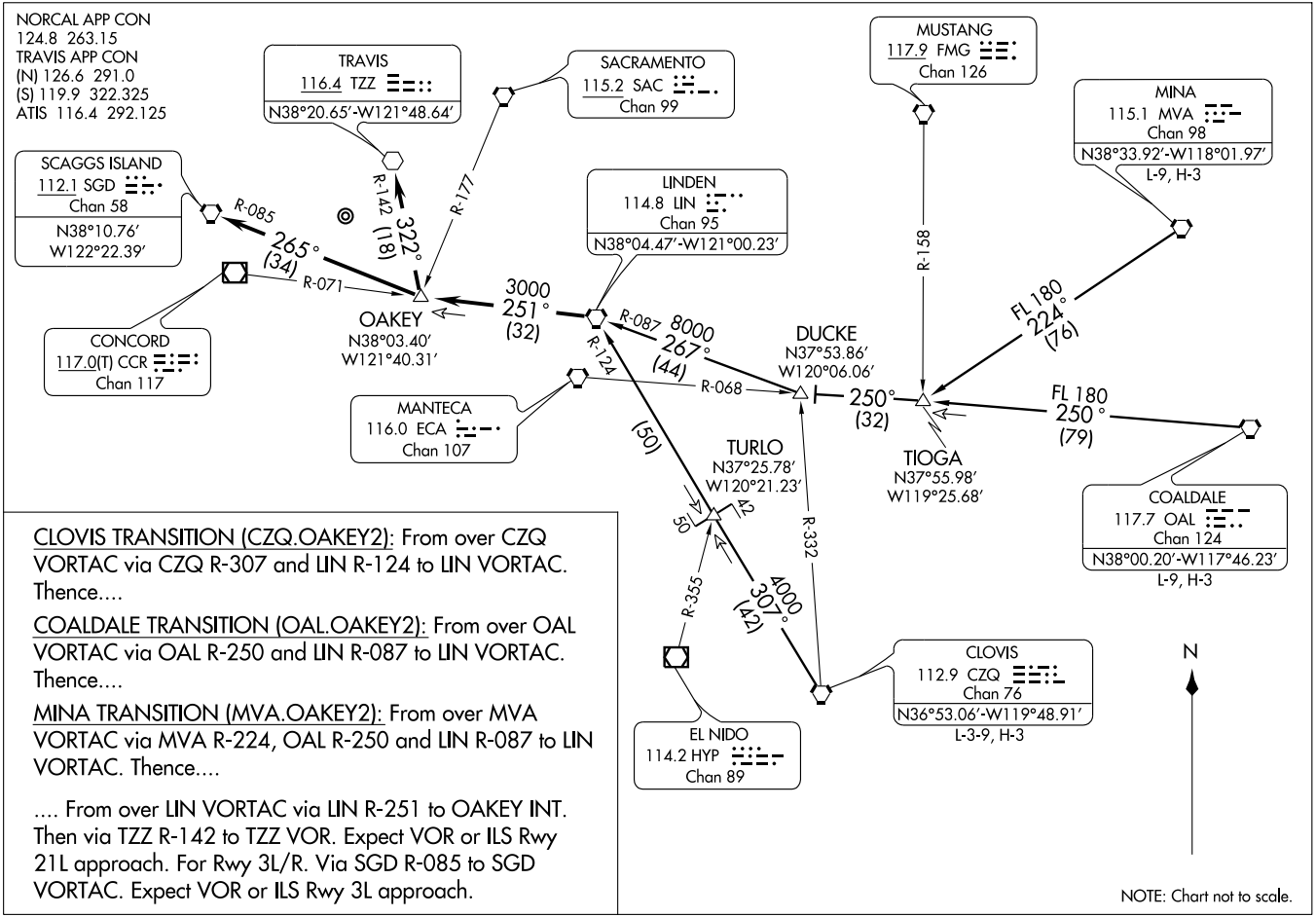
MANTECA TRANSITION (MENTO1•ECA): Turn right intercept and fly SAC R-137 to ECA VORTAC R-317 to ECA.

RAILE TRANSITION (MENTO1•RAILE): Turn left intercept and fly SAC R-311 to ILA VORTAC R-131 to ILA then turn right intercept and fly ILA R-057 to 28.1 DME (RAILE).

WILLIAMS TRANSITION (MENTO1•ILA): Turn left intercept and fly SAC R-311 to ILA R-131 to ILA.

SW-2, 22 OCT 2009 to 19 NOV 2009

OAKEY TWO ARRIVAL (LIN.OAKEY2) 09127



CLOVIS TRANSITION (CZQ.OAKEY2): From over CZQ VORTAC via CZQ R-307 and LIN R-124 to LIN VORTAC. Thence....

COALDALE TRANSITION (OAL.OAKEY2): From over OAL VORTAC via OAL R-250 and LIN R-087 to LIN VORTAC. Thence....

MINA TRANSITION (MVA.OAKEY2): From over MVA VORTAC via MVA R-224, OAL R-250 and LIN R-087 to LIN VORTAC. Thence....

.... From over LIN VORTAC via LIN R-251 to OAKEY INT. Then via TZZ R-142 to TZZ VOR. Expect VOR or ILS Rwy 21L approach. For Rwy 3L/R. Via SGD R-085 to SGD VORTAC. Expect VOR or ILS Rwy 3L approach.

ST-488 (FAA)

TRAVIS AFB
FAIRFIELD, CALIFORNIA

RNAV (GPS) RWY 3L

APCH CRS	Rwy ldg	11,001
032°	TDZE	36
	Arpt Elev	62

AL-488 [USAF]

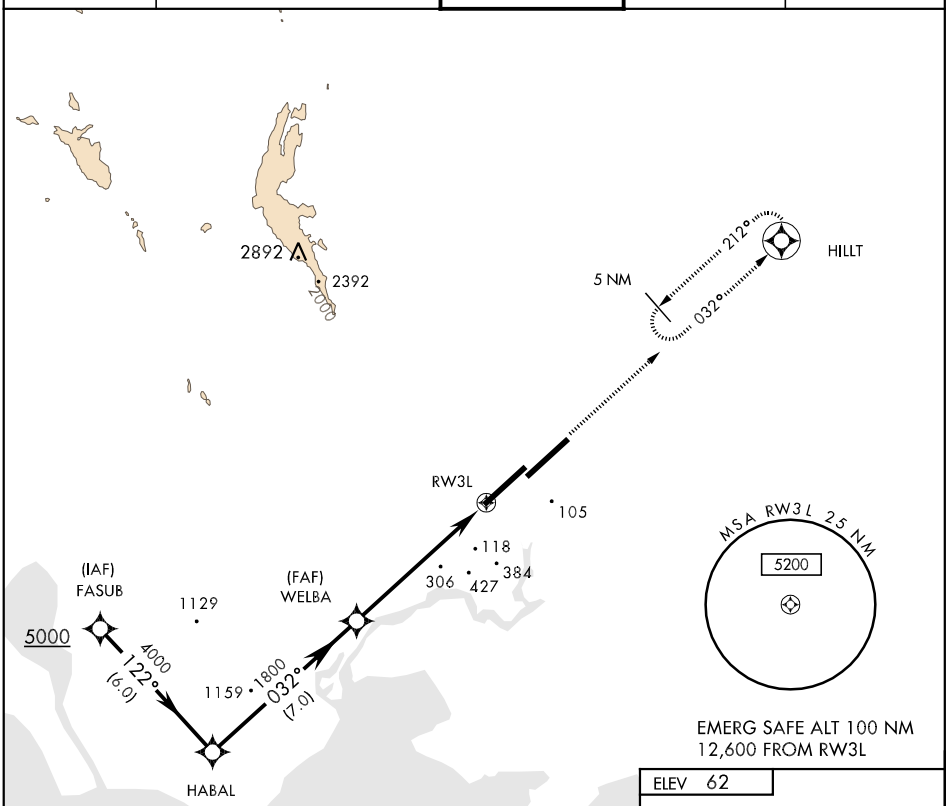
TRAVIS AFB (KSUU)

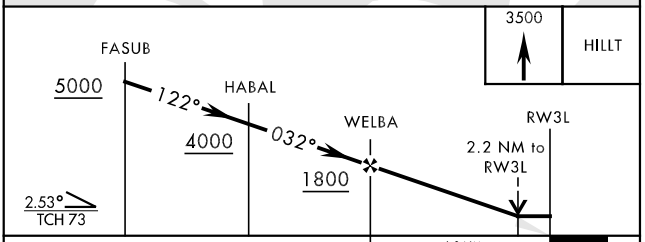
▼ * Circling not authorized NW of Rwys 3L-21R.

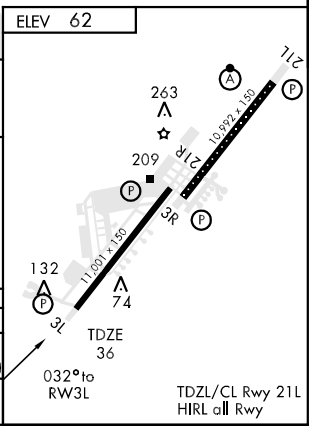
DME/DME RNP-0.3 NA

MISSED APPROACH: Climbing straight ahead to 3500 direct HILLT and hold.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8







CATEGORY	A	B	C	D	E
LNAV MDA	680/50 644 (700-1)		680-1¾ 644 (700-1¾)	680-2 644 (700-2)	680-2¼ 644 (700-2¼)
CIRCLING *	680-1 618 (700-1)		680-1¾ 618 (700-1¾)	800-2¼ 738 (800-2¼)	1440-3 1378(1400-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 21L

APCH CRS	Rwy ldg	10,992
212°	TDZE	58
	Arpt Elev	62

AL-488 [USAF]

TRAVIS AFB (KSUU)

* When ALS inop, increase CAT A RVR to 50 and vis to 1 mile, CAT B RVR to 60 and vis to 1¼ miles, CAT C vis to 2¼ miles, CAT D vis to 2½ miles, and CAT E vis to 2¾ miles.

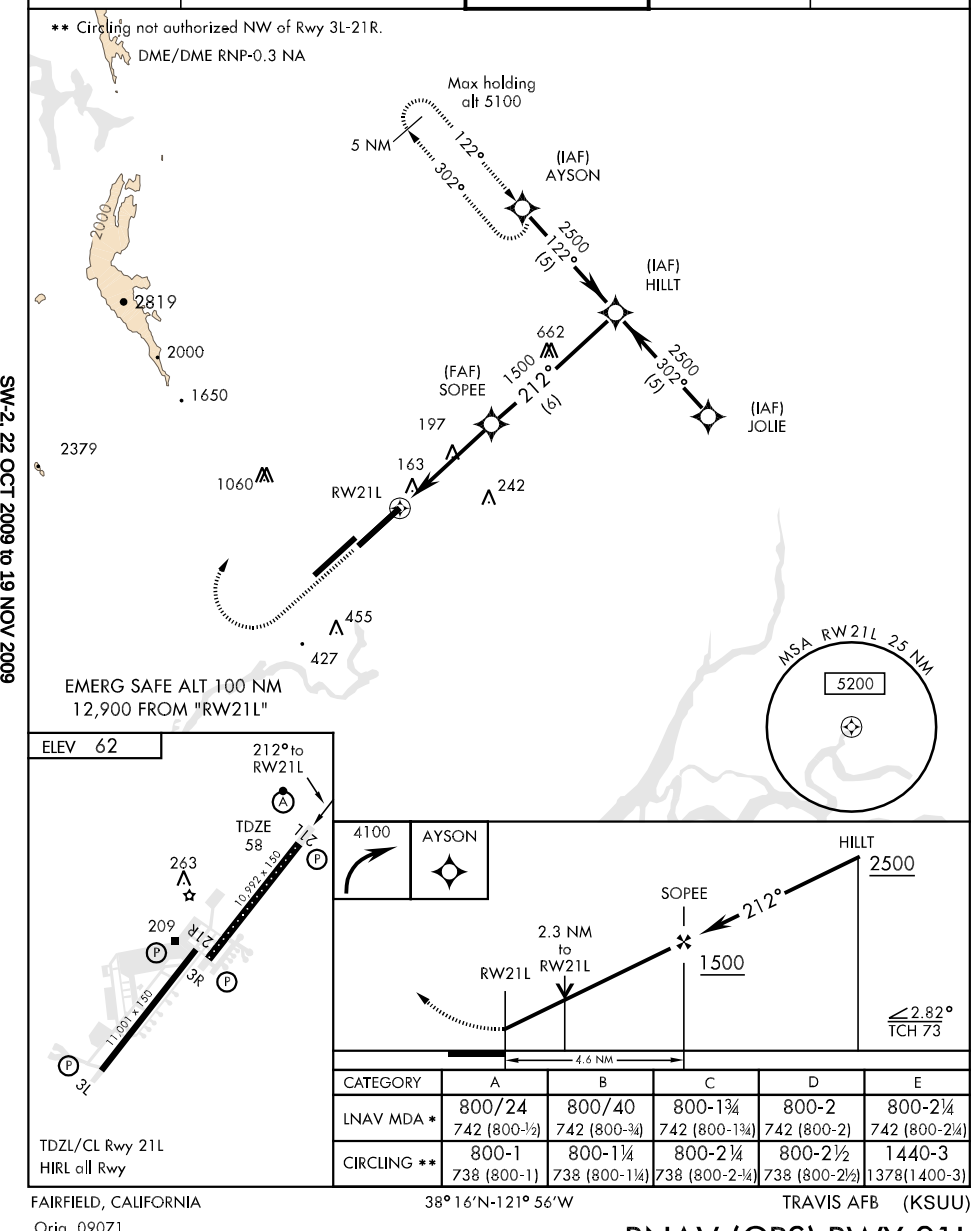
ALSF-2

MISSED APPROACH: Climbing right turn to 4100 direct AYSON and hold.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8

** Circling not authorized NW of Rwy 3L-21R.

DME/DME RNP-0.3 NA



CATEGORY	A	B	C	D	E
LNAV MDA *	800/24 742 (800-½)	800/40 742 (800-¾)	800-1¾ 742 (800-1¾)	800-2 742 (800-2)	800-2¼ 742 (800-2¼)
CIRCLING **	800-1 738 (800-1)	800-1¼ 738 (800-1¼)	800-2¼ 738 (800-2¼)	800-2½ 738 (800-2½)	1440-3 1378(1400-3)

TDZL/CL Rwy 21L
HIRL all Rwy

SW-2, 22 OCT 2009 to 19 NOV 2009

FAIRFIELD, CALIFORNIA

RNAV (GPS) RWY 21R

APCH CRS	Rwy ldg	11,001
212°	TDZE	53
	Arpt Elev	62

AL-488 [USAF]

TRAVIS AFB (KSUU)

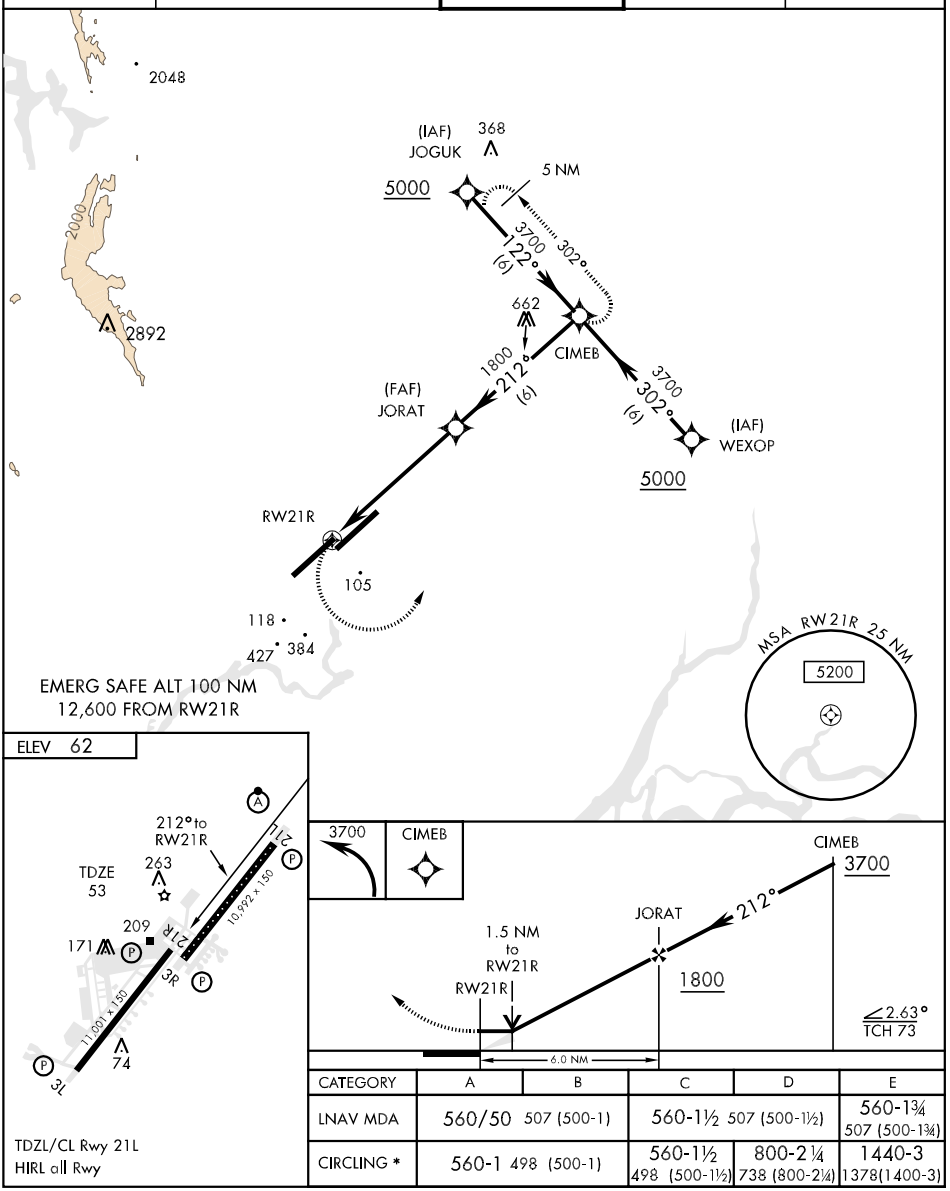
* Circling not authorized NW of Rwy 3L-21R.

DME/DME RNP-0.3 NA

MISSED APPROACH: Climbing left turn to 3700 direct CIMEB and hold. Climb in holding authorized.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8

SW-2, 22 OCT 2009 to 19 NOV 2009



CATEGORY	A	B	C	D	E
LNAV MDA	560/50 507 (500-1)		560-1½ 507 (500-1½)		560-1¾ 507 (500-1¾)
CIRCLING *	560-1 498 (500-1)		560-1½ 498 (500-1½)	800-2¼ 738 (800-2¼)	1440-3 1378(1400-3)

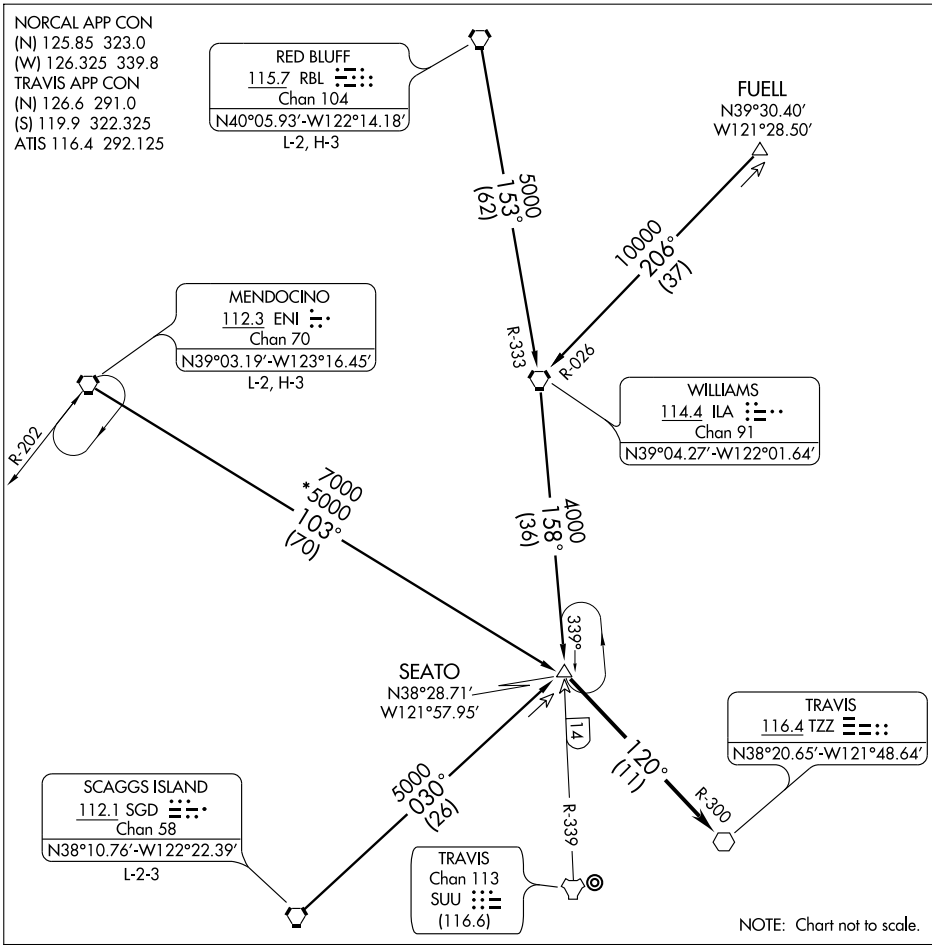
TDZL/CL Rwy 21L
HIRL all Rwy

(SEATO.SEATO2) 09127

SEATO TWO ARRIVAL

ST-488 (FAA)

TRAVIS AFB
FAIRFIELD, CALIFORNIA



FUELL TRANSITION (FUELL.SEATO2): From over FUELL DME via ILA R-026 to ILA VORTAC then via ILA R-158 to SEATO INT. Thence . . . .

MENDOCINO TRANSITION (ENI.SEATO2): From over ENI VORTAC via ENI R-103 to SEATO INT. Thence . . . .

RED BLUFF TRANSITION (RBL.SEATO2): From over RBL VORTAC via RBL R-153 and ILA R-333 to ILA VORTAC then via ILA R-158 to SEATO INT. Thence . . . .

SCAGGS ISLAND TRANSITION (SGD.SEATO2): From over SGD VORTAC via SGD R-030 to SEATO INT. Thence . . . .

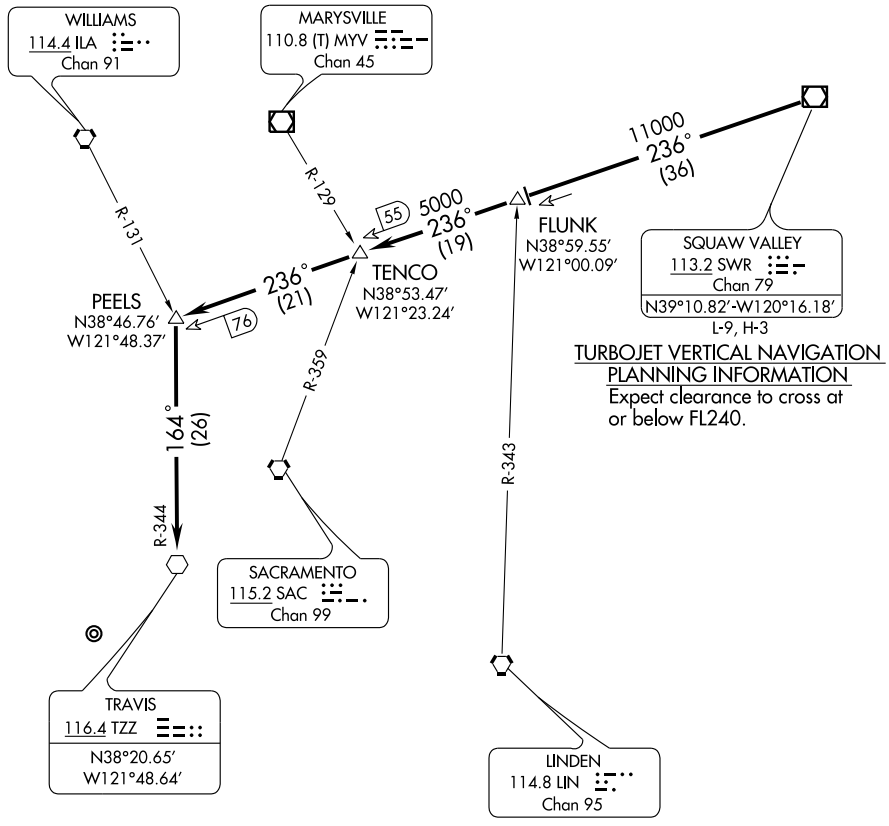
. . . . From over SEATO INT via TZZ R-300 to TZZ VOR. Expect vectors for VOR or ILS Rwy 21L approach. For Rwys 3L/R expect vectors for VOR or ILS 3L approach.

LOST COMMUNICATIONS: For Rwys 3L/R execute VOR or ILS Rwy 21L approach, circle to land Rwy 3L.

SW-2, 22 OCT 2009 to 19 NOV 2009

SQUAW VALLEY ONE ARRIVAL ST-488 (FAA)

NORCAL APP CON
120.45 353.7
TRAVIS APP CON
(N) 126.6 395.8
(S) 119.9 322.325
ATIS 116.4 292.125



TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at or below FL240.

NOTE: Chart not to scale.

From over SWR VORTAC via SWR R-236 to PEELS INT, then via TZZ R-344 to TZZ VOR. Expect VOR or ILS Rwy 21L Approach. For Rwy 3L/R: Expect vectors for VOR Rwy 3L Approach.

TACAN RWY 3L

TACAN SUU Chan 113	APCH CRS 042°	Rwy ldg 11,001 TDZE 36 Arpt Elev 62

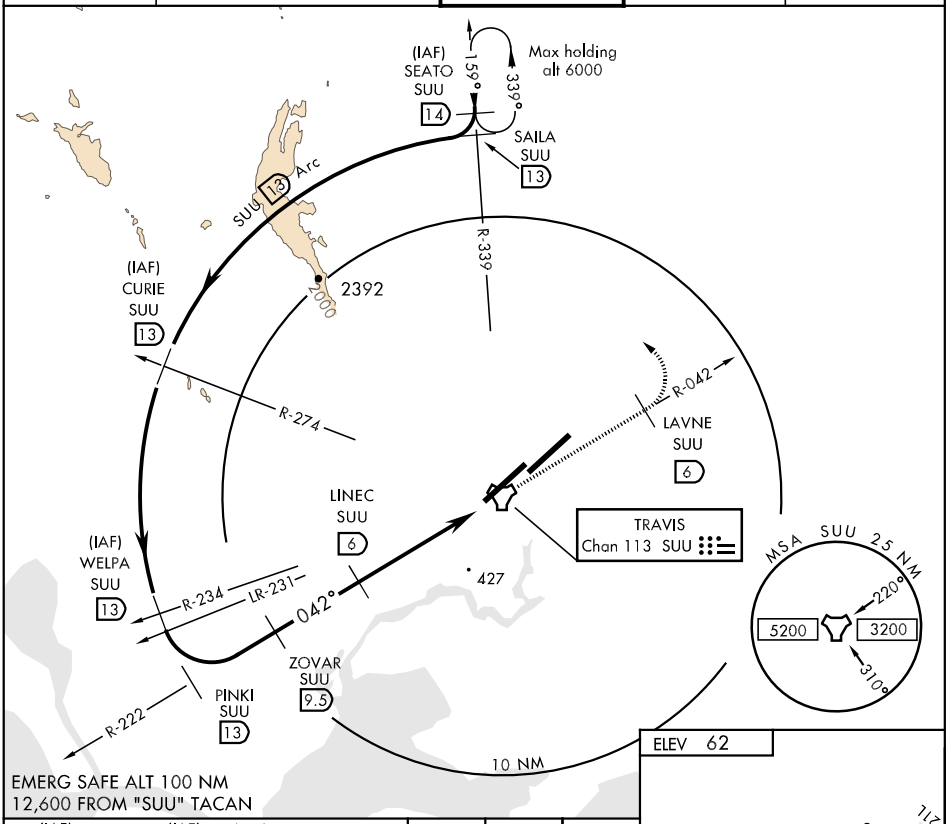
AL-488 [USAF]

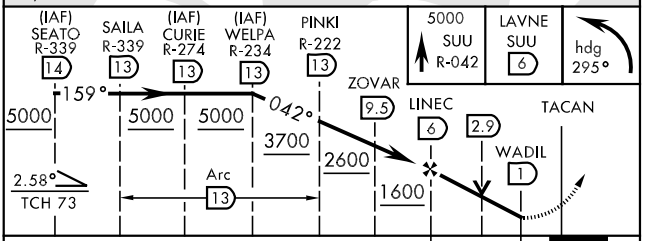
TRAVIS AFB (KSUU)

* Circling not authorized NW of Rwys 3L-21R.

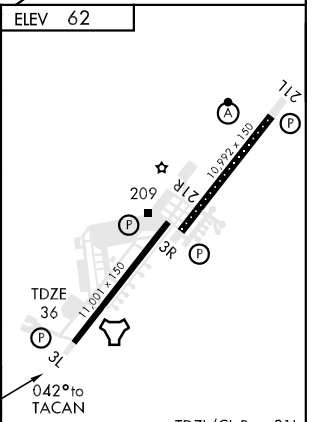
MISSED APPROACH: Climb to 5000 via SUU TACAN R-042 to LAVNE, then turn left via 295° course to intercept SUU R-339 to SEATO and hold, continue climb in hold to 5000.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8





CATEGORY	A	B	C	D	E
S-3L	740/50	704 (700-1)	740-2 704 (700-2)	740-2¼ 704 (700-2¼)	740-2½ 704 (700-2½)
CIRCLING *	740-1	678 (700-1)	740-2 678 (700-2)	800-2¼ 738 (800-2¼)	1440-3 1378(1400-3)



TDZL/CL Rwy 21L HIRL all Rwy

TACAN RWY 21L

TACAN SUU Chan 113	APCH CRS 209°	Rwy ldg 10,992 TDZE 58 Arpt Elev 62

AL-488 [USAF]

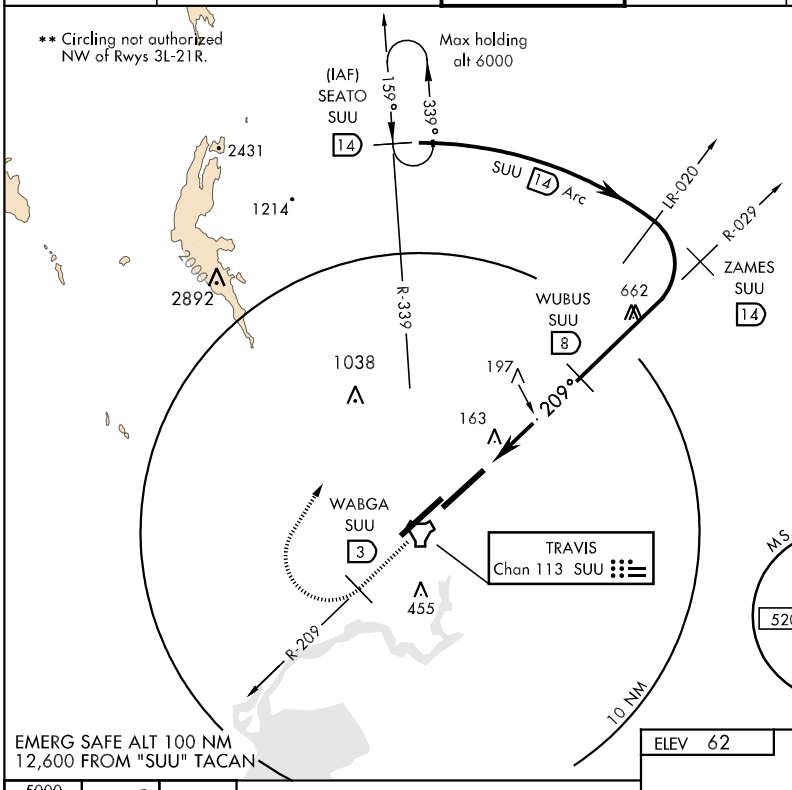
TRAVIS AFB (KSUU)

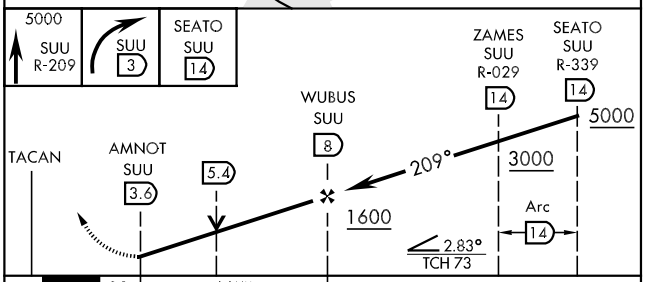
▼* When ALS inop, increase CAT A RVR to 50 and vis to 1 mile, CAT B RVR to 60 and vis to 1¼ miles, CAT C vis to 2¼ miles, CAT D vis to 2½ miles, and CAT E vis to 2¾ miles.

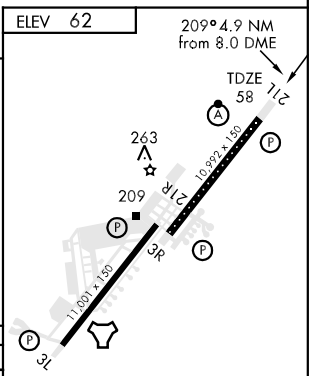
ALSF-2

MISSED APPROACH: Climb to 5000 via SUU TACAN R-209 to WABGA, then turn right hdg 015° to intercept SUU R-339 to SEATO and hold, continue climb in hold to 5000.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8







CATEGORY	A	B	C	D	E
S-21L *	800/24 742 (800-½)	800/40 742 (800-¾)	800-1¾ 742 (800-1¾)	800-2 742 (800-2)	800-2 ¼ 742 (800-2¼)
CIRCLING**	800-1 738 (800-1)	800-1¼ 738 (800-1¼)	800-2¼ 738 (800-2¼)	800-2½ 738 (800-2½)	1440-3 1378(1400-3)

TDZL/CL Rwy 21L
HIRL all Rwy

SW-2, 22 OCT 2009 to 19 NOV 2009

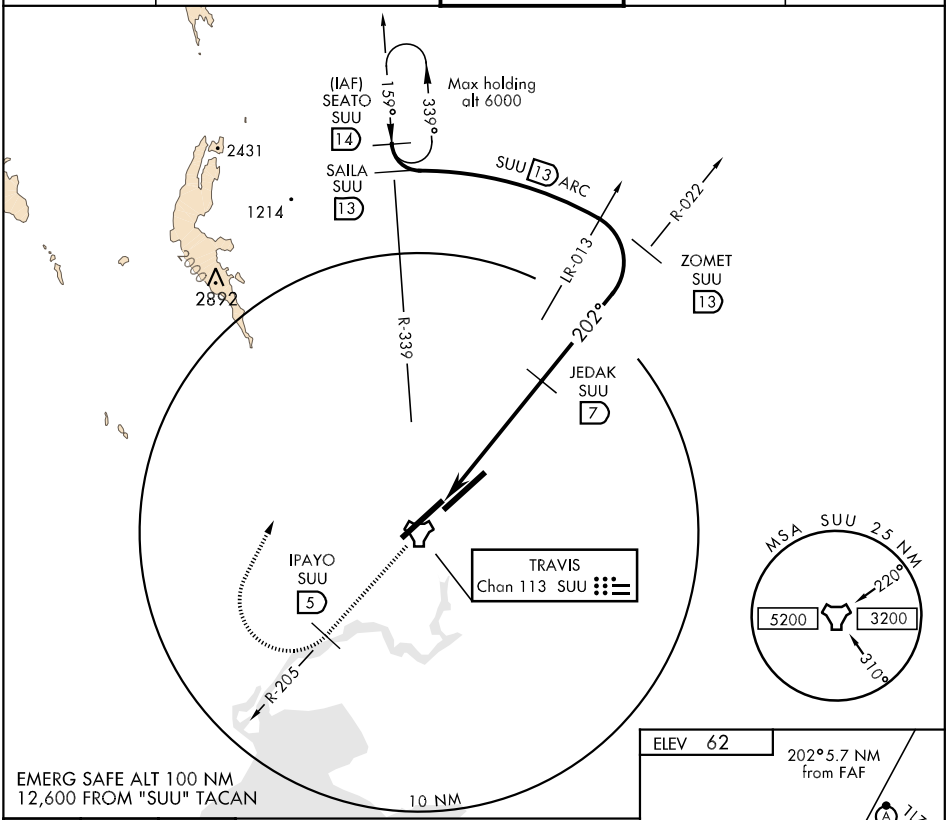
TACAN RWY 21R

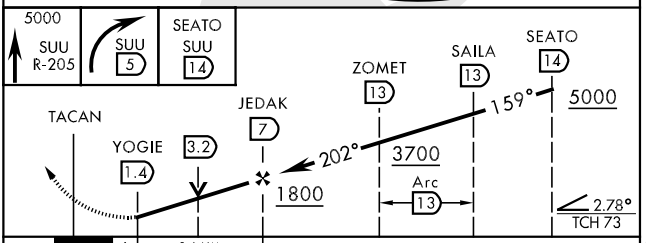
TACAN SUU Chan 113	APCH CRS 202°	Rwy ldg 11,001 TDZE 53 Arpt Elev 62	AL-488 [USAF]	TRAVIS AFB (KSUU)

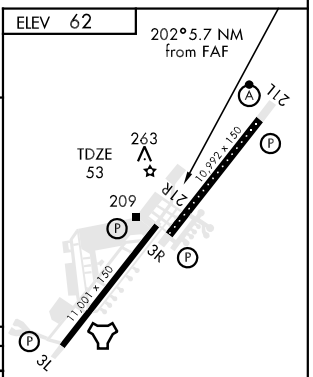
* Circling not authorized NW of Rwys 3L-21R.

MISSED APPROACH: Climb to 5000 via SUU TACAN R-205 to IPAYO, then turn right via 010° course to intercept SUU R-339 to SEATO and hold, continue climb in hold to 5000.

ATIS	TRAVIS APP CON	TRAVIS TOWER	GND CON	CLNC DEL
116.4 292.125	119.9 (S) 126.6 (N) 291.0	120.75 254.4	121.8 289.4	127.55 335.8





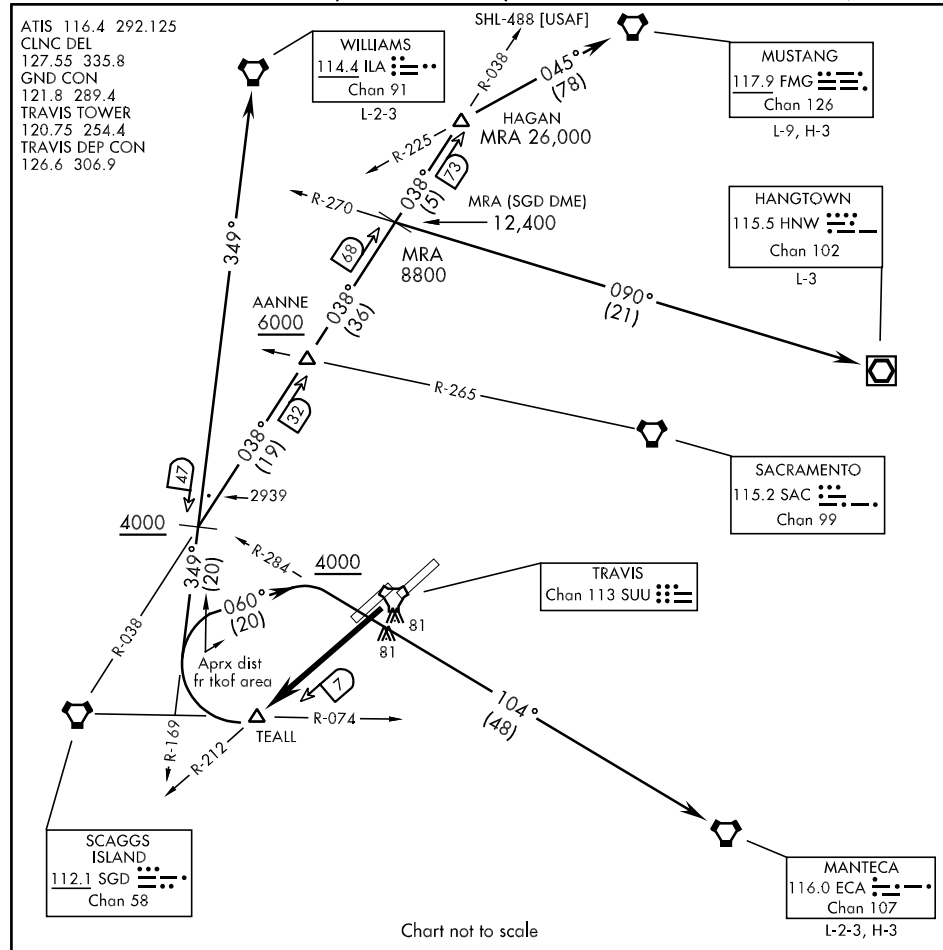


CATEGORY	A	B	C	D	E
S-21R	680/50 627 (700-1)		680-1¾ 627 (700-1¾)	680-2 627 (700-2)	680-2¼ 627 (700-2¼)
CIRCLING *	680-1 618 (700-1)		680-1¾ 618 (700-1¾)	800-2¼ 738 (800-2¼)	1440-3 1378(1400-3)

TDZL/CL Rwy 21L
HIRL all Rwy

SW-2, 22 OCT 2009 to 19 NOV 2009

TEALL-ONE DEPARTURE (RWY 21 L/R) (TEALL1 • TEALL)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 21L/R: Climb direct TEALL (SUU TACAN R-212/7 DME). Then via assigned transition (or assigned route).

HANGTOWN TRANSITION (TEALL 1 • HNW): Turn right and track 349°to intercept SGD VORTAC R-038 at or above 4000. Then via SGD R-038/HNW VOR/DME R-270 to HNW. Cross SAC VORTAC R-265 at or above 6000.

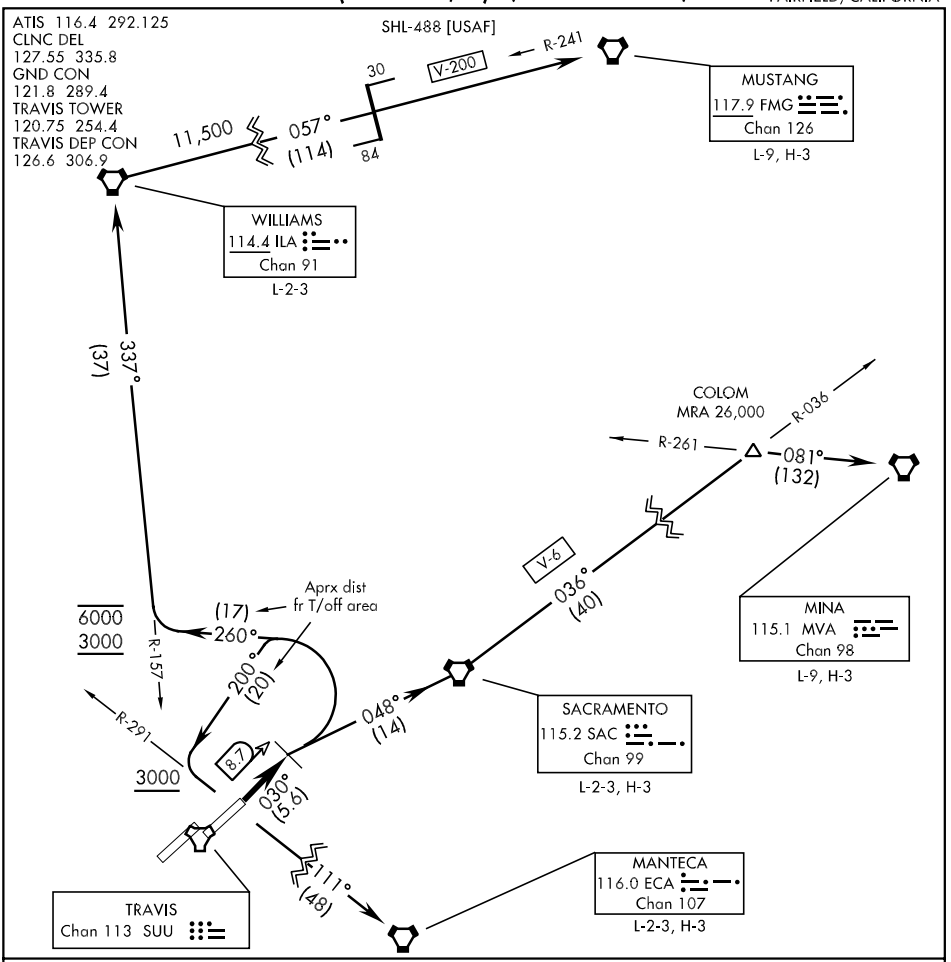
MANTECA TRANSITION (TEALL 1 • ECA): Turn right and track 060°to intercept ECA VORTAC R-284 at or above 4000 direct ECA.

MUSTANG TRANSITION (TEALL 1 • FMG): Turn right and track 349°to intercept SGD VORTAC R-038 at or above 4000. Then via SGD R-038 and FMG VORTAC R-225 to FMG. Cross SAC VORTAC R-265 at or above 6000.

WILLIAMS TRANSITION (TEALL 1 • ILA): Turn right to intercept ILA VORTAC R-169 to ILA. Cross ILA 47 DME at or above 4000.

TEALL-ONE DEPARTURE (RWY 21 L/R) (TEALL1 • TEALL)

FAIRFIELD, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L/R: Climb and intercept the SUU TACAN R-030 to 8.7 DME. Then via assigned transition (or assigned route).

MANTECA TRANSITION (TRAVS 1•ECA): Turn left and track 200° to intercept ECA VORTAC R-291 at or above 3000 direct ECA.

MINA TRANSITION (TRAVS 1•MVA): Direct SAC VORTAC. Then via SAC R-036 to COLOM and MVA VORTAC R-261 to MVA.

MUSTANG TRANSITION (TRAVS 1•FMG): Turn left and track 260° to intercept ILA VORTAC R-157 to ILA. Intercept the ILA R-157 between 3000 and 6000. Then via V-200 to FMG VORTAC.

WILLIAMS TRANSITION (TRAVS 1•ILA): Turn left and track 260° to intercept ILA VORTAC R-157 between 3000 and 6000 direct ILA.

APP CRS	Rwy Idg	2160
181°	TDZE	708
	Apt Elev	708

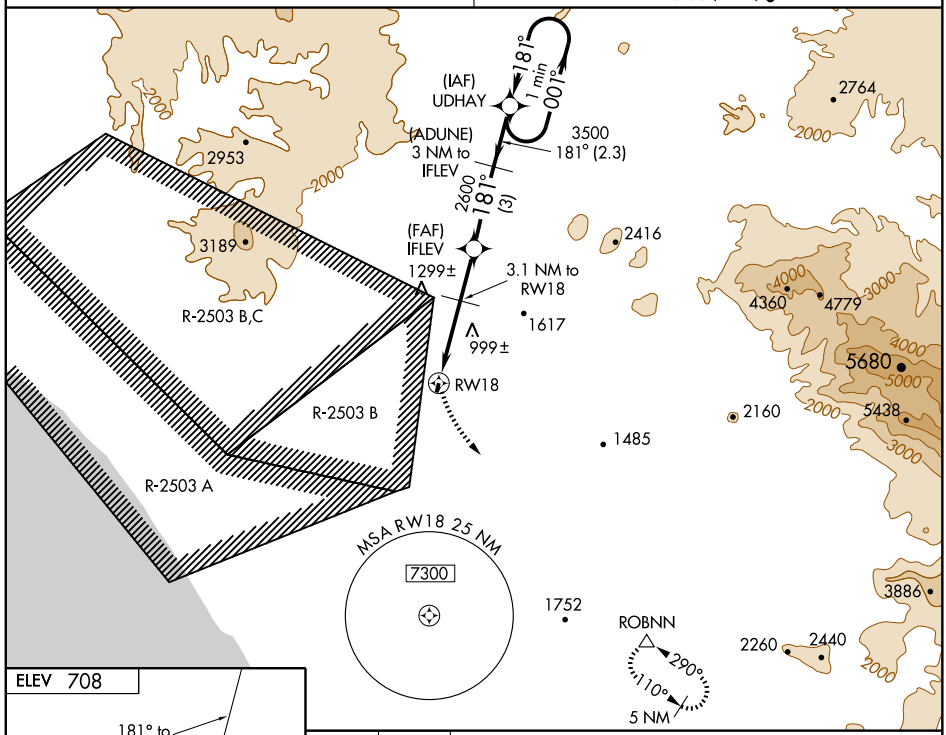
GPS RWY 18

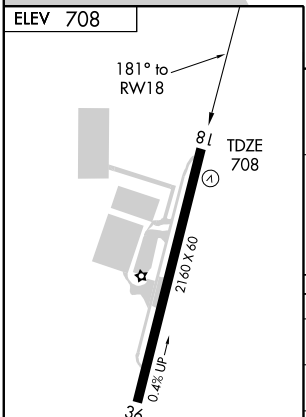
FALLBROOK COMMUNITY AIRPARK (L18)

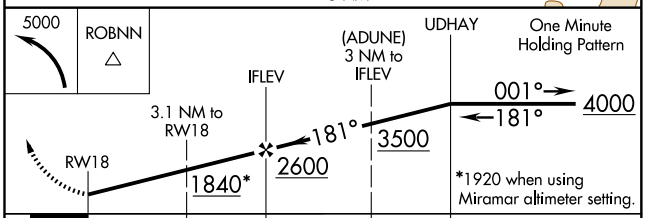
Circling not authorized west of Rwy 18-36.
NA Obtain local altimeter setting on CTAF; when not received, use MCAS Miramar altimeter setting minimums.

MISSED APPROACH: Climbing left turn to 5000 direct ROBNN WP and hold.

SOCAL APP CON	UNICOM
127.3 323.0	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-18	1260-1	552 (600-1)	NA	
CIRCLING	1260-1	552 (600-1)	NA	
MCAS MIRAMAR ALTIMETER SETTING MINIMUMS				
S-18	1360-1	652 (700-1)	NA	
CIRCLING	1360-1	652 (700-1)	NA	

MIRL Rwy 18-36 L

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC PXN	APP CRS	Rwy Idg	N/A
112.6	044°	TDZE	N/A
Chan 73		Apt Elev	157

VOR/DME or GPS-A

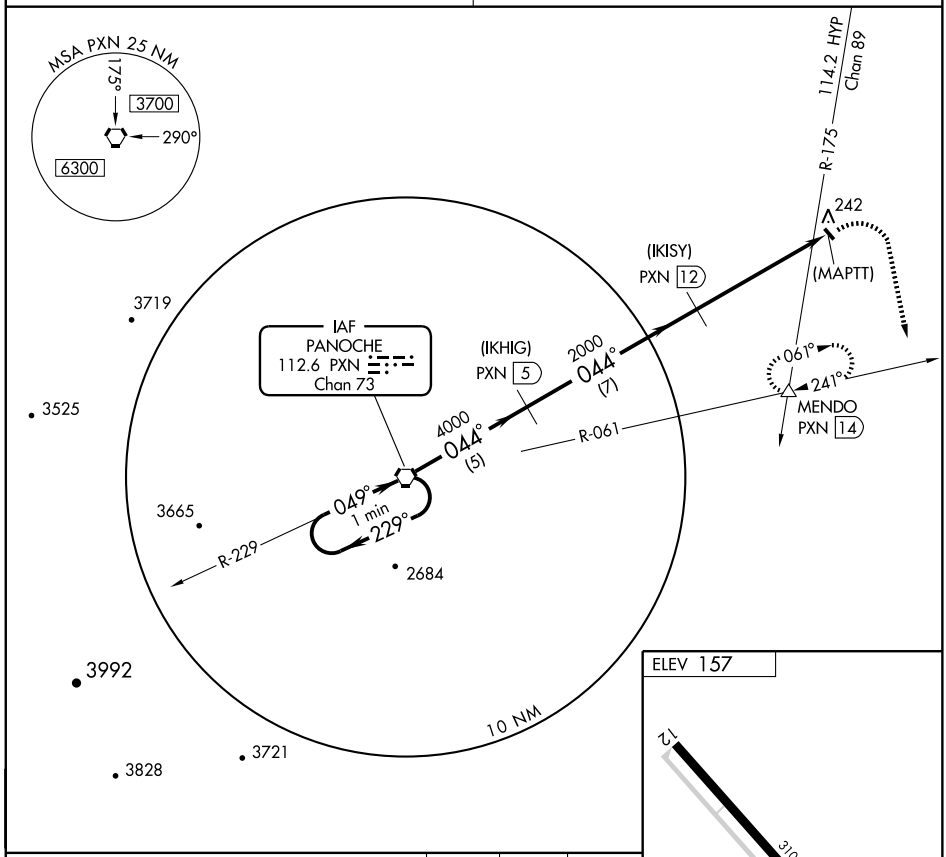
FIREBAUGH (F34)

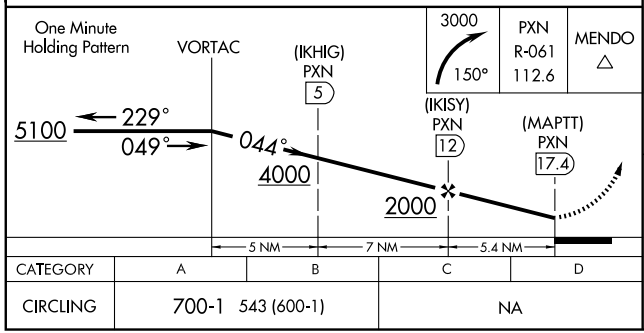
T
ANA

Use Madera altimeter setting.

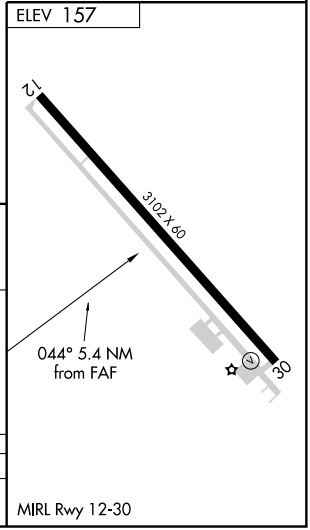
MISSED APPROACH: Climbing right turn to 3000 via heading 150° and PXN R-061 to MENDO Int/PXN 14 DME and hold.

NORCAL APP CON	CTAF
120.95 269.45	122.9





CATEGORY	A	B	C	D
CIRCLING	700-1 543 (600-1)		NA	



SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4005
110°	TDZE	382
	Apt Elev	392

GPS RWY 11

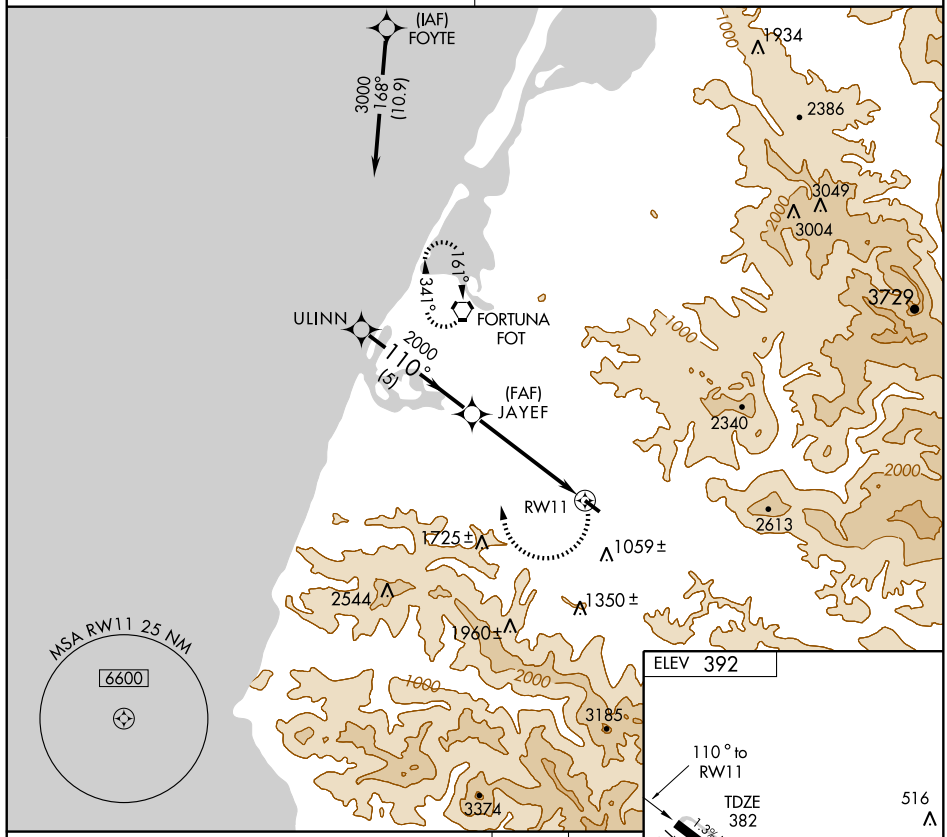
FORTUNA/ ROHNERVILLE (FOT)

Use Arcata altimeter setting.

NA

MISSED APPROACH: Climbing right turn to 3000 direct FOT VORTAC and hold.

SEATTLE CENTER	CTAF
124.85 306.3	122.9 L



CATEGORY	A	B	C	D
S-11	1140-1 758 (800-1)	1160-1 ¼ 778 (800-1¼)	1200-2 ½ 818 (900-2½)	1560-3 1178 (1200-3)
CIRCLING	1140-1 748 (800-1)	1160-1 ¼ 768 (800-1¼)	1320-2 ¾ 928 (1000-2¾)	1560-3 1168 (1200-3)

REIL Rwys 11 and 29
MIRL Rwy 11-29 L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4005
276°	TDZE	392
	Apt Elev	392

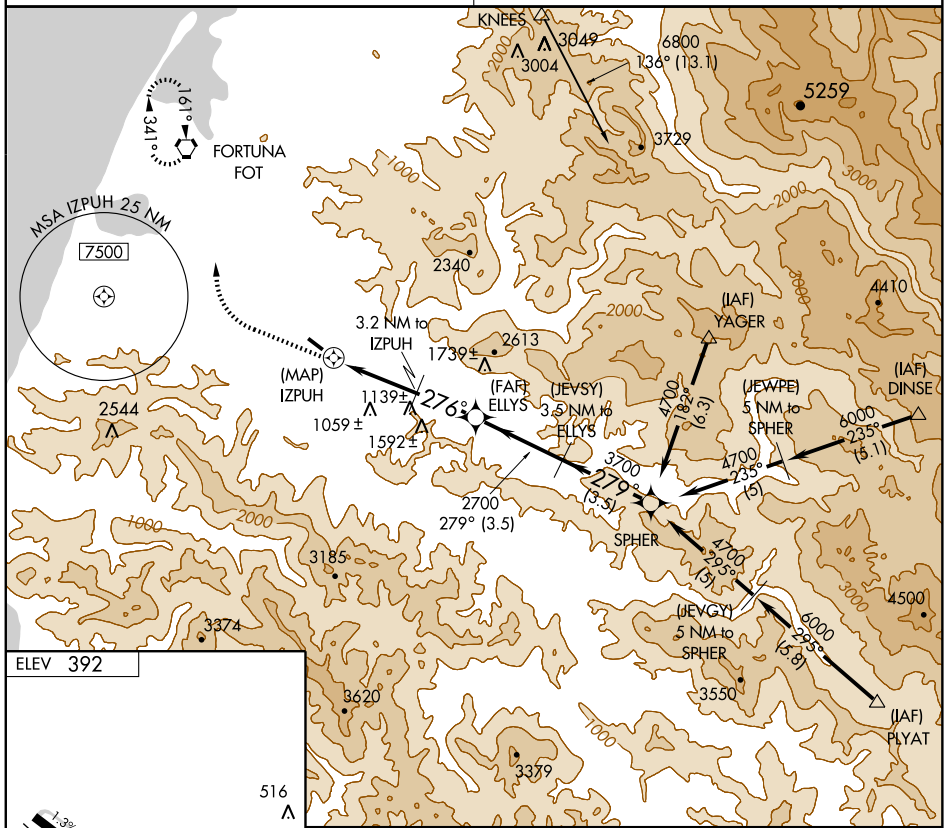
GPS RWY 29

FORTUNA/ROHNERVILLE (FOT)

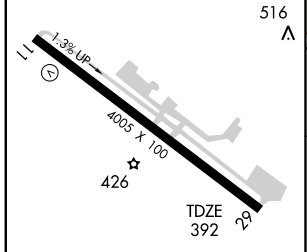
T ANA — Use Arcata altimeter setting.

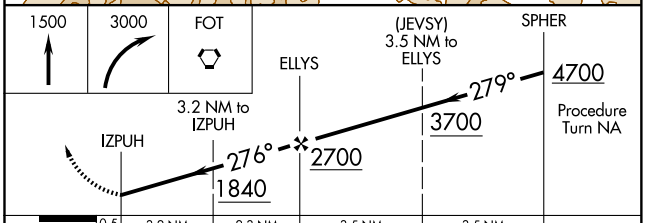
MISSED APPROACH: Climb to 1500 then climbing right turn to 3000 direct FOT VORTAC and hold.

SEATTLE CENTER	CTAF
124.85 306.3	122.9 L



ELEV 392





CATEGORY	A	B	C	D
S-29	1160-1 768 (800-1)	1160-1¼ 768 (800-1¼)	1160-2¼ 768 (800-2¼)	1160-2½ 768 (800-2½)
CIRCLING	1160-1 768 (800-1)	1160-1¼ 768 (800-1¼)	1320-2¾ 928 (1000-2¾)	1460-3 1068 (1100-3)

REIL Rwys 11 and 29
MIRL Rwy 11-29 L

SW-2, 22 OCT 2009 to 19 NOV 2009

FORTUNA, CALIFORNIA

AL-960 (FAA)

VORTAC FOT	APP CRS	Rwy Idg	4005
114.0	128°	TDZE	382
Chan 87		Apt Elev	392

VOR RWY 11

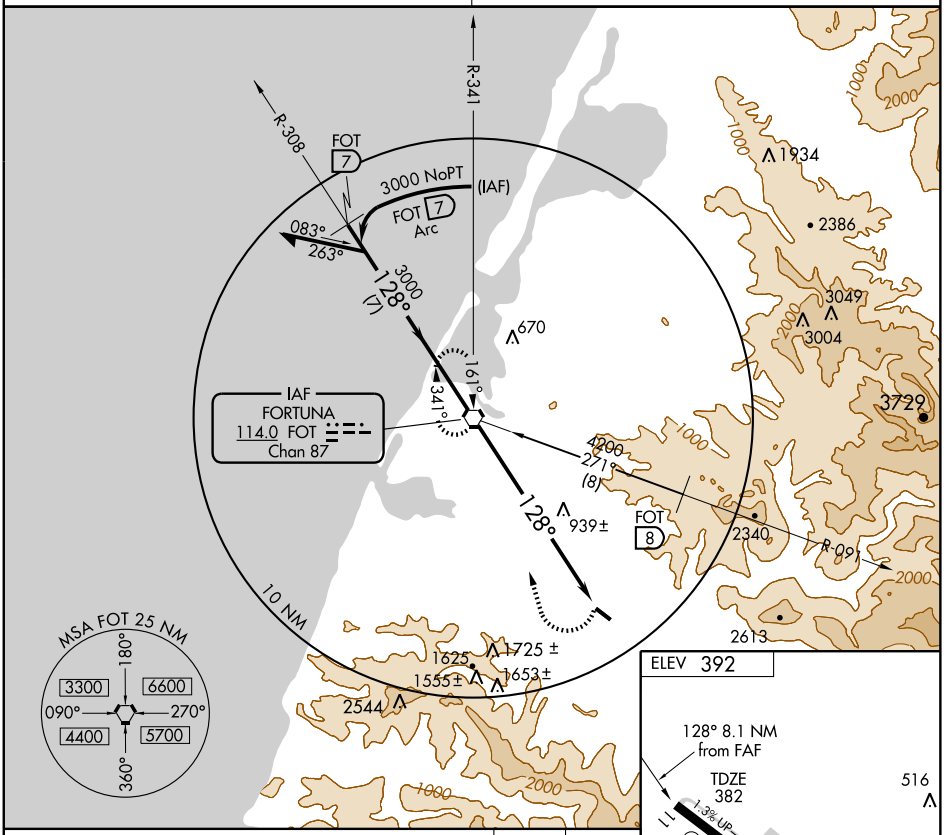
FORTUNA/ROHNERVILLE (FOT)

Use Arcata altimeter setting.

NA

MISSED APPROACH: Climbing right turn to 3000 direct FOT VORTAC and hold.

SEATTLE CENTER	CTAF
124.85 306.3	122.9 L



CATEGORY	A	B	C	D
S-11	1640-1¼ 1258 (1300-1¼)	1680-1½ 1298 (1300-1½)	1720-3	1338 (1400-3)
CIRCLING	1640-1¼ 1248 (1300-1¼)	1680-1½ 1288 (1300-1½)	1720-3	1338 (1400-3)

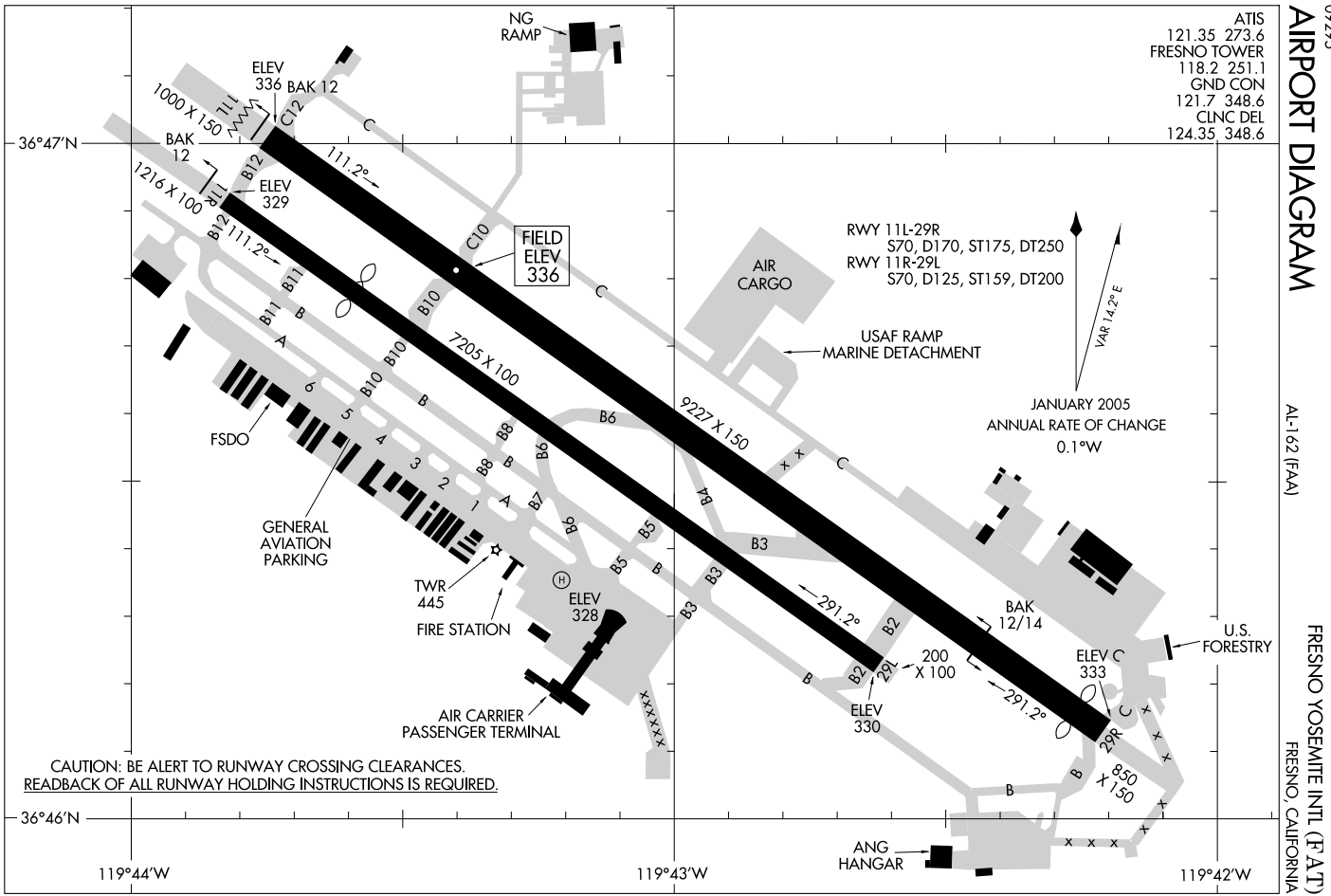
REIL Rwys 11 and 29

MIRL Rwy 11-29 L

FAF to MAP 8.1 NM

Knots	60	90	120	150	180
Min:Sec	8:06	5:24	4:03	3:14	2:42

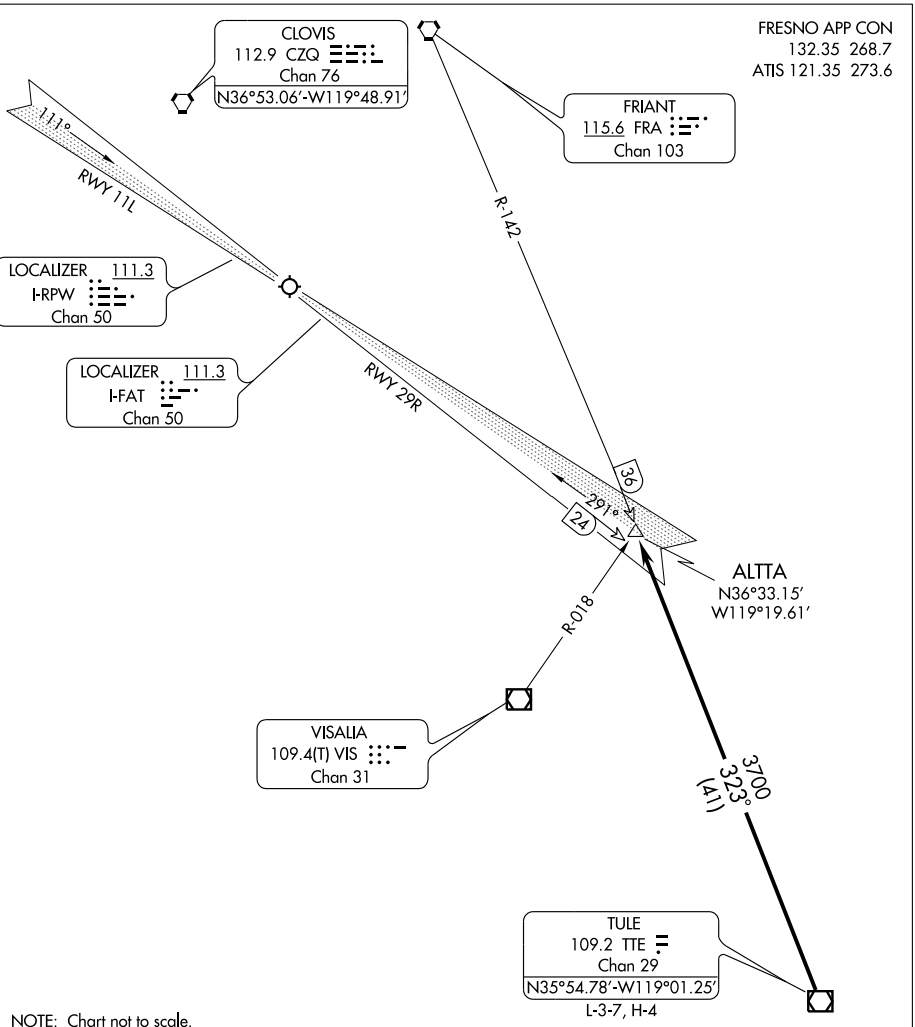
SW-2, 22 OCT 2009 to 19 NOV 2009


AIRPORT DIAGRAM
FRESNO YOSEMITE INTL (FAT)
FRESNO, CALIFORNIA
AL-162 (FAA)
ATIS
121.35 273.6
FRESNO TOWER
118.2 251.1
GND CON
121.7 348.6
CLNC DEL
124.35 348.6
NG RAMP
ELEV 336
BAK 12
1000 X 150
C12
111.2°
BAK 12
1216 X 100
B12
ELEV 329
FIELD ELEV 336
7205 X 100
9227 X 150
AIR CARGO
USAF RAMP
MARINE DETACHMENT
RWY 11L-29R
S70, D170, ST175, DT250
RWY 11R-29L
S70, D125, ST159, DT200
VAR 14.2° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
FSDO
GENERAL AVIATION PARKING
TWR 445
FIRE STATION
ELEV 328
AIR CARRIER PASSENGER TERMINAL
291.2°
BAK 12/14
200 X 100
ELEV 330
ELEV C 333
U.S. FORESTRY
850 X 150
ANG HANGAR
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
36°47'N
36°46'N
119°44'W
119°43'W
119°42'W

ALTTA EIGHT ARRIVAL

ST-162 (FAA)

FRESNO YOSEMITE INTL
FRESNO, CALIFORNIA



From over TTE VOR/DME via TTE R-323 and FRA R-142 to ALTTA DME fix. Expect ILS or LOC Rwy 29R approach. For Rwy 11L operations: Expect routing via CZQ VORTAC and radar vectors to Fresno Localizer Rwy 11L approach.

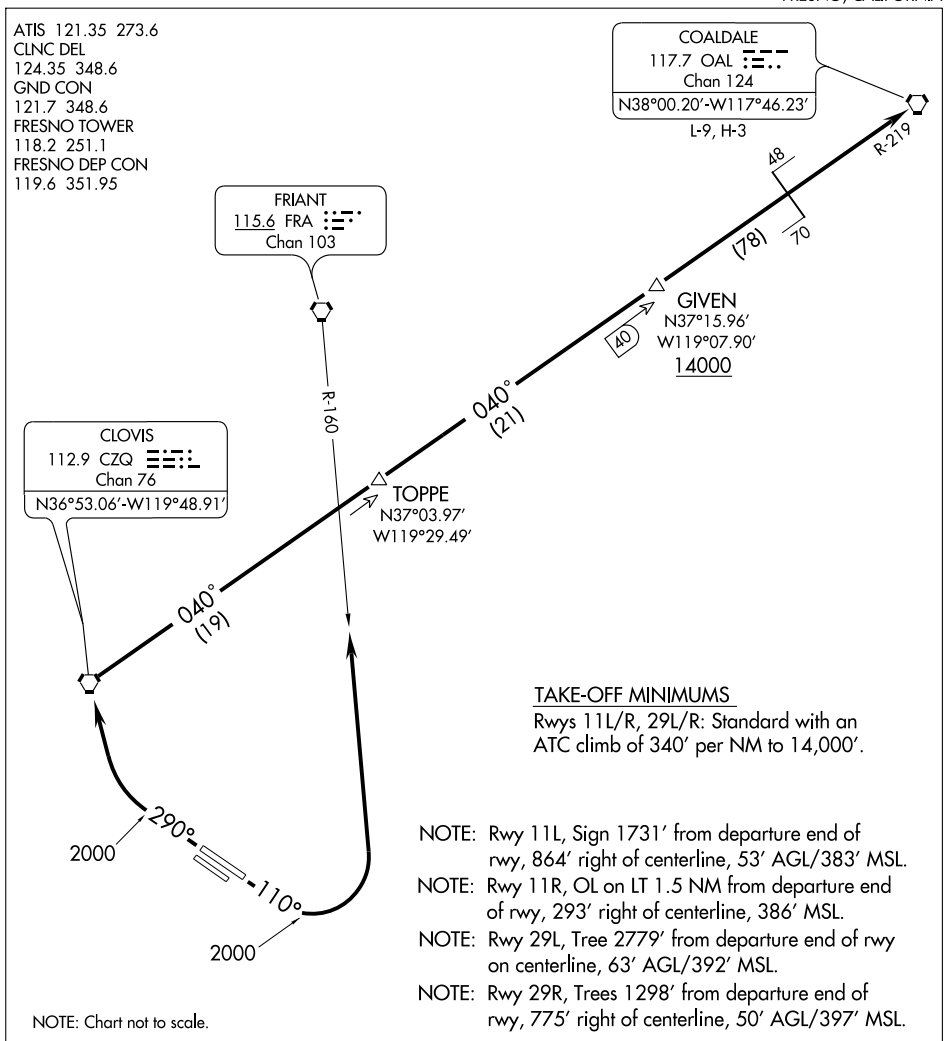
LOST COMMUNICATIONS: Rwy 11L: Execute VOR/DME or TACAN Rwy 11L approach.

SW-2, 22 OCT 2009 to 19 NOV 2009

COALDALE ONE DEPARTURE

SL-162 (FAA)

FRESNO YOSEMITE INTL (FAT)
FRESNO, CALIFORNIA



TAKE-OFF MINIMUMS

Rwys 11L/R, 29L/R: Standard with an ATC climb of 340' per NM to 14,000'.

NOTE: Rwy 11L, Sign 1731' from departure end of rwy, 864' right of centerline, 53' AGL/383' MSL.

NOTE: Rwy 11R, OL on LT 1.5 NM from departure end of rwy, 293' right of centerline, 386' MSL.

NOTE: Rwy 29L, Tree 2779' from departure end of rwy on centerline, 63' AGL/392' MSL.

NOTE: Rwy 29R, Trees 1298' from departure end of rwy, 775' right of centerline, 50' AGL/397' MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11L/R: Climb via 110° heading to 2000', then climbing left turn via FRA R-160 and CZQ R-040. Thence . . . .

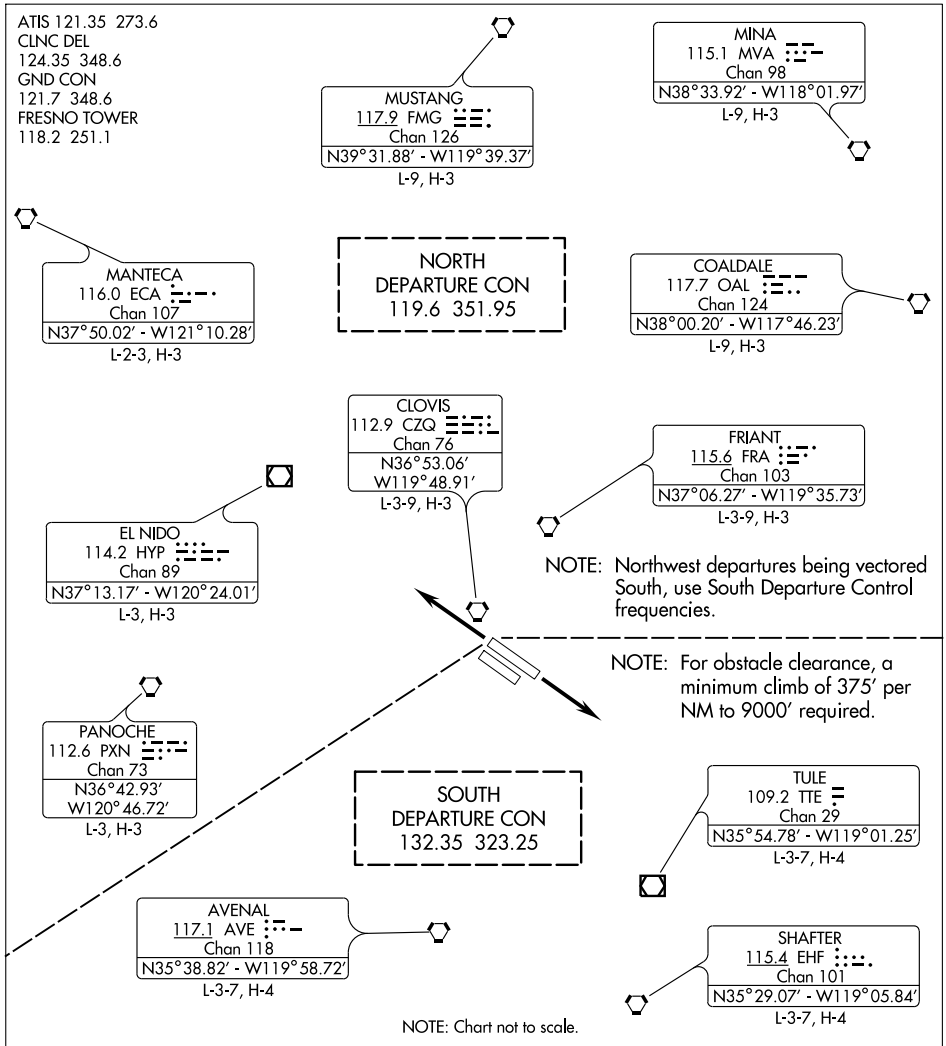
TAKE-OFF RUNWAYS 29L/R: Climb via 290° heading to 2000', then climbing right turn direct CZQ VORTAC. Thence . . . .

. . . . Intercept and proceed via CZQ R-040 and OAL R-219 to OAL VORTAC. Cross GIVEN DME at or above 14000'. Expect clearance to filed altitude after GIVEN DME.

SW-2, 22 OCT 2009 to 19 NOV 2009

FRESNO FIVE DEPARTURE

FRESNO YOSEMITE INTL (FAT)
FRESNO, CALIFORNIA



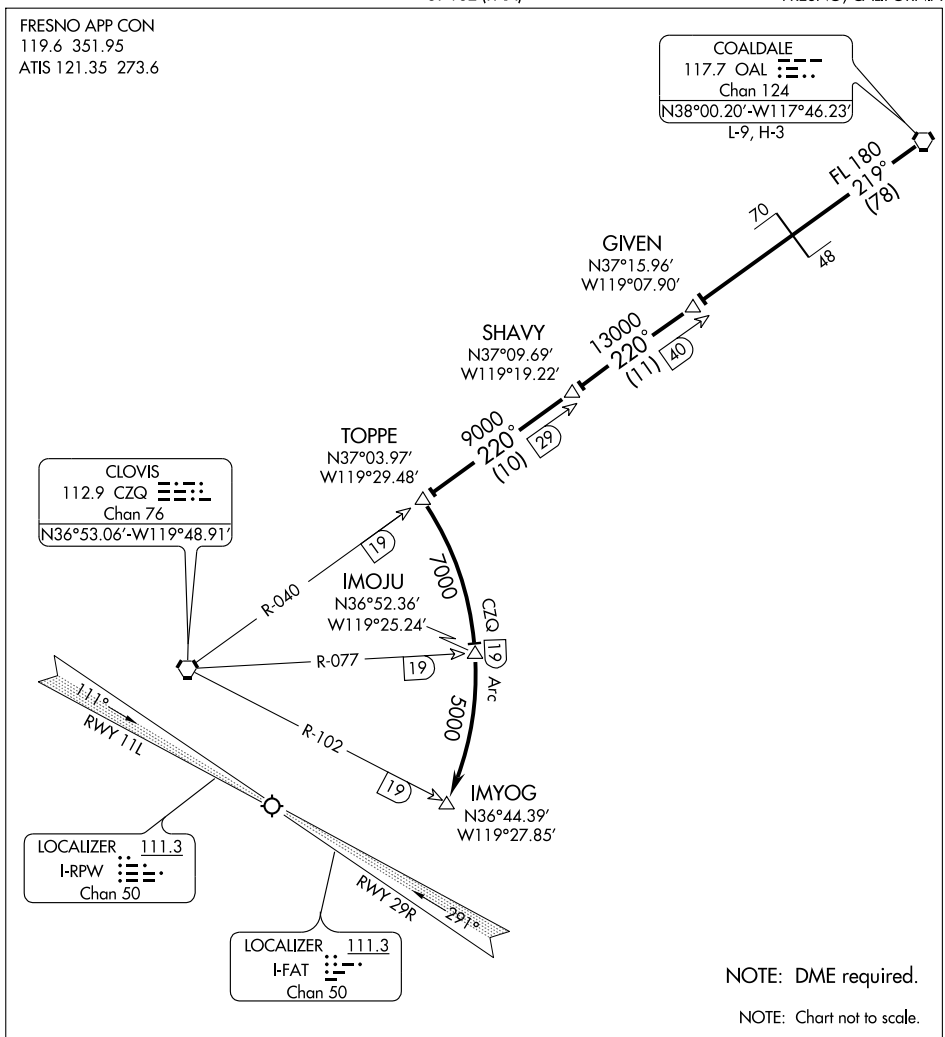
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11L/R AND 29L/R: Fly runway heading for vectors to assigned route/fix. Expect clearance to filed altitude five minutes after departure.

LOST COMMUNICATIONS: If no radio contact for two minutes, aircraft enroute to FRA, MVA, FMG and OAL proceed direct CZQ VORTAC, then direct FRA VORTAC, cross FRA VORTAC at or above 9000′, thence via (assigned route) to filed altitude.

SW-2, 22 OCT 2009 to 19 NOV 2009

GIVEN SIX ARRIVAL



From over OAL VORTAC via OAL R-219 and CZQ R-040 to TOPPE DME fix, thence . . . .

. . . . RWY 11L: arrivals can expect radar vectors from TOPPE DME fix to FRESNO Rwy 11L localizer.

. . . . RWY 29R: south via CZQ 19 DME arc to IMYOG R-102/19 DME, then via radar vectors to intercept the FRESNO ILS Rwy 29R localizer course.

SW-2, 22 OCT 2009 to 19 NOV 2009

HI-ILS or LOC/DME RWY 29R

LOC/DME I-FAT	APCH CRS	Rwy ldg	8915
111.3	291°	TDZE	333
Chan 50		Arpt Elev	336

JAL-162 [USAF] — FRESNO YOSEMITE INTL (KFAT)

ALSF-2

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 direct CZQ VORTAC and hold. (TACAN aircraft continue climb to 3000 via CZQ R-307 to OXVEV/7 DME and hold northwest, right turns, 127° inbound.) or when directed by ATC, climb to 1800 via 290° heading for radar vectors.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	132.35 323.25	118.2 251.1	121.7 348.6	124.35 348.6

* When ALS inop, increase CAT CDE RVR to 40.
** When ALS inop, increase CAT E RVR to 60.

CLOVIS 112.9 CZQ Chan 76

MSA CZQ 25 NM
120° 7700
1900 300°

OXVEV CZQ 7
R-307 127° 307°
R-118
1706 2200 1182 779 791 429 640 504 639

LOCALIZER 111.3 I-FAT Chan 50
Use I-FAT DME when on LOC course

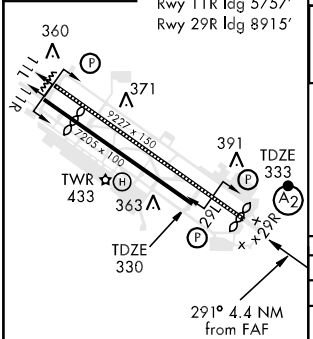
SANGO I-FAT CZQ 12.1 18.9 2149
STORI I-FAT 6.1
291° 298°
(IAF) GRIFN CZQ 34.2
R-118 337° 9000 (61)
R-033 9000 017° (61)

20 NM
FEEDER FACILITIES
HIGH ALTITUDE FACILITIES

VISALIA 109.4 VIS Chan 31
SHAFTER
AVENAL

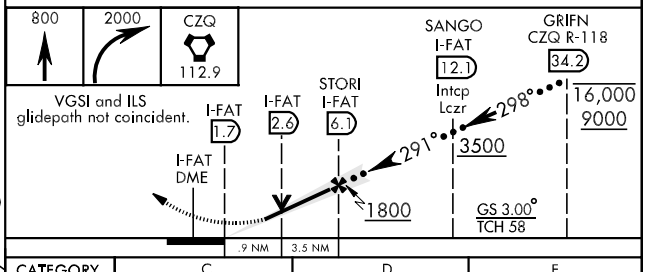
EMERG SAFE ALT 100 NM 16,700

ELEV 336
Rwy 11R ldg 5757′
Rwy 29R ldg 8915′



291° 4.4 NM from FAF

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZL/CL Rwy 29R



CATEGORY	C	D	E
S-ILS 29R*	533/18 200 (200-⅜)		533/24 200 (200-½)
S-LOC 29R**	680/24 347 (400-½)	680/40 347 (400-¾)	
SIDE STEP RWY 29L	680-1½ 350 (400-1½)	680-2 350 (400-2)	
CIRCLING	820-1½ 484 (500-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

SW-2, 22 OCT 2009 to 19 NOV 2009

HI-LOC/DME RWY 11L

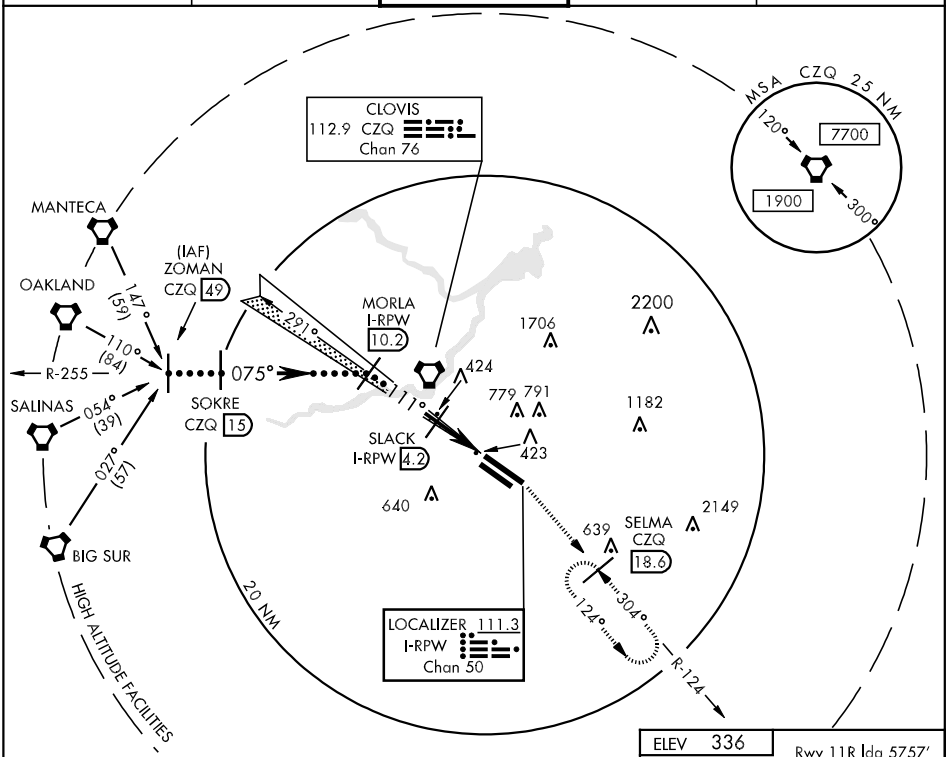
LOC/DME I-RPW	APCH CRS	Rwy ldg	9227
111.3	111°	TDZE	336
Chan 50		Arpt Elev	336

JAL-162 [USAF]

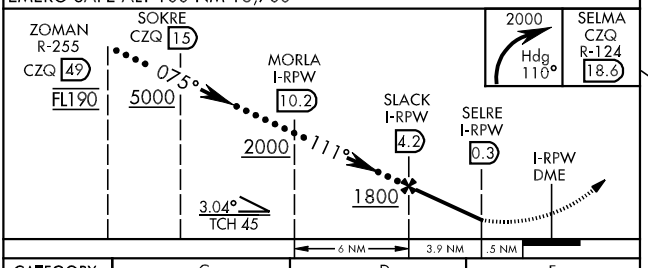
FRESNO YOSEMITE INTL (KFAT)

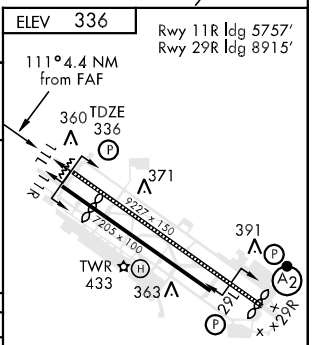
MISSED APPROACH: Climb to 2000 via heading 110° and CZQ R-124 to SELMA 18.6 DME and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6



EMERG SAFE ALT 100 NM 16,700





CATEGORY	C	D	E
S-11L	680/50 344 (400-1)	680/60	344 (400-1¼)
SIDE STEP RWY 11R	680-1½ 347 (400-1½)	680-2	347 (400-2)
CIRCLING	820-1½ 484 (500-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZL/CL Rwy 29R

SW-2, 22 OCT 2009 to 19 NOV 2009

HI-VOR/DME or TACAN RWY 11L

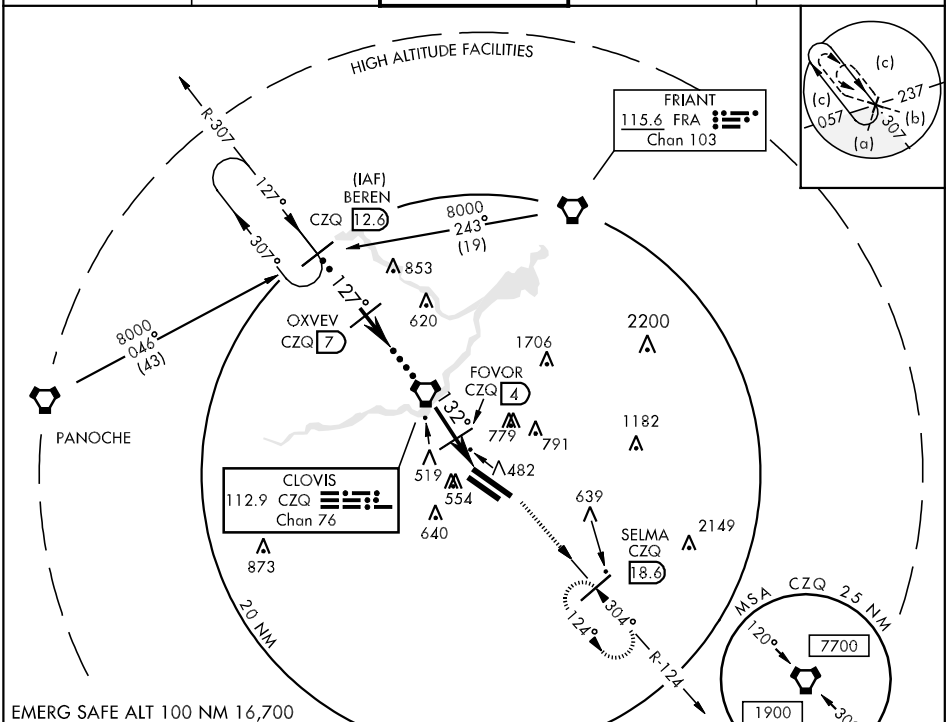
VORTAC CZQ	APCH CRS	Rwy ldg	9227
112.9	132°	TDZE	336
Chan 76		Arpt Elev	336

JAL-162 [USAF]

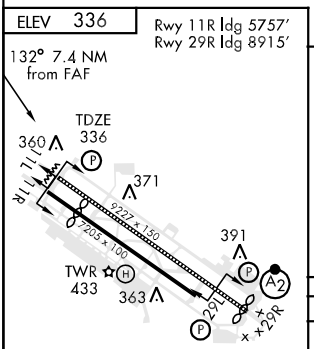
FRESNO YOSEMITE INTL (KFAT)

MISSED APPROACH: Climbing left turn to 2000 via CZQ R-124 to SELMA 18.6 DME and hold.

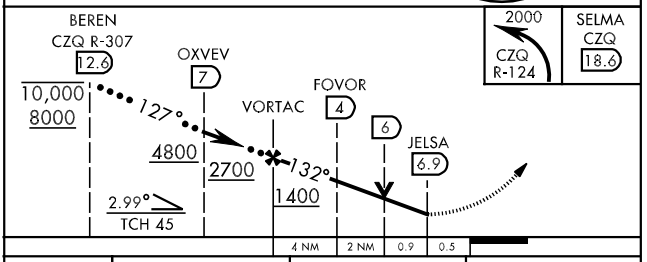
ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6



EMERG SAFE ALT 100 NM 16,700



REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZL/CL Rwy 29R



CATEGORY	C	D	E
S-11L	800/60 464 (500-1¼)	800-1½ 464 (500-1½)	800-1¾ 464 (500-1¾)
SIDESTEP 11R	800-1½ 467 (500-1½)	800-2	467 (500-2)
CIRCLING	820-1½ 484 (500-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

SW-2, 22 OCT 2009 to 19 NOV 2009

HI-VOR/DME or TACAN RWY 29R

VORTAC CZQ	APCH CRS	Rwy ldg	8915
112.9	306°	TDZE	333
Chan 76		Arpt Elev	336

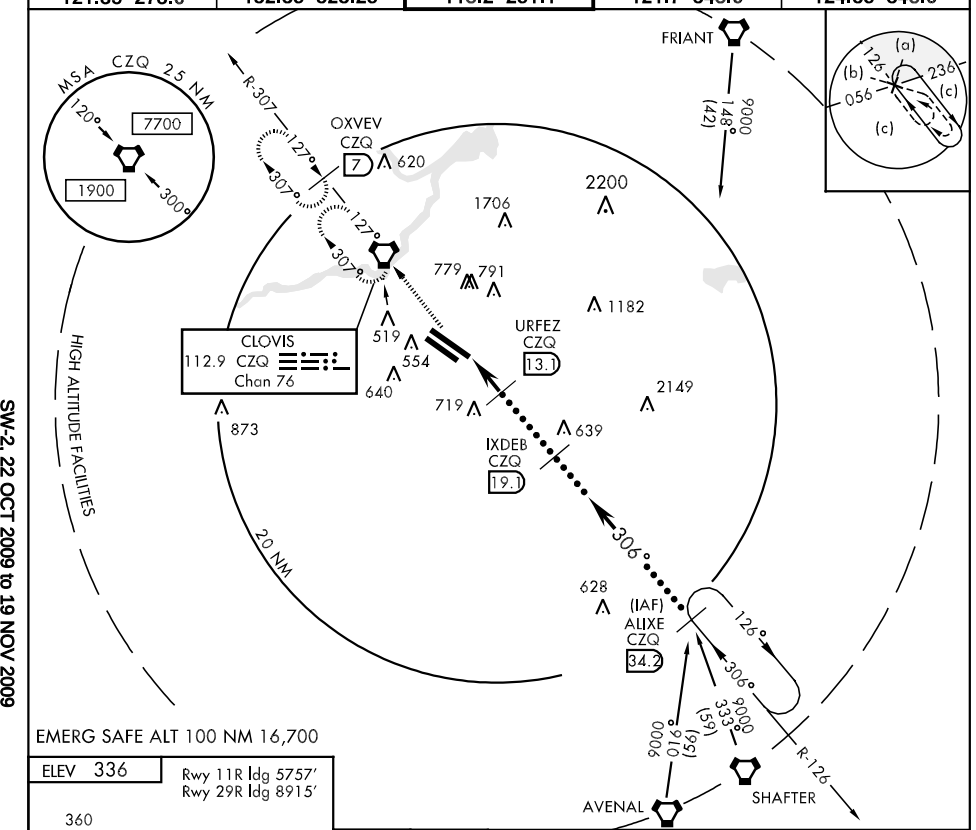
JAL-162 [USAF] — FRESNO YOSEMITE INTL (KFAT)

▼ *When ALS inop, increase CAT C RVR to 60, CAT DE vis to 1½.

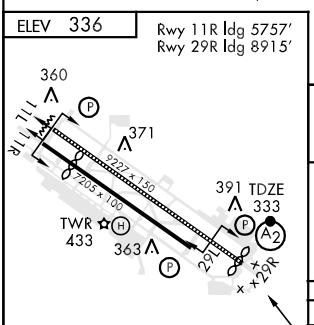
ALSF-2

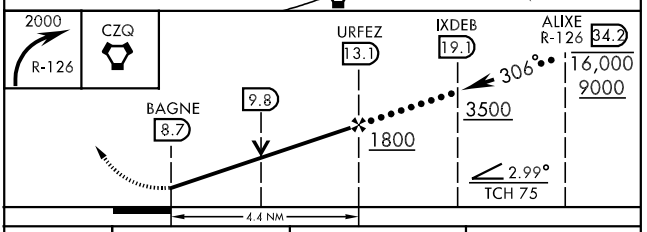
MISSED APPROACH: Climb to 2000 via CZQ VORTAC R-126 to CZQ VORTAC and hold. (TACAN acft continue climb to 3000 via CZQ R-307 to OXVEV 7 DME and hold NW, RT 127° inbound).

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	132.35 323.25	118.2 251.1	121.7 348.6	124.35 348.6



EMERG SAFE ALT 100 NM 16,700





CATEGORY	C	D	E
S-29R*	760/40 427 (500-¾)	760/50	427 (500-1)
SIDESTEP 29L	760-1½ 430 (500-1½)	760-2	430 (500-2)
CIRCLING	820-1½ 484 (500-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

SW-2, 22 OCT 2009 to 19 NOV 2009

FRESNO, CALIFORNIA AL-162 (FAA)

ILS or LOC/DME RWY 29R

FRESNO YOSEMITE INTL (FAT)

LOC/DME I-FAT	APP CRS	Rwy 29R ldg	8915	Rwy 29L ldg	7205
111.3 Chan 50	291°	TDZE	333	TDZE	330
		Apt Elev	336	Apt Elev	336

For inoperative ALSF-2, increase S-ILS Cat E visibility to RVR 4000 and S-LOC Cat E visibility to RVR 6000. Hold in lieu of PT not authorized for Cat E aircraft.

ALSF-2 Rwy 29R

MISSED APPROACH: Climb to 800, then climbing right turn to 2000 direct CZQ VORTAC and hold. (TACAN aircraft climb to 3000 via CZQ VORTAC R-307 to OXVEV/ CZQ 7 DME and hold NW, RT, 127° inbound.)

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6

TACAN MISSED APCH FIX

OXVEV CZQ 7

127° 307° R-307 112.9 CZQ Chan 76

CLOVIS 112.9 CZQ Chan 76

Radar required for terminal route CLOVIS (CZQ) VORTAC to STORI INT.

ALTERNATE MISSED APCH FIX

NIVEE FRA 8

115.6 FRA Chan 103

022° 202° R-202

2000 to STORI 122° (13)

779

(IAF) STORI I-FAT 6.1

Maximum holding airspeed 200 KIAS

10 NM

LOCALIZER 111.3 I-FAT Chan 50

IM

554 515 505

429± 484± 489±

1 min 291° 111°

1800 291° (6.1)

660

2108

(IF) SANGO I-FAT 12.1

MSA CZQ 25 NM

120° 300° 7700 1900

DME REQUIRED

2600 NoPT 291° (12)

(IAF) ALTTA I-FAT 24.1

ELEV 336

362 371 391 363 404

07L/25R 9227 X 150

07R/25L 7205 X 100

TWR 445

TDZE 333 TDZE 330

29R

291° 4.4 NM from FAF

800 2000 CZQ 112.9

STORI I-FAT 6.1

VGSI and ILS glidepath not coincident

One Minute Holding Pattern

1800

I-FAT 1.7 I-FAT 2.6 IM

291° 111° 291° 1800 1800

GS 3.00° TCH 58

0.1 0.8 3.5 NM

CATEGORY	A	B	C	D	E
S-ILS 29R	533/18 200 (200-½)				533/24 200 (200-½)
S-LOC 29R	680/24 347 (400-½)			680/40 347 (400-¾)	
SIDESTEP RWY 29L	740-1 410 (500-1)		740-1½ 410 (500-1½)	740-2 410 (500-2)	
CIRCLING	820-1 484 (500-1)		820-1½ 484 (500-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 22 OCT 2009 to 19 NOV 2009

FRESNO, CALIFORNIA AL-162 (FAA)

LOC/DME I-FAT	APP CRS	Rwy Idg	8915
111.3	291°	TDZE	333
Chan 50		Apt Elev	336

ILS RWY 29R (CAT II)

FRESNO YOSEMITE INTL (FAT)

ALSF-2

MISSED APPROACH: Climb to 800, then climbing right turn to 2000 direct CZQ VORTAC and hold. (TACAN aircraft climb to 3000 via CZQ VORTAC R-307 to OXVEV/ CZQ 7 DME and hold NW, RT, 127° inbound.)

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6

TACAN MISSED APCH FIX

OXVEV
CZQ 7

127° R-307
307° 112.9 CZQ Chan 76

CLOVIS
112.9 CZQ Chan 76

Radar required for terminal route CLOVIS (CZQ) VORTAC to STORI INT.

ALTERNATE MISSED APCH FIX

NIVEE
FRA 8

115.6 FRA Chan 103
022° 202° R-202

2000 to STORI
122° (13)

779

LOCALIZER 111.3
I-FAT
Chan 50

554 515 505

(IAF)
STORI
I-FAT 6.1
Maximum holding airspeed 200 KIAS

IM

429±
484±
489±
660

1800
291° (6.1)

1 min
291°
111°

10 NM

2108

(IF)
SANGO
I-FAT 12.1

MSA CZQ 25 NM
120° 7700
1900
300°

DME REQUIRED

2600 NoPT
291°
(12)

(IAF)
ALTTA
I-FAT 24.1

ELEV 336

362
371
391
TDZE 333
TWR 445
363
404
11L
29R
11R
0°/205 X 100
9227 X 150

800	2000	CZQ
		112.9

STORI
I-FAT 6.1

One Minute Holding Pattern

1800
111°
291°
1800
1800

DH
RA 102
IM
291°
333
MSL

VGSI and ILS glidepath not coincident

GS 3.00°
TCH 58

1050′ 820′ 4.3 NM

CATEGORY	A	B	C	D
S-ILS 29R	433/12 100 RA 102			

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-FAT	APP CRS	Rwy Idg	8915
111.3	291°	TDZE	333
Chan 50		Apt Elev	336

ILS RWY 29R (CAT III)

FRESNO YOSEMITE INTL (FAT)

ALSF-2

MISSED APPROACH: Climb to 800, then climbing right turn to 2000 direct CZQ VORTAC and hold. (TACAN aircraft climb to 3000 via CZQ VORTAC R-307 to OXVEV/ CZQ 7 DME and hold NW, RT, 127° inbound.)

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6

TACAN MISSED APCH FIX

OXVEV CZQ 7

127° 307° R-307 112.9 CZQ Chan 76

CLOVIS 112.9 CZQ Chan 76

Radar required for terminal route CLOVIS (CZQ) VORTAC to STORI INT.

ALTERNATE MISSED APCH FIX

NIVEE FRA 8

115.6 FRA Chan 103

022° 202° R-202

2000 to STORI 122° (113)

779

10 NM

LOCALIZER 111.3 I-FAT Chan 50

(IAF) STORI I-FAT 6.1

Maximum holding airspeed 200 KIAS

IM

554 515 505

429± 484± 489±

1 min

291° 111°

1800 291° (6.1)

660

2108

(IF) SANGO I-FAT 12.1

111°

2600 NoPT 291° (12)

(IAF) ALTTA I-FAT 24.1

DME REQUIRED

MSA CZQ 25 NM

120° 300° 7700 1900

ELEV 336

362 371 391 404

TDZE 333

9227 X 150

9205 X 100

TWR 445 363

11R 29R 11L

800 2000 CZQ 112.9

STORI I-FAT 6.1

One Minute Holding Pattern

1800 111° 291° 1800 1800

IM 435

333 MSL

291°

VGSI and ILS glidepath not coincident

GS 3.00° TCH 58

1050′ 850′ 4.3 NM

CATEGORY	A	B	C	D
S-ILS 29R	CAT IIIa	RVR 07		
S-ILS 29R	CAT IIIb	RVR 06		
S-ILS 29R	CAT IIIc	NA		

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

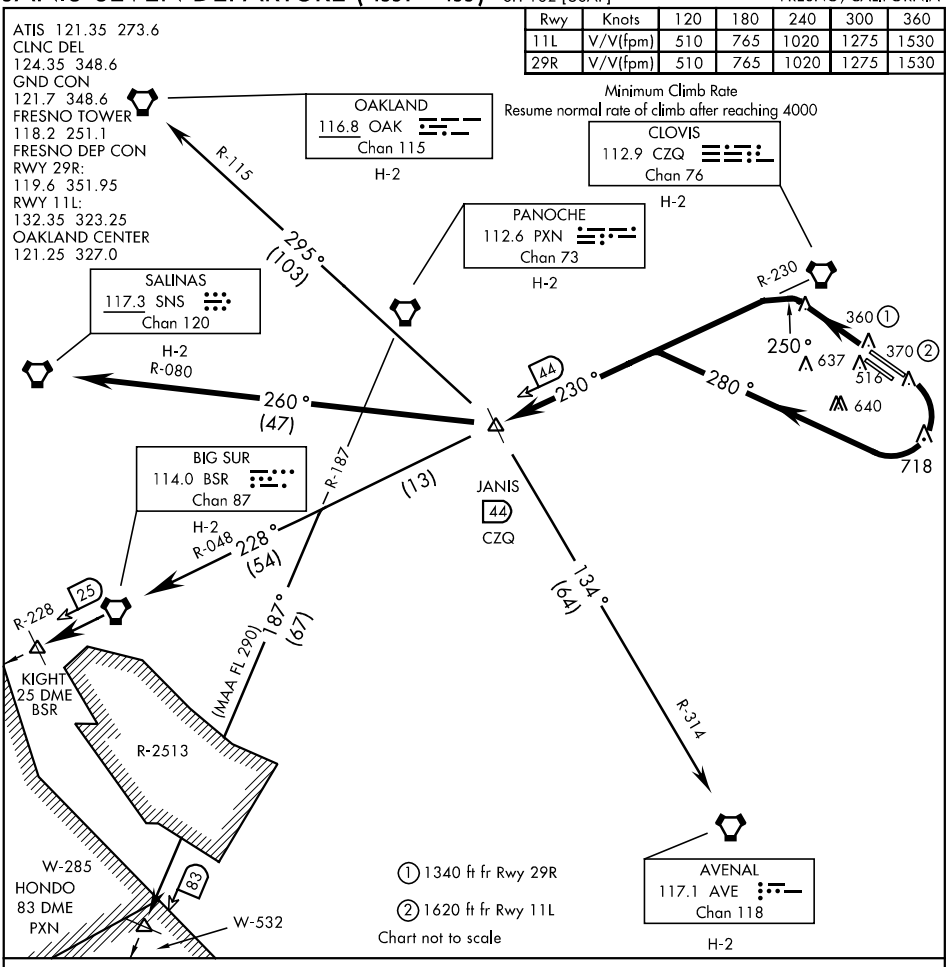
CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

JANIS-SEVEN DEPARTURE (4JJF•4JJ)

SH-162 [USAF]

FRESNO, CALIFORNIA



Rwy	Knots	120	180	240	300	360
11L	V/V(fpm)	510	765	1020	1275	1530
29R	V/V(fpm)	510	765	1020	1275	1530

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 29R: Climb runway heading until reaching 2200 or above, turn left heading 250°, intercept and proceed via CZQ R-230 to JANIS. Thence via (transition) or (assigned route).

TAKE-OFF RWY 11L: Climb runway heading until reaching 2200 or above, turn right heading 280°, intercept and proceed via CZQ R-230 to JANIS. Thence via (transition) or (assigned route).

OAKLAND TRANSITION (4JJ7•OAK): Via OAK R-115 to OAKLAND VORTAC.

SALINAS TRANSITION (4JJ7•SNS): Via SNS R-080 to SALINAS VORTAC.

KIGHT TRANSITION (4JJ7•4VV): Via CZQ and BSR R-228 to KIGHT.

HONDO TRANSITION (4JJ7•4VX): Via CZQ R-230 and PXN R-187 to HONDO.

AVENAL TRANSITION (4JJ7•AVE): Via AVE R-314 to AVENAL VORTAC.

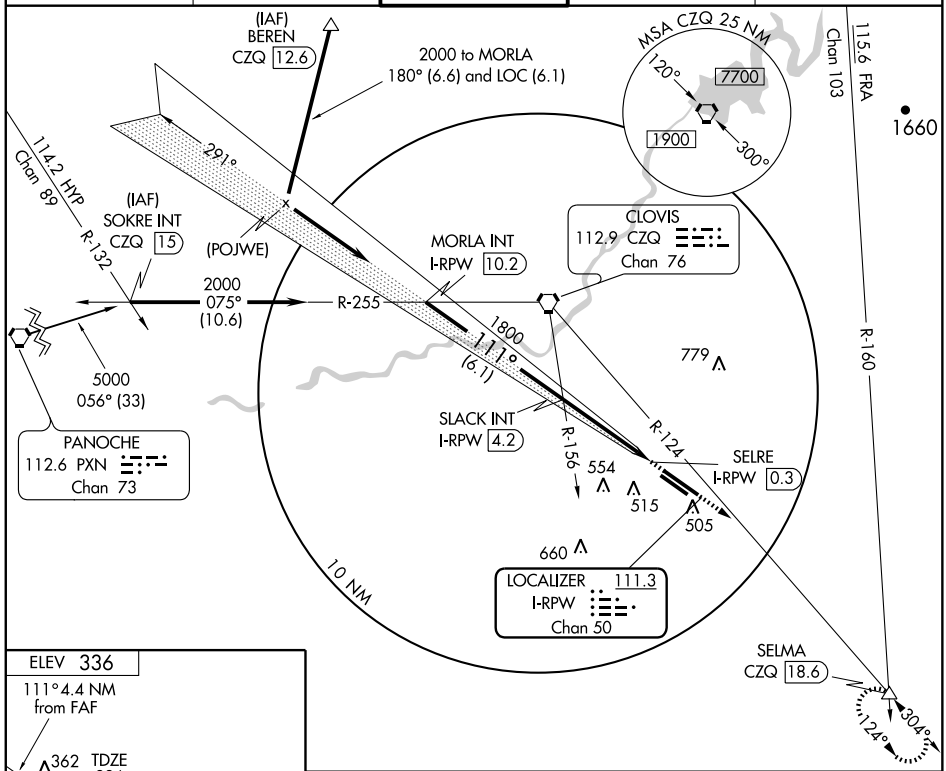
LOC/DME I-RPW	APP CRS	Rwy 11L Idg	9227	Rwy 11R Idg	5757
111.3	111°	TDZE	336	TDZE	333
Chan 50		Apt Elev	336	Apt Elev	336

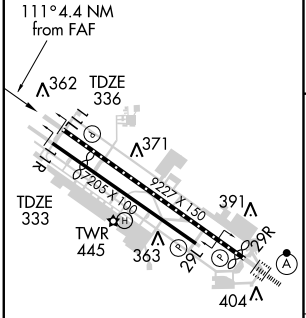
LOC RWY 11L

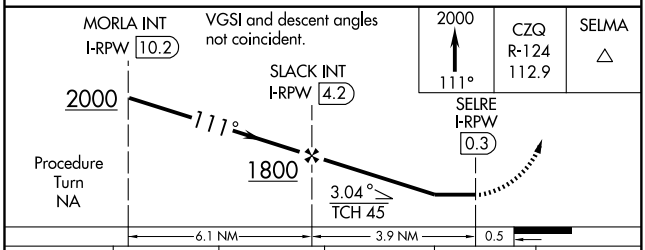
FRESNO YOSEMITE INTL (FAT)

MISSED APPROACH: Climb to 2000 via heading 111° and CZQ R-124 to SELMA and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

CATEGORY	A	B	C	D	E
S-11L	680/50 344 (400-1)			680/60 344 (400-1¼)	
SIDESTEP 11R	680-1 347 (400-1)		680-1½ 347 (400-1½)	680-2 347 (400-2)	
CIRCLING	820-1 484 (500-1)		820-1½ 484 (500-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 77505 W11A	APP CRS 111°	Rwy Idg 9227 TDZE 336 Apt Elev 336

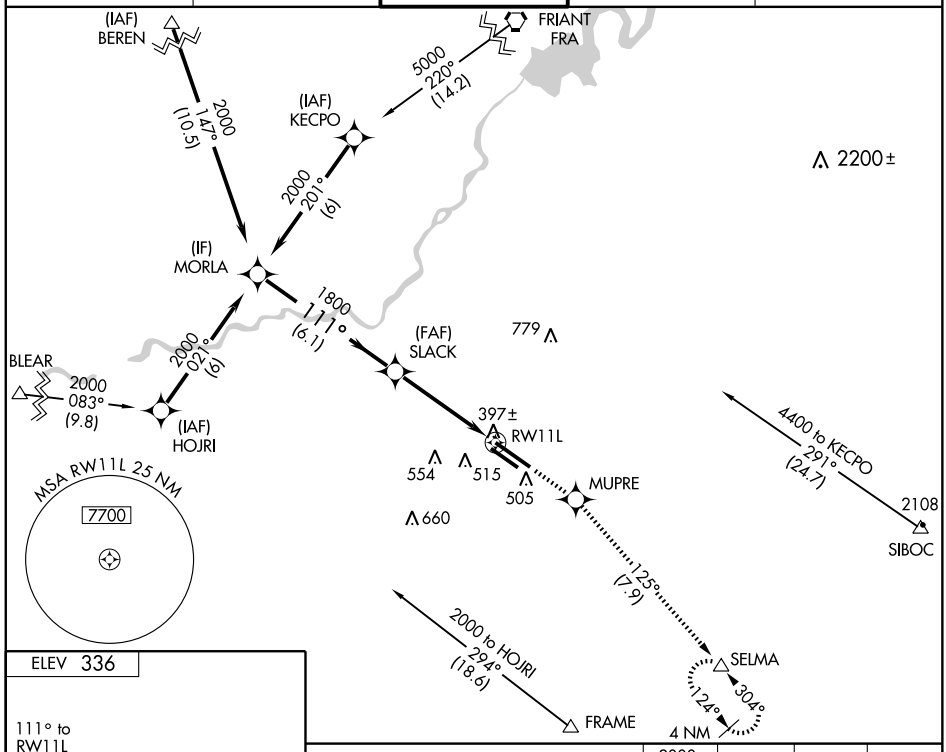
RNAV (GPS) RWY 11L

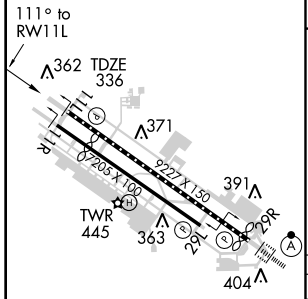
FRESNO YOSEMITE INTL (FAT)

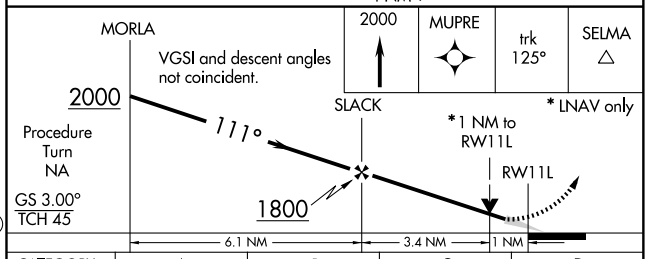
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).

MISSED APPROACH: Climb to 2000 direct MUPRE and via 125° track to SELMA and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D
LPV DA	590/50 254 (300-1)			
LNAV/VNAV DA	760-1½ 424 (500-1½)			
LNAV MDA	680/50 344 (400-1)			680/60 344 (400-1¼)
CIRCLING	820-1 484 (500-1)		820-1½ 484 (500-1½)	920-2 584 (600-2)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5757
113°	TDZE	333
	Apt Elev	336

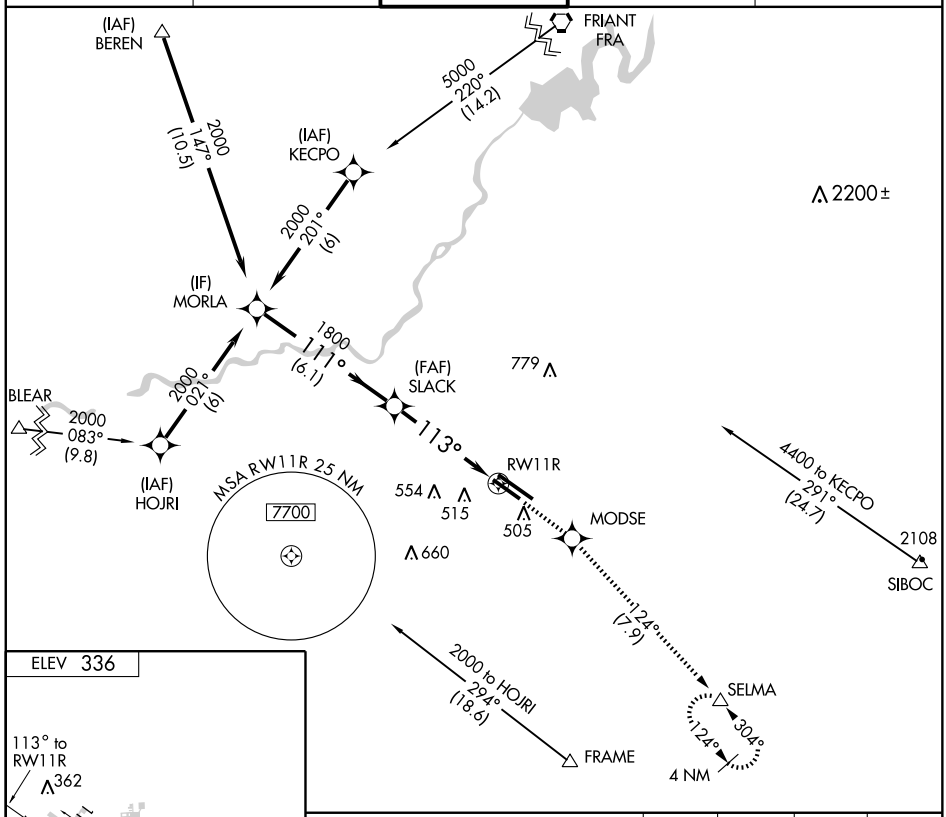
RNAV (GPS) RWY 11R

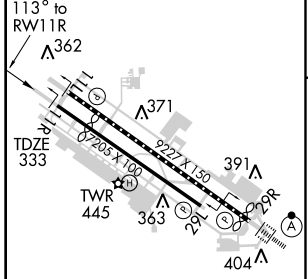
FRESNO YOSEMITE INTL (FAT)

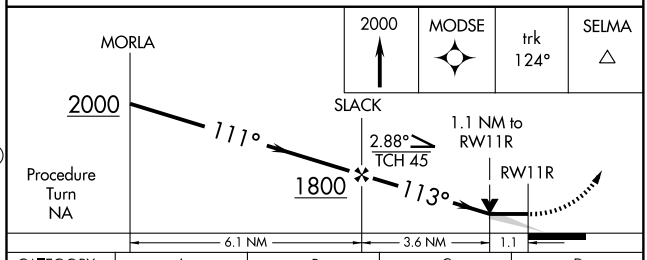
DME/DME RNP-0.3 NA.
Straight-in minimums NA at night.

MISSED APPROACH: Climb to 2000 direct MODSE and via 124° track to SELMA and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D
LNAV MDA	700-1 367 (400-1)			700-1¼ 367 (400-1¼)
CIRCLING	820-1 484 (500-1)		820-1½ 484 (500-1½)	920-2 584 (600-2)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7205
290°	TDZE	330
	Apt Elev	336

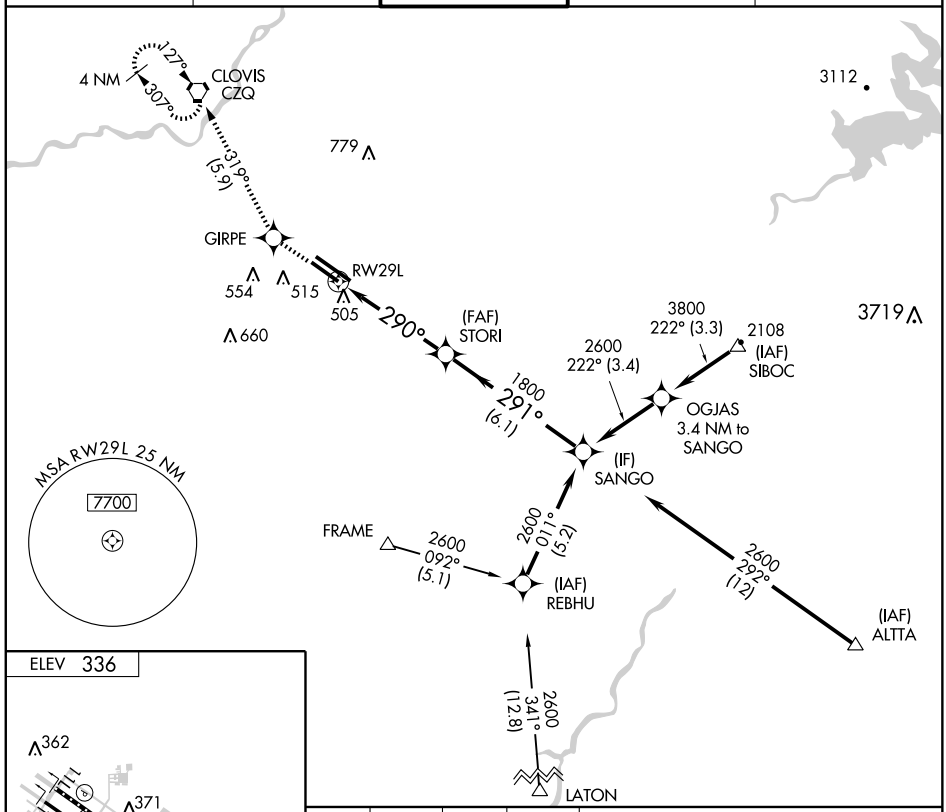
RNAV (GPS) RWY 29L

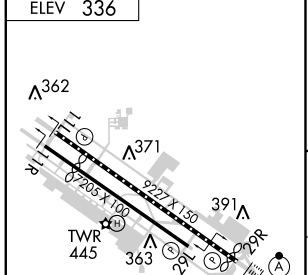
FRESNO YOSEMITE INTL (FAT)

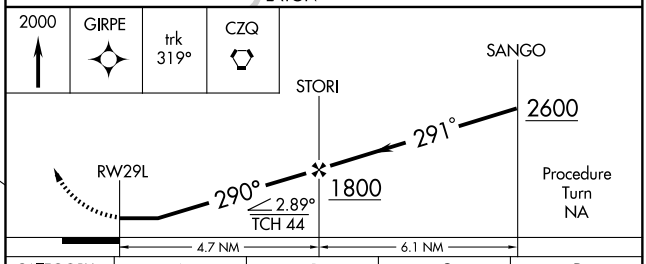
DME/DME RNP-0.3 NA.
Straight-in minimums NA at night.

MISSED APPROACH: Climb to 2000 direct GIRPE and via 319° track to CZQ VORTAC and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D
LNAV MDA	760-1 430 (500-1)		760-1¼ 430 (500-1¼)	760-1½ 430 (500-1½)
CIRCLING	820-1 484 (500-1)		820-1½ 484 (500-1½)	920-2 584 (600-2)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 81803 W29A	APP CRS 291°	Rwy Idg 8915 TDZE 333 Apt Elev 336

RNAV (GPS) RWY 29R

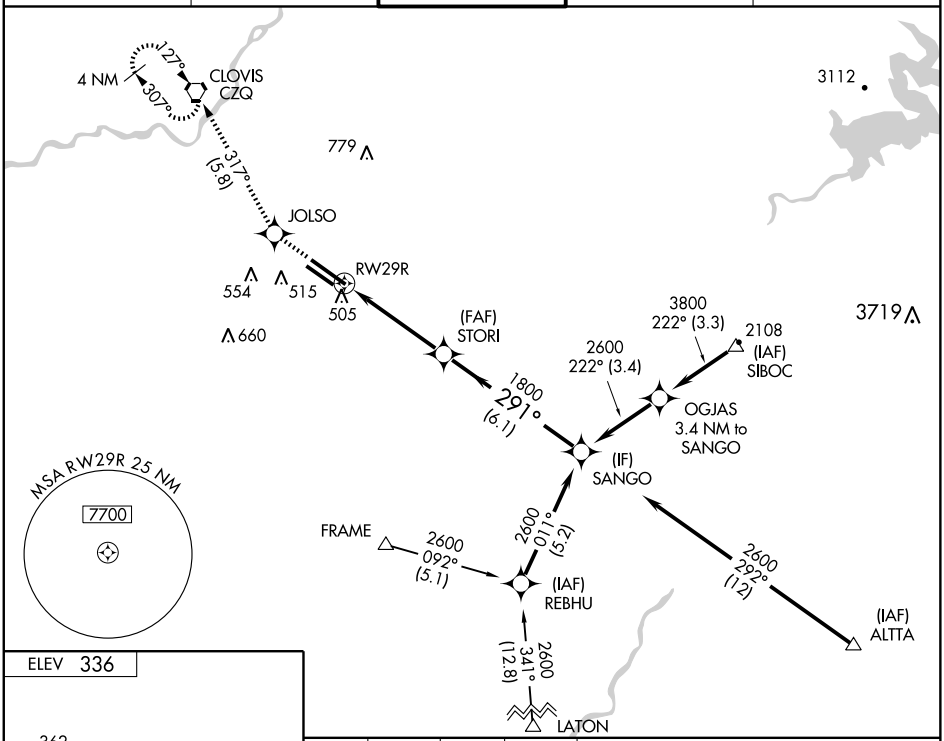
FRESNO YOSEMITE INTL (FAT)

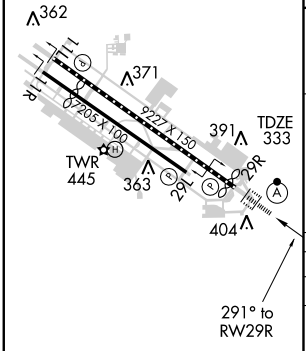
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).
For inoperative ALSF-2, increase LPV visibility to RVR 4000, all Cats.

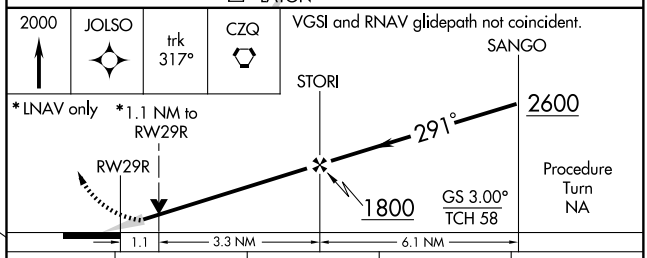
ALSF-2

MISSED APPROACH: Climb to 2000 direct JOLSO and via 317° track to CZQ VORTAC and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D
LPV DA	590/24 257 (300-½)			
LNAV/VNAV DA	760/50 427 (500-1)			
LNAV MDA	760/24 427 (500-½)		760/40 427 (500-¾)	760/50 427 (500-1)
CIRCLING	820-1½ 484 (500-1½)			920-2 584 (600-2)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 22 OCT 2009 to 19 NOV 2009

FRESNO, CALIFORNIA AL-162 (FAA)

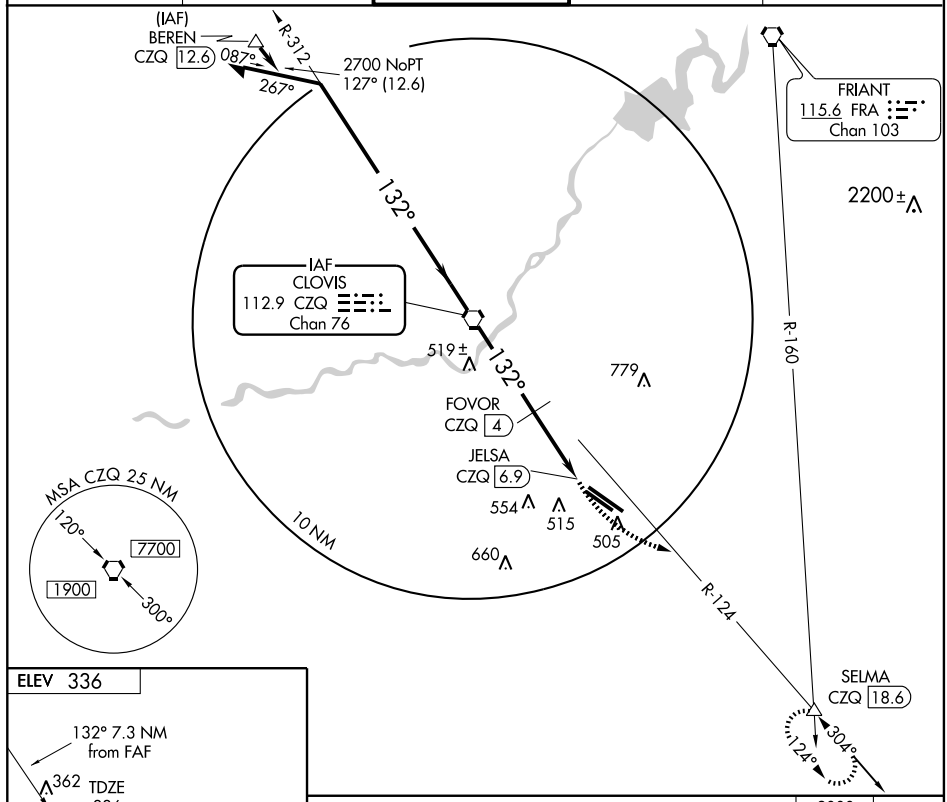
VOR/DME or TACAN RWY 11L

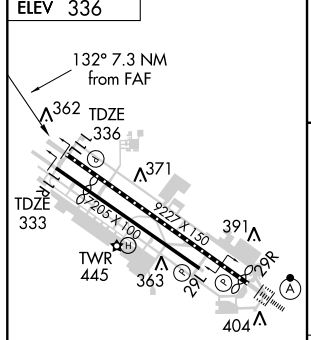
VORTAC CZQ	APP CRS	Rwy 11L Idg	9227	Rwy 11R Idg	5757
112.9	132°	TDZE	336	TDZE	333
Chan 76		Apt Elev	336	Apt Elev	336

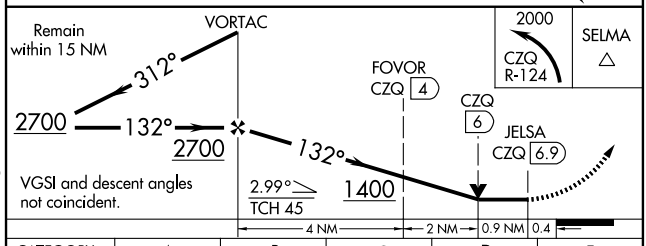
FRESNO YOSEMITE INTL (FAT)

MISSED APPROACH: Climbing left turn to 2000 via CZQ VORTAC R-124 to SELMA/CZQ 18.6 DME and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D	E
S-11L	800/50	464 (500-1)	800/60 464 (500-1¼)	800-1½ 464 (500-1½)	800-1¾ 464 (500-1¾)
SIDESTEP 11R	800-1	467 (500-1)	800-1½ 467 (500-1½)	800-2	467 (500-2)
CIRCLING	820-1	484 (500-1)	820-1½ 484 (500-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 22 OCT 2009 to 19 NOV 2009

FRESNO, CALIFORNIA AL-162 (FAA)

VOR/DME or TACAN RWY 29R

VORTAC CZQ 112.9 Chan 76	APP CRS 306°	Rwy 29R ldg 8915 TDZE 333 Apt Elev 336	Rwy 29L ldg 7205 TDZE 330 Apt Elev 336

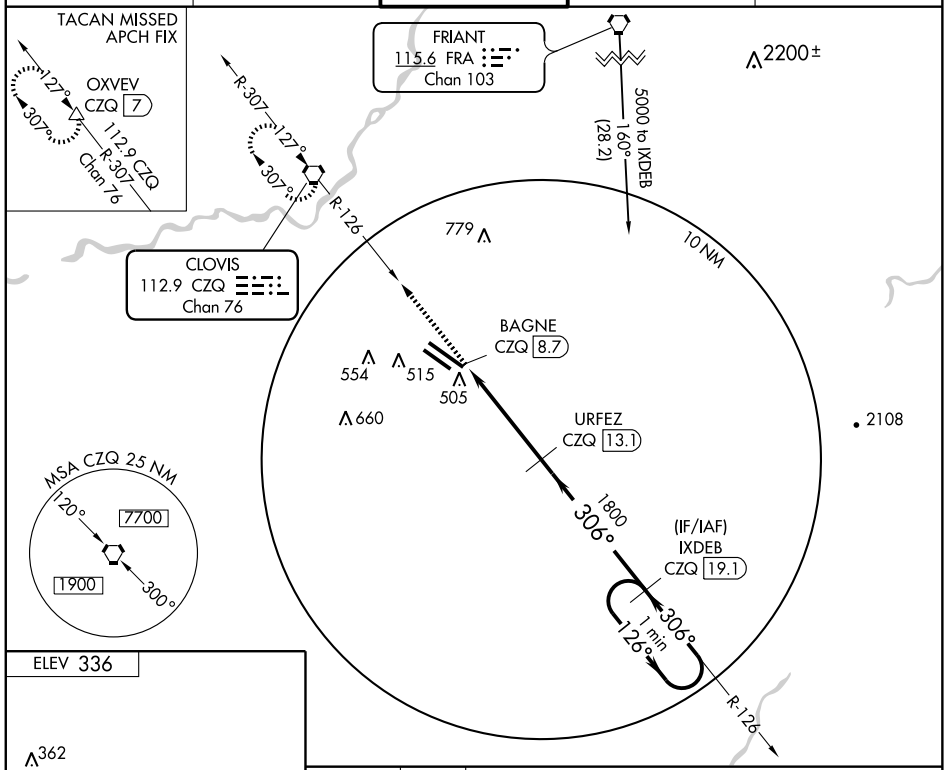
FRESNO YOSEMITE INTL (FAT)

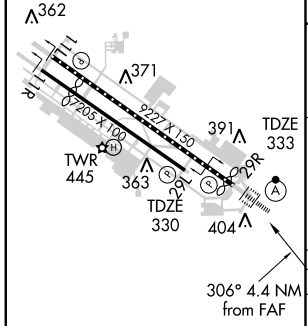
For inoperative ALSF-2, increase S-29R Cat E visibility to 1½.

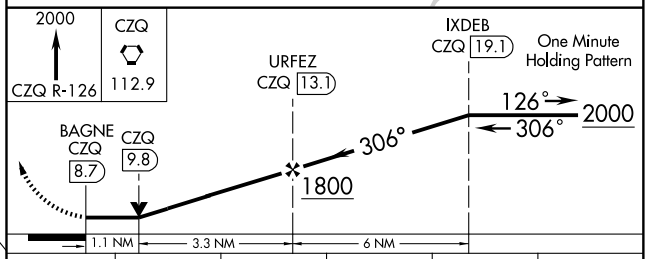
ALSF-2 Rwy 29R

MISSED APPROACH: Climb to 2000 via CZQ R-126 to CZQ VORTAC and hold. (TACAN aircraft continue climb to 3000 via CZQ R-307 to OXVEV/7 DME and hold (NW, RT, 127° inbound).

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D	E
S-29R	760/24	427 (500-½)	760/40 427 (500-¾)	760/50	427 (500-1)
SIDESTEP 29L	760-1	430 (500-1)	760-1½ 430 (500-1½)	760-2	430 (500-2)
CIRCLING	820-1	484 (500-1)	820-1½ 484 (500-1½)	920-2	1140-2¾ 804 (900-2¾)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

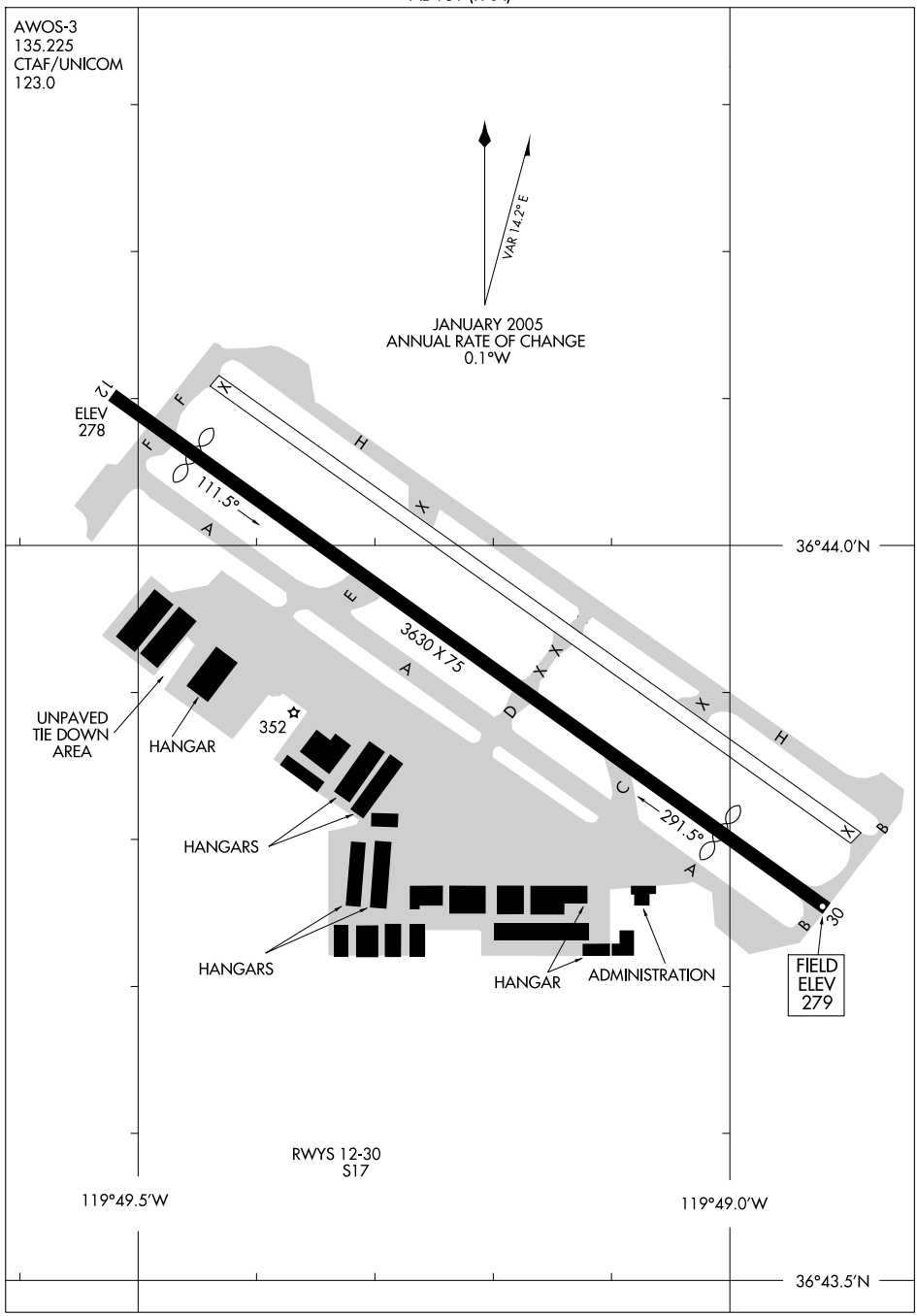
SW-2, 22 OCT 2009 to 19 NOV 2009

09071

AIRPORT DIAGRAM

AL-161 (FAA)

FRESNO CHANDLER EXECUTIVE (FCH)
FRESNO, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3212
111°	TDZE	279
	Apt Elev	280

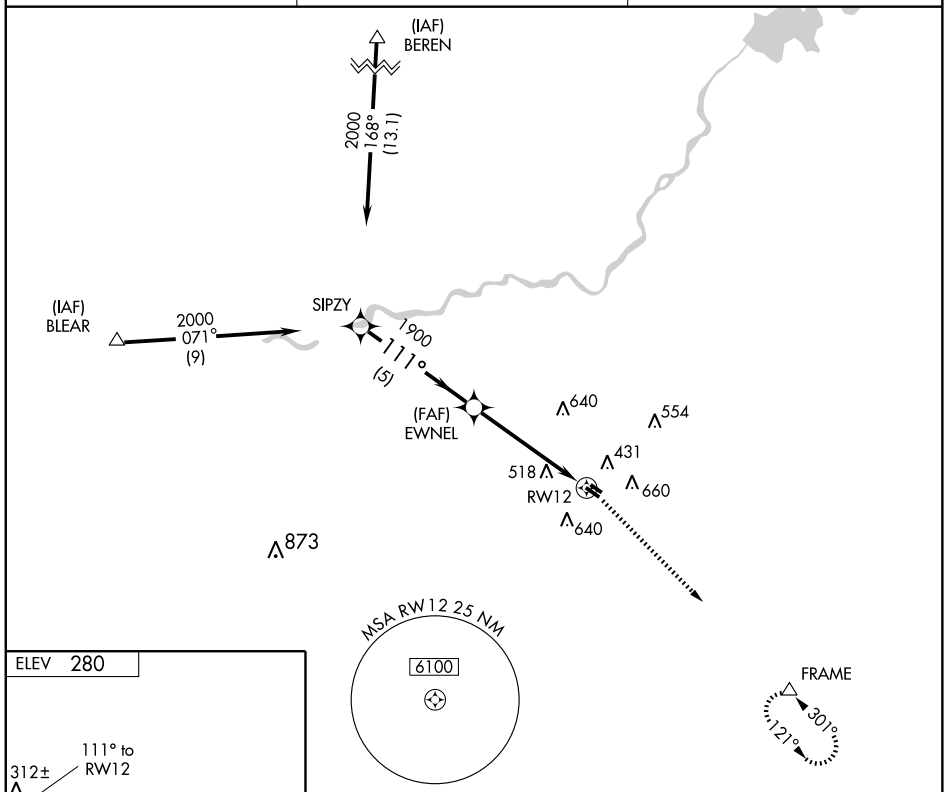
GPS RWY 12

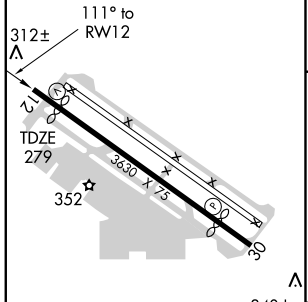
FRESNO CHANDLER EXECUTIVE (FCH)

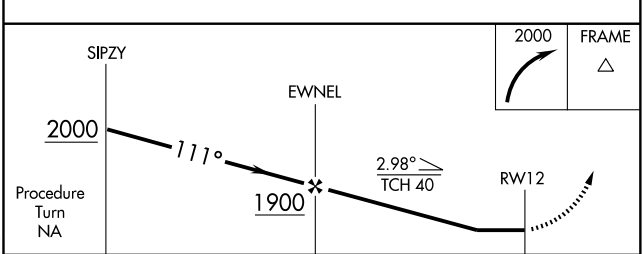
T NA — If local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase all MDAs 20 feet.

MISSED APPROACH: Climbing right turn to 2000 direct FRAME WP and hold.

AWOS-3	FRESNO APP CON	UNICOM
135.225	119.0 323.25	123.0 (CTAF) L







REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

CATEGORY	A	B	C	D
S-12	820-1	541 (600-1)	820-1½ 541 (600-1½)	NA
CIRCLING	1020-1	740 (800-1)	1020-2 740 (800-2)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3090
301°	TDZE	279
	Apt Elev	280

GPS RWY 30

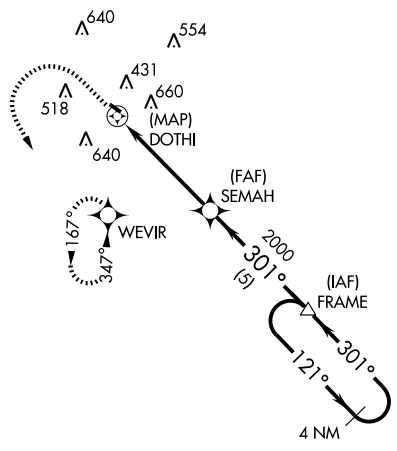
FRESNO CHANDLER EXECUTIVE (FCH)

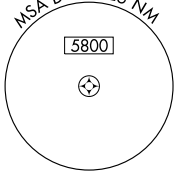
NA — If local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase all MDAs 20 feet.

MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct WEVIR WP and hold.

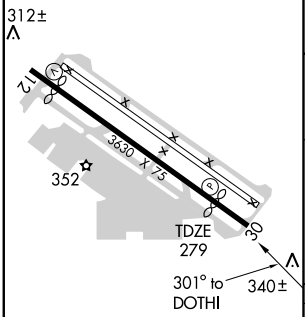
AWOS-3	FRESNO APP CON	UNICOM
135.225	119.0 323.25	123.0 (CTAF) L

NoPT for arrival at FRAME on V23 northwest bound.

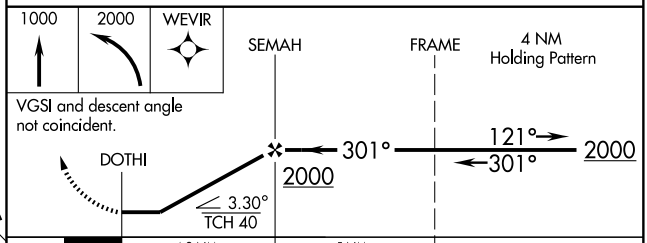




ELEV 280



REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
S-30	900-1	621 (700-1)	900-1¾ 621 (700-1¾)	NA
CIRCLING	1020-1	740 (800-1)	1020-2 740 (800-2)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

NDB FCH 344	APP CRS 030°	Rwy Idg N/A TDZE N/A Apt Elev 280

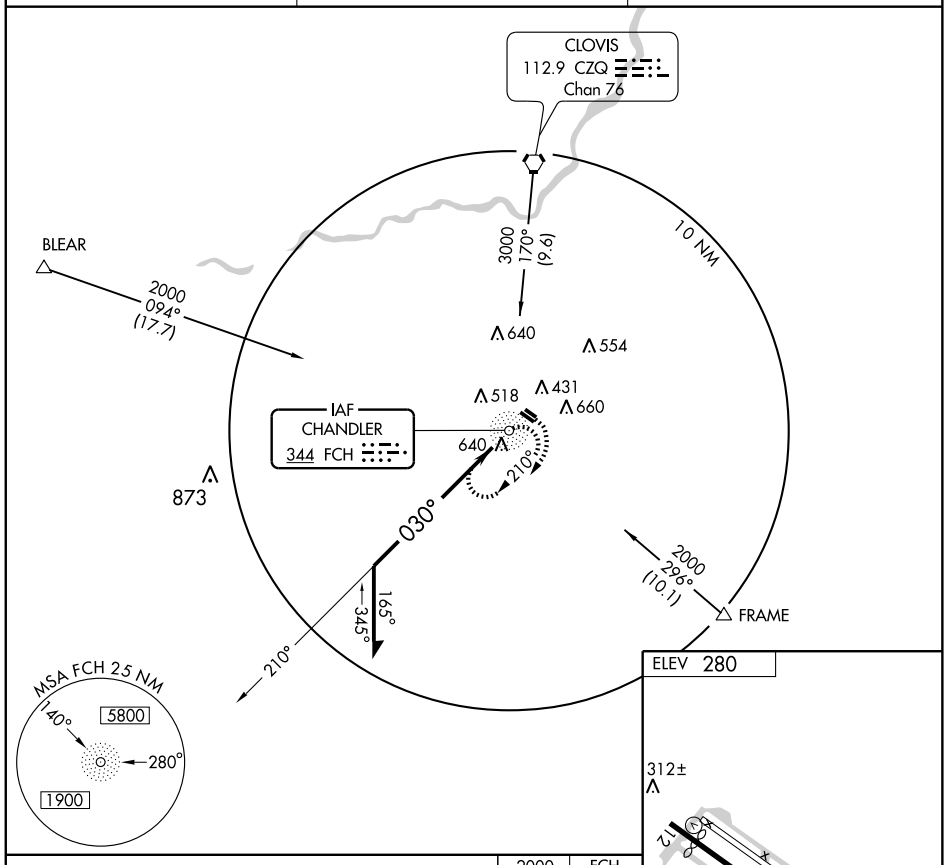
NDB or GPS-B

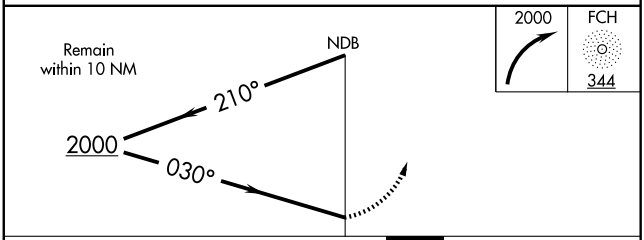
FRESNO CHANDLER EXECUTIVE (FCH)

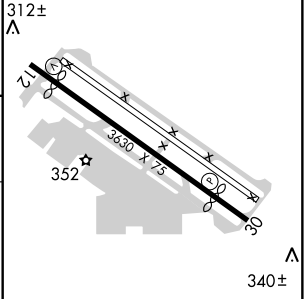
T NA If local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase MDA 20 feet.

MISSED APPROACH: Climbing right turn to 2000 in FCH NDB holding pattern.

AWOS-3	FRESNO APP CON	UNICOM
135.225	119.0 323.25	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1020-1	740 (800-1)	1020-2 740 (800-2)	NA

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC CZQ	APP CRS	Rwy Idg	N/A
112.9	347°	TDZE	N/A
Chan 76		Apt Elev	280

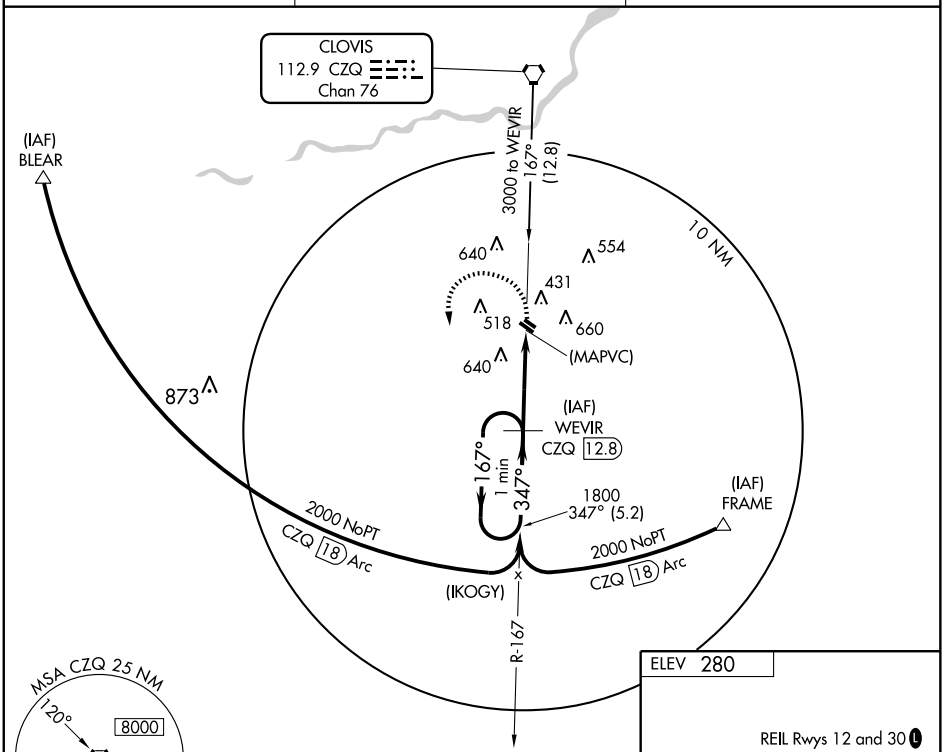
VOR/DME or GPS-C

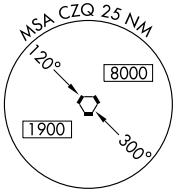
FRESNO CHANDLER EXECUTIVE (FCH)

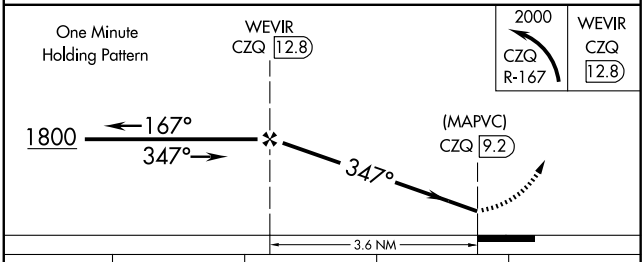
If local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase MDA 20 feet.

MISSED APPROACH: Climbing left turn to 2000 via R-167 to WEVIR 12.8 DME and hold.

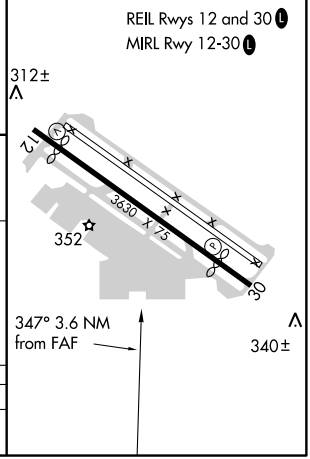
AWOS-3	FRESNO APP CON	UNICOM
135.225	119.0 323.25	123.0 (CTAF) L







2000 CZQ R-167	WEVIR CZQ 12.8



CATEGORY	A	B	C	D
CIRCLING	1020-1	740 (800-1)	1020-2	NA
			740 (800-2)	

SW-2, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-5136 (FAA)

FULLERTON MUNI (FUL)
FULLERTON, CALIFORNIA

ATIS
125.05
FULLERTON TOWER★
119.1
GND CON
121.8

33°52.5'N

117°59.0'W

VAR 13.1°E

JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

ELEV
85

9
B
A
064.0°

HANGARS

3121 X 75
0.3% UP

TRANSIENT
PARKING

TWR/TERMINAL
158

INTERSECTION
DEPARTURES
NOT AUTHORIZED

244.0°

FIELD
ELEV
96

24

RWY 6-24
S12.5

33°52.0'N

117°58.5'W

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-3, 22 OCT 2009 to 19 NOV 2009

ANAHEIM THREE DEPARTURE

ATIS 125.05
GND CON
121.8
SOCAL DEP CON
124.65 316.125

TAKE-OFF MINIMUMS
Rwys 6 and 24: standard.

NOTE: All Rwys, cross DER at or above 35′ AGL.

NOTE: This departure procedure not authorized for Turbo-prop or Turbo-jet aircraft.

NOTE: RADAR required.

LAKE HUGHES
108.4 LHS
Chan 21
N34°40.98′ - W118°34.62′
L-3-4-7

VAN NUYS
113.1 VNY
Chan 78

PALMDALE
114.5 PMD
Chan 92

VICTORVILLE
109.4 VCV
Chan 31

113.2 DAG
Chan 79

APLES
N34° 32.91′
W117° 08.97′
10000

112.5 FIM
Chan 72

DARTS
N34°09.36′
W118°16.18′

POMONA
110.4 POM
Chan 41

LOS ANGELES
113.6 LAX
Chan 83
N33°55.99′
W118°25.92′

HECTOR
112.7 HEC
Chan 74
N34°47.82′
W116°27.78′
L-7, H-4

BAYJY
N34°00.44′
W117°47.14′

SADDE
N34° 02.34′
W118° 45.88′

PARADISE
112.2 PDZ
Chan 59
N33°55.10′ - W117°31.80′

POXKU
N33°51.22′
W117°46.94′

WILMA
N33°46.28′
W118°15.57′

VENTURA
108.2 VTU
Chan 19
N34°06.90′ - W119°02.97′
L-3-4-7, H-4

SEAL BEACH
115.7 SLI
Chan 104
N33°47.00′ - W118°03.29′

†Hector Transition
††Lake Hughes Transition

NOTE: Rwy 6, building 3206′ from DER, 820′ right of centerline, 112′ AGL/217′ MSL.
Rwy 24, trees 352′ from DER, 223′ right of centerline, 50′ AGL/142′ MSL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 6: Turn right heading 120° for radar vectors to SLI VORTAC. Thence. . . .

TAKE-OFF RUNWAY 24: Turn left heading 120° for radar vectors to SLI VORTAC. Thence. . . .

. . . .via (transition) or (assigned route). Maintain 2000 feet. Expect clearance to filed altitude 10 minutes after departure.

HECTOR TRANSITION (ANAHM3.HEC): From over SLI VORTAC via SLI R-058 and PDZ R-238 to PDZ VORTAC, then via PDZ R-012 and HEC R-232 to HEC VORTAC.

LAKE HUGHES TRANSITION (ANAHM3.LHS): From over SLI VORTAC via SLI R-058 and PDZ R-238 to POXKU INT, then via POM R-164 to BAYJY INT, then via VNY R-095 to DARTS INT. Thence via SLI R-319 and LHS R-139 to LHS VORTAC.

VENTURA TRANSITION (ANAHM3.VTU): From over SLI VORTAC via SLI R-251 to WILMA INT, then via LAX R-123 to LAX VORTAC, then via LAX R-276 and VTU R-093 to VTU VOR/DME.

SW-3, 22 OCT 2009 to 19 NOV 2009

KAYOH FOUR ARRIVAL

SOCAL APP CON
133.85 346.35
FULLERTON MUNI ATIS
125.05
LONG BEACH ATIS
127.75
ORANGE COUNTY ATIS
126.0
TORRANCE MUNI ATIS
125.6

HECTOR TRANSITION (HEC.KAYOH4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to DAWNA INT, then via HDF R-353 to HDF VOR then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

PALM SPRINGS TRANSITION (PSP.KAYOH4): From over PSP VORTAC via PSP R-260 to BANDS INT, then via HDF R-054 to HDF VOR, then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

....From over KAYOH INT via SLI R-075 to SLI VORTAC.

Expect radar vectors to final approach course.

HECTOR
112.7 HEC
Chan 74
N34°47.82′
W116°27.78′
L-7, H-4

V8-21-283-587
10,500
211°
(46)

31
44

DAWNA
N34°15.90′-W117°06.78′
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojet: Expect clearance to cross at 13,000′.
Non-Turbojet: Expect clearance to cross at 12,000′.

PARADISE
112.2 PDZ
Chan 59

29

R-030

V283-587
10,500
173°
(29)

POMONA
110.4 POM
Chan 41

KAYOH
N33°46.82′
W117°35.41′
VERTICAL NAVIGATION PLANNING INFORMATION

210K

FULLERTON MUNI

LONG BEACH (DAUGHERTY FIELD)

R-164

R-185

R-154

R-353

V283-372

8000
257°
(16)

V372
8000
234°
(18)

13,000
260°
(21)

V16-370-372

R-054

ZAMPERINI FIELD

R-075 4000
(14)

6000
255°
(9)

19
23
24
(5)

LOS ALAMITOS AAF

JOGIT
N33°46.91′
W117°46.85′

BANDS
N33°53.38′-W116°50.97′
VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at 14,000′.

JOHN WAYNE ARPT-ORANGE COUNTY

DEJAY
N33°46.77′
W117°29.86′

HOMELAND
113.4 HDF
N33°46.58′-W117°11.12′

R-021

SEAL BEACH
115.7 SLI
Chan 104
N33°47.00′-W118°03.29′

VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or above 8000′.

N

PALM SPRINGS
115.5 PSP
Chan 102
N33°52.20′-W116°25.79′
L-4, H-4

OCEANSIDE
115.3 OCN
Chan 100

NOTE: Chart not to scale.

FULLERTON, CALIFORNIA

AL-5136 (FAA)

LOC/DME I-FUL	APP CRS	Rwy Idg	2868
108.9	243°	TDZE	95
Chan 26		Apt Elev	96

LOC/DME RWY 24

FULLERTON MUNI (FUL)

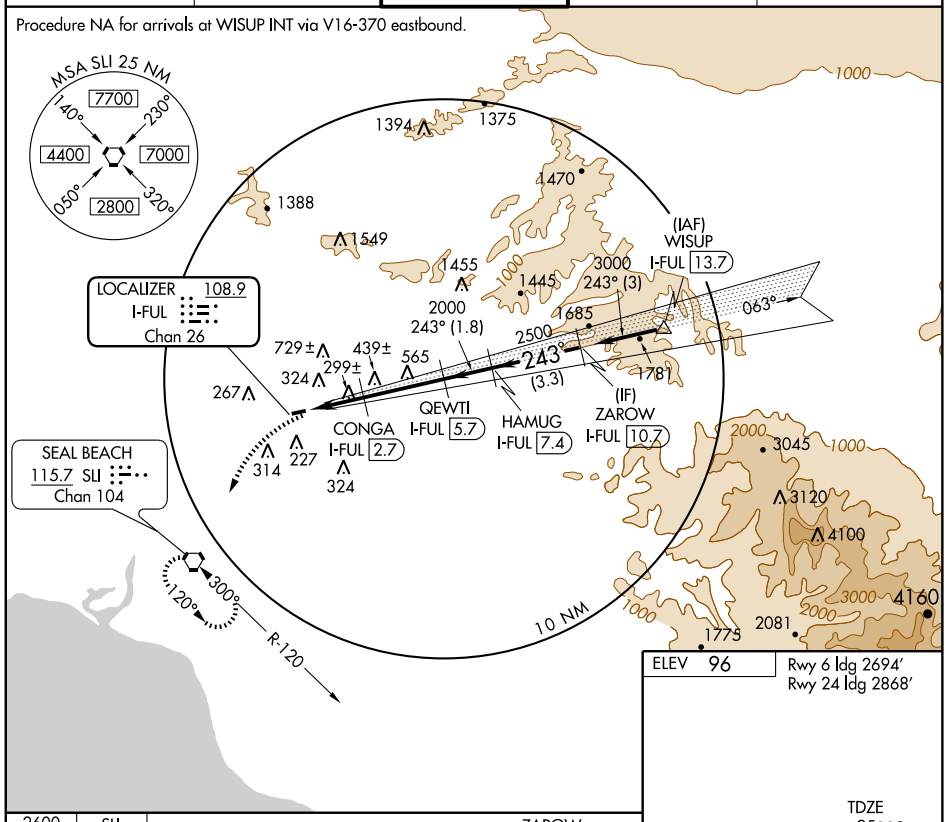
Inoperative table does not apply.

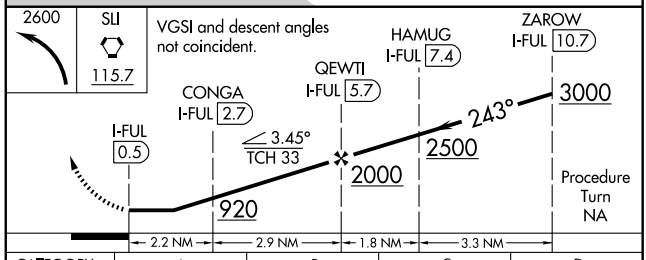
MALSR

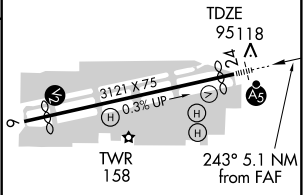
MISSED APPROACH: Climbing left turn to 2600 direct SLI VORTAC and hold.

ATIS	SOCAL APP CON	FULLERTON TOWER ★	GND CON	UNICOM
125.05	124.65 316.125	119.1 (CTAF) L	121.8	122.95

Procedure NA for arrivals at WISUP INT via V16-370 eastbound.







ELEV 96

Rwy 6 ldg 2694′
Rwy 24 ldg 2868′

MIRL Rwy 6-24 L

REIL Rwys 6 and 24 L

CATEGORY	A	B	C	D
S-24	560-1 465 (500-1)		NA	
CIRCLING	760-1 664 (700-1)	820-1 724 (800-1)	NA	

Knots	60	90	120	150	180
Min:Sec					

SW-3, 22 OCT 2009 to 19 NOV 2009

FULLERTON, CALIFORNIA AL-5136 (FAA)

APP CRS	Rwy Idg	2868
243°	TDZE	95
	Apt Elev	96

RNAV (GPS) RWY 24
FULLERTON MUNI (FUL)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA

MALSR

MISSED APPROACH: Climb to 1300, then climbing left turn to 2600 direct SLI VORTAC and hold.

ATIS	SOCAL APP CON	FULLERTON TOWER ★	GND CON	UNICOM
125.05	124.65 316.125	119.1 (CTAF) L	121.8	122.95

Procedure NA for arrival on POM VORTAC airway radials 104 CW 224.

(IAF) POMONA POM
1375
1394
1470
3000
164°
11.0 (I)
1388
1549
1455
1445
1000
HAVUR 2.7 NM to AKTAQ
1685
1781
(FAF) AKTAQ
729±
634±
324
267
243°
RW24
2000
243° (2.7)
2700
243° (2.3)
LEYMI
314
227
324
2000
3045
1000
3120
4127±
3000
2000
1000
SEAL BEACH SLI
238°
058°
4 NM
MSA RW 24 25 NM
10800

ELEV 96
Rwy 6 ldg 2694′
Rwy 24 ldg 2868′

243° to RW24
118
3121 X 75
0.3% UP
TDZE 95
TWR 158

1300 | 2600 | SLI

VGSI and descent angles not coincident

AKTAQ
HAVUR 2.7 NM to AKTAQ
LEYMI
243°
3000
2700
2000
RW24
3.51°
TCH 40
Procedure Turn NA
5 NM | 2.7 NM | 2.3 NM

CATEGORY	A	B	C	D
LNAV MDA	900-1 805 (900-1)	900-1¼ 805 (900-1¼)	NA	
CIRCLING	900-1 804 (900-1)	900-1¼ 804 (900-1¼)	NA	

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

SW-3, 22 OCT 2009 to 19 NOV 2009

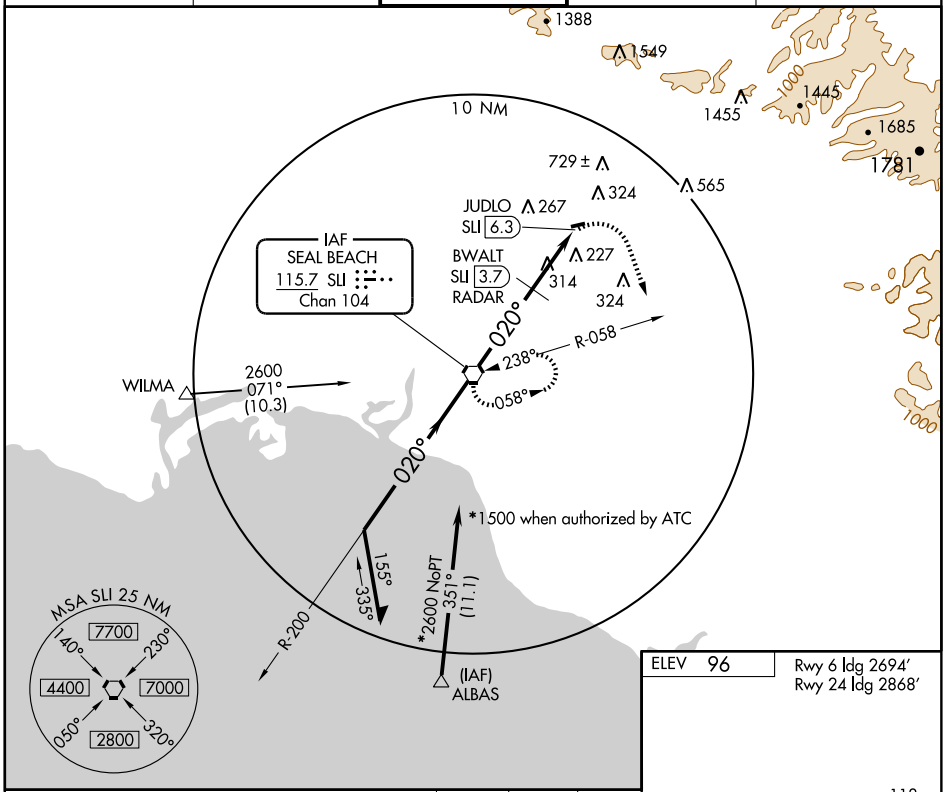
VORTAC SLI 115.7 Chan 104	APP CRS 020°	Rwy Idg N/A TDZE N/A Apt Elev 96

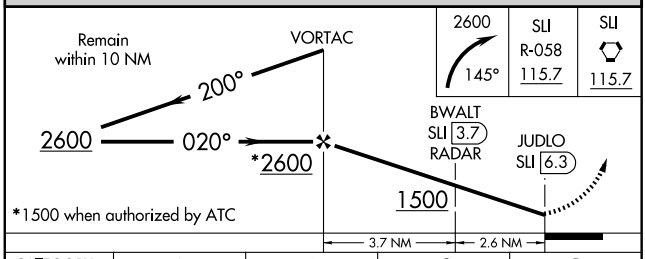
VOR-A
FULLERTON MUNI (FUL)

Maximum entry altitude 6000.

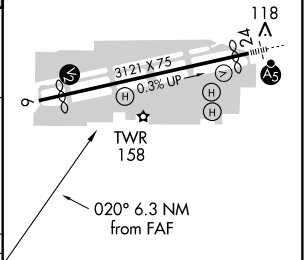
MISSED APPROACH: Climbing right turn to 2600 via heading 145° and SLI R-058 to SLI VORTAC and hold.

ATIS	SOCAL APP CON	FULLERTON TOWER*	GND CON	UNICOM
125.05	124.65 316.125	119.1 (CTAF) L	121.8	122.95





2600 / 145°	SLI R-058 115.7	SLI 115.7



CATEGORY	A	B	C	D
CIRCLING	1500-1¼ 1404 (1500-1¼)	1500-1½ 1404 (1500-1½)	NA	

BWALT FIX MINIMUMS

CIRCLING	740-1 644 (700-1)	760-1 664 (700-1)	NA

FAF to MAP 6.3 NM

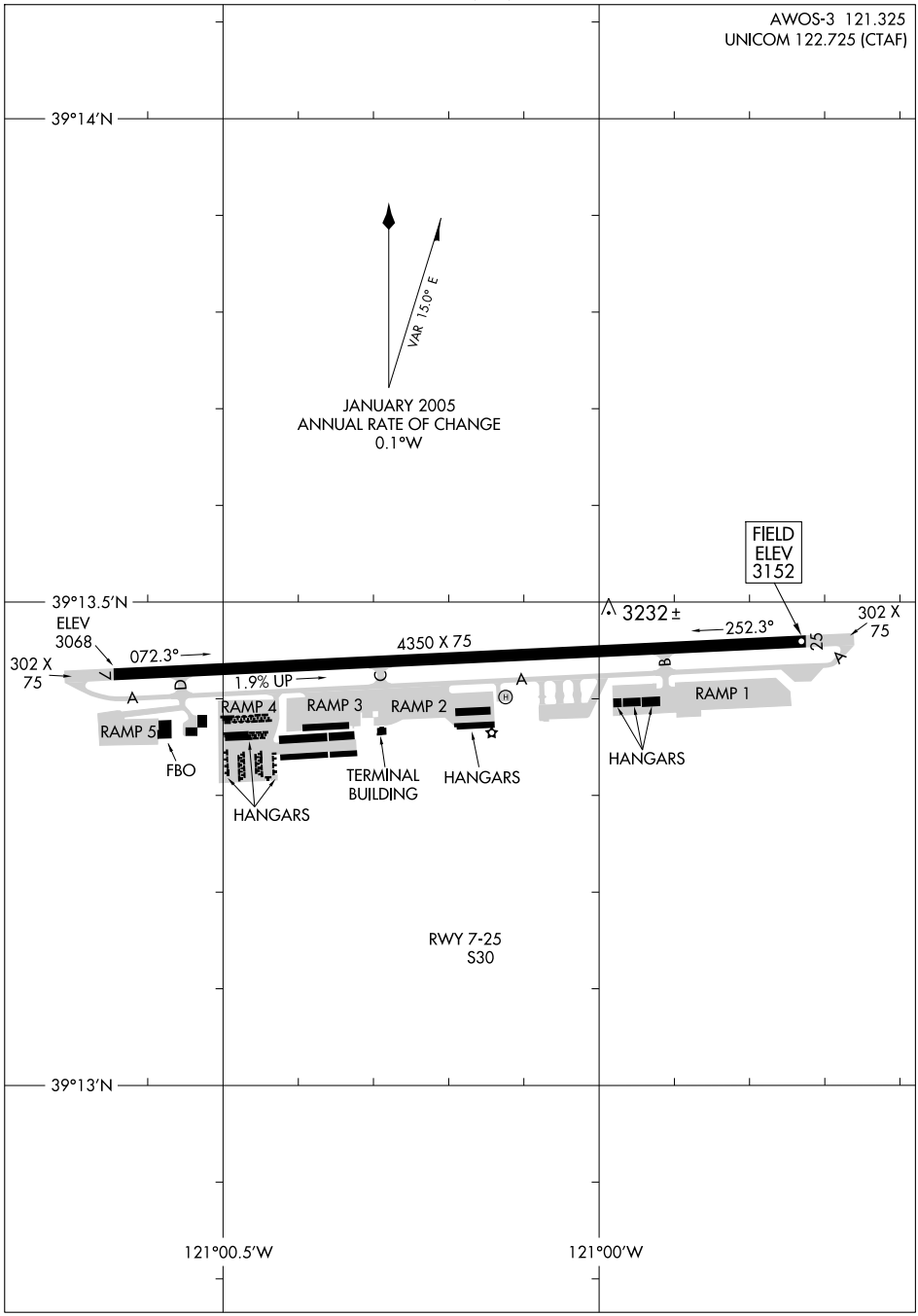
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

SW-3, 22 OCT 2009 to 19 NOV 2009

06327

AIRPORT DIAGRAM

GRASS VALLEY/ NEVADA COUNTY AIRPARK (GOO)
GRASS VALLEY, CALIFORNIA
AL-6659 (FAA)



SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4350
071°	TDZE	3128
	Apt Elev	3152

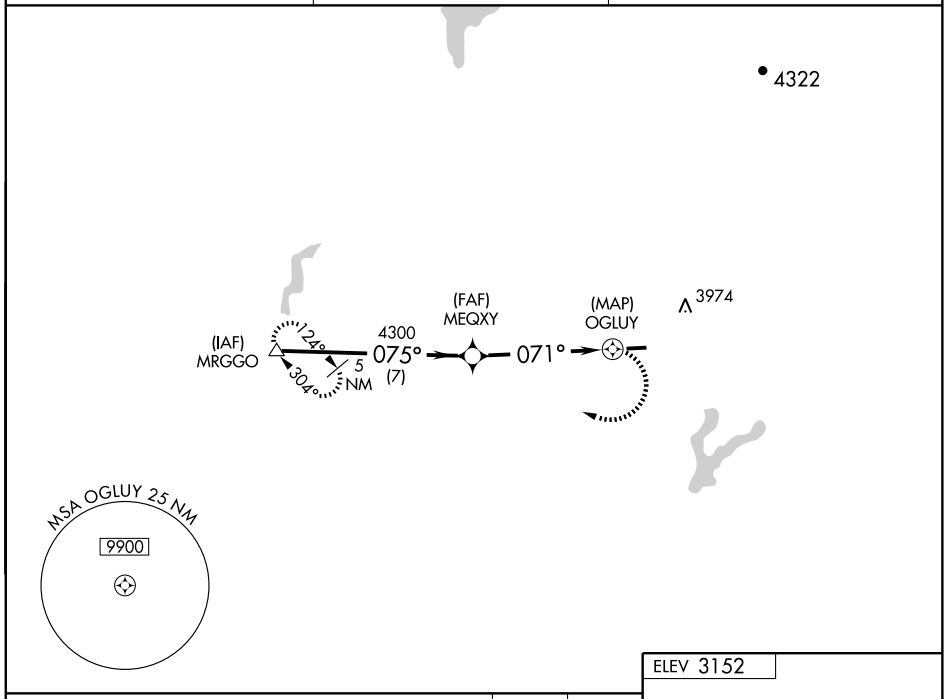
GPS RWY 7

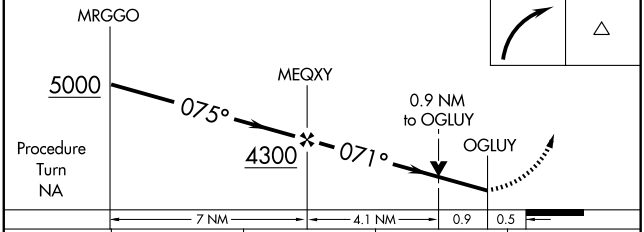
GRASS VALLEY/ NEVADA COUNTY AIR PARK (GOO)

When local altimeter setting not received, use Emigrant Gap altimeter setting.
Circling not authorized north of Rwy 7-25.

MISSED APPROACH: Climbing right turn to 6000 direct MRGGO WP and hold.

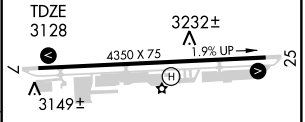
AWOS-3	NORCAL APP CON	UNICOM
121.325	125.4 259.1	122.725 (CTAF) L





CATEGORY	A	B	C	D
S-7	3540-1	412 (400-1)	3540-1¼ 412 (400-1¼)	NA
CIRCLING	3680-1	528 (600-1)	3680-1½ 528 (600-1½)	NA
EMIGRANT GAP ALTIMETER SETTING MINIMUMS				
S-7	3880-1 752 (800-1)	3880-1¼ 752 (800-1¼)	3880-2¼ 752 (800-2¼)	NA
CIRCLING	4020-1 868 (900-1)	4020-1¼ 868 (900-1¼)	4020-2½ 868 (900-2½)	NA

ELEV 3152



REIL Rwys 7 and 25
MIRL Rwy 7-25 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME MYV 110.8 Chan 45	APP CRS 058°	Rwy Idg N/A TDZE N/A Apt Elev 3152

VOR or GPS-A

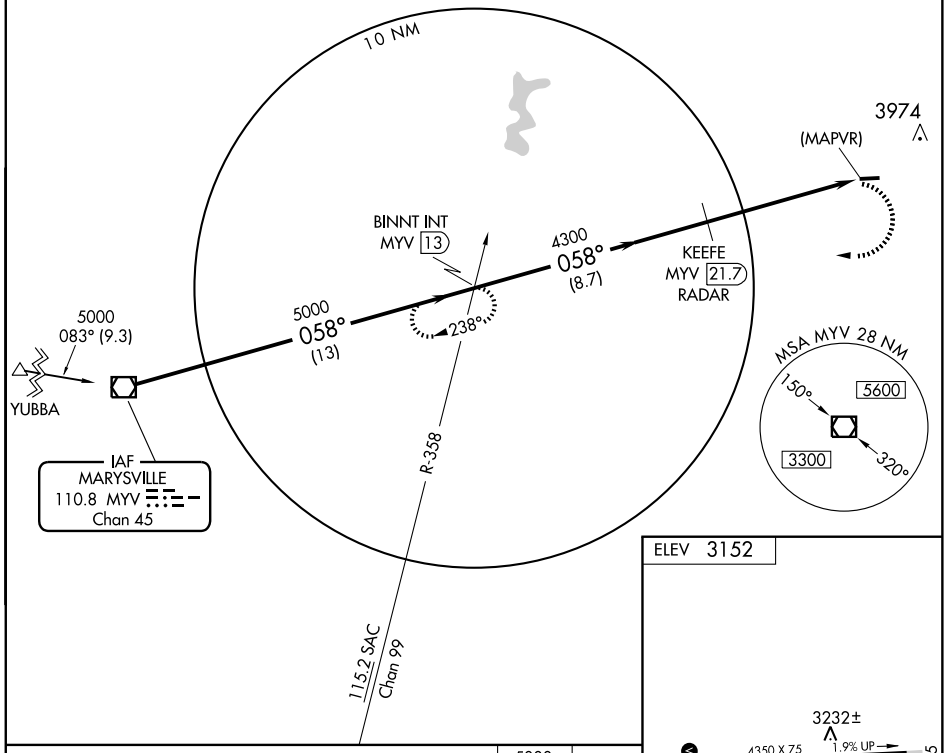
GRASS VALLEY/ NEVADA COUNTY AIR PARK (GOO)

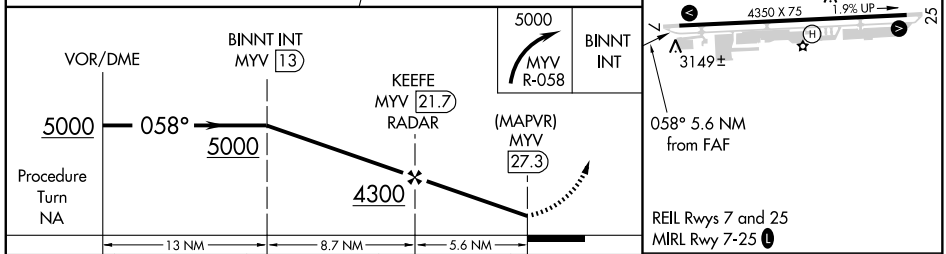
T NA — When local altimeter setting not received, use Emigrant Gap altimeter setting. Circling not authorized north of Rwy 7-25.

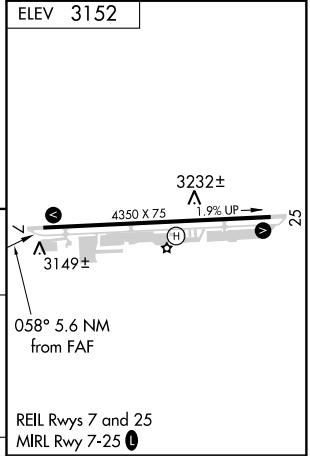
MISSED APPROACH: Climbing right turn to 5000 via MYV R-058 to BINNT Int/MYV 13 DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
121.325	125.4 259.1	122.725 (CTAF) L

DME or RADAR REQUIRED







CATEGORY	A	B	C	D
CIRCLING	4280-1¼ 1128 (1200-1¼)	4280-1½ 1128 (1200-1½)	4280-3 1128 (1200-3)	NA

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

SW-2, 22 OCT 2009 to 19 NOV 2009

GROVELAND, CALIFORNIA

APP CRS	Rwy Idg	3625
291°	TDZE	2930
	Apt Elev	2930

AL-9084 (FAA)

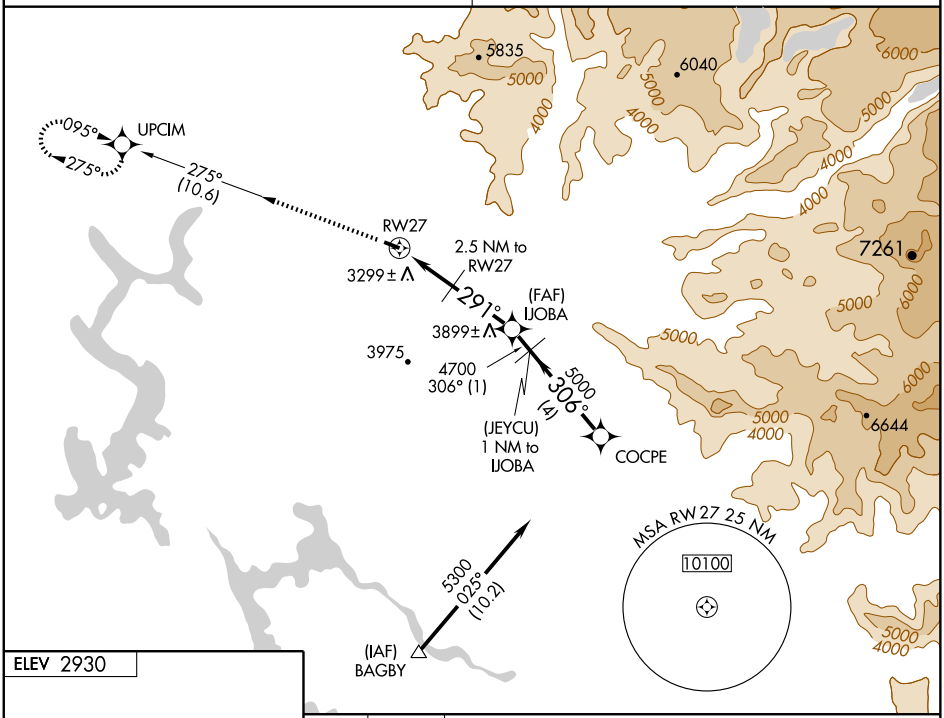
GPS RWY 27

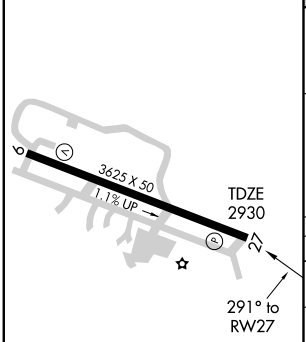
GROVELAND/ PINE MOUNTAIN LAKE (E45)

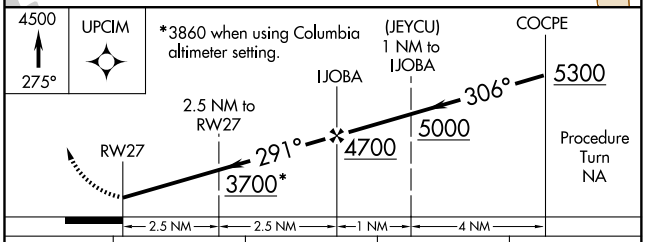
NA — Obtain local altimeter setting on CTAF; when not received, use Columbia altimeter setting.

MISSED APPROACH: Climb to 4500 via 275° course to UPCIM WP and hold.

OAKLAND CENTER	CTAF
121.25 327.0	122.9 (L)







CATEGORY	A	B	C	D
S-27	3560-1	630 (700-1)	NA	
CIRCLING	3560-1 630 (700-1)	3700-1¼ 770 (800-1¼)	NA	
COLUMBIA ALTIMETER SETTING MINIMUMS				
S-27	3700-1 770 (800-1)	3700-1¼ 770 (800-1¼)	NA	
CIRCLING	3700-1 770 (800-1)	3860-1¼ 930 (1000-1¼)	NA	

MIRL Rwy 9-27 (L)

SW-2, 22 OCT 2009 to 19 NOV 2009

GROVELAND, CALIFORNIA

AL-9084 (FAA)

APP CRS	Rwy Idg	3625
095°	TDZE	2919
	Apt Elev	2930

RNAV (GPS) RWY 9

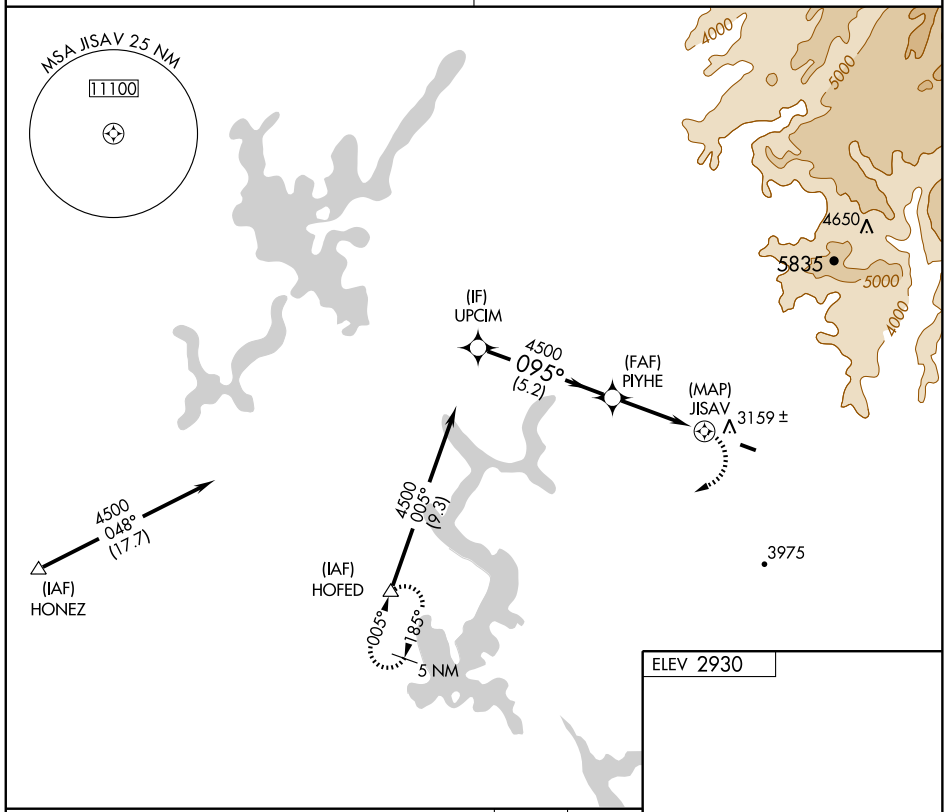
GROVELAND/ PINE MOUNTAIN LAKE (E45)

DME/DME RNP-0.3 NA.
Use Columbia altimeter setting; If not received, use Castle altimeter setting and increase all MDA's 560 feet.

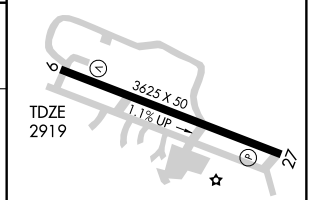
NA

MISSED APPROACH: Climbing right turn to 7000 direct HOFED and hold, continue climb-in-hold to 7000.

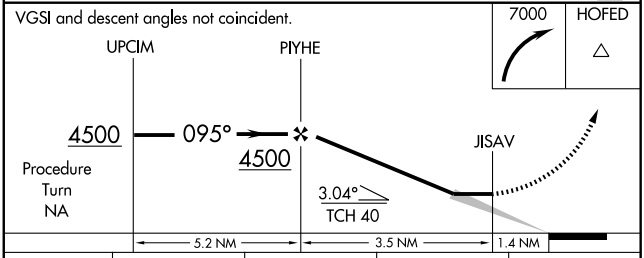
OAKLAND CENTER	CTAF
121.25 327.0	122.9 L



ELEV 2930



VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
LNAV MDA	4060-1¾	1141 (1200-1¾)	NA	
CIRCLING	4060-1¾	1130 (1200-1¾)	NA	

MIRL Rwy 9-27 L

SW-2, 22 OCT 2009 to 19 NOV 2009

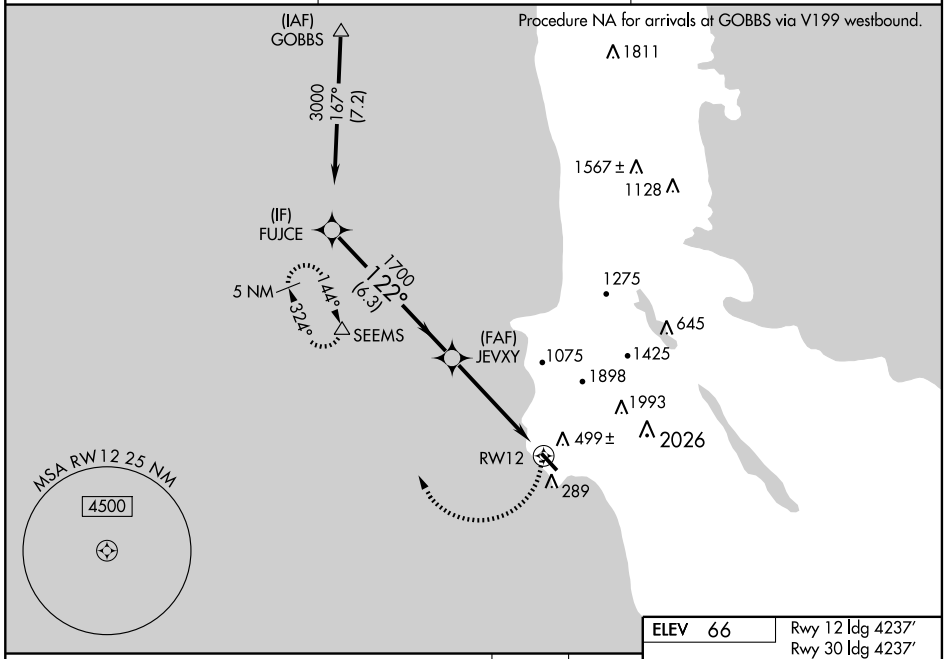
APP CRS		
122°	Rwy Idg	4237
	TDZE	59
	Apt Elev	66

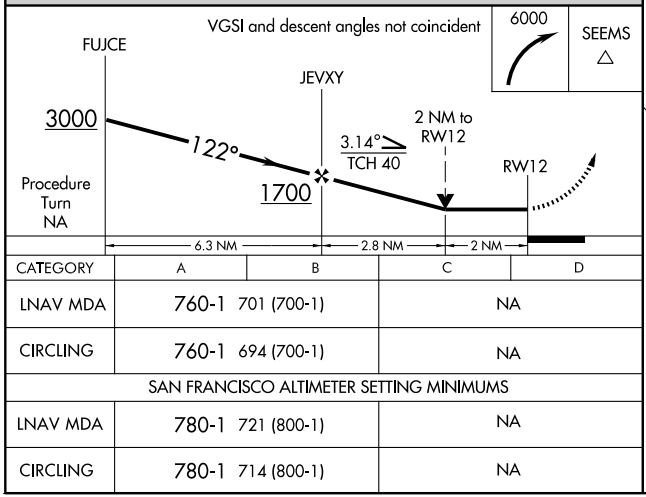
RNAV (GPS) Y RWY 12
HALF MOON BAY (HAF)

Circling NA east of Rwy 12/30. DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
VDP NA when using San Francisco Intl altimeter setting.
Obtain local altimeter setting on CTAF; when not received, use San Francisco Intl altimeter setting.

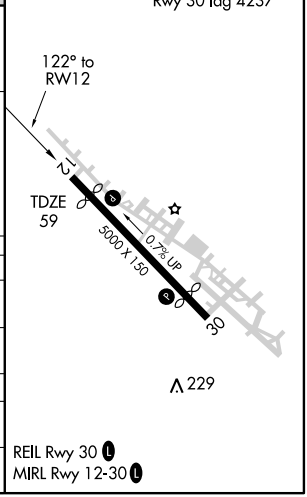
MISSED APPROACH: Climbing right turn to 6000 direct SEEMS and hold, continue climb-in-hold to 6000.

AWOS	NORCAL APP CON	UNICOM
127.275	135.1 307.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	760-1 701 (700-1)		NA	
CIRCLING	760-1 694 (700-1)		NA	
SAN FRANCISCO ALTIMETER SETTING MINIMUMS				
LNAV MDA	780-1 721 (800-1)		NA	
CIRCLING	780-1 714 (800-1)		NA	



SW-2, 22 OCT 2009 to 19 NOV 2009

HALF MOON BAY, CALIFORNIA AL-6675 (FAA)

RNAV (GPS) Y RWY 30

HALF MOON BAY (HAF)

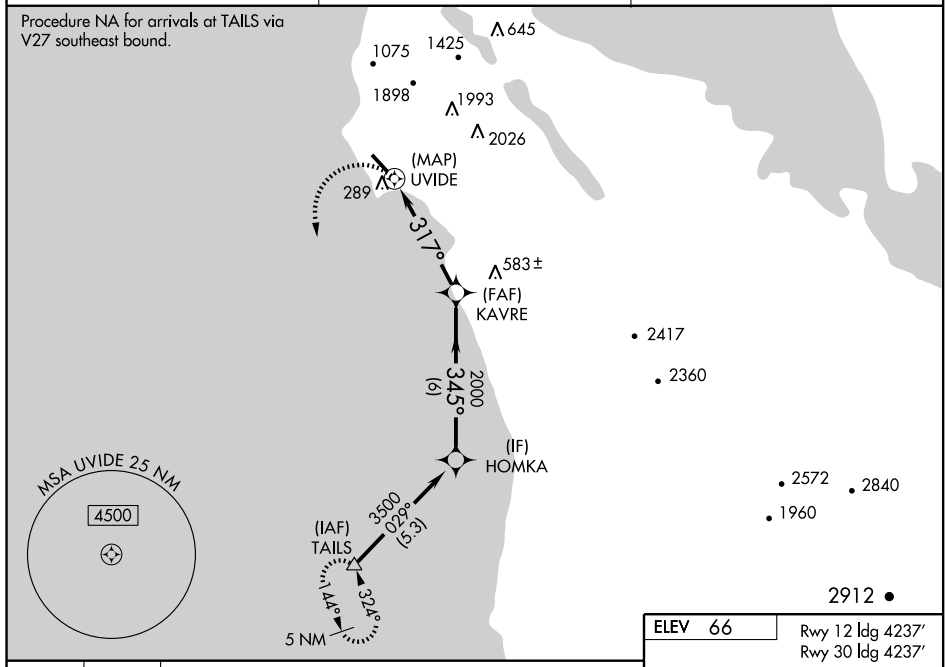
APP CRS	Rwy Idg	4237
317°	TDZE	54
	Apt Elev	66

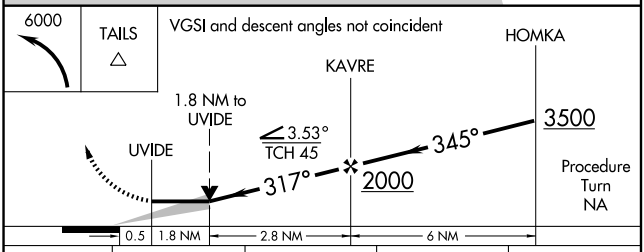
Circling NA east of Rwy 12/30.
NA
DME/DME RNP- 0.3 NA.
Obtain local altimeter setting on CTAF; when not received, use San Francisco Intl altimeter setting.
VDP NA when using San Francisco Intl altimeter setting.

MISSED APPROACH: Climbing left turn to 6000 direct TAILS and hold, continue climb-in-hold to 6000.

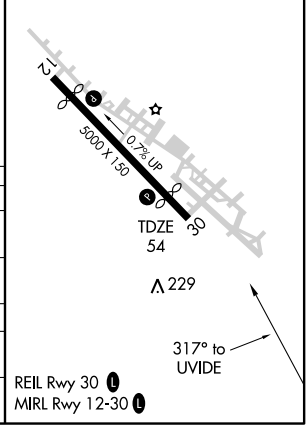
AWOS	NORCAL APP CON	UNICOM
127.275	135.1 307.2	122.8 (CTAF) L

Procedure NA for arrivals at TAILS via V27 southeast bound.





CATEGORY	A	B	C	D
LNAV MDA	800-1 746 (800-1)	800-1¼ 746 (800-1¼)	NA	
CIRCLING	800-1 734 (800-1)	800-1¼ 734 (800-1¼)	NA	
SAN FRANCISCO ALTIMETER SETTING MINIMUMS				
LNAV MDA	840-1 786 (800-1)	840-1¼ 786 (800-1¼)	NA	
CIRCLING	840-1 774 (800-1)	840-1¼ 774 (800-1¼)	NA	



SW-2, 22 OCT 2009 to 19 NOV 2009

HALF MOON BAY, CALIFORNIA

AL-6675 (FAA)

WAAS	APP CRS	Rwy Idg	4237
CH 93802	122°	TDZE	59
W12A		Apt Elev	66

RNAV (GPS) Z RWY 12

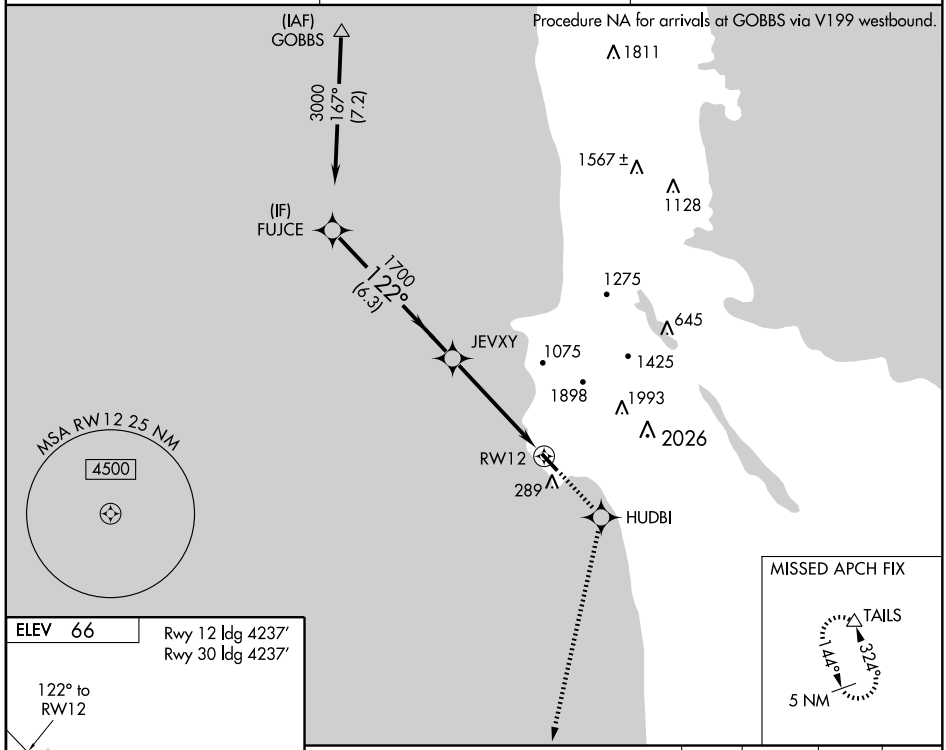
HALF MOON BAY (HAF)

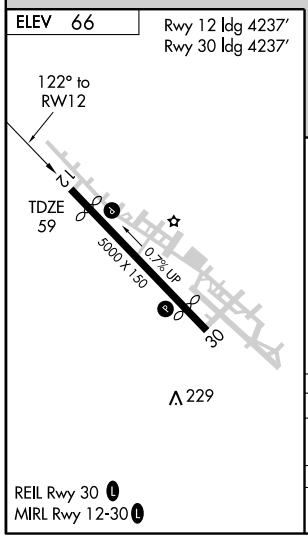
T
NA
W

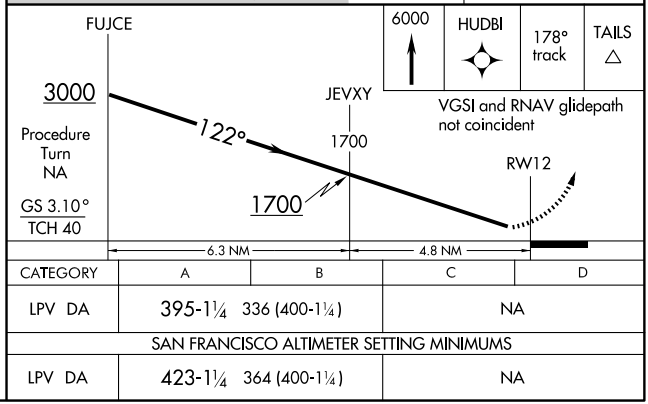
DME/DME RNP- 0.3 NA.
Obtain local altimeter setting on CTAF; when not received, use San Francisco Intl altimeter setting.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 6000 direct HUDBI and via 178° track to TAILS and hold, continue climb-in-hold to 6000.

AWOS	NORCAL APP CON	UNICOM
127.275	135.1 307.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	395-1¼ 336 (400-1¼)		NA	
SAN FRANCISCO ALTIMETER SETTING MINIMUMS				
LPV DA	423-1¼ 364 (400-1¼)		NA	

REIL Rwy 30 L
MIRL Rwy 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

HALF MOON BAY, CALIFORNIA

AL-6675 (FAA)

WAAS	APP CRS		
CH **50302**	**302°**	Rwy Idg	**4237**
W30A		TDZE	**54**
		Apt Elev	**66**

RNAV (GPS) Z RWY 30

HALF MOON BAY (HAF)

T
NA
W

DME/DME RNP- 0.3 NA.
Obtain local altimeter setting on CTAF; when not received, use San Francisco Intl altimeter setting.

MISSED APPROACH: Climb to 6000 direct LAYKI and via 267° track to SEEMS and hold, continue climb-in-hold to 6000.

AWOS	NORCAL APP CON	UNICOM
127.275	**135.1 307.2**	**122.8** (CTAF) L

Procedure NA for arrivals at SAPID via V25-V87 southeast bound.

5 NM 144° 324° SEEMS

LAYKI

1275 1075 1425 645 1898 1993 2026

RW30 289

302°

2204± 2417 2360

WOHLI

3300 302° (6.1)

(IF) JUMDA

2572 2840 1960

4200 313° (9.9)

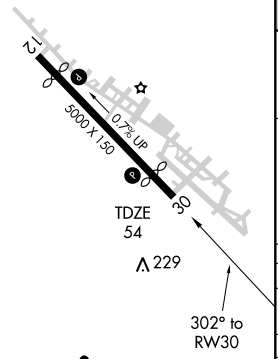
2912 3231 2359

(IAF) SAPID

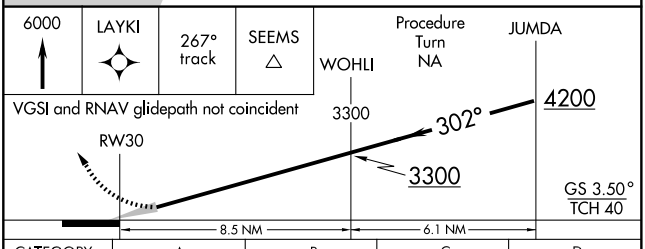
MSA RW30 25 NM
4500

ELEV 66

Rwy 12 ldg 4237′
Rwy 30 ldg 4237′



REIL Rwy 30 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	363-1 309 (300-1)		NA	
SAN FRANCISCO ALTIMETER SETTING MINIMUMS				
LPV DA	391-1 337 (400-1)		NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

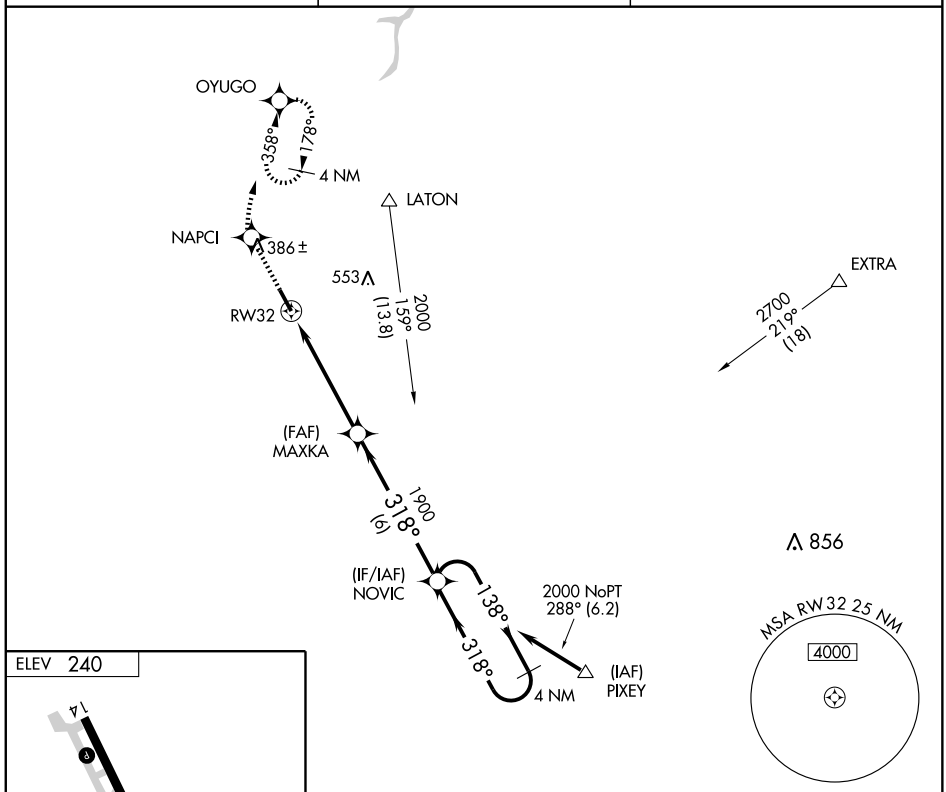
APP CRS	Rwy Idg	5175
318°	TDZE	238
	Apt Elev	240

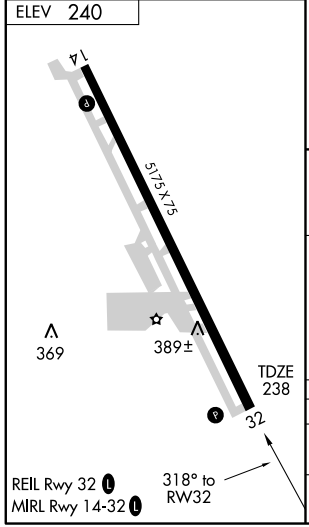
RNAV (GPS) RWY 32
HANFORD MUNI (HJO)

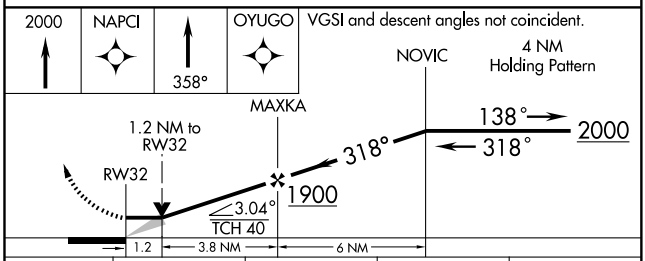
DME/DME RNP -0.3 NA. When local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climb to 2000 direct NAPCI and via 358° track to OYUGO and hold.

ASOS	FRESNO APP CON	UNICOM
134.75	123.9	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	640-1 402 (400-1)		NA	
CIRCLING	720-1 480 (500-1)		NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME VIS	APP CRS	Rwy Idg	N/A
109.4	230°	TDZE	N/A
Chan 31		Apt Elev	240

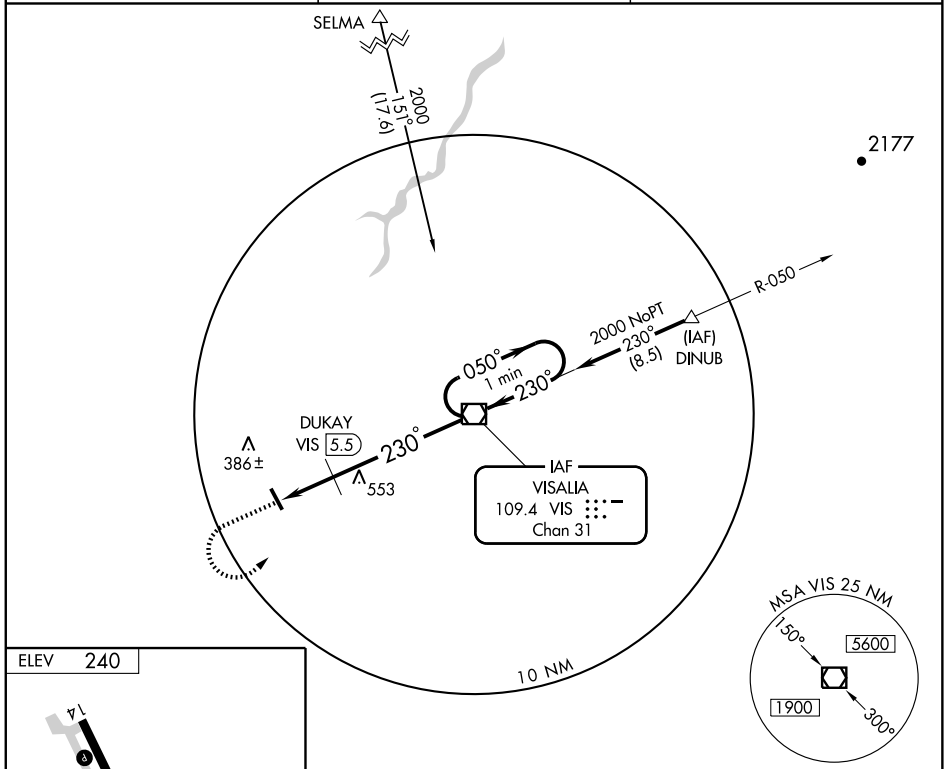
VOR-A

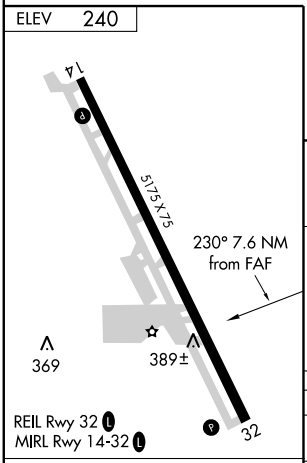
HANFORD MUNI (HJO)

When local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase all MDAs 80 feet.

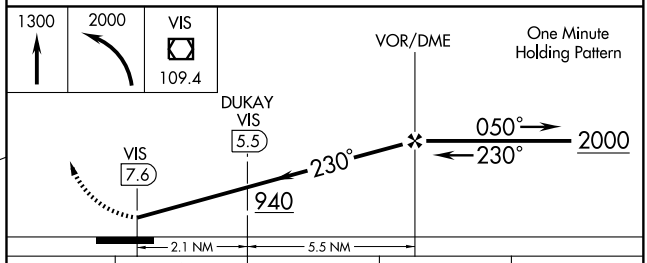
MISSED APPROACH: Climb to 1300 then climbing left turn to 2000 direct VIS VOR/DME and hold.

ASOS	FRESNO APP CON	UNICOM
134.75	123.9	122.8 (CTAF) L





FAF to MAP 7.6 NM					
Knots	60	90	120	150	180
Min:Sec	7:36	5:04	3:48	3:02	2:32



CATEGORY	A	B	C	D
CIRCLING	940-1 700 (700-1)		NA	

DUKAY FIX MINIMUMS

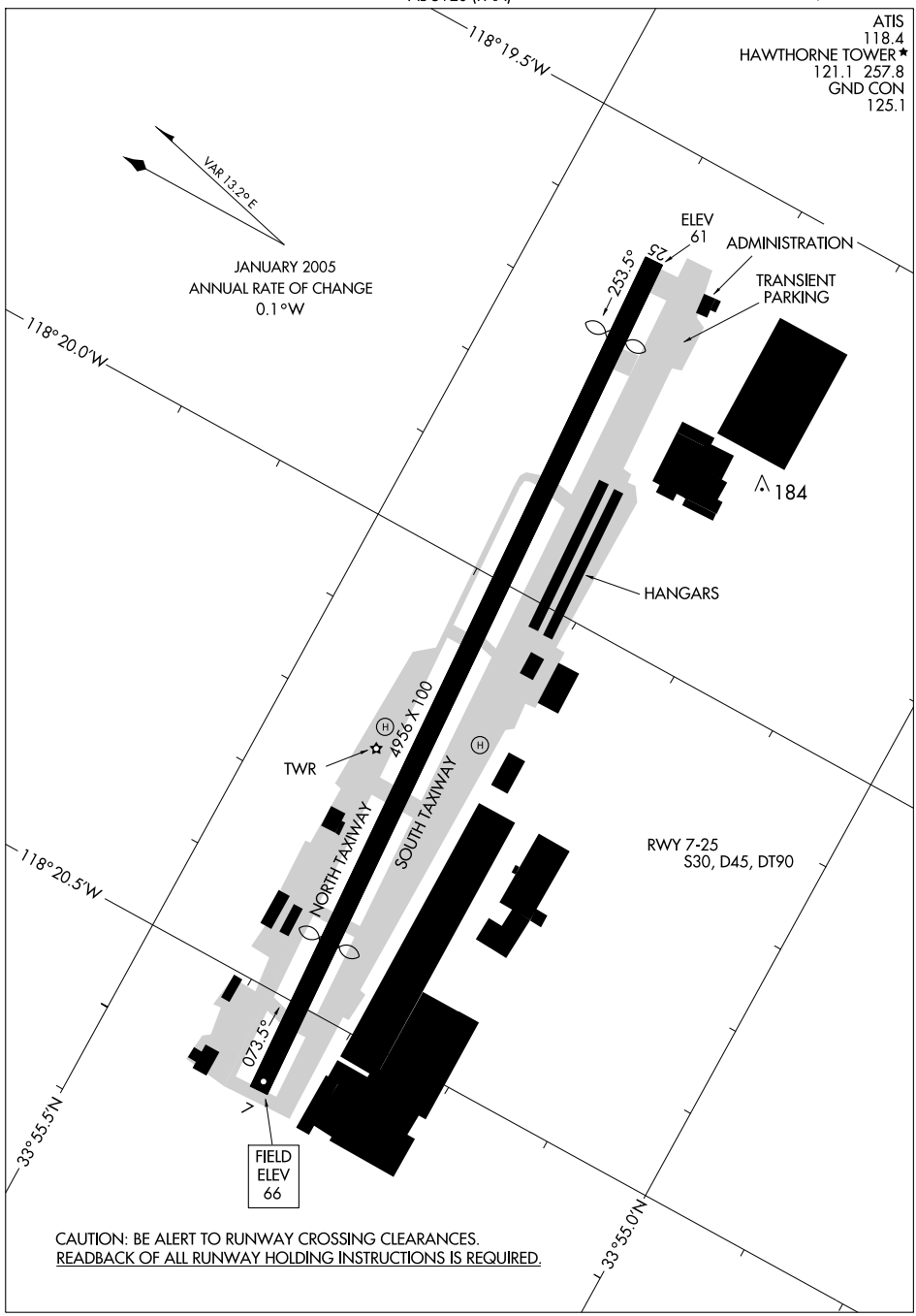
CIRCLING	720-1 480 (500-1)		NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

HAWTHORNE/JACK NORTHROP FIELD/HAWTHORNE MUNI (HHR)
AL-5120 (FAA)
HAWTHORNE, CALIFORNIA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-HHR	APP CRS	Rwy Idg	4493
109.1	253°	TDZE	63
		Apt Elev	66

LOC RWY 25

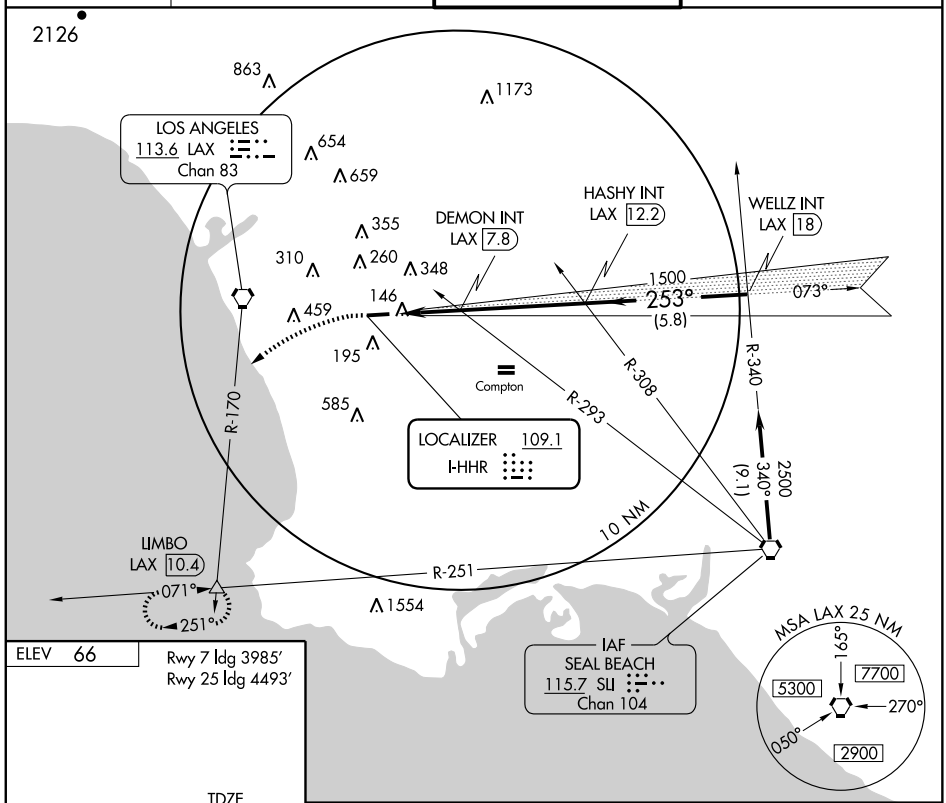
HAWTHORNE/JACK NORTHROP FIELD/HAWTHORNE MUNI (HHR)

DME from LAX VORTAC. Inoperative table does not apply.
Visibility reduction by helicopters NA.
Circling not authorized north of Rwy 7-25.
Circling not authorized when control tower closed.

ODALS

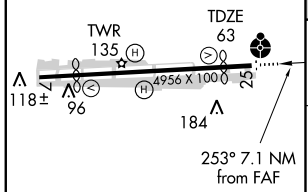
MISSED APPROACH: Climb to 700 then climbing left turn to 3000 via heading 210° and LAX R-170 to LIMBO Int and hold.

ATIS	SOCAL APP CON	HAWTHORNE TOWER ★	GND CON
118.4	124.9 269.0	121.1 (CTAF) C 257.8	125.1



ELEV 66

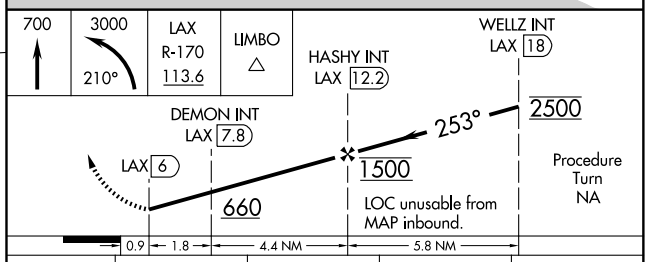
Rwy 7 Idg 3985′
Rwy 25 Idg 4493′



REIL Rwy 25
MIRL Rwy 7-25 C

FAF to MAP 6.2 NM

Knots	60	90	120	150	180
Min:Sec	6:12	4:08	3:06	2:29	2:04



CATEGORY	A	B	C	D
S-LOC 25	600-1¼ 537 (600-1¼)		600-1½ 537 (600-1½)	600-1¾ 537 (600-1¾)
CIRCLING	600-1¼ 534 (600-1¼)		600-1½ 534 (600-1½)	620-2 554 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC LAX	APP CRS	Rwy Idg	4493
113.6	261°	TDZE	63
Chan 83		Apt Elev	66

VOR or GPS RWY 25

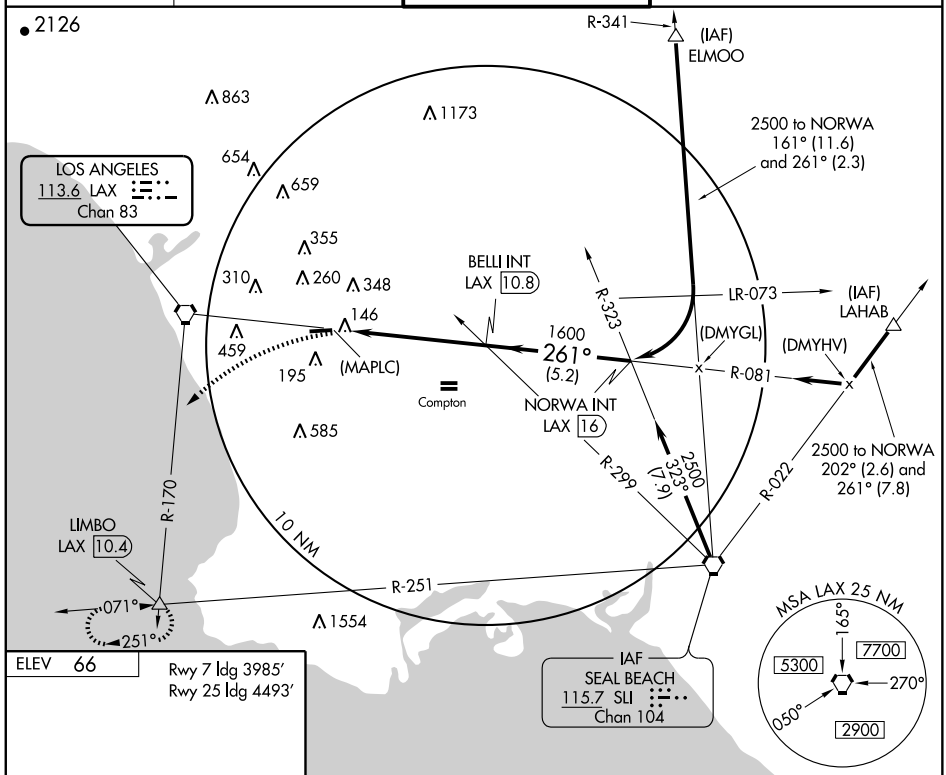
HAWTHORNE/JACK NORTHROP FIELD/HAWTHORNE MUNI (HHR)

Visibility reduction by helicopters NA. Inoperative table does not apply. Circling not authorized north of Rwy 7-25. Circling not authorized when control tower closed.

ODALS

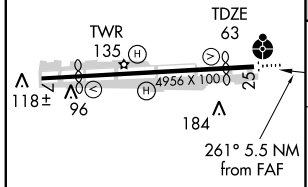
MISSED APPROACH: Climbing left turn to 3000 via heading 210° and LAX R-170 to LIMBO Int and hold.

ATIS	SOCAL APP CON	HAWTHORNE TOWER ★	GND CON
118.4	124.9 269.0	121.1 (CTAF) L 257.8	125.1



ELEV 66

Rwy 7 Idg 3985′
Rwy 25 Idg 4493′

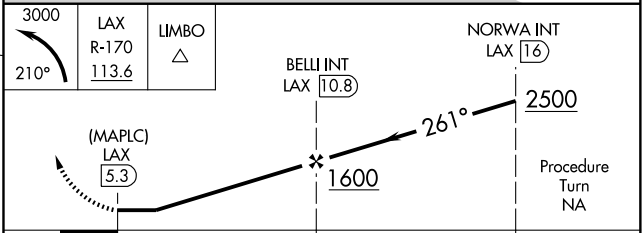


REIL Rwy 25
MIRL Rwy 7-25 L

FAF to MAP 5.5 NM

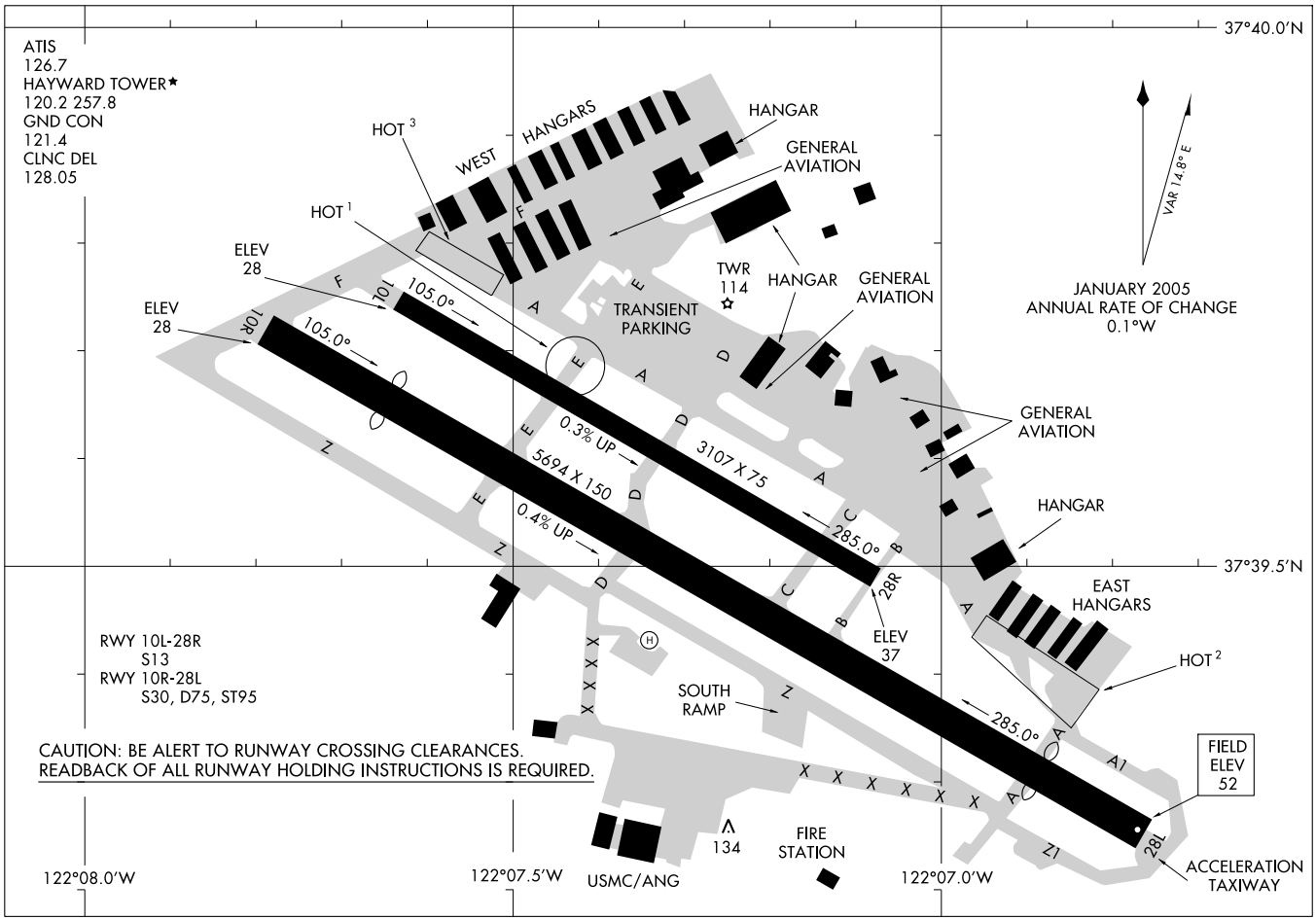
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

3000	LAX	LIMBO
210°	R-170	△
	113.6	



CATEGORY	A	B	C	D
S-25	680-1 617 (700-1)		680-1¾ 617 (700-1¾)	680-2 617 (700-2)
CIRCLING	680-1 614 (700-1)		680-1¾ 614 (700-1¾)	680-2 614 (700-2)

SW-3, 22 OCT 2009 to 19 NOV 2009


AIRPORT DIAGRAM
AL-5015 (FAA)
HAYWARD EXECUTIVE (HWD)
HAYWARD, CALIFORNIA
37°40.0'N
37°39.5'N
122°08.0'W
122°07.5'W
122°07.0'W
ATIS
126.7
HAYWARD TOWER★
120.2 257.8
GND CON
121.4
CLNC DEL
128.05
HOT 3
WEST HANGARS
HANGAR
GENERAL AVIATION
HOT 1
ELEV 28
ELEV 28
10L
10R
105.0°
105.0°
TWR 114
HANGAR
GENERAL AVIATION
TRANSIENT PARKING
VAR 14.8° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
GENERAL AVIATION
0.3% UP
3107 X 75
5694 X 150
0.4% UP
285.0°
285.0°
HANGAR
28R
ELEV 37
EAST HANGARS
HOT 2
RWY 10L-28R
S13
RWY 10R-28L
S30, D75, ST95
SOUTH RAMP
FIELD ELEV 52
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
134
FIRE STATION
USMC/ANG
28L
ACCELERATION TAXIWAY

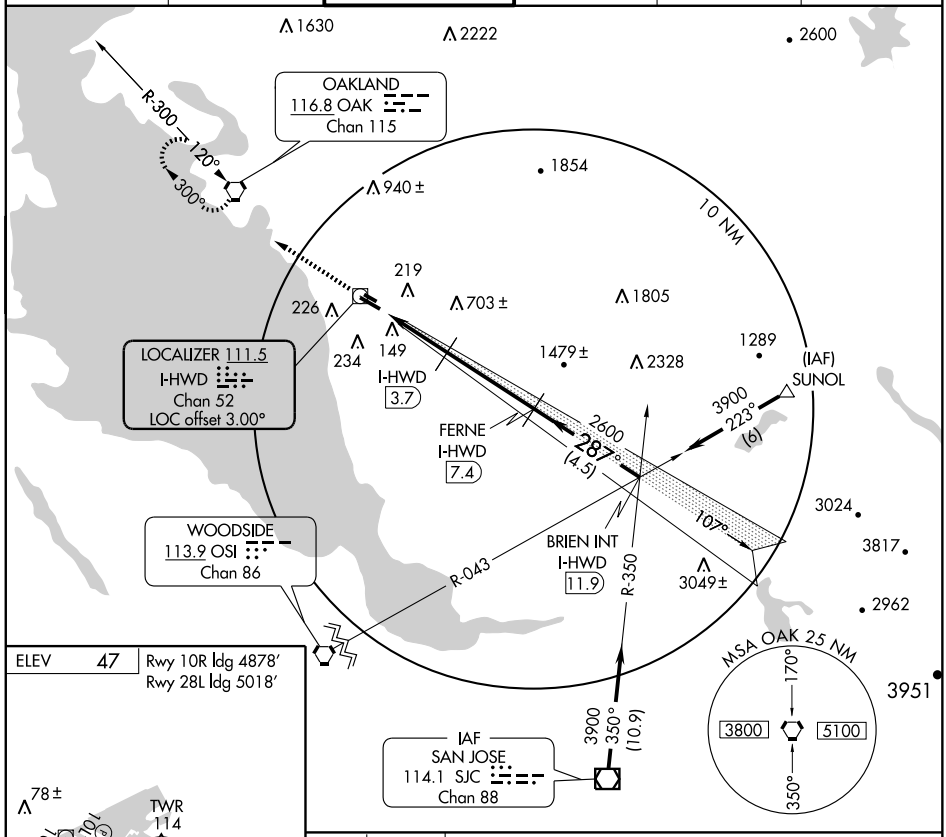
LOC/DME I-HWD	APP CRS	Rwy Idg	5018
111.5	287°	TDZE	47
Chan 52		Apt Elev	47

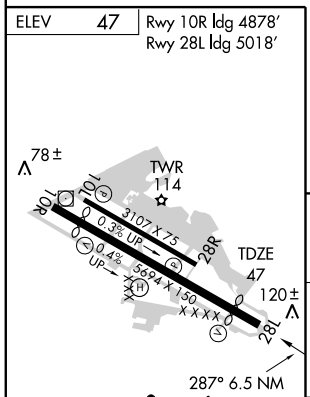
LOC/DME RWY 28L
HAYWARD EXECUTIVE (HWD)

Circling not authorized north of Rwy 10L-28R.

MISSED APPROACH: Climb to 2000 direct OAK VORTAC and hold.

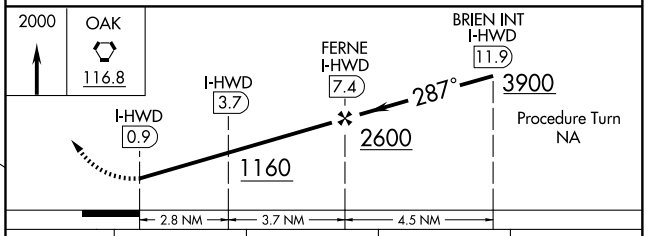
ATIS	NORCAL APP CON	HAYWARD TOWER★	GND CON	CLNC DEL	UNICOM
126.7	124.4 351.8	120.2 (CTAF) Ⓛ 257.8	121.4	128.05	122.95





MIRL Rwy10R-28L Ⓛ
MIRL Rwy 10L-28R
REIL Rwys 10R and 28L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-28L	400-1 353 (400-1)			400-1¼ 353 (400-1¼)
CIRCLING	540-1 493 (500-1)		540-1½ 493 (500-1½)	600-2 553 (600-2)

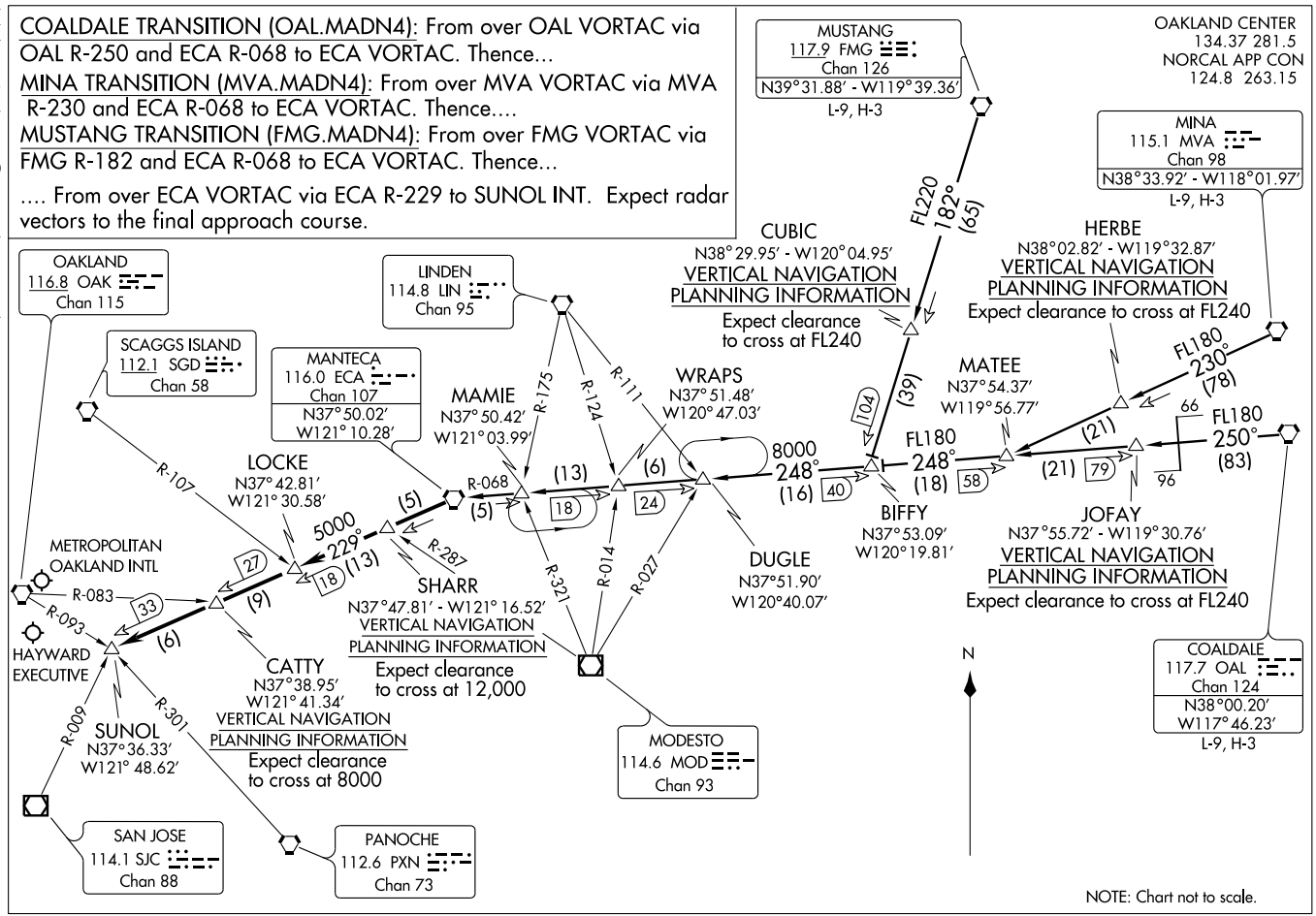
SW-2, 22 OCT 2009 to 19 NOV 2009

COALDALE TRANSITION (OAL.MADN4): From over OAL VORTAC via OAL R-250 and ECA R-068 to ECA VORTAC. Thence...

MINA TRANSITION (MVA.MADN4): From over MVA VORTAC via MVA R-230 and ECA R-068 to ECA VORTAC. Thence....

MUSTANG TRANSITION (FMG.MADN4): From over FMG VORTAC via FMG R-182 and ECA R-068 to ECA VORTAC. Thence...

.... From over ECA VORTAC via ECA R-229 to SUNOL INT. Expect radar vectors to the final approach course.

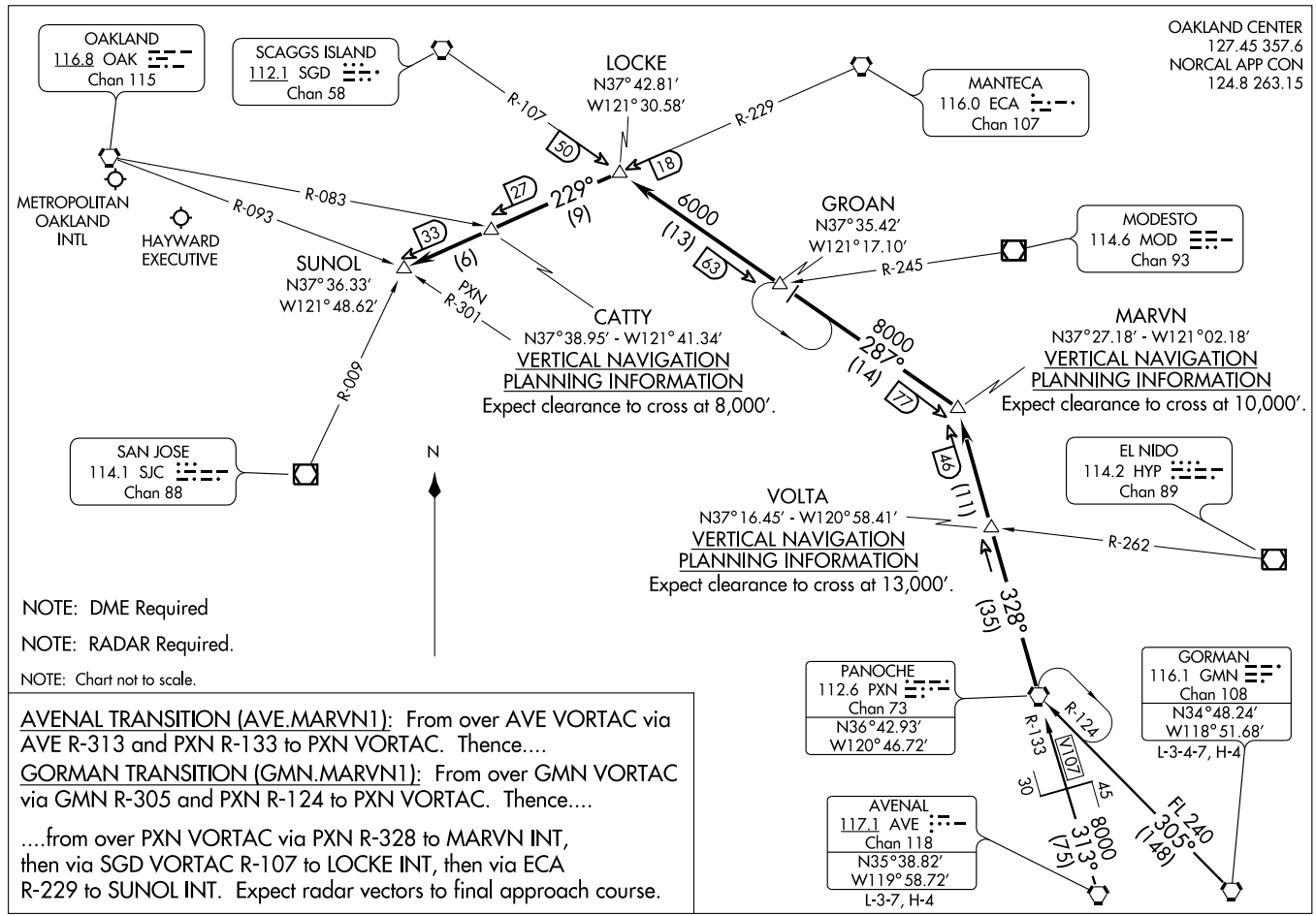


(ECA.MADN4) 08101

MADWIN FOUR ARRIVAL

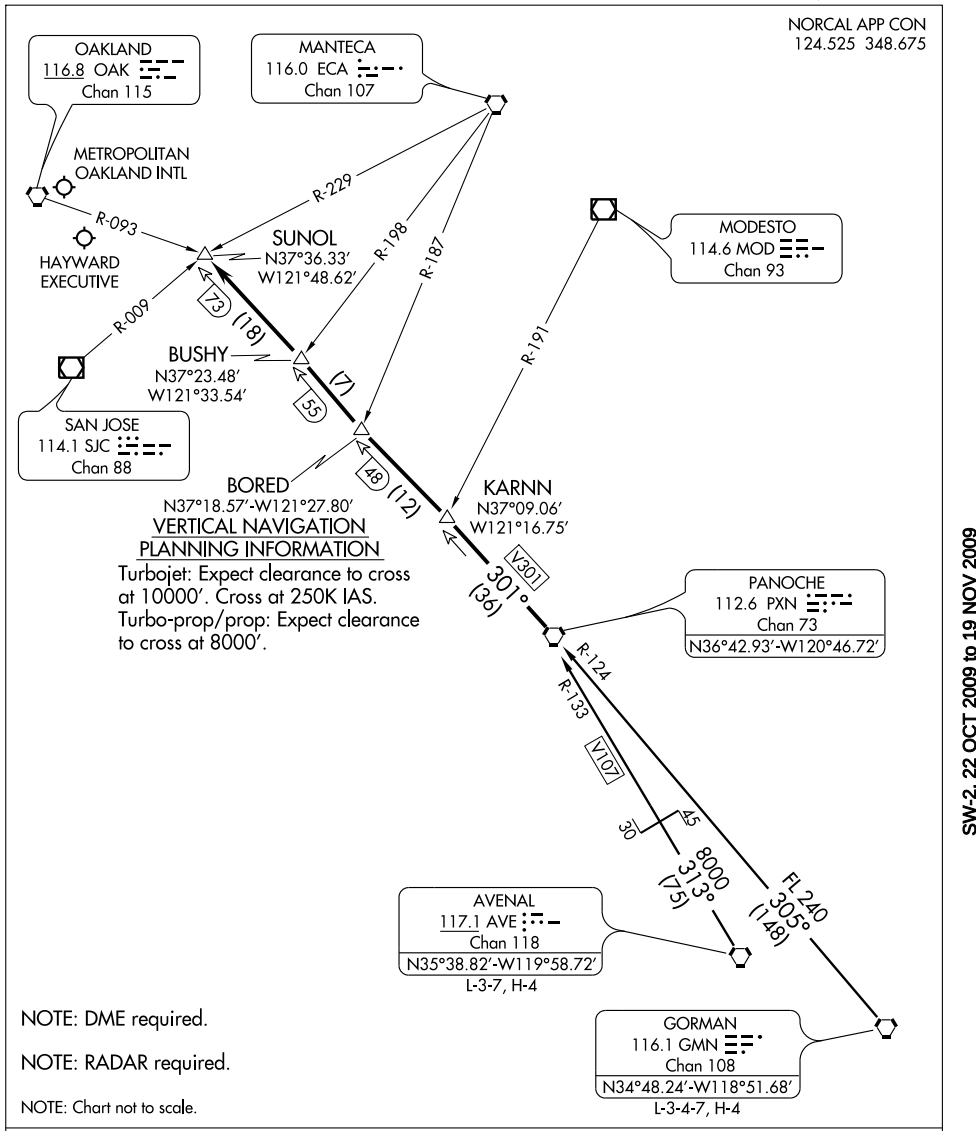
ST-294 (FAA)

OAKLAND, CALIFORNIA



(PXN.MARVN1) 09295
MARVN ONE ARRIVAL
ST-294 (FAA)
OAKLAND, CALIFORNIA

PANOCHE TWO ARRIVAL



AVENAL TRANSITION (AVE.PXN2): From over AVE VORTAC via AVE R-313 and PXN R-133 to PXN VORTAC. Thence....

GORMAN TRANSITION (GMN. PXN2): From over GMN VORTAC via GMN R-305 and PXN R-124 to PXN VORTAC. Thence....

....From over PXN VORTAC via PXN R-301 to SUNOL INT. Expect radar vectors to the final approach course.

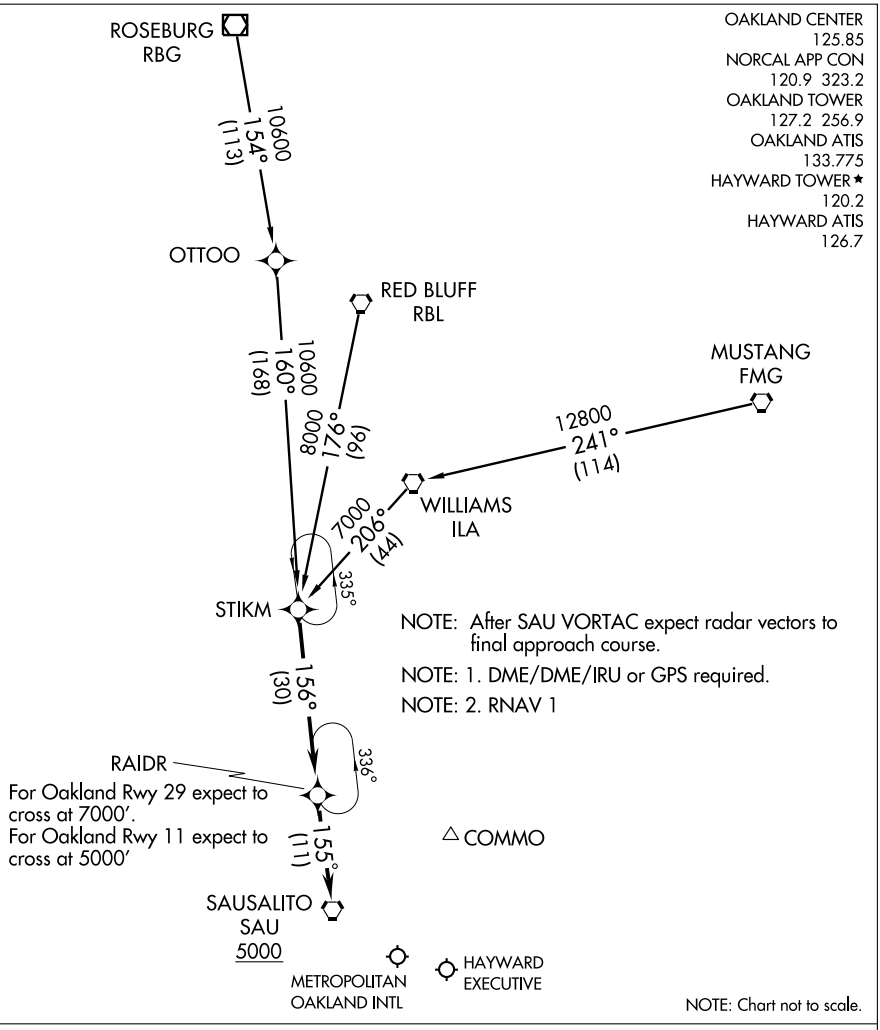
SW-2, 22 OCT 2009 to 19 NOV 2009

(RAIDR.RAIDR2) 07354

RAIDR TWO ARRIVAL (RNAV)

ST-294 (FAA)

OAKLAND, CALIFORNIA



MUSTANG TRANSITION (FMG.RAIDR2)

RED BLUFF TRANSITION (RBL.RAIDR2)

ROSEBURG TRANSITION (RBG.RAIDR2)

From over STIKM WP via 156° track to RAIDR WP, thence as depicted to cross SAU VORTAC at or above 5000. Expect radar vectors to final approach course.

LOST COMMUNICATIONS:

Depart SAU VORTAC and proceed direct to COMMO INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5018
299°	TDZE	50
	Apt Elev	52

RNAV (GPS) Y RWY 28L

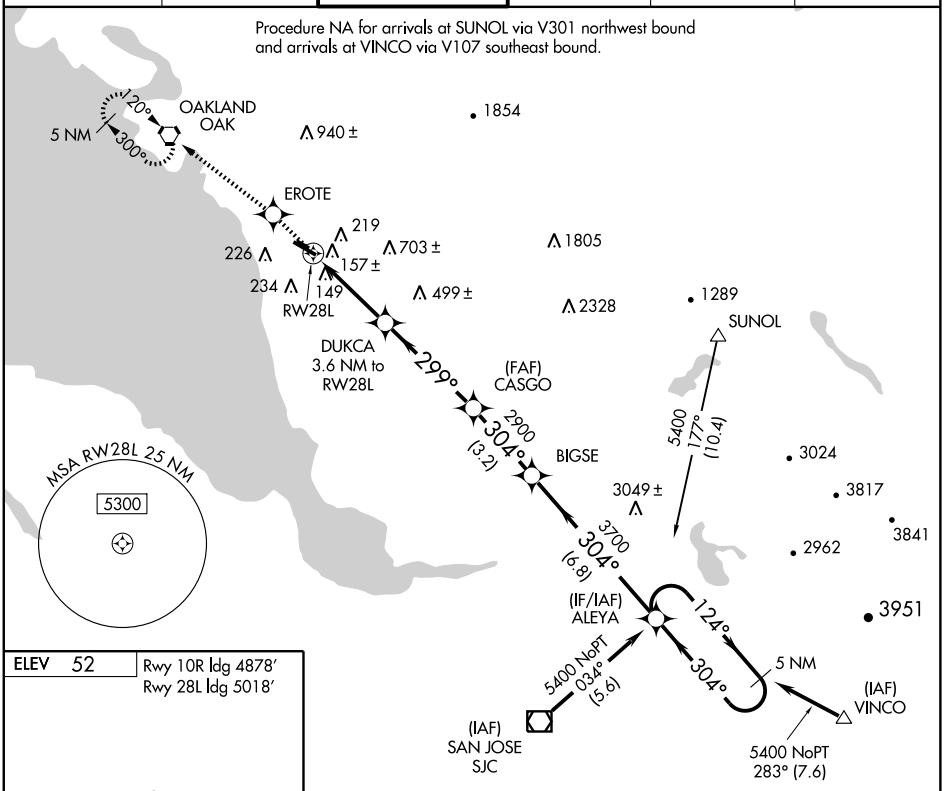
HAYWARD EXECUTIVE (HWD)

Circling NA north of Rwy 10L-28R. DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Oakland altimeter setting and increase all MDAs 20 feet. Visibility reduction by helicopters NA.

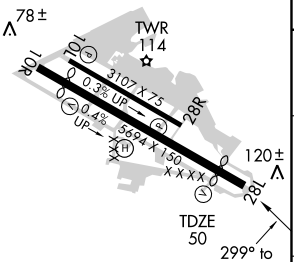
MISSED APPROACH: Climb to 2000 direct EROTE and via 292° track to OAK VORTAC and hold.

ATIS	NORCAL APP CON	HAYWARD TOWER★	GND CON	CLNC DEL	UNICOM
126.7	124.4 351.8	120.2 (CTAF) L 257.8	121.4	128.05	122.95

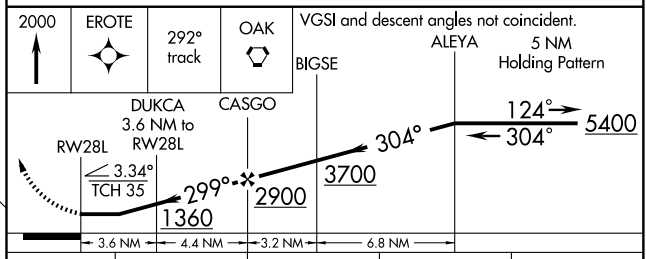
Procedure NA for arrivals at SUNOL via V301 northwest bound and arrivals at VINCO via V107 southeast bound.



ELEV 52	Rwy 10R ldg 4878′
	Rwy 28L ldg 5018′



MIRL Rwy10R-28L L
MIRL Rwy 10L-28R
REIL Rwys 10R and 28L



CATEGORY	A	B	C	D
LNAV MDA	460-1 410 (500-1)		460-1¼ 410 (500-1¼)	
CIRCLING	540-1 488 (500-1)		540-1½ 488 (500-1½)	620-2 568 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 77604 W28A	APP CRS 285°	Rwy Idg 5018 TDZE 50 Apt Elev 52

RNAV (GPS) Z RWY 28L

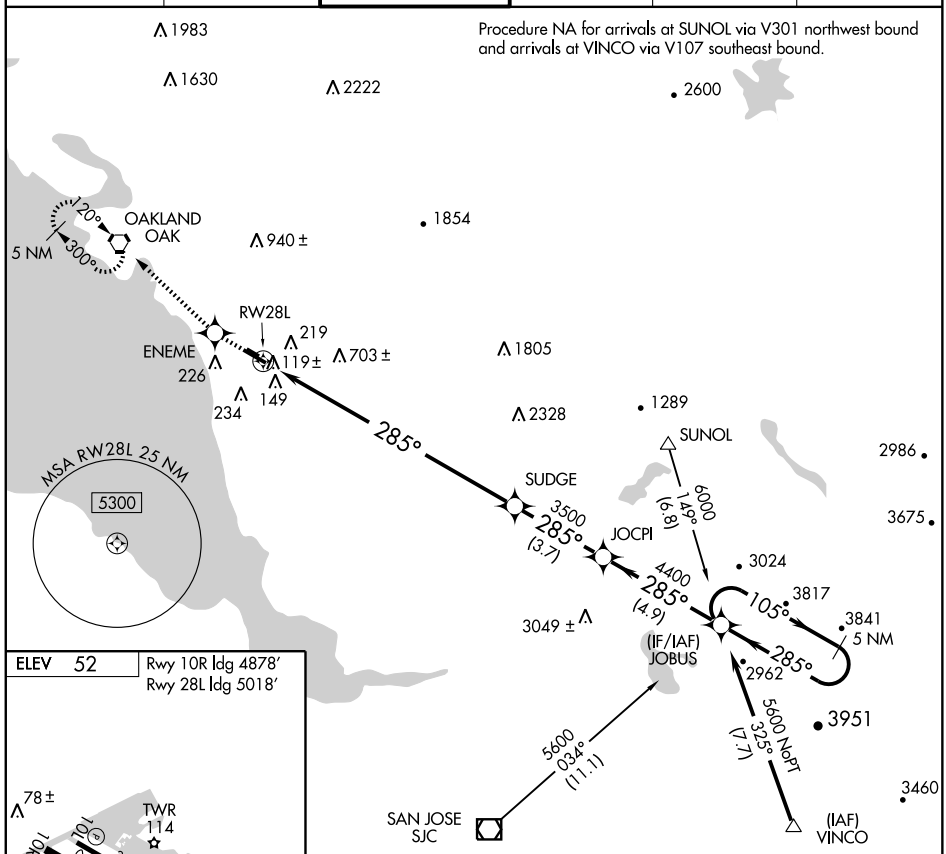
HAYWARD EXECUTIVE (HWD)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. If local altimeter setting not received, use Oakland altimeter setting and increase DA 20 feet.

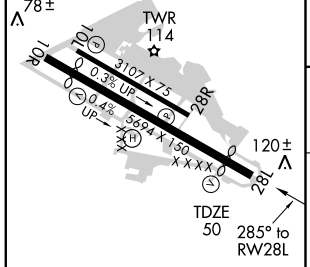
MISSED APPROACH: Climb to 2000 direct ENEME and via 298° track to OAK VORTAC and hold.

ATIS	NORCAL APP CON	HAYWARD TOWER★	GND CON	CLNC DEL	UNICOM
126.7	124.4 351.8	120.2 (CTAF) L 257.8	121.4	128.05	122.95

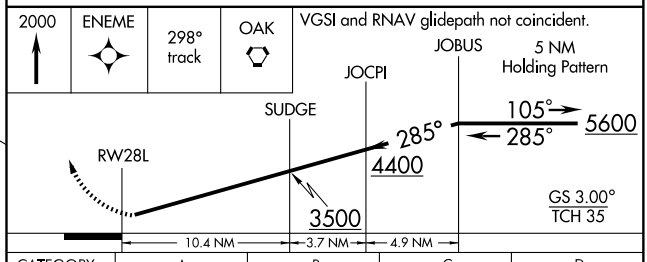
Procedure NA for arrivals at SUNOL via V301 northwest bound and arrivals at VINCO via V107 southeast bound.



ELEV 52	Rwy 10R ldg 4878′ Rwy 28L ldg 5018′



MIRL Rwy10R-28L L
MIRL Rwy 10L-28R
REIL Rwys 10R and 28L



CATEGORY	A	B	C	D
LPV DA	348-1 298 (300-1)			

SW-2, 22 OCT 2009 to 19 NOV 2009

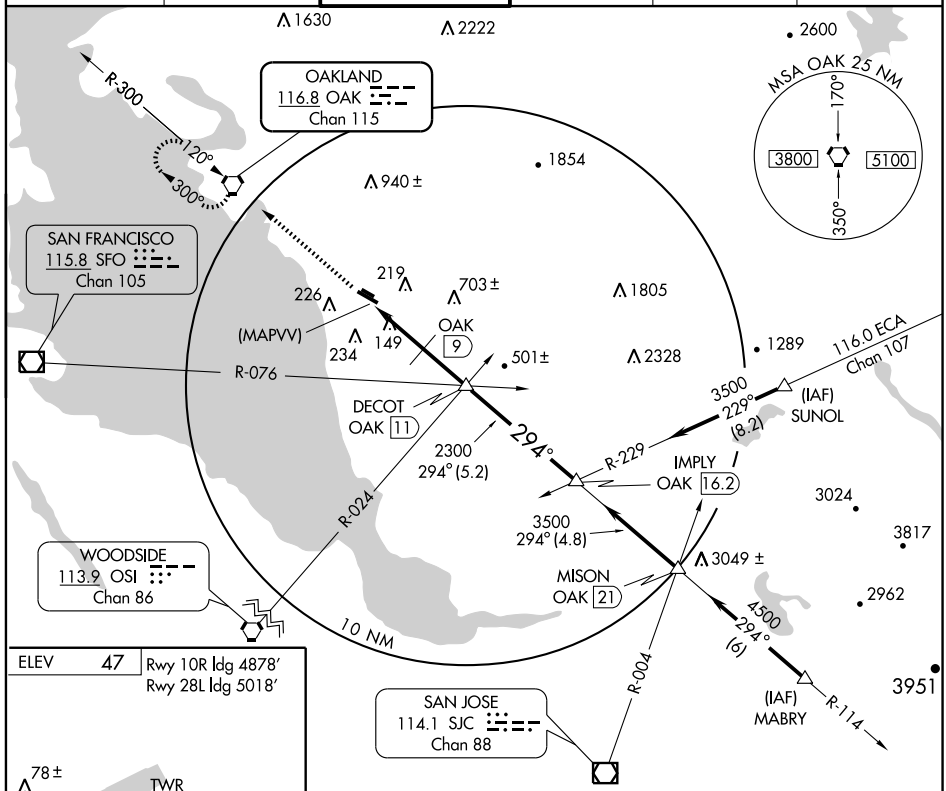
VORTAC OAK	APP CRS	Rwy Idg	N/A
116.8	294°	TDZE	N/A
Chan 115		Apt Elev	47

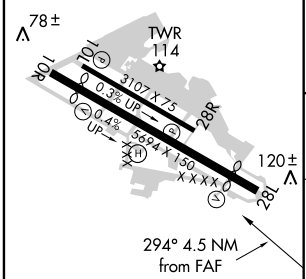
VOR/DME or GPS-B
HAYWARD EXECUTIVE (HWD)

Circling not authorized north of Rwy 10L-28R.

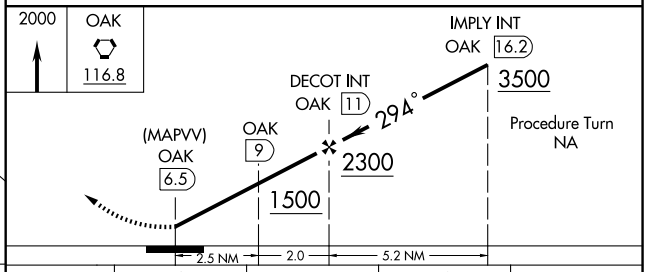
MISSED APPROACH: Climb to 2000 direct to OAK VORTAC and hold.

ATIS	NORCAL APP CON	HAYWARD TOWER★	GND CON	CLNC DEL	UNICOM
126.7	124.4 351.8	120.2 (CTAF) Ⓛ 257.8	121.4	128.05	122.95





MIRL Rwy10R-28L Ⓛ
MIRL Rwy 10L-28R
REIL Rwys 10R and 28L



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	540-1	493 (500-1)	540-1½ 493 (500-1½)	600-2 553 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

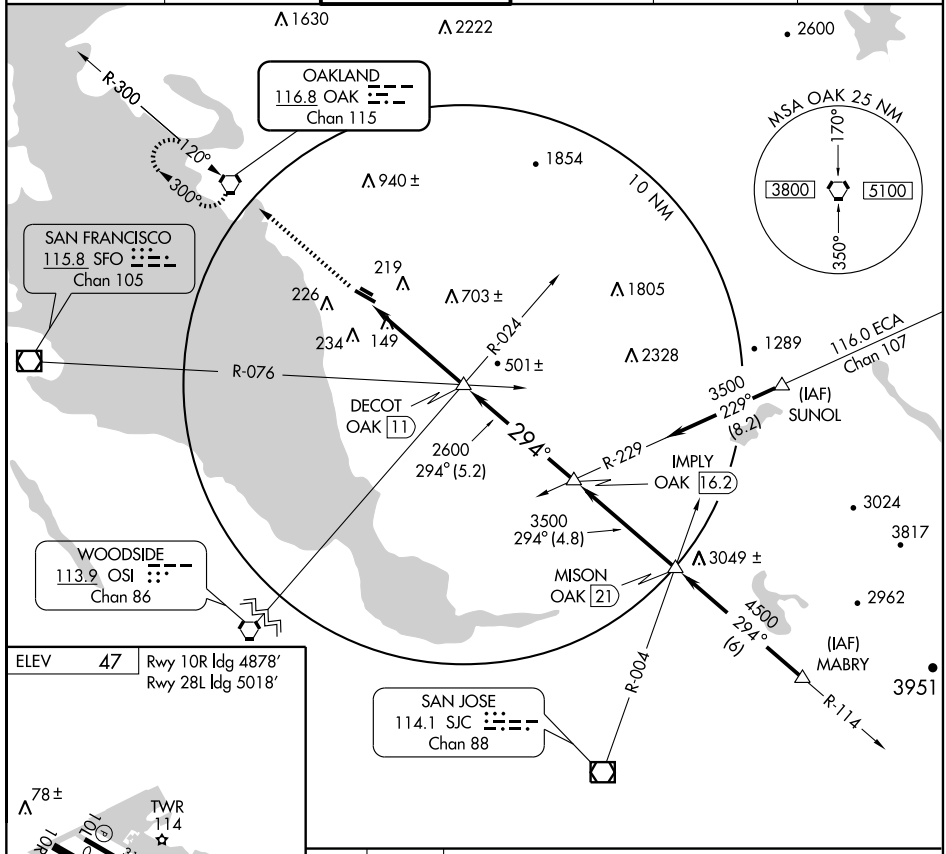
VORTAC OAK	APP CRS	Rwy Idg	N/A
116.8	294°	TDZE	N/A
Chan 115		Apt Elev	47

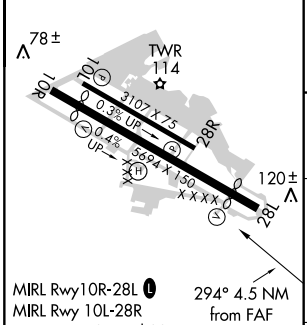
VOR or GPS-A
HAYWARD EXECUTIVE (HWD)

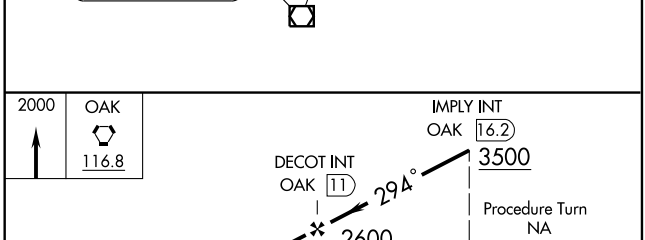
Circling not authorized north of Rwy 10L-28R.

MISSED APPROACH: Climb to 2000 direct to OAK VORTAC and hold.

ATIS	NORCAL APP CON	HAYWARD TOWER★	GND CON	CLNC DEL	UNICOM
126.7	124.4 351.8	120.2 (CTAF) Ⓛ 257.8	121.4	128.05	122.95







FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

CATEGORY	A	B	C	D
CIRCLING	800-1 *753 (800-1)*	800-1¼ *753 (800-1¼)*	800-2¼ *753 (800-2¼)*	800-2½ *753 (800-2½)*

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4314
035°	TDZE	1505
	Apt Elev	1512

RNAV (GPS) RWY 5

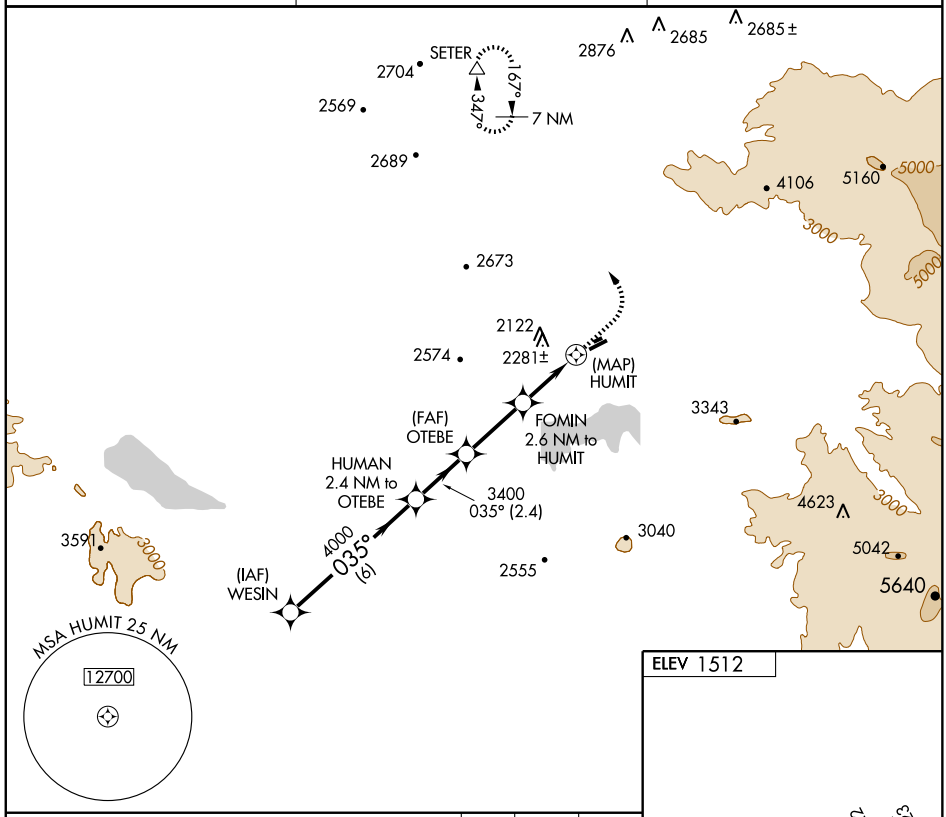
HEMET-RYAN (HMT)

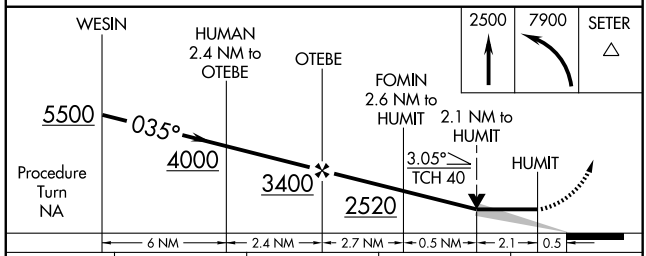
NA

DME/DME RNP- 0.3 NA.
Circling NA at night.

MISSED APPROACH: Climb to 2500, then climbing left turn to 7900 direct SETER and hold, continue climb-in-hold to 7900.

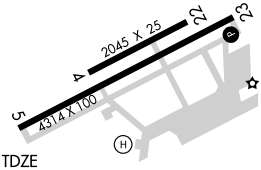
AWOS-3	MARCH APP CON ★	UNICOM
118.375	133.5 324.1	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2360-1 855 (900-1)	2360-1¼ 855 (900-1¼)	2360-2½ 855 (900-2½)	NA
CIRCLING	2360-1 848 (900-1)	2400-1¼ 888 (900-1¼)	2600-3 1088 (1100-3)	NA

ELEV 1512



TDZE
1505

Rwy 4-22 restricted for glider operations.

MIRL Rwy 5-23 L

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 26

APCH CRS	Rwy ldg	10,000
262°	TDZE	4012
	Arpt Elev	4012

AL-6624 [USA]

AMEDEE AAF (KAHC)

DME/DME RNP-0.3 NA.
Procedure not authorized at night.
** Circling NA for CATS DE north of Rwy 8-26.

MISSED APPROACH: Climbing left turn to 12,000 direct JEBED and hold, continue climb-in-hold to 12,000. When authorized by ATC, climb in hold to 14,000.

OAKLAND CENTER	
128.8	285.5

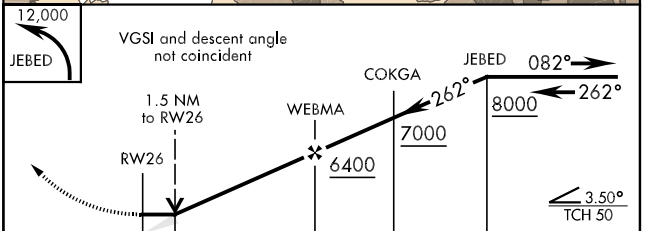
CTAF	
126.1	241.9

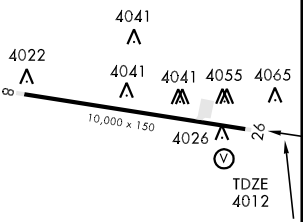
NOT FOR CIVIL USE

SW-2, 22 OCT 2009 to 19 NOV 2009

HETUX
12,000
151°
(25.6)
KETBE
6221
8000
151°
(11.6)
6720
6571
4895
5000
6000
7000
R2530
5352
4044
RW26
4064
4388
4509
4132
262°
(6.3)
6400
(2.6)
(FAF)
WEBMA
COKGA
4126
6077
7000
262°
(4.3)
(IAF)
JEBED
Max holding
230 KIAS
082°
262°
7 NM
MSA RW26 25 NM
10,000
NoPT
8000
331°
(6.4)
4231
(IAF)
SEDTO
11,000
MUSTANG
117.9 FMG
Chan 126
331°
(36.4)
11,000

ELEV 4012





CATEGORY	A	B	C	D	E
LNAV MDA	4600-1 588 (600-1)		4600-1½ 588 (600-1½)	4600-1¾ 588 (600-1¾)	4600-2 588 (600-2)
CIRCLING **	4600-1 588 (600-1)		4600-1½ 588 (600-1½)	4600-2 588 (600-2)	

LIRL Rwy 26

VOR/DME RWY 26

VOR/DME AHC	APCH CRS	Rwy Idg 10,000
109.0	268°	TDZE 4012
Chan 27		Arpt Elev 4012

AL-6624 [USA] AMEDEE AAF (KAHC)

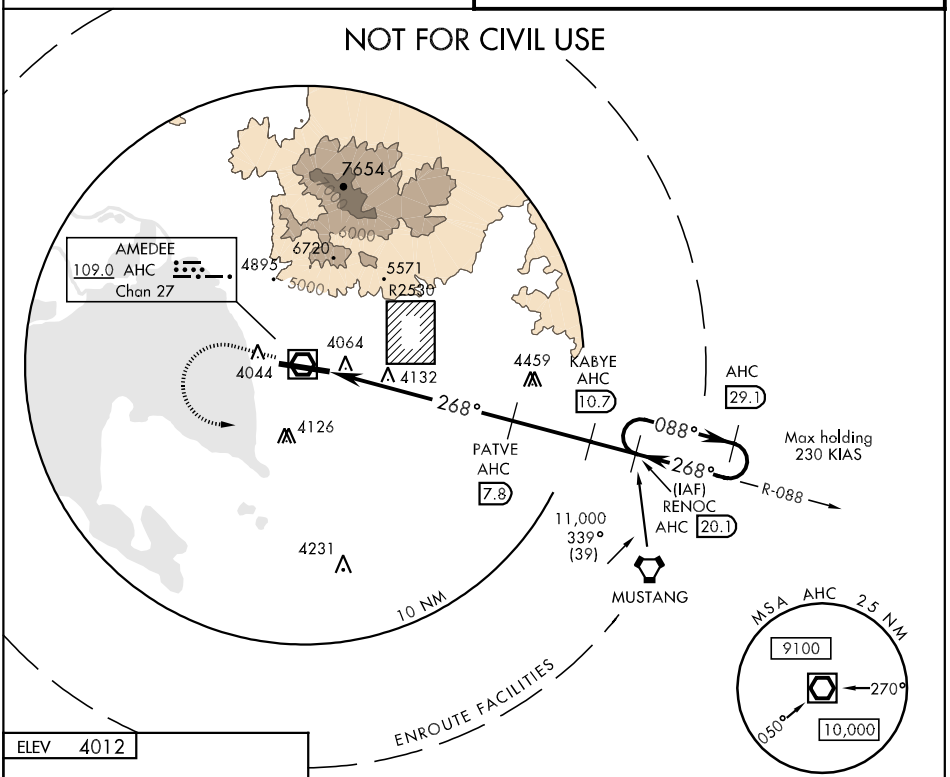
▼ Procedure not authorized at night.
** Circling NA for CATS DE north of Rwy 8-26.

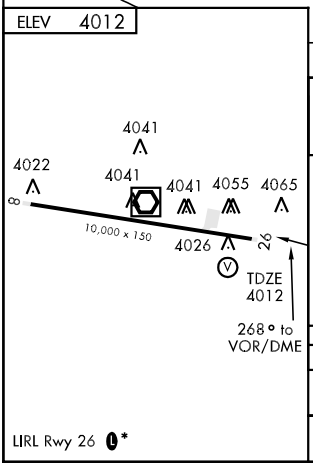
MISSED APPROACH: Climb to 5500, then climbing left turn to 10,500 via AHC R-088 to RENOC (20.1 DME) and hold, continue climb-in-hold to 10,500. When authorized by ATC, climb-in-hold to 14,000.

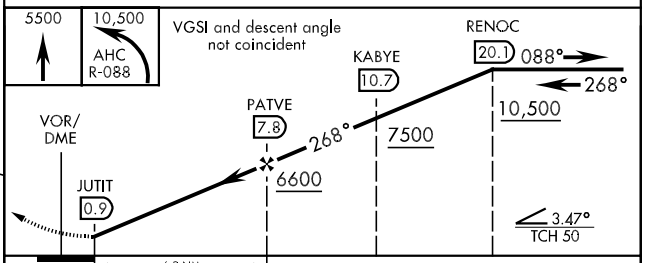
OAKLAND CENTER	
128.8	285.5

CTAF	
126.1	241.9 L*

NOT FOR CIVIL USE







CATEGORY	A	B	C	D	E
S-26	4620-1 608 (700-1)		4620-1¾ 608 (700-1¾)	4620-2 608 (700-2)	4620-2¼ 608 (700-2¼)
CIRCLING **	4620-1 608 (700-1)		4620-1¾ 608 (700-1¾)	4620-2 608 (700-2)	4620-2¼ 608 (700-2¼)

LIRL Rwy 26 L*

SW-2, 22 OCT 2009 to 19 NOV 2009

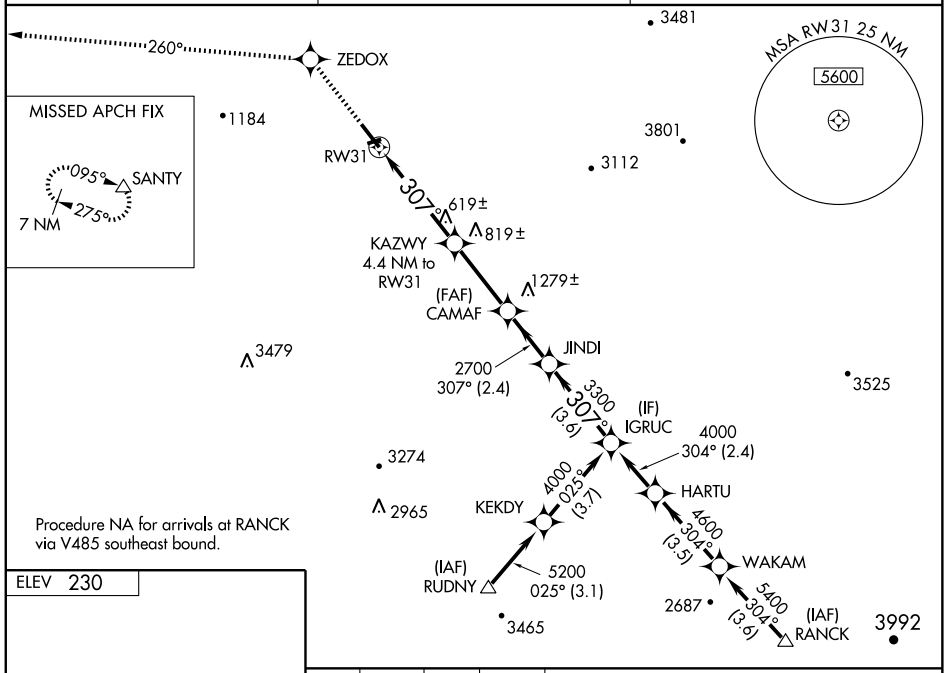
WAAS	APP CRS		
CH **93806**	**307°**	Rwy Idg	**6350**
W31A		TDZE	**230**
		Apt Elev	**230**

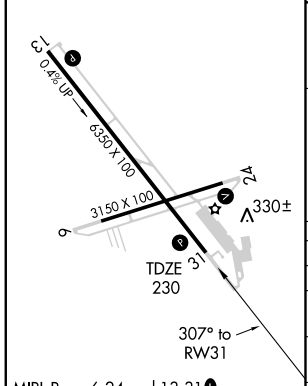
RNAV (GPS) RWY 31
HOLLISTER MUNI (CVH)

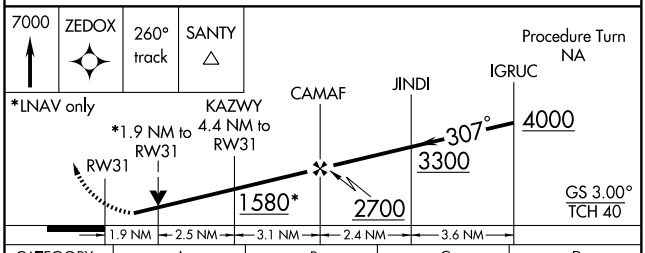
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
Baro-VNAV NA when using Norman Y. Mineta (KSJC) San Jose Intl altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).
When local altimeter setting not received, use Norman Y. Mineta (KSJC) San Jose Intl altimeter setting, and increase all DAs/MDAs 120 feet and all visibilities ½ mile.
VDP NA when using Norman Y. Mineta (KSJC) San Jose Intl altimeter setting.

MISSED APPROACH: Climb to 7000 direct ZEDOX and via 260° track to SANTY and hold, continue climb-in-hold to 7000.

AWOS-3	NORCAL APP CON	UNICOM
120.425	**124.525 348.675**	**123.0** (CTAF) L







CATEGORY	A	B	C	D
LPV DA	553-1¼ 323 (400-1¼)			NA
LNAV/VNAV DA	801-2 571 (600-2)			NA
LNAV MDA	880-1 650 (700-1)		880-1¾ 650 (700-1¾)	NA
CIRCLING	880-1 650 (700-1)		880-1¾ 650 (700-1¾)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

COPTER NDB RWY 32

NDB HGT	APCH CRS	Rwy Idg	570
209	295°	TDZE	1017
		Arpt Elev	1017

AL-3073 [USA]

TUSI AHP (KHGT)

NA

Procedure NA when Fort Hunter-Liggett altimeter setting not available.

MISSED APPROACH: Climbing left turn to 3400 direct HGT NDB and hold.

OAKLAND CENTER	RANGE CON/OPS
128.7 307.0	41.05 126.2 229.5

NOT FOR CIVIL USE

BIG SUR

9000
105°
(25.7)

IAF
HUNTER LIGGETT
209 HGT

1709

Descend to 3400 in holding pattern prior to commencing approach.

R-2513

115°

295°

5000
286°
(32.4)

PASO ROBLES

10 NM

MSA HGT 25 NM

150°
5700
7100
250°
020°
4900

ENROUTE FACILITIES

ELEV 1017

14
270-4.50
32
TDZE
1017

295° 3.0 NM from NDB

MIRL Rwys 14-32

3400
HGT

NDB
115°
3400
295°
295°
4.48°
3.0 NM

CATEGORY	COPTER			
H-32	1980-¾	963	(1000-¾)	

FAF to MAP 3.0 NM					
Knots	45	60	75	90	105
Min:Sec	4:00	3:00	2:24	2:00	1:43

SW-3, 22 OCT 2009 to 19 NOV 2009

HUNTER LIGGETT, CALIFORNIA

COPTER RNAV (GPS) RWY 32

APCH CRS	Rwy Idg	570
301°	TDZE	1017
	Arpt Elev	1017

AL-3073 (USA)

TUSI AHP (KHGT)

NA
Procedure NA when Fort Hunter-Liggett altimeter setting not available.
Limit Final and Missed Approach to 90 KIAS.

MISSED APPROACH: Climbing right turn to 6000 direct JOSUX and hold.

OAKLAND CENTER	RANGE CON/OPS
128.7 307.0	41.05 126.2 229.5

NOT FOR CIVIL USE

DME/DME RNP-0.3 NA

4000

4 NM

LUCAB

6000
230°
(7)

031°
211°

(MAP)
RW32

1339

(FAF)
PIXAE

(IAF)
JOSUX

4000
217°
(4)

6000

YATBU

2800
301°
(3)

1635

R-2513

2000

HILUX

4000
031°
(4)

WONGO

6000
075°
(13.3)

6000
(IAF)
ZOVAD

MSA RW 32 2.5 NM
7100

6000
011°
(16.2)

BLANC

ELEV 1017

6000

JOSUX

HILUX

4000

PIXAE

301°

YATBU

2800

RW32

2040

3.77°

1 NM

2 NM

14

570 x 50

32

TDZE
1017

301° 3.0 NM
from FAF

CATEGORY	COPTER		
LNAV MDA	1640-½	623	(700-½)

MIRL Rwys 14-32

HUNTER LIGGETT, CALIFORNIA

36°00'N-121°14'W

TUSI AHP (KHGT)

Orig 08297

COPTER RNAV (GPS) RWY 32

SW-3, 22 OCT 2009 to 19 NOV 2009

COPTER TACAN RWY 27

TACAN	NRS	APCH CRS	Rwy ldg	4999
Chan	29	255°	TDZE	23
			Arpt Elev	24

AL-307 [USN]

IMPERIAL BEACH NOLF (REAM FIELD) (KNRS)

▼ Use by tilt rotor aircraft not authorized.

MISSED APPROACH: Climb to 1600 via NRS R-075 to NRS TACAN, then via NRS R-270 to FOLTA and hold. Remain within 5.2 DME when established in holding.

ATIS ★	SOCAL APP CON	IMPERIAL BEACH TOWER ★	GND CON	ASOS
276.2	125.15 317.55	120.65 239.25	285.575	

RADAR REQUIRED

1350

IMPERIAL BEACH
Chan 29 NRS

Turn in holding required prior to crossing ZIPAD. Remain within 4.7 DME when established in holding.

507

FOLTA
NRS
2.5

R-270

090°

270°

256

189

075°

876

255°

R-075

739

UNITED STATES
MEXICO

(IAF) CESVI
JULAS NRS
NRS
1.5
1

RUMGE
NRS
3

ZIPAD
NRS
4

UNITED STATES
MEXICO

892

930

1345

5 NM

820

MSA NRS 25 NM

4700

195°

105°

5900

2000

285°

015°

5300

JULAS 1
NRS R-075
1900

075°

255°

Remain within 4.7 DME

RUMGE 3

ZIPAD NRS 4 R-075

TACAN

CESVI 1.5

CISAV .5

255°

1900

1600

860

VDA CESVI to thld

5.43°

TCH 50

1 NM

1.5 NM

1600 NRS R-075

NRS

NRS R-270

ELEV 24

66

2241 x 150

85

4999 x 340

27

TDZE 23

255° to TACAN

HIRL Rwy 9-27

CATEGORY	COPTER		
H-27	340-½	317	(400-½)
CIRCLING	NOT AUTHORIZED		

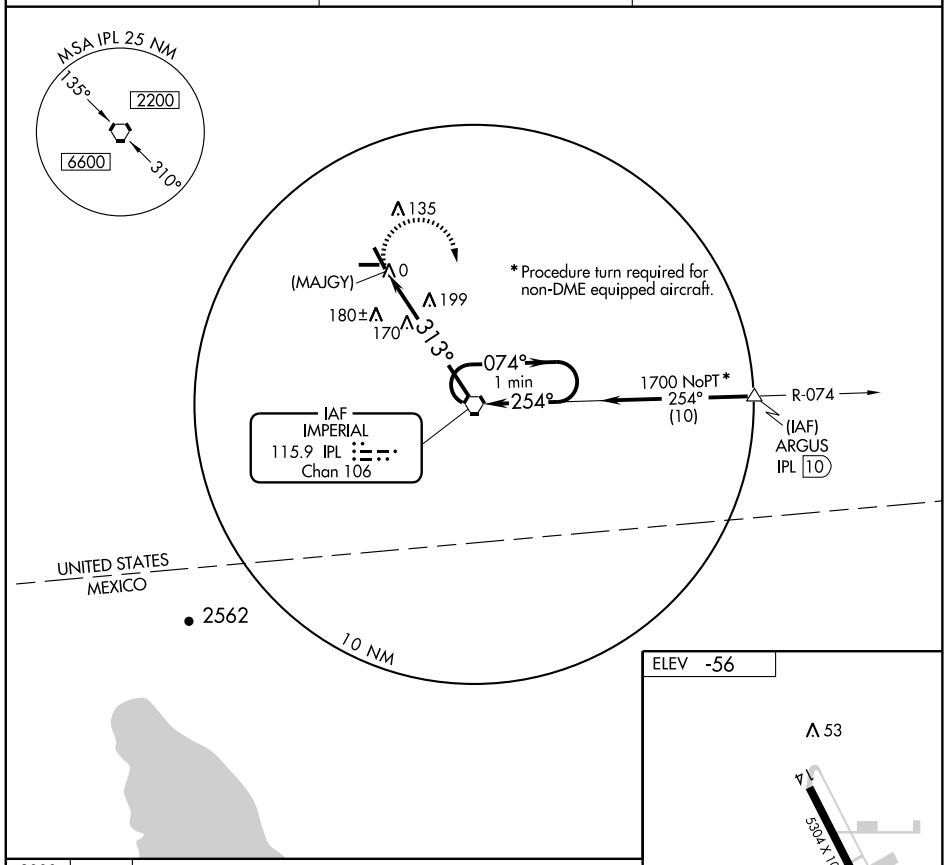
SW-3, 22 OCT 2009 to 19 NOV 2009

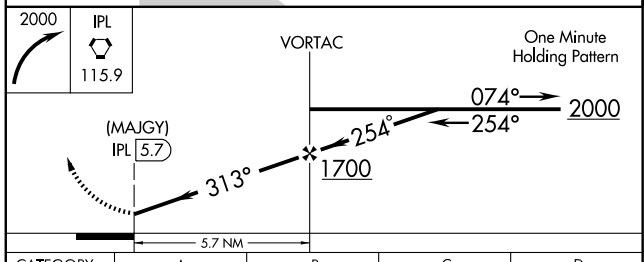
VORTAC IPL 115.9 Chan 106	APP CRS 313°	Rwy Idg N/A TDZE N/A Apt Elev -56

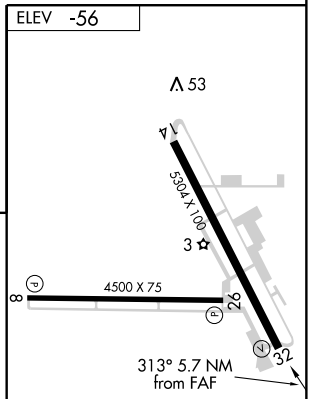
VOR or GPS-A
IMPERIAL COUNTY (IPL)

MISSED APPROACH: Climbing right turn to 2000 direct IPL VORTAC and hold.

ASOS	LOS ANGELES CENTER	UNICOM
132.175	128.6 291.7	122.7 (CTAF) L





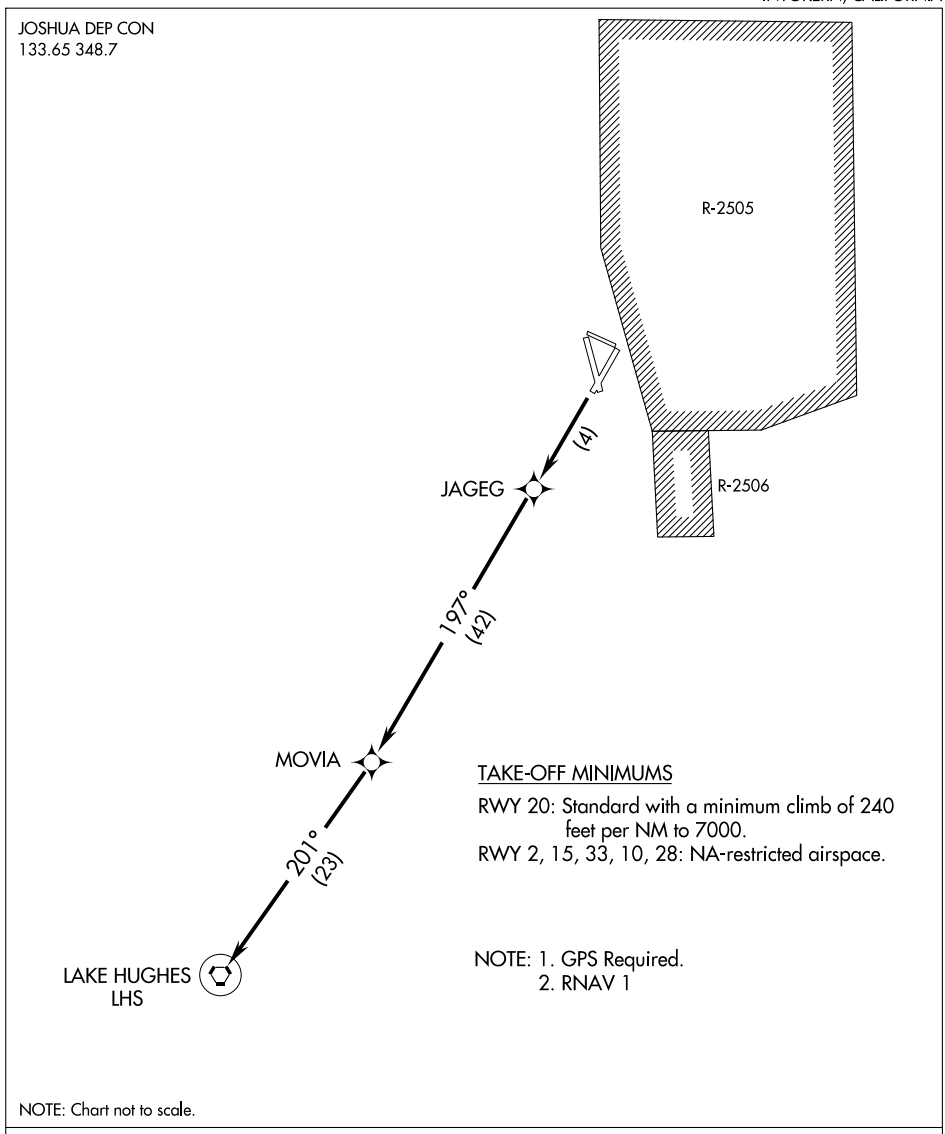


MIRL Rwys 8-26 and 14-32 L

CATEGORY	A	B	C	D
CIRCLING	560-1 616 (700-1)		560-1¾ 616 (700-1¾)	560-2 616 (700-2)

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

LAKE HUGHES TWO DEPARTURE (RNAV) (OBSTACLE)



SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 20: Climb direct JAGEG then continue climb to 8000 via 197° track to MOVIA and 201° track to LHS VORTAC. Thence via assigned route and altitude.

TAKE-OFF RUNWAYS 2, 33, 15, 10, and 28: NA.

APP CRS	Rwy Idg	6275
017°	TDZE	2442
	Apt Elev	2457

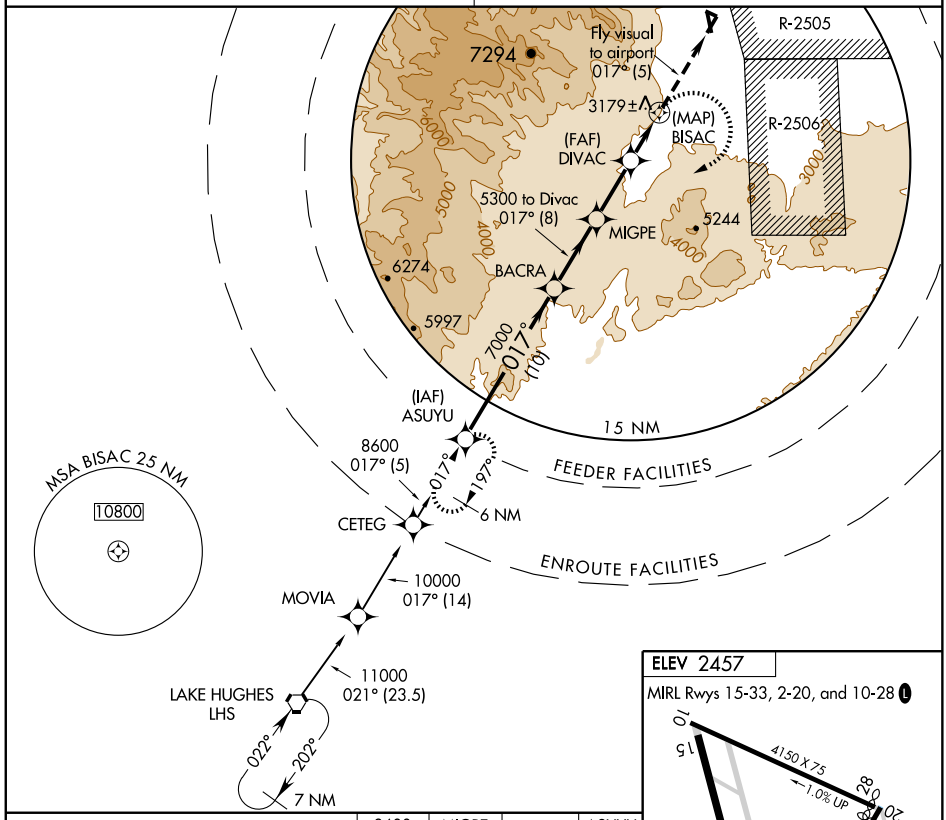
RNAV (GPS) Y RWY 2

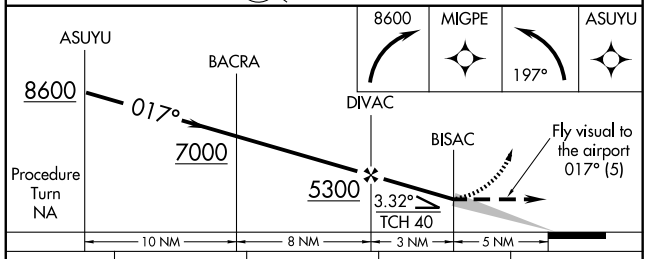
INYOKERN (IYK)

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Except for operators with approved weather reporting service, use NAS China Lake altimeter setting, if not available procedure NA. Procedure NA at night.

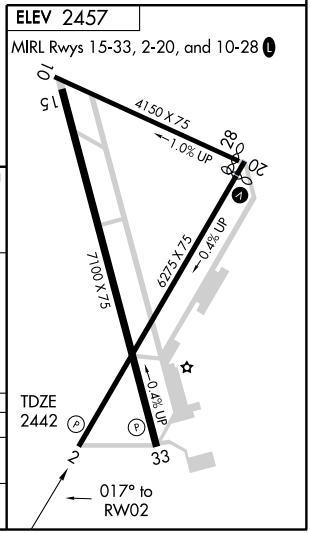
MISSED APPROACH: Climbing right turn to 8600 direct MIGPE WP then left turn via 197° track to ASUYU WP and hold.

JOSHUA APP CON	UNICOM
133.65 348.7	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	4100-2	1658 (1700-2)	4100-3 1658 (1700-3)	NA
CIRCLING	4100-2	1643 (1700-2)	4100-3 1643 (1700-3)	NA



SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS		
017°	Rwy Idg	6275
	TDZE	2442
	Apt Elev	2457

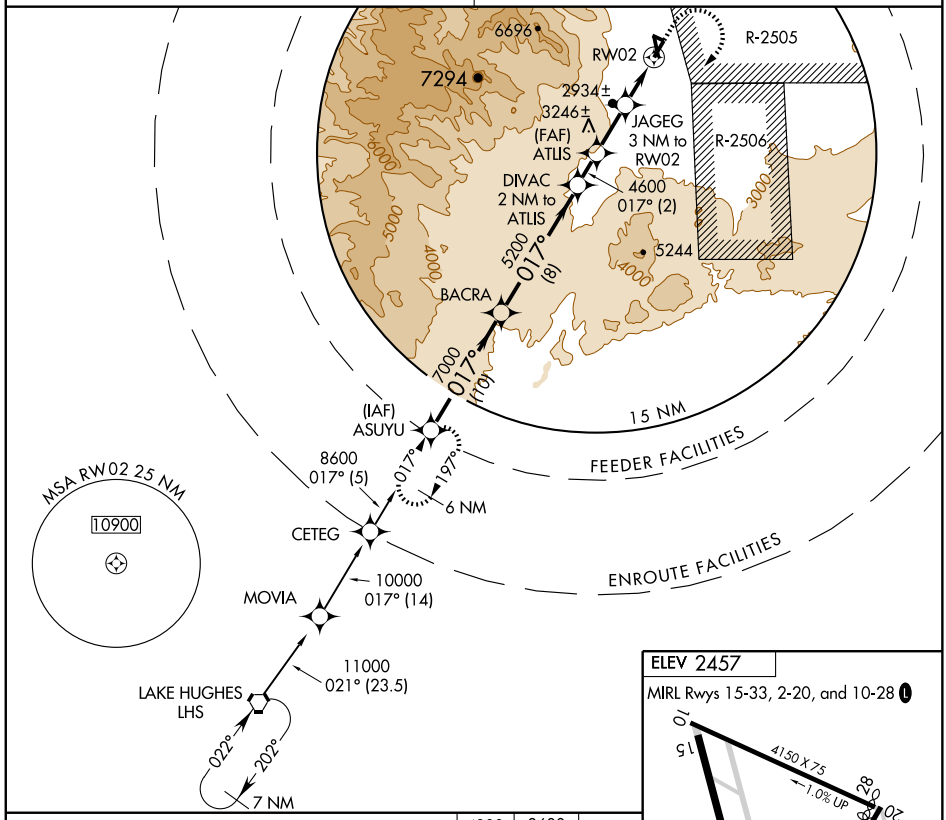
RNAV (GPS) Z RWY 2

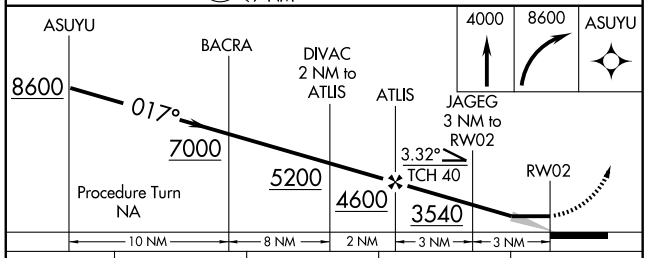
INYOKERN (IYK)

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Except for operators with approved weather reporting services, use NAS China Lake altimeter setting, if not available procedure NA. Procedure NA at night. Procedure NA when R-2505 or R-2506 active.

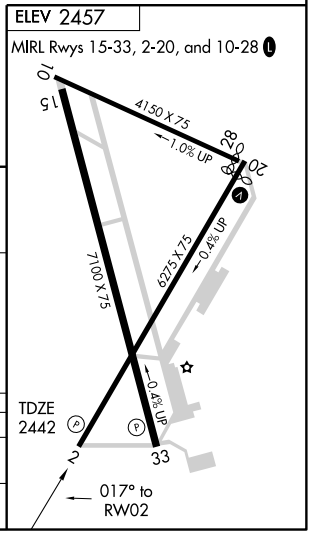
MISSED APPROACH: Climb to 4000 then climbing right turn to 8600 direct ASUYU WP and hold.

JOSHUA APP CON	UNICOM
133.65 348.7	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	3160-1	718 (800-1)	3160-2 718 (800-2)	NA
CIRCLING	3160-1	703 (800-1)	3160-2 703 (800-2)	NA



SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3401
006°	TDZE	1690
	Apt Elev	1690

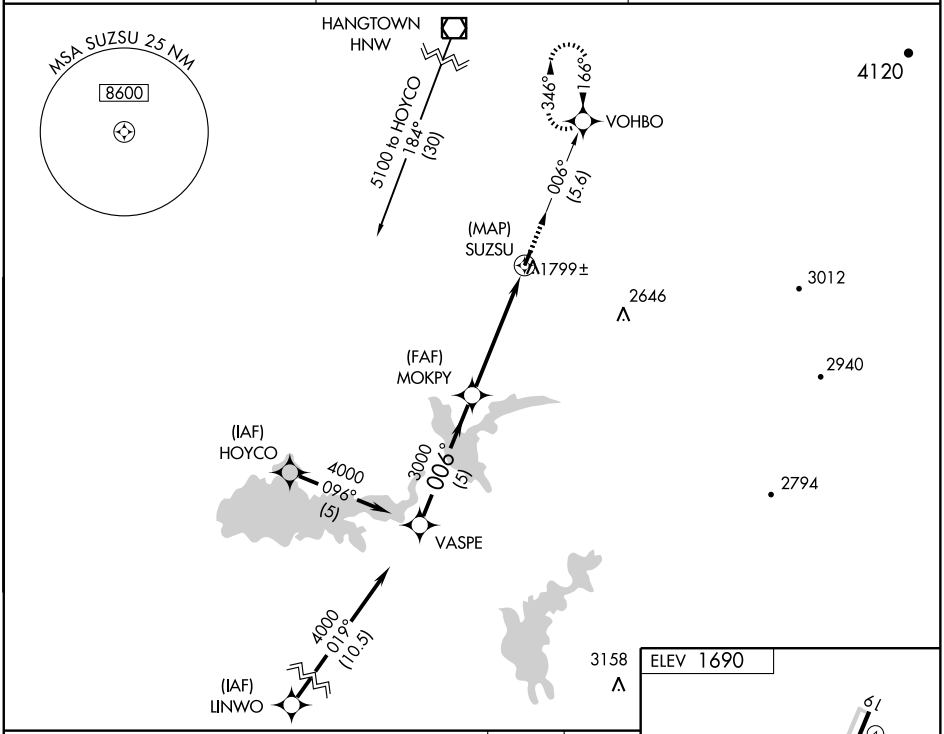
GPS RWY 1

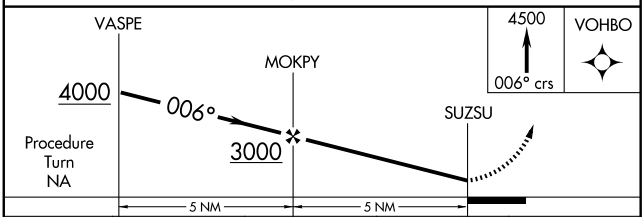
JACKSON/ WESTOVER FIELD AMADOR COUNTY(JAQ)

T NA If local altimeter not received, use Sacramento Executive altimeter setting.

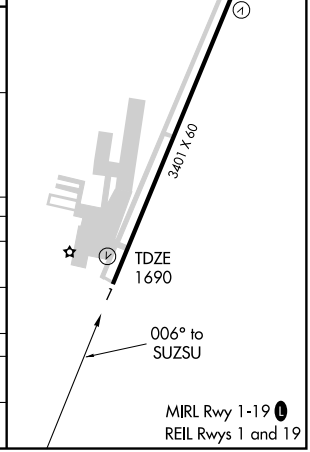
MISSED APPROACH: Climb to 4500 via 006° course to VOHBO WP and hold.

AWOS-3	NORCAL APP CON	UNICOM
121.125	125.1 363.2	123.075 (CTAF) L





CATEGORY	A	B	C	D
S-1	2060-1	370 (400-1)	NA	
CIRCLING	2200-1	510 (600-1)	NA	
SACRAMENTO EXECUTIVE ALTIMETER SETTING MINIMUMS				
S-1	2380-1	690 (700-1)	NA	
CIRCLING	2520-1 830 (900-1)	2520-1¼ 830 (900-1¼)	NA	



SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC LIN	APP CRS	Rwy Idg	3401
114.8	012°	TDZE	1690
Chan 95		Apt Elev	1690

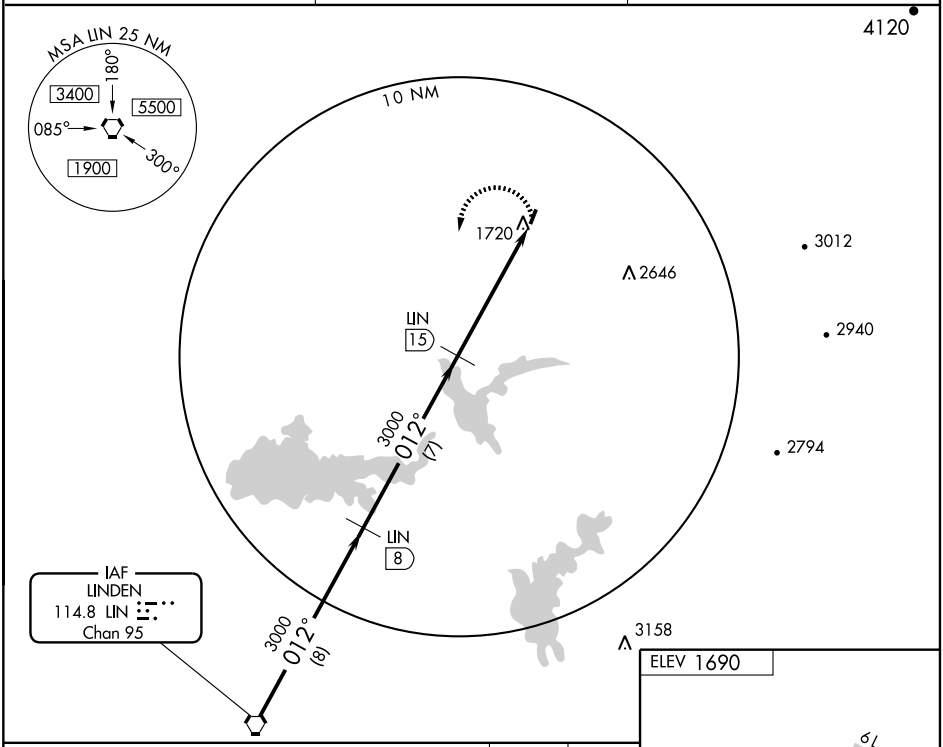
VOR/DME RWY 1

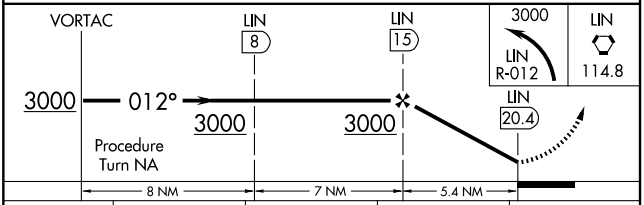
JACKSON/ WESTOVER FIELD AMADOR COUNTY(JAQ)

T ANA If local altimeter not received, use Sacramento Executive altimeter setting.

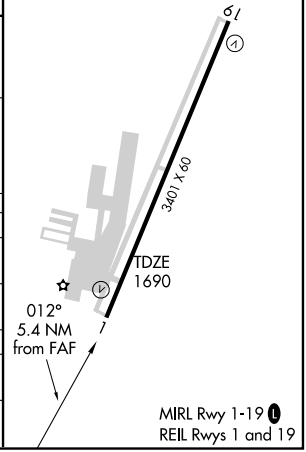
MISSED APPROACH: Climbing left turn to 3000 via LIN R-012 to LIN VORTAC.

AWOS-3	NORCAL APP CON	UNICOM
121.125	125.1 363.2	123.075 (CTAF) L





CATEGORY	A	B	C	D
S-1	2080-1 390 (400-1)	2080-1¼ 390 (400-1¼)	NA	
CIRCLING	2200-1 510 (600-1)	2200-1¼ 510 (600-1¼)	NA	
SACRAMENTO EXECUTIVE ALTIMETER SETTING MINIMUMS				
S-1	2380-1 690 (700-1)	2380-1¼ 690 (700-1¼)	NA	
CIRCLING	2520-1 830 (900-1)	2520-1¼ 830 (900-1¼)	NA	



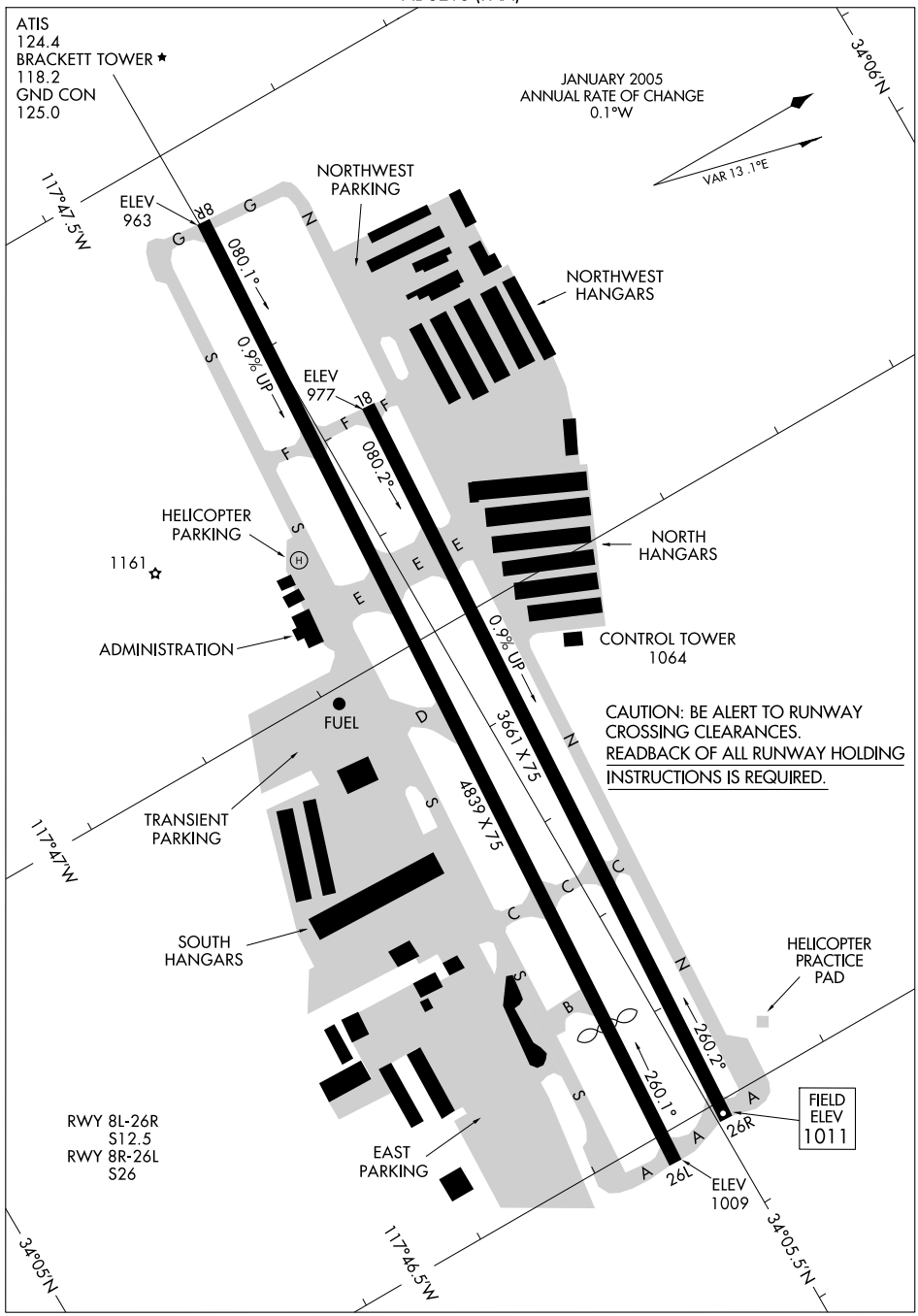
SW-2, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-5218 (FAA)

LA VERNE/BRACKETT FIELD (POC)
LA VERNE, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

LA VERNE, CALIFORNIA AL-5218 (FAA)

LOC I-POC	APP CRS	Rwy Idg	4151
110.5	259°	TDZE	1002
		Apt Elev	1011

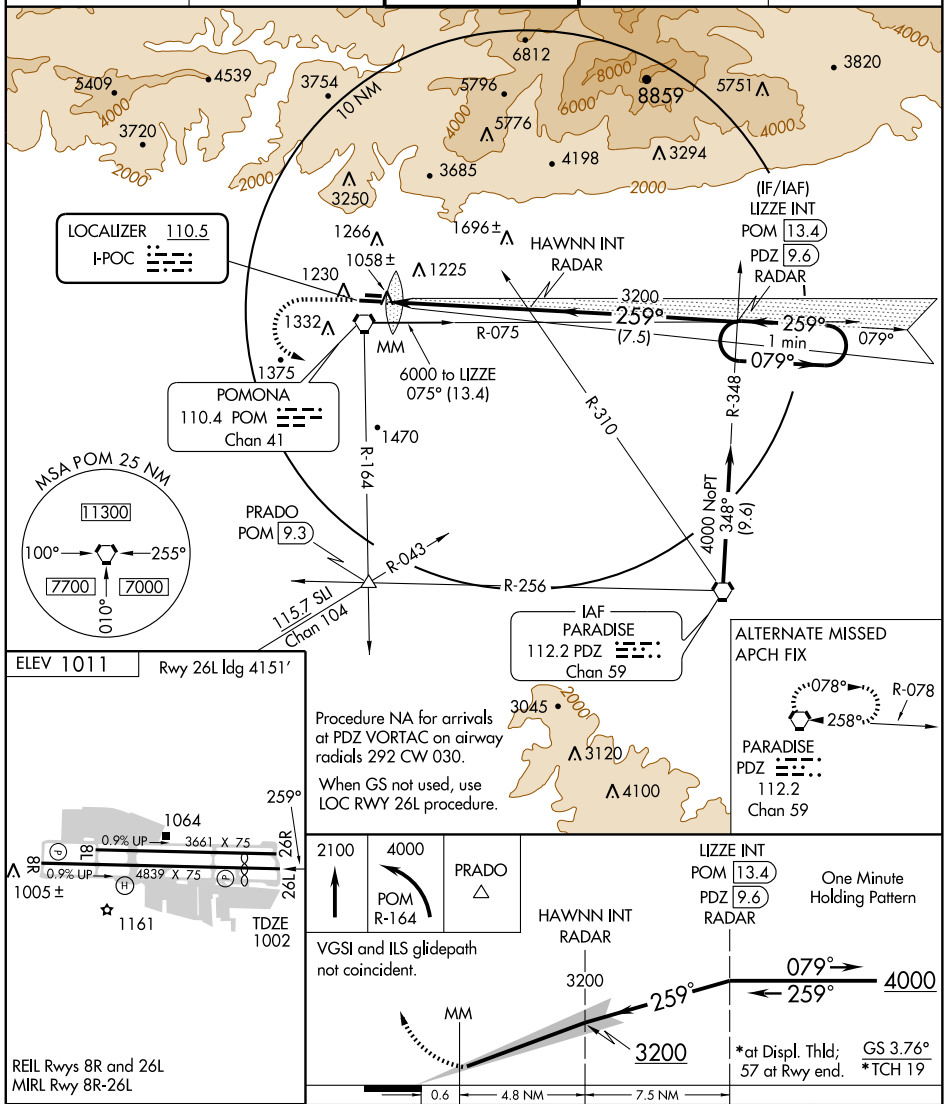
ILS RWY 26L

LA VERNE/ BRACKETT FIELD (POC)

Visibility reduction by helicopters NA.
When local altimeter setting not received, use Ontario Intl altimeter setting and increase DA to 1363.

MISSED APPROACH: Climb to 2100, then climbing left turn to 4000 via POM VORTAC R-164 to PRADO INT/POM 9.3 DME.

ATIS	SOCAL APP CON	BRACKETT TOWER ★	GND CON	UNICOM
124.4	125.5 349.0	118.2 (CTAF)	125.0	122.95



ELEV 1011 Rwy 26L Idg 4151′

REIL Rwys 8R and 26L
MIRL Rwy 8R-26L

2100	4000	PRADO
	POM R-164	△

VGSI and ILS glidepath not coincident.

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-ILS 26L	1332-1 330 (400-1)		NA	

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-POC	APP CRS	Rwy Idg	4151
110.5	259°	TDZE	1002
		Apt Elev	1011

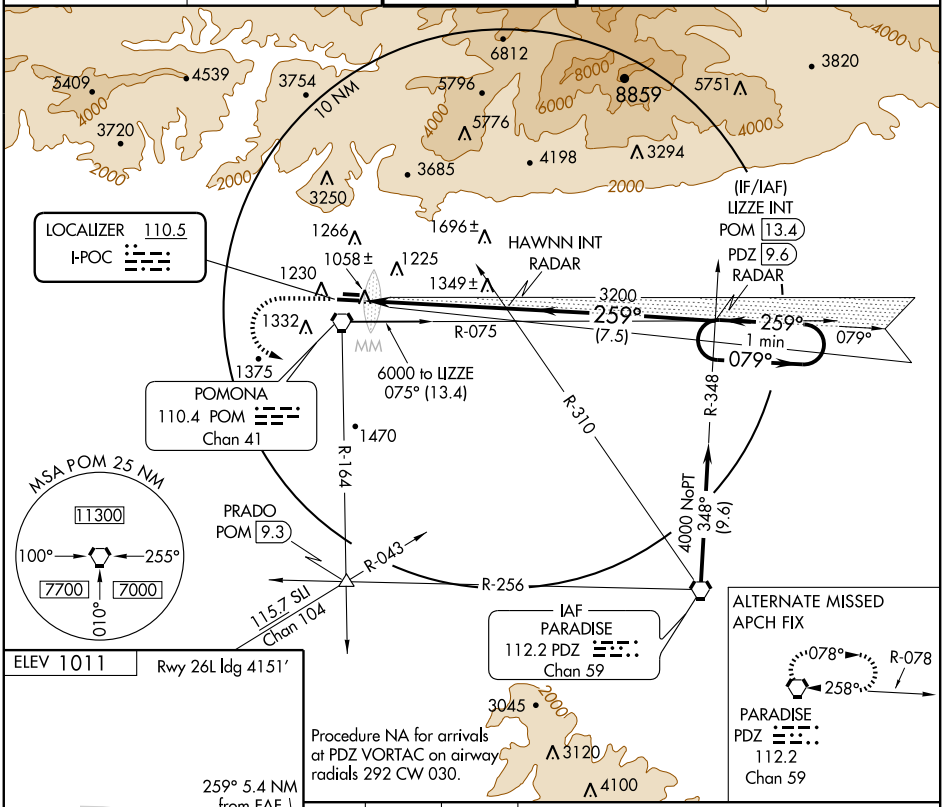
LOC RWY 26L

LA VERNE/BRACKETT FIELD (POC)

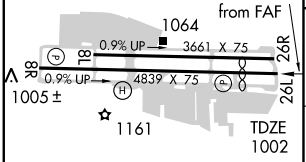
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Ontario Intl altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 2100 then climbing left turn to 4000 via POM VORTAC R-164 to PRADO INT/POM 9.3 DME.

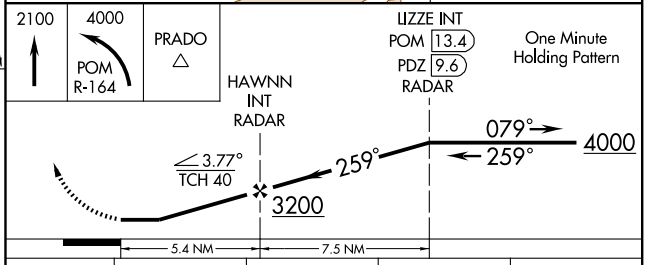
ATIS	SOCAL APP CON	BRACKETT TOWER★	GND CON	UNICOM
124.4	125.5 349.0	118.2 (CTAF)	125.0	122.95



ELEV 1011 Rwy 26L Idg 4151′



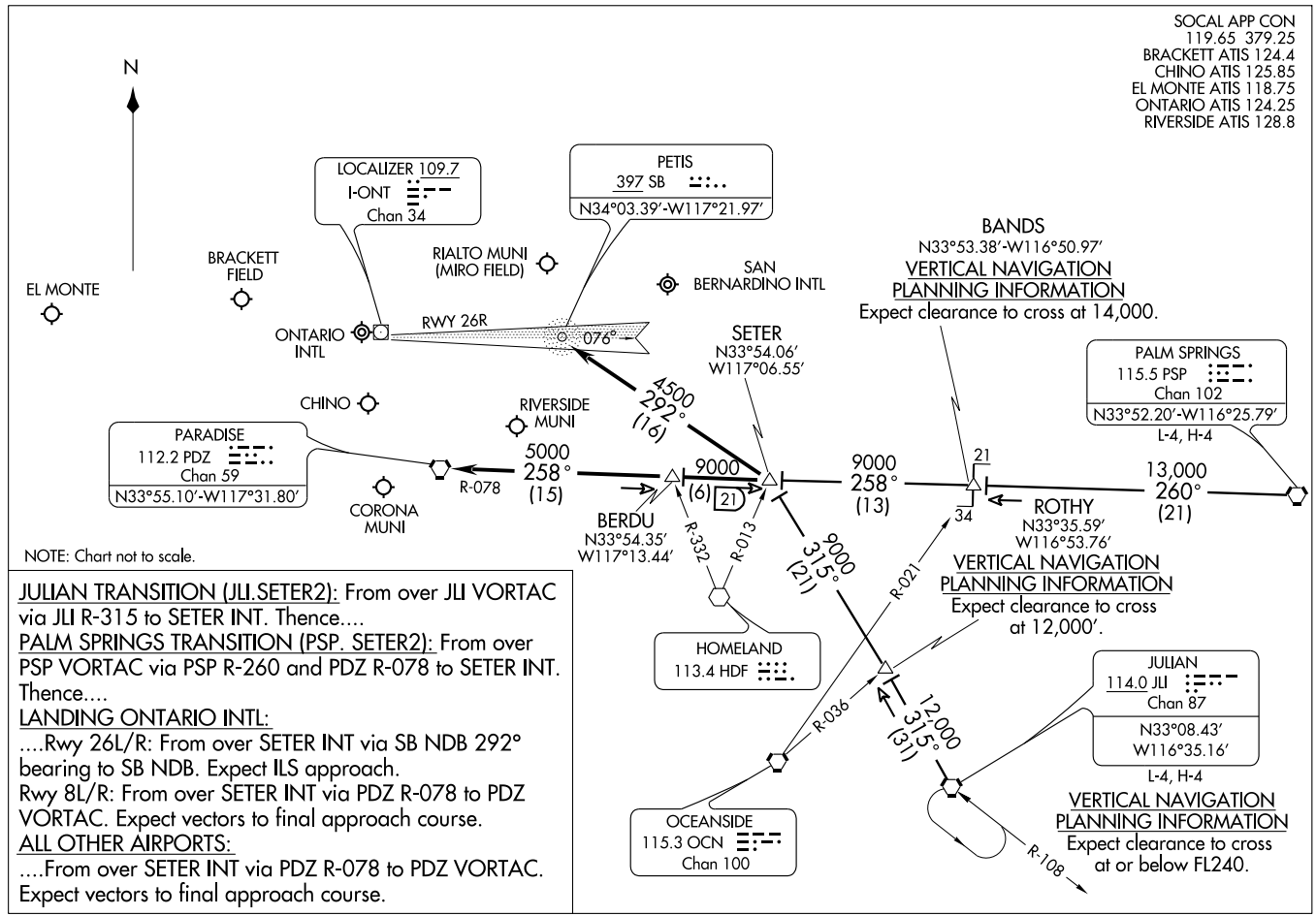
REIL Rwys 8R and 26L
MIRL Rwy 8R-26L



FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
S-26L	1600-1 598 (600-1)		NA	
CIRCLING	1680-1 669 (700-1)		NA	

SW-3, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

VORTAC POM	APP CRS	Rwy Idg	N/A
110.4	344°	TDZE	N/A
Chan 41		Apt Elev	1011

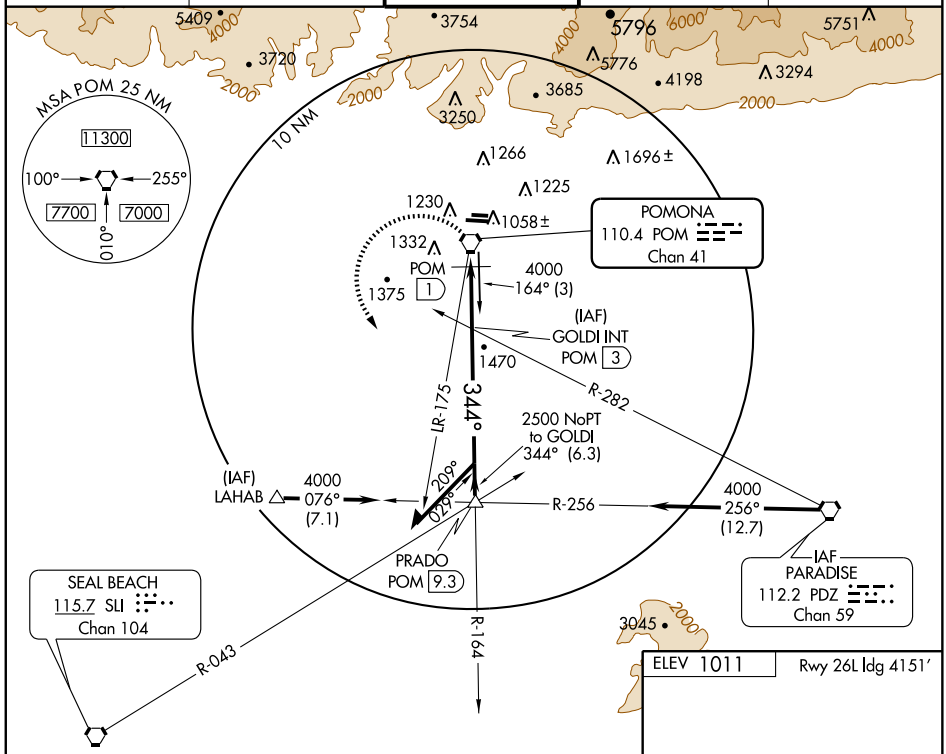
VOR or GPS-A

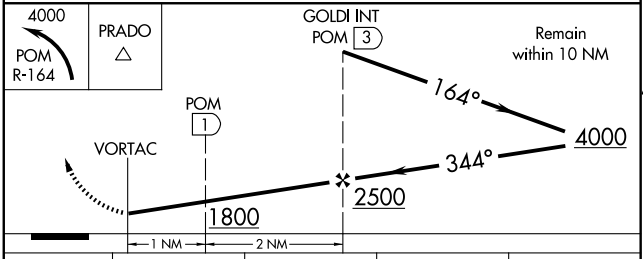
LA VERNE/BRACKETT FIELD (POC)

When local altimeter setting not received, use Ontario Intl altimeter setting and increase all MDA 40 feet and visibility Cat. C ¼ mile.

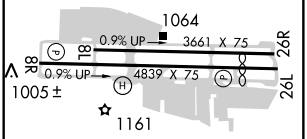
MISSED APPROACH: Climbing left turn to 4000 via POM R-164 to PRADO Int.

ATIS	SOCAL APP CON	BRACKETT TOWER ★	GND CON	UNICOM
124.4	125.5 349.0	118.2 (CTAF)	125.0	122.95





ELEV 1011 Rwy 26L ldg 4151′

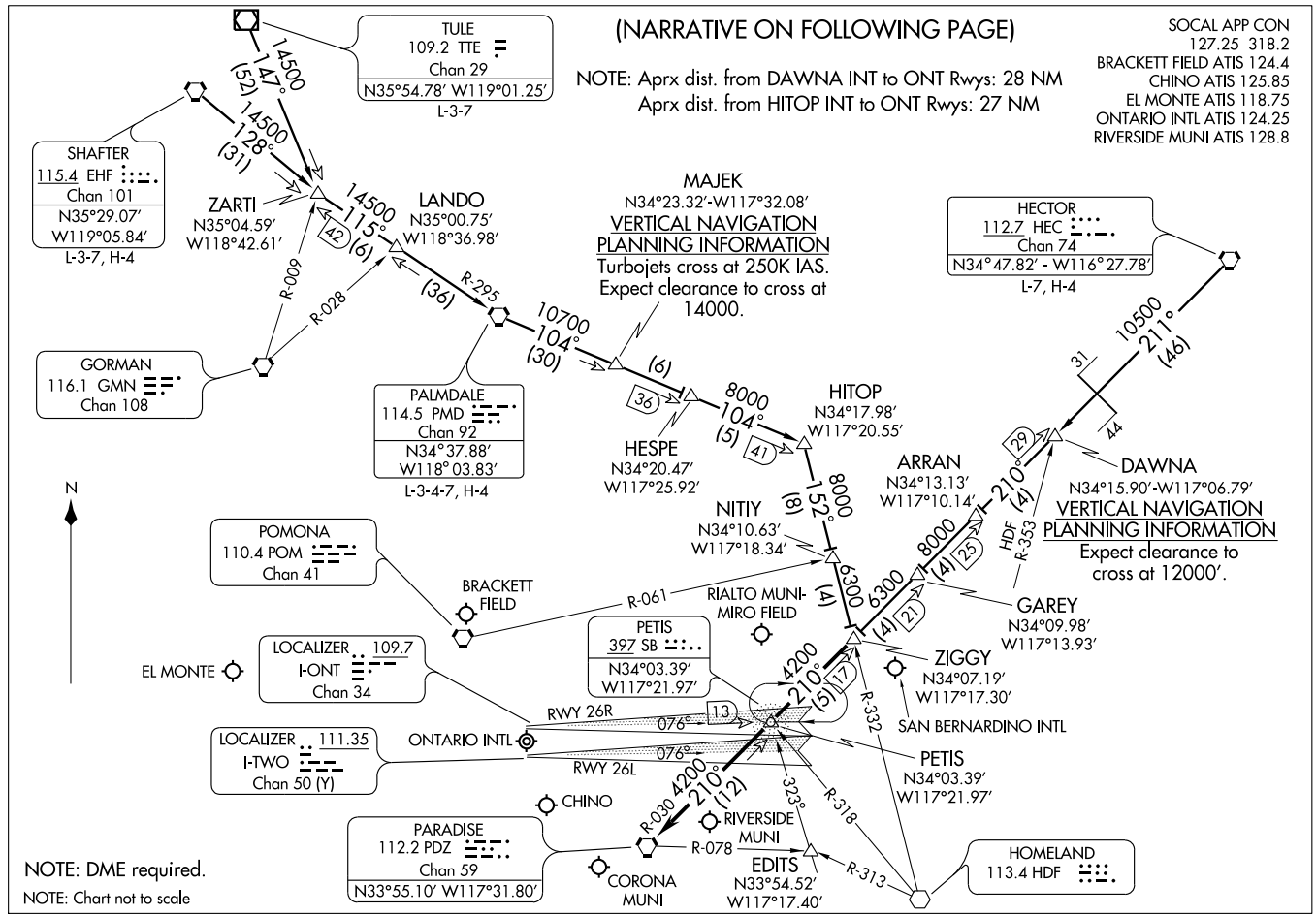


REIL Rwys 8R and 26L
MIRL Rwy 8R-26L

CATEGORY	A	B	C	D
CIRCLING	1800-1 789 (800-1)	1800-1¼ 789 (800-1¼)	1800-2¼ 789 (800-2¼)	NA
DME MINIMUMS				
CIRCLING	1640-1 629 (700-1)		1680-1¾ 669 (700-1¾)	NA

Knots	60	90	120	150	180
Min:Sec					

SW-3, 22 OCT 2009 to 19 NOV 2009



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009

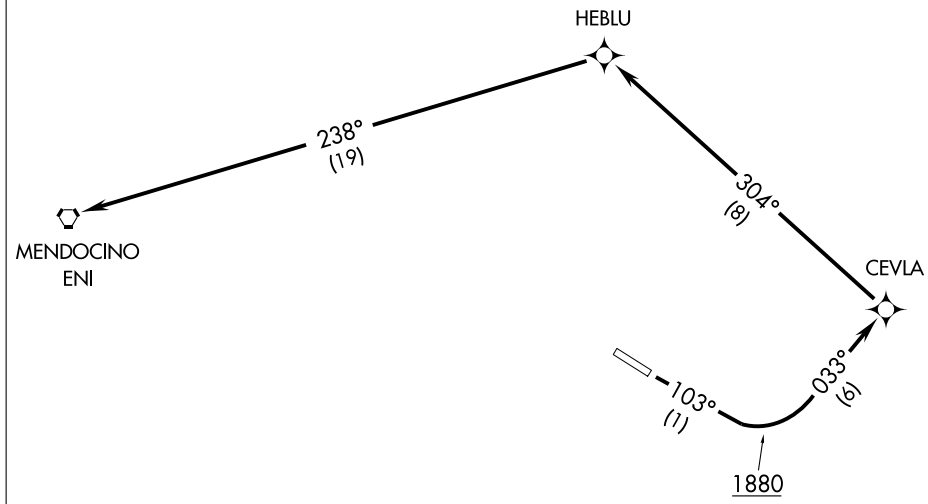
LAKEPORT TWO DEPARTURE (RNAV)

OAKLAND CENTER
127.8 353.5
AWOS-2
118.35

TAKE-OFF MINIMUMS
Rwy 10: Standard with minimum climb of 496′ per NM to 4500.
Rwy 28: NA- Rapidly rising terrain.

NOTE: TAKE-OFF Rwy 10: Do not exceed 175 knots until passing HEBLU.

NOTE: 1. GPS Required.
2. RNAV 1.



TAKE-OFF OBSTACLE NOTES

Rwy 10: Vehicle on road 347′ from DER, 7′ right of centerline, 15′ AGL/1394′ MSL.
Trees beginning 280′ from DER, 201′ left of centerline, up to 100′ AGL/1479′ MSL.
Trees beginning 494′ from DER, 219′ right of centerline, up to 100′ AGL/1479′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 10: Climb heading 103° to 1880, then climb to 6000 on 033° course to CEVLA, then via 304° track to HEBLU, then via 238° track to ENI VORTAC, thence . . . .

. . . . via assigned route, expect clearance to filed altitude 10 minutes after departure.

LAKEPORT, CALIFORNIA

AL-6939 (FAA)

APP CRS	Rwy Idg	N/A
164°	TDZE	N/A
	Apt Elev	1379

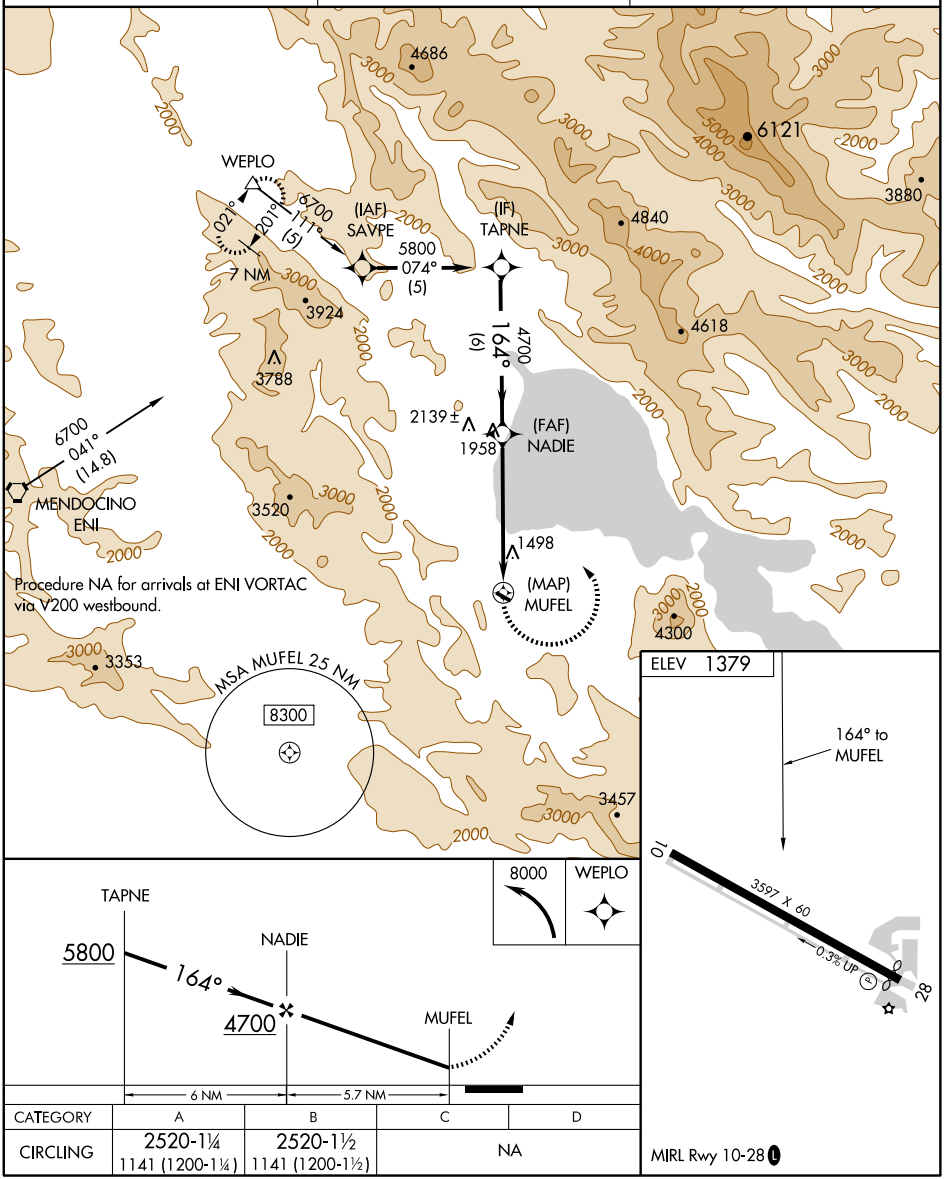
RNAV (GPS)-A

LAKEPORT/ LAMPSON FIELD (102)

Circling NA south of Rwy 10 and 28. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Ukiah altimeter setting and increase all MDA 560 feet.

MISSED APPROACH: Climbing left turn to 8000 direct WEPLO and hold, continue climb-in-hold to 8000.

AWOS-2	OAKLAND CENTER	UNICOM
118.35	127.8 353.5	122.8 (CTAF) L



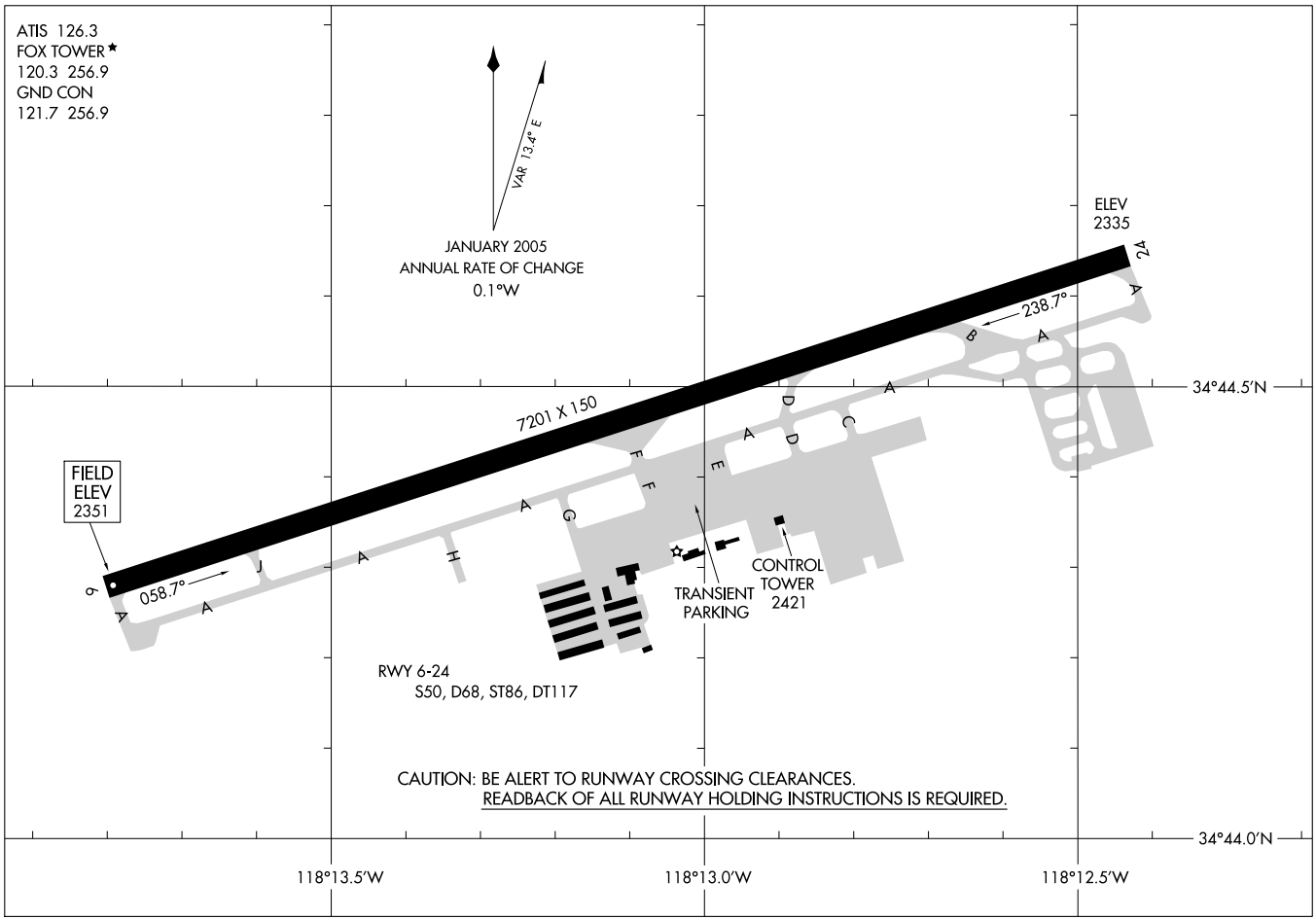
CATEGORY	A	B	C	D
CIRCLING	2520-1¼ 1141 (1200-1¼)	2520-1½ 1141 (1200-1½)	NA	

MIRL Rwy 10-28 L

SW-2, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

LANCASTER/ GENERAL WILLIAM J. FOX AIRFIELD (WJF)
AL-5065 (FAA)
LANCASTER, CALIFORNIA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NDB GWF	APP CRS	Rwy Idg	N/A
282	113°	TDZE	N/A
		Apt Elev	2351

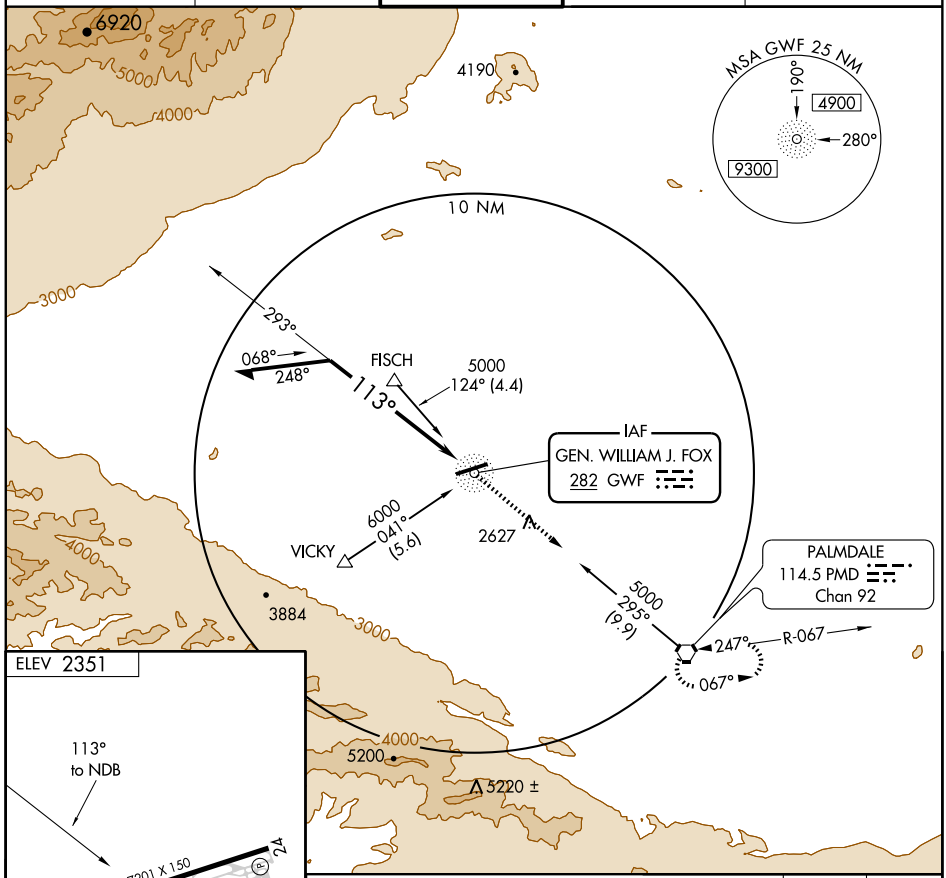
NDB-C

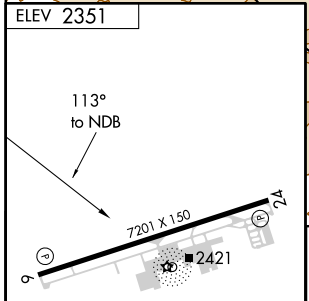
LANCASTER/GENERAL WILLIAM J. FOX AIRFIELD (WJF)

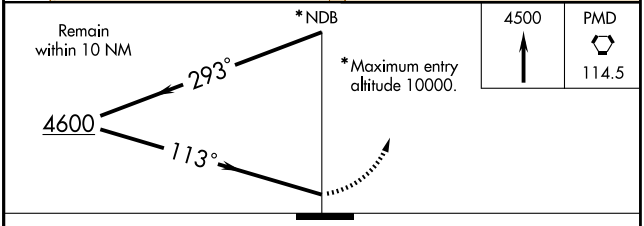
NA

MISSED APPROACH: Climb to 4500 direct PMD VORTAC and hold.

ATIS	JOSHUA APP CON	FOX TOWER ★	GND CON	UNICOM
126.3	126.1 290.3	120.3 (CTAF) 256.9	121.7 256.9	122.95







CATEGORY	A	B	C	D
CIRCLING	3100-1 749 (800-1)	3100-1¼ 749 (800-1¼)	3100-2¼ 749 (800-2¼)	3100-2½ 749 (800-2½)

REIL Rwys 6 and 24
MIRL Rwy 6-24

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS CH 93702 W06A	APP CRS 057°	Rwy Idg 7201 TDZE 2351 Apt Elev 2351

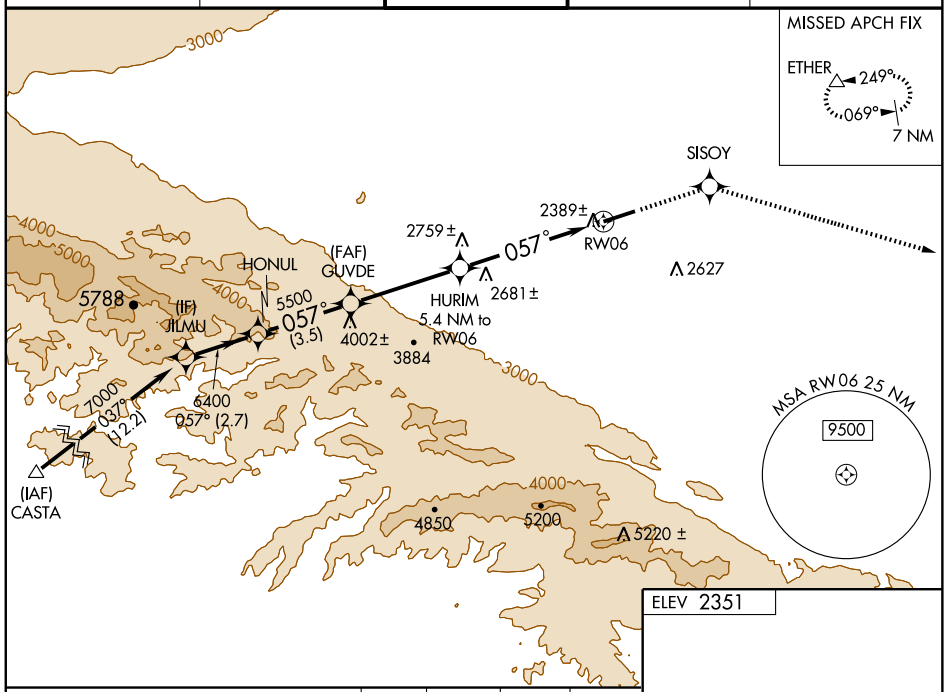
RNAV (GPS) RWY 6

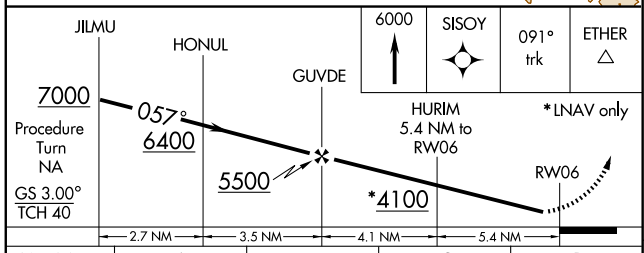
LANCASTER/ GENERAL WILLIAM J. FOX AIRFIELD (WJF)

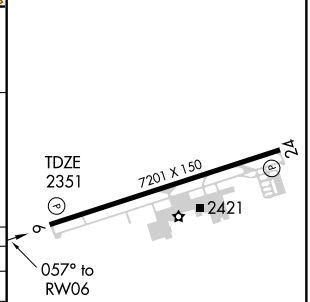
When VGSI inoperative, straight-in/circling Rwy 6 procedure NA at night.
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 45°C (113°F).
If local altimeter setting not received, use Palmdale altimeter setting and increase all DA/MDAs 60 feet.
Baro-VNAV NA when using Palmdale altimeter setting.

MISSED APPROACH: Climb to 6000 direct SISOY and via 091° track to ETHER and hold.

ATIS	JOSHUA APP CON	FOX TOWER ★	GND CON	UNICOM
126.3	126.1 290.3	120.3 (CTAF) 256.9	121.7 256.9	122.95







CATEGORY	A	B	C	D
LPV DA		2601-1	250 (300-1)	
LNAV/ VNAV DA		2649-1	298 (300-1)	
LNAV MDA	2940-1	589 (600-1)	2940-1½ 589 (600-1½)	2940-1¾ 589 (600-1¾)
CIRCLING	2940-1	589 (600-1)	2940-1½ 589 (600-1½)	2940-2 589 (600-2)

REIL Rwys 6 and 24
MIRL Rwy 6-24

SW-3, 22 OCT 2009 to 19 NOV 2009

LANCASTER, CALIFORNIA AL-5065 (FAA)

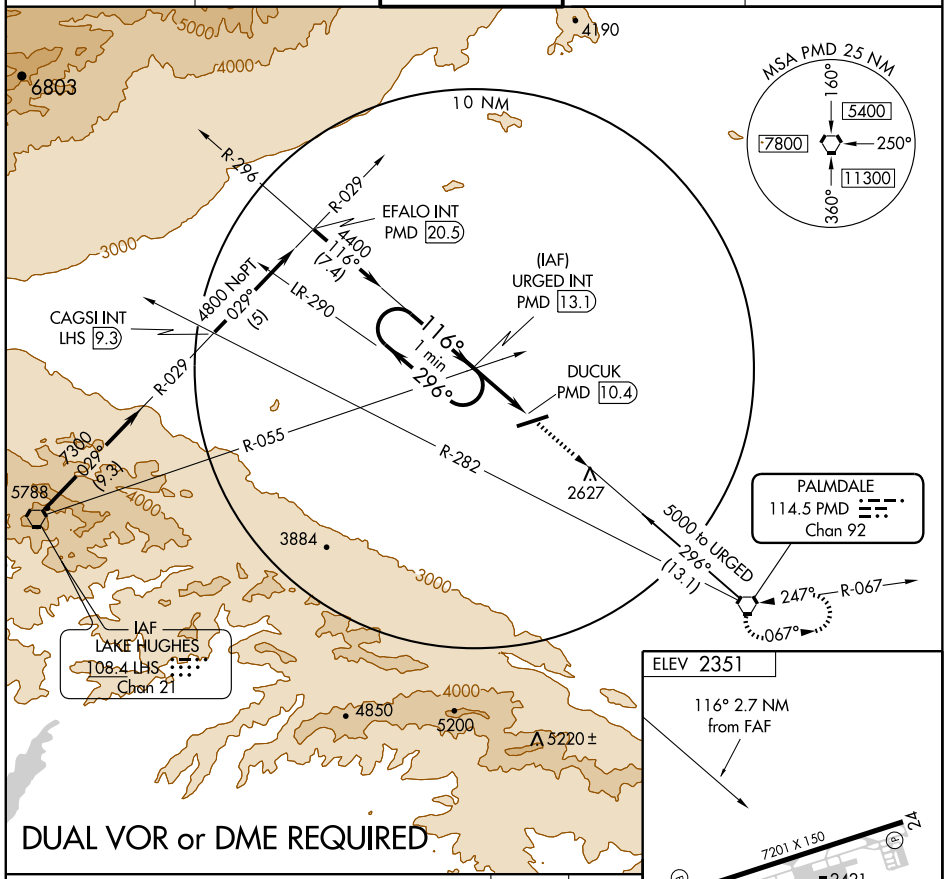
VORTAC PMD 114.5 Chan 92	APP CRS 116°	Rwy Idg N/A TDZE N/A Apt Elev 2351

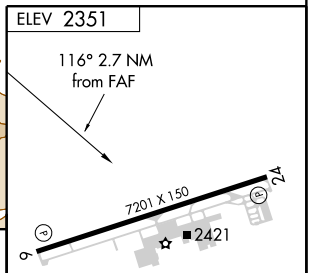
VOR-B

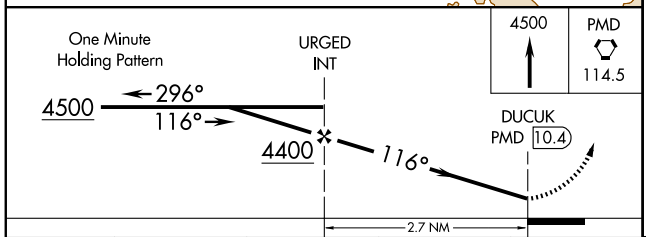
LANCASTER/GENERAL WILLIAM J. FOX AIRFIELD (WJF)

MISSED APPROACH: Climb to 4500 direct PMD VORTAC and hold.

ATIS 126.3	JOSHUA APP CON 126.1 290.3	FOX TOWER ★ 120.3 (CTAF) 256.9	GND CON 121.7 256.9	UNICOM 122.95







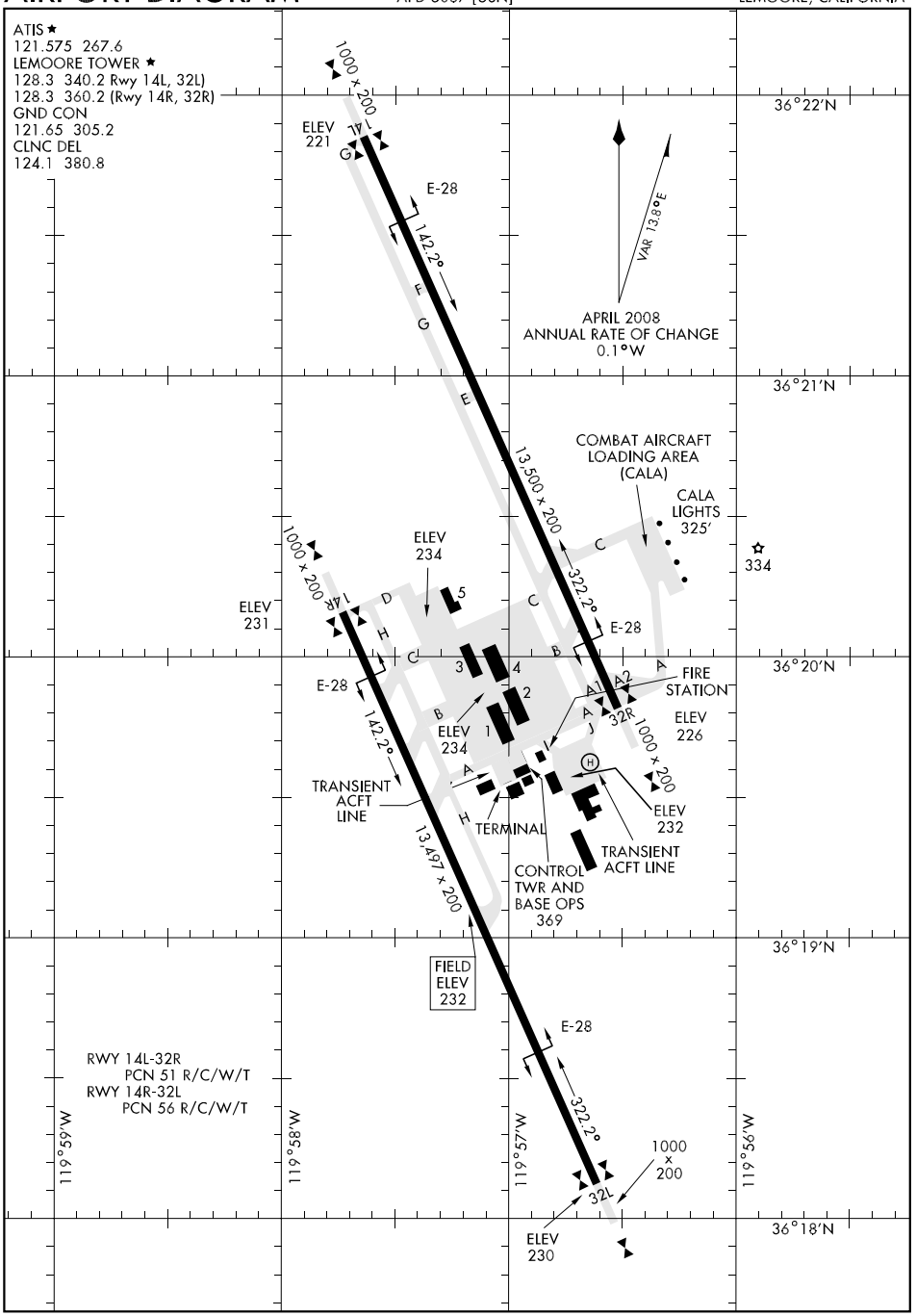
REIL Rwys 6 and 24
MIRL Rwy 6-24

CATEGORY	A	B	C	D
CIRCLING	3320-1¼ 969 (1000-1¼)	3320-1½ 969 (1000-1½)	3320-3 969 (1000-3)	

FAF to MAP 2.7 NM

Knots	60	90	120	150	180
Min:Sec	2:42	1:48	1:21	1:05	0:54

SW-3, 22 OCT 2009 to 19 NOV 2009



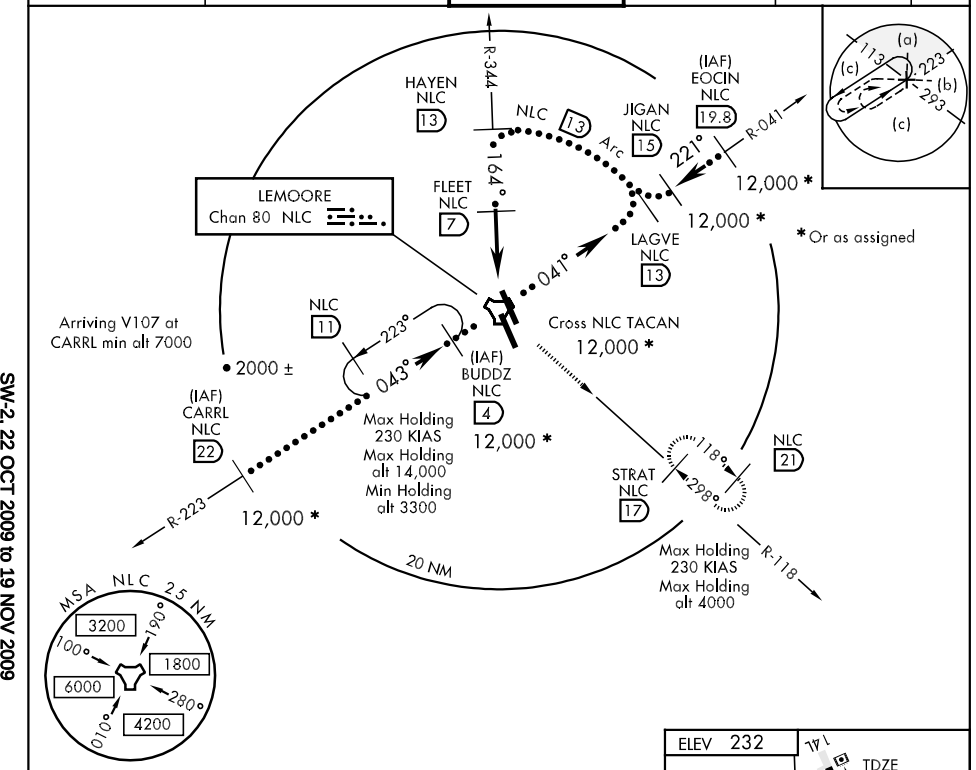
SW-2, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 14L

TACAN NLC Chan 80	APCH CRS 164°	Rwy ldg 13,500 TDZE 222 Arpt Elev 232	JAL-5067 [USN]	LEMOORE NAS (REEVES FIELD) (KNLC)

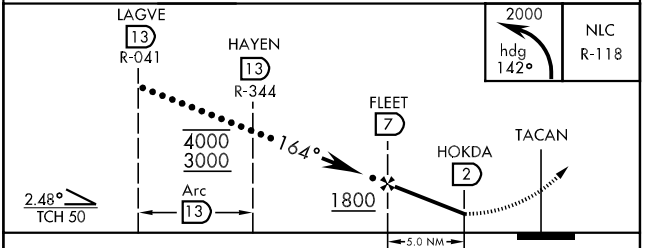
MISSED APPROACH: Climbing left turn to 2000 via heading 142°, intercept NLC R-118 to STRAT and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/ PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 340.2	121.65 305.2	124.1 380.8	

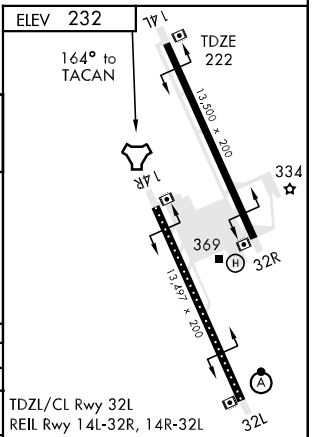


SW-2, 22 OCT 2009 to 19 NOV 2009

EMERG SAFE ALT 100 NM 16,500



CATEGORY	C	D	E
S-14L	520-1	298	(300-1)
CIRCLING	700-1½ 468 (500-1½)	800-2 568	(600-2)
S-PAR 14L	322- ½	100	(100-½) GS 3.0°

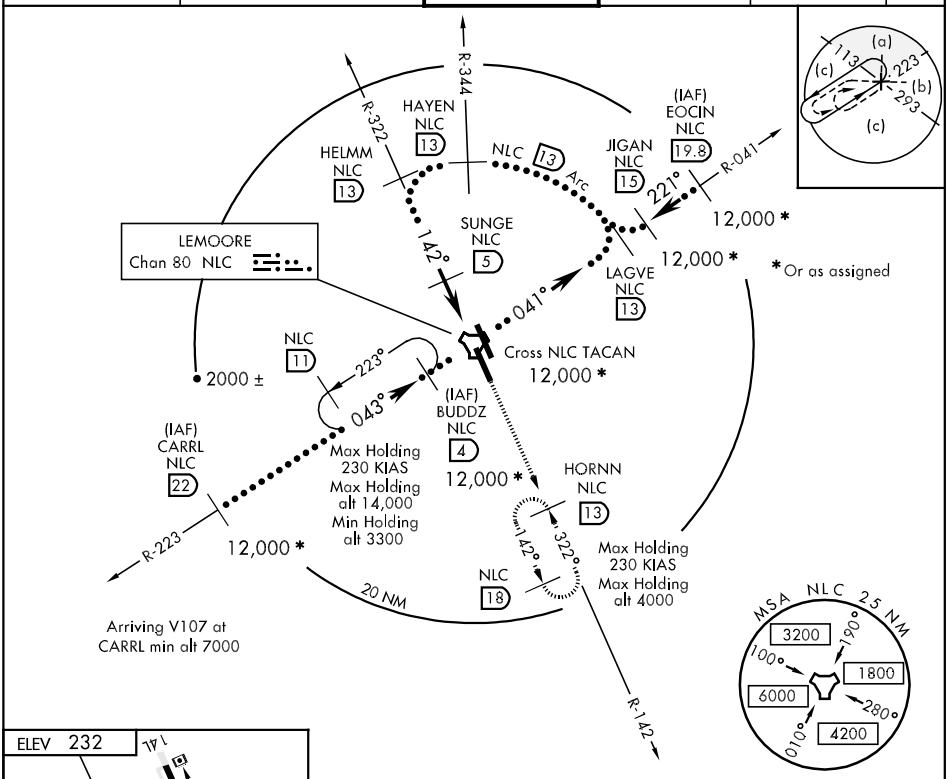


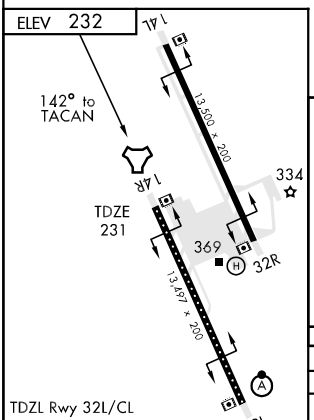
HI-TACAN RWY 14R

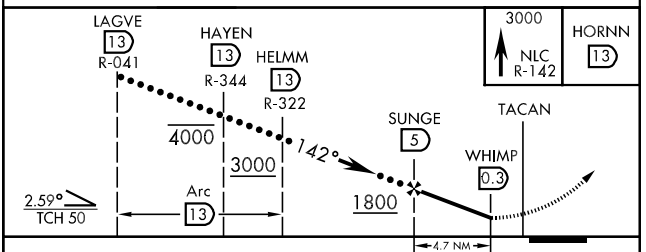
TACAN NLC Chan 80	APCH CRS 142°	Rwy ldg 13,497 TDZE 231 Arpt Elev 232	JAL-5067 [USN]	LEMOORE NAS (REEVES FIELD) (KNLC)

MISSED APPROACH: Climb to 3000 via R-142 to HORNN and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 360.2	121.65 305.2	124.1 380.8	







CATEGORY	C	D	E
S-14R	520-1	289	(300-1)
CIRCLING	700-1½ 468 (500-1½)	800-2	568 (600-2)
S-PAR 14R	331-½ 100	(100-½)	GS 3.0°

LEMOORE, CALIFORNIA

HI-TACAN Y RWY 32L

TACAN NLC Chan 80	APCH CRS 322°	Rwy ldg 13,497 TDZE 230 Arpt Elev 232

JAL-5067 [USN]

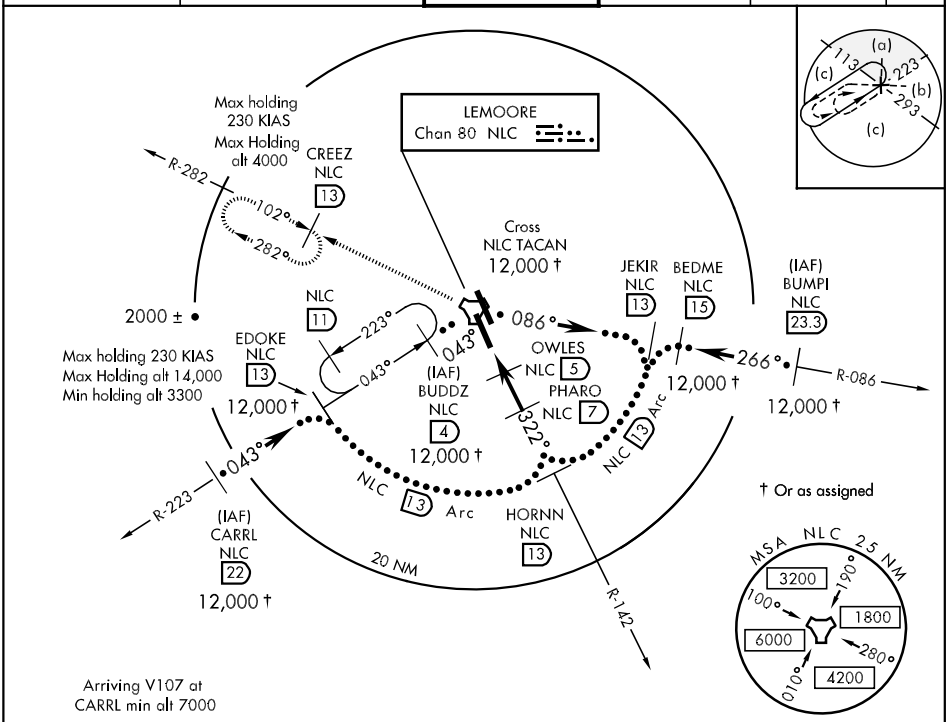
LEMOORE NAS (REEVES FIELD) (KNLC)

▼ * When ALS inop, increase CAT CDE RVR to 50 and vis to 1 mile.
** When ALS inop, increase CAT CDE RVR to 24 and vis to ½ mile.

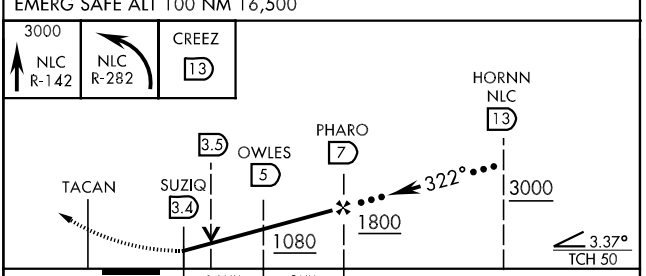
ALSF-2

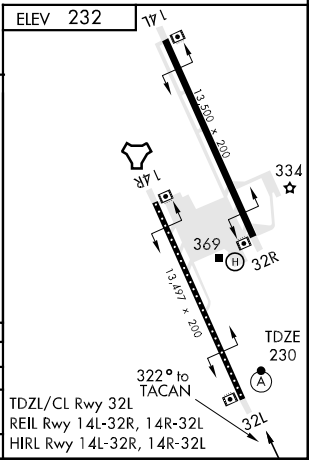
MISSED APPROACH: Climb to 3000 via R-142 to NLC TACAN, then via R-282 to CREEZ and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 340.2	121.65 305.2	124.1 380.8	



EMERG SAFE ALT 100 NM 16,500





CATEGORY	C	D	E
S-32L *	540/40	310	(400-¾)
CIRCLING	700-1½ 468 (500-1½)	800-2	568 (600-2)
S-PAR 32L**	330/16	100	(100-¼) GS 3.0°

LEMOORE, CALIFORNIA 36°20'N-119°57'W LEMOORE NAS (REEVES FIELD) (KNLC)

Amdt 1 08129

HI-TACAN Y RWY 32L

SW-2, 22 OCT 2009 to 19 NOV 2009

HI-TACAN Z RWY 32L

TACAN NLC Chan 80	APCH CRS 322°	Rwy ldg 13,497 TDZE 230 Arpt Elev 232

JAL-5067 [USN]

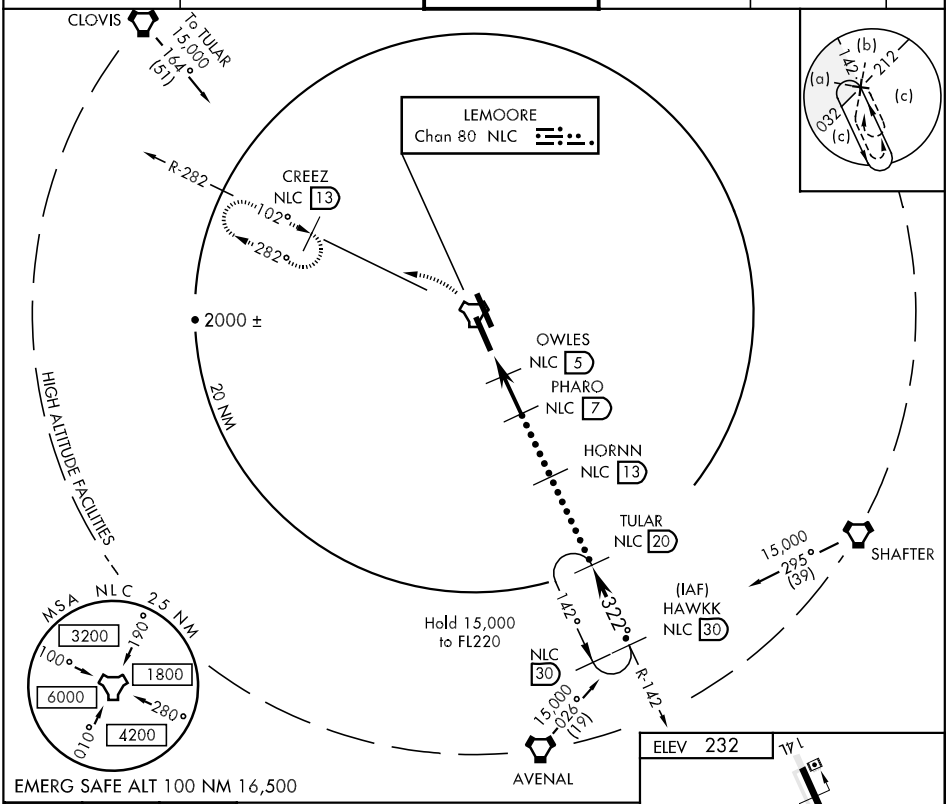
LEMOORE NAS (REEVES FIELD) (KNLC)

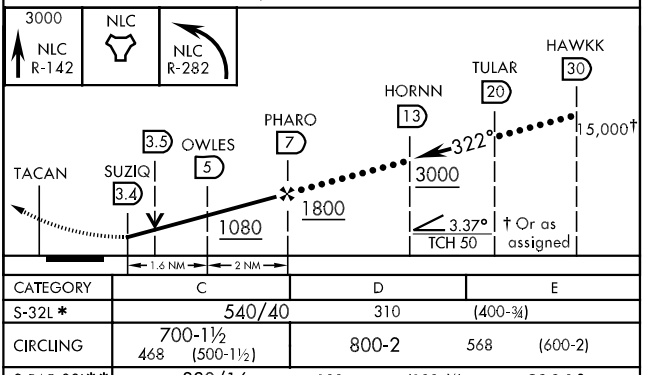
* When ALS inop, increase CAT CDE RVR to 50 and vis to 1 mile.
** When ALS inop, increase CAT CDE RVR to 24 and vis to ½ mile.

ALSF-2

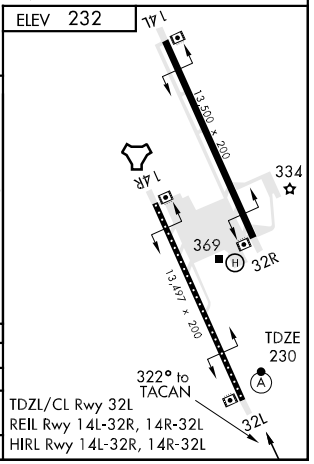
MISSED APPROACH: Climb to 3000 via R-142 to NLC TACAN, then via R-282 to CREEZ and hold.

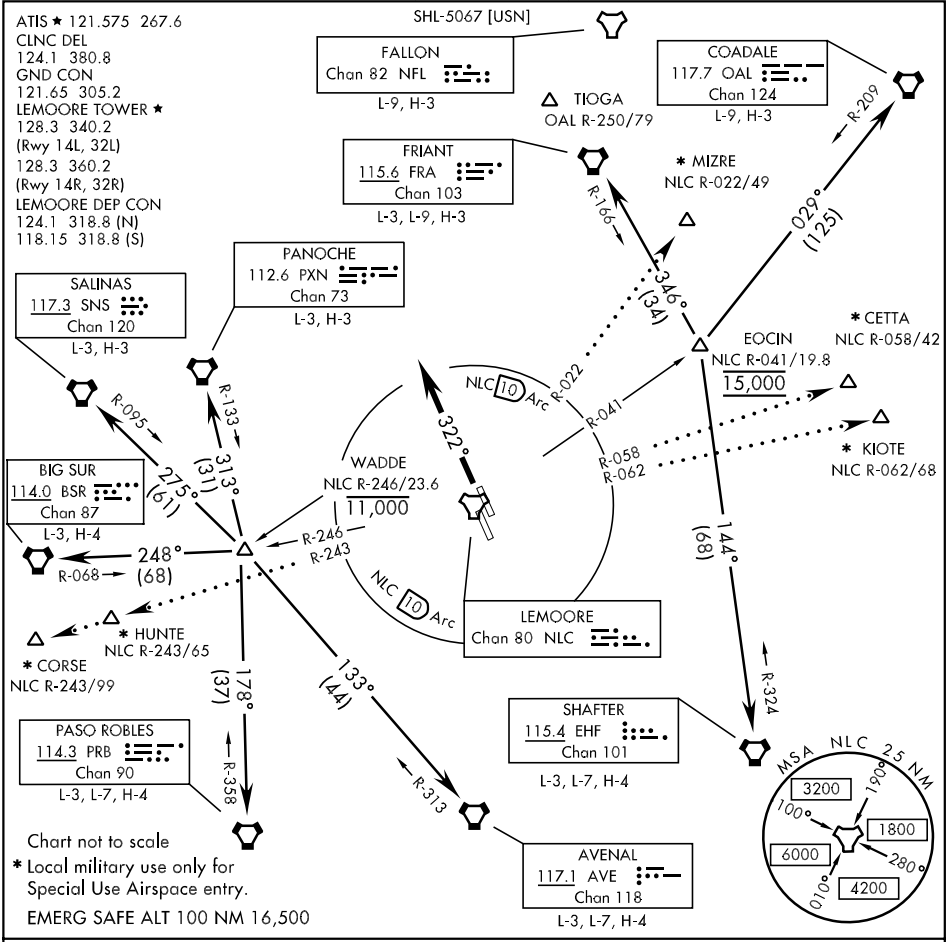
ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 340.2	121.65 305.2	124.1 380.8	





CATEGORY	C	D	E
S-32L *	540/40	310	(400-¾)
CIRCLING	700-1½ 468 (500-1½)	800-2 568	(600-2)
S-PAR 32L**	330/16	100 (100-¼)	GS 3.0°





DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 32L/32R: Climb to 2000 via heading 322°. Expect radar vectors to join assigned transition route.

AVENAL TRANSITION (NLC7.AVE): From over WADDE via AVE R-313 to AVENAL VORTAC. Thence as filed. Cross WADDE at or below 11,000.

BIG SUR TRANSITION (NLC7.BSR): From over WADDE climb on heading 248° to 11,000 or as assigned for vectors to intercept BSR R-068 to BIG SUR VORTAC. Thence as filed. Cross WADDE at or below 11,000.

COALDALE TRANSITION (NLC7.OAL): From over EOCIN climb on heading 029° to 15,000 or as assigned for radar vectors to intercept OAL R-209 to COALDALE VORTAC. Thence as filed. Cross EOCIN at 15,000.

(Continued on next page)

SW-2, 22 OCT 2009 to 19 NOV 2009

SHL-5067 [USN]

DEPARTURE ROUTE DESCRIPTION
(Continued)

CORSE TRANSITION (NLC7.CORSE): From over WADDE fly heading 246° for vectors to intercept NLC R-243 to CORSE. Cross WADDE at or below 11,000.

FALLON TRANSITION (NLC7.NFL): From over EOCIN fly heading 041° for vectors to FALLON TACAN. Then as filed. Cross EOCIN at 15,000.

FRIANT TRANSITION (NLC7.FRA): From over EOCIN via FRA R-166 to FRIANT VORTAC. Thence as filed. Cross EOCIN at 15,000.

HUNTE TRANSITION (NLC7.HUNTE): From over WADDE fly heading 246° for vectors to intercept NLC R-243 to HUNTE. Cross WADDE at or below 11,000.

MIZRE TRANSITION (NLC7.MIZRE): from over EOCIN fly heading 041° for vectors to intercept NLC R-022 to MIZRE. Thence as filed. Cross EOCIN at 15,000.

PANOCHE TRANSITION (NLC7.PXN): From over WADDE via PXN R-133 to PANOCHE VORTAC. Thence as filed. Cross WADDE at or below 11,000.

PASO ROBLES TRANSITION (NLC7.PRB): From over WADDE via PRB R-358 to PASO ROBLES VORTAC. Thence as filed. Cross WADDE at or below 11,000.

SALINAS TRANSITION (NLC7.SNS): From over WADDE climb on heading 275° to 11,000 or as assigned for vectors to intercept SNS R-095 to SALINAS VORTAC. Thence as filed. Cross WADDE at or below 11,000.

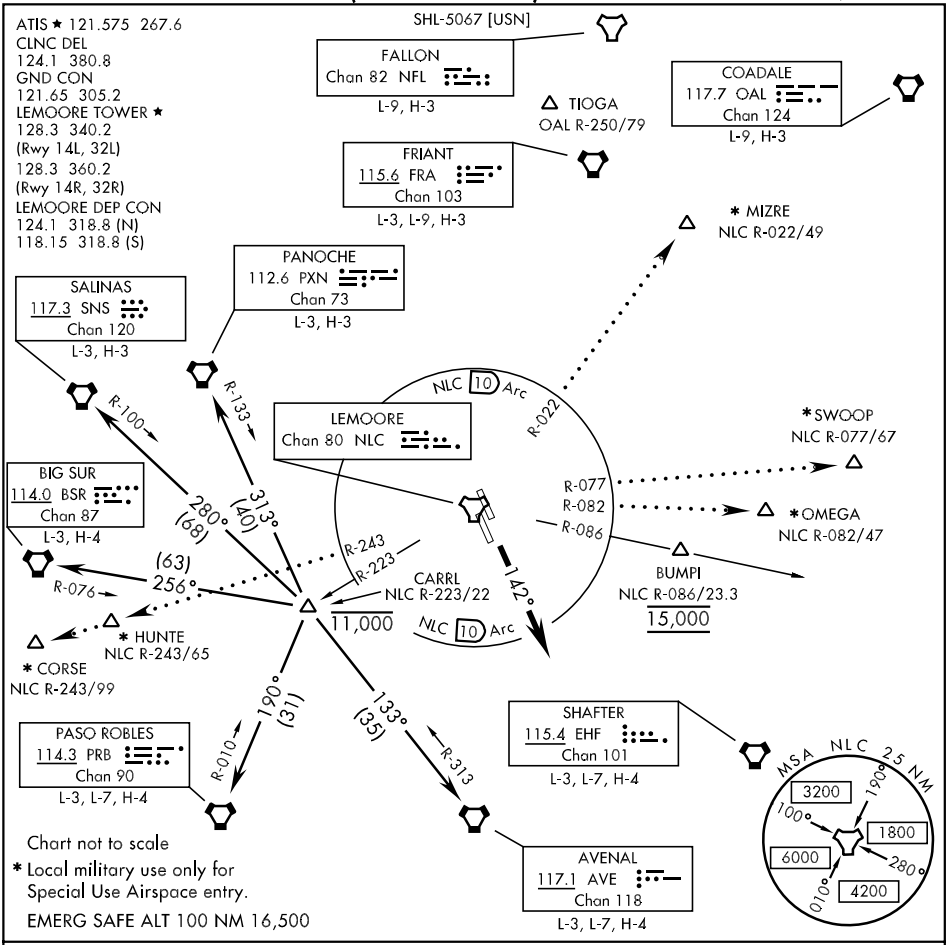
SHAFTER TRANSITION (NLC7.EHF): From over EOCIN via EHF R-324 to SHAFTER VORTAC. Thence as filed. Cross EOCIN at 15,000.

TIOGA TRANSITION (NLC7.TIOGA): From over EOCIN fly heading 041° for vectors to TIOGA. Thence as filed. Cross EOCIN at 15,000.

LOST COMMUNICATIONS: If no transmissions are received within 8 DME of NLC TACAN, climb to 4000, fly departure heading to intercept NLC TACAN 10 mile arc, arc to respective departure radial then via departure radial to assigned departure fix . Then via assigned transition or route. Once established on departure radial climb to filed altitude.

SW-2, 22 OCT 2009 to 19 NOV 2009

REEVES-ONE DEPARTURE (REVES1• NLC)



SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 14L/14R: Climb to 2000 via heading 142°. Expect radar vectors to join assigned transition route.

AVENAL TRANSITION (REVES1.AVE): From over CARRL via AVE R-313 to AVENAL VORTAC. Thence as filed. Cross CARRL at or below 11,000.

BIG SUR TRANSITION (REVES1.BSR): From over CARRL climb on heading 256° to 11,000 or as assigned for vectors to intercept BSR R-076 to BIG SUR VORTAC. Thence as filed. Cross CARRL at or below 11,000.

(Continued on next page)

SHL-5067 [USN]

DEPARTURE ROUTE DESCRIPTION
(Continued)

CORSE TRANSITION (REVES1.CORSE): From over CARRL fly heading 270° for vectors to intercept NLC R-243 to CORSE. Cross CARRL at or below 11,000.

HUNTE TRANSITION (REVES1.HUNTE): From over CARRL fly heading 270° for vectors to intercept NLC R-243 to HUNTE. Cross CARRL at or below 11,000.

PANOCHE TRANSITION (REVES1.PXN): From over CARRL via PXN R-133 to PANOCHE VORTAC. Thence as filed. Cross CARRL at or below 11,000.

PASO ROBLES TRANSITION (REVES1.PRB): From over CARRL via PRB R-010 to PASO ROBLES VORTAC. Thence as filed. Cross CARRL at or below 11,000.

SALINAS TRANSITION (REVES1.SNS): From over CARRL climb on heading 280° to 11,000 or as assigned for vectors to intercept SNS R-100 to SALINAS VORTAC. Thence as filed. Cross CARRL at or below 11,000.

LOST COMMUNICATIONS: If no transmissions are received within 8 DME of NLC TACAN, climb to 4000, fly departure heading to intercept NLC TACAN 10 mile arc, thence...

West bound Departures: Arc west of NLC TACAN via 10 mile arc to NLC R-223 to CARRL, then via assigned transition or route. Once established on departure radial climb to filed altitude. Cross CARRL at or below 11,000.

East bound Departures: Arc east of NLC TACAN via 10 mile arc to NLC R-086, then via NLC R-086 to BUMPI, then via assigned route. Once established on NLC R-086 climb to filed altitude. Cross BUMPI at 15,000.

SW-2, 22 OCT 2009 to 19 NOV 2009

LEMOORE, CALIFORNIA

RNAV (GPS) RWY 14L

APCH CRS	Rwy ldg 13,500
142°	TDZE 222
	Arpt Elev 232

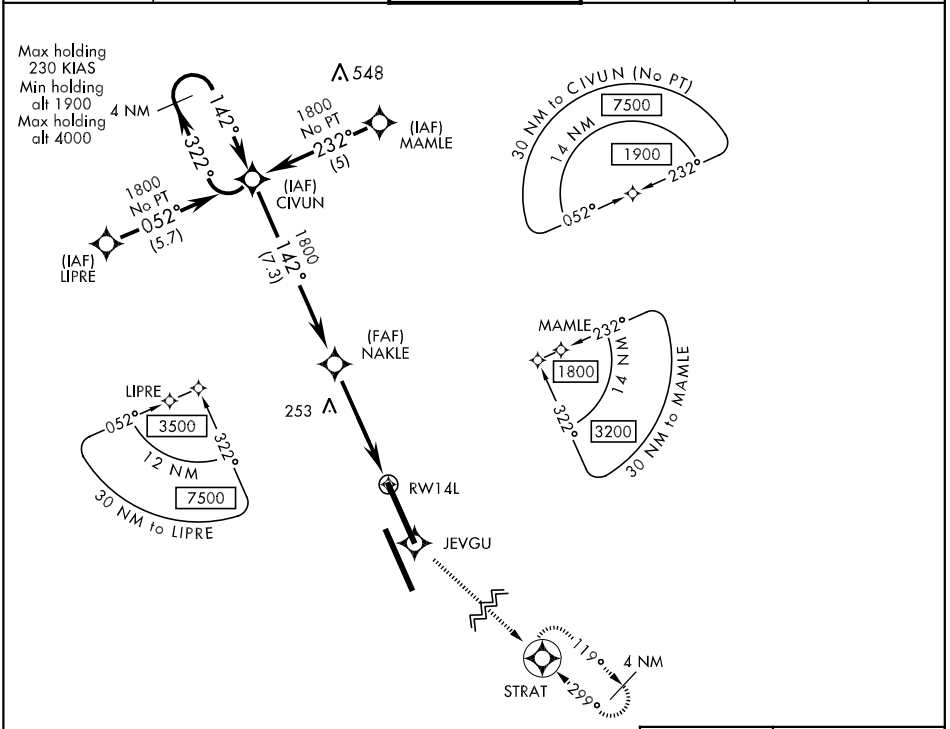
AL-5067 [USN]

LEMOORE NAS (REEVES FLD) (KNLC)

Baro VNAV NA below - 15.46°C (4.17°F).
DME/DME RNP-0.3 NA

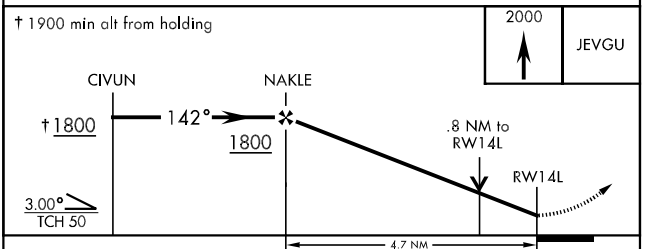
MISSED APPROACH: Climb to 2000 direct JEVGU, then via track 119° to STRAT and hold.

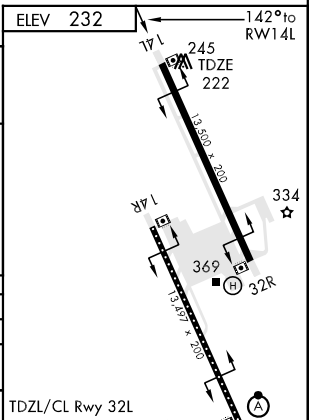
ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 340.2	121.65 305.2	124.1 380.8	



EMERG SAFE ALT 100 NM 16,500

† 1900 min alt from holding





CATEGORY	A	B	C	D
LNAV MDA	520-1	298	(300-1)	
LNAV/ VNAV DA	520-1	298	(300-1)	
CIRCLING	680-1 448 (500-1)	700-1 468 (500-1)	700-1½ 468 (500-1½)	800-2 568 (600-2)
S-PAR 14L	322-½	100	(100-½)	GS 3.0°

TDZL/CL Rwy 32L
REIL Rwys 14L-32R, 14R-32L
HIRL Rwys 14L-32R, 14R-32L

RNAV (GPS) RWY 14R

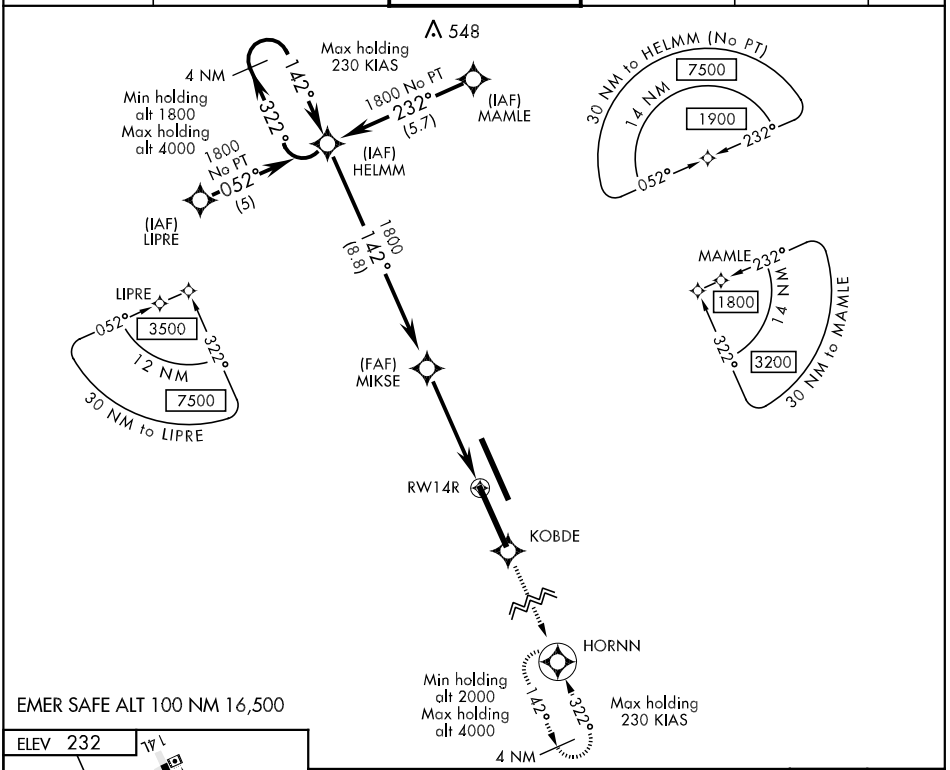
APCH CRS	Rwy ldg	13,497
142°	TDZE	231
	Arpt Elev	232

AL-5067 [USN] LEMOORE NAS (REEVES FLD) (KNLC)

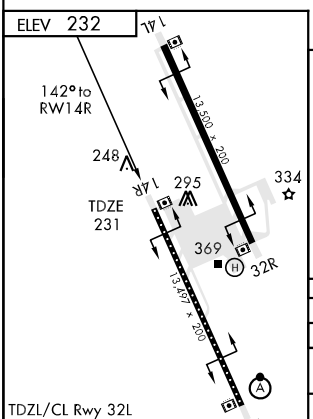
Baro VNAV NA below - 15.46°C (4.17°F).
DME/DME RNP-0.3 NA

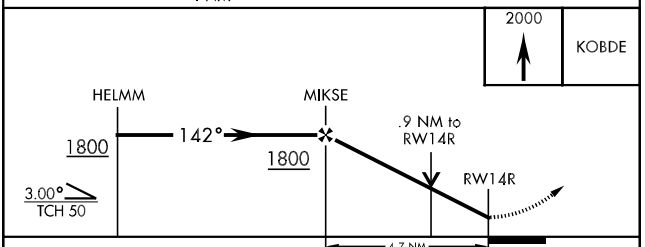
MISSED APPROACH: Climb to 2000 direct KOBDE, then via track 142°to HORNN and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 360.2	121.65 305.2	124.1 380.8	



EMER SAFE ALT 100 NM 16,500





CATEGORY	A	B	C	D
LNAV MDA	560-1	330	(400-1)	
LNAV/ VNAV DA	500-1	270	(300-1)	
CIRCLING	680-1 448 (500-1)	700-1 468 (500-1)	700-1½ 468 (500-1½)	800-2 568 (600-2)
S-PAR 14R	331-½	100	(100-½)	GS 3.00°

RNAV (GPS) RWY 32L

APCH CRS	Rwy ldg	13,497
322°	TDZE	230
	Arpt Elev	232

AL-5067 [USN]

LEMOORE NAS (REEVES FLD) (KNLC)

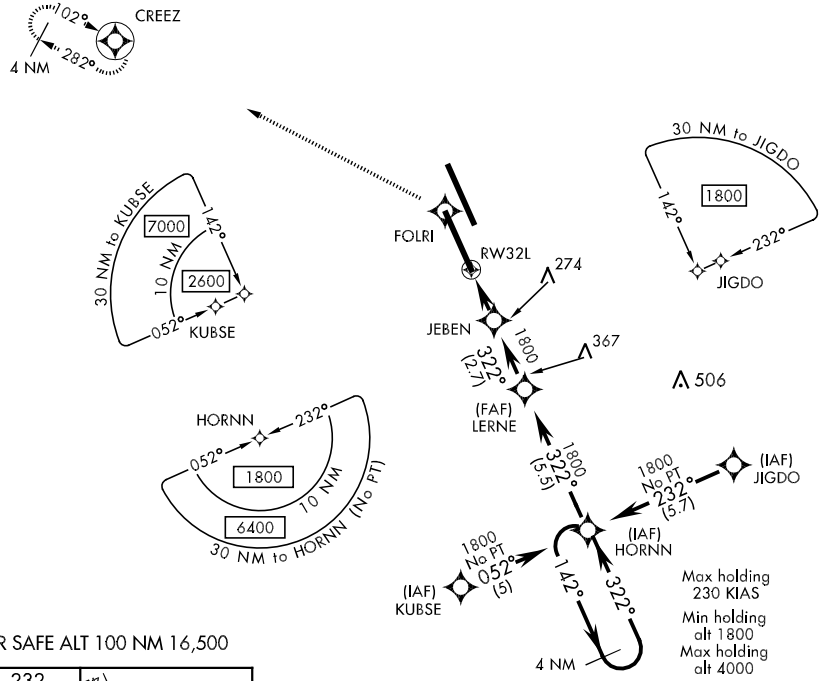
▼ * When ALS inop, increase CAT ABCD RVR to 50 and vis to 1 mile.
** When ALS inop, increase CAT ABCD RVR to 24 and vis to ½ mile.

ALSF-2

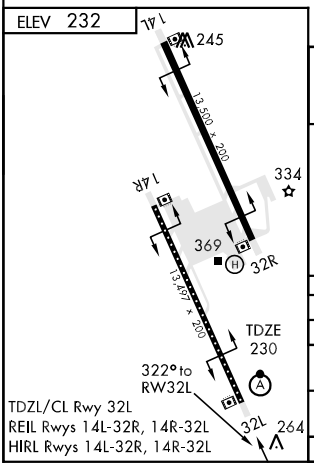
MISSED APPROACH: Climb to 3200 direct FOLRI, then via track 281° to CREEZ and hold.

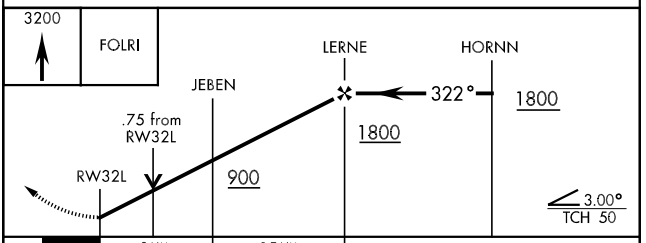
ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 340.2	121.65 305.2	124.1 380.8	

Baro VNAV NA below - 15.46°C (4.17°F).
DME/DME RNP-0.3 NA



EMER SAFE ALT 100 NM 16,500





CATEGORY	A	B	C	D
LNAV MDA *	520/24 290	(300-½)	520/40 290	(300-¾)
LNAV/ VNAV DA *	520/24 290	(300-½)	520/40 290	(300-¾)
CIRCLING	680-1 448 (500-1)	700-1 468 (500-1)	700-1½ 468 (500-1½)	800-2 568 (600-2)
S-PAR 32L**	330/16 100 (100-¼) GS 3.00°			

SW-2, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 32R

APCH CRS	Rwy ldg	13,500
322°	TDZE	225
	Arpt Elev	232

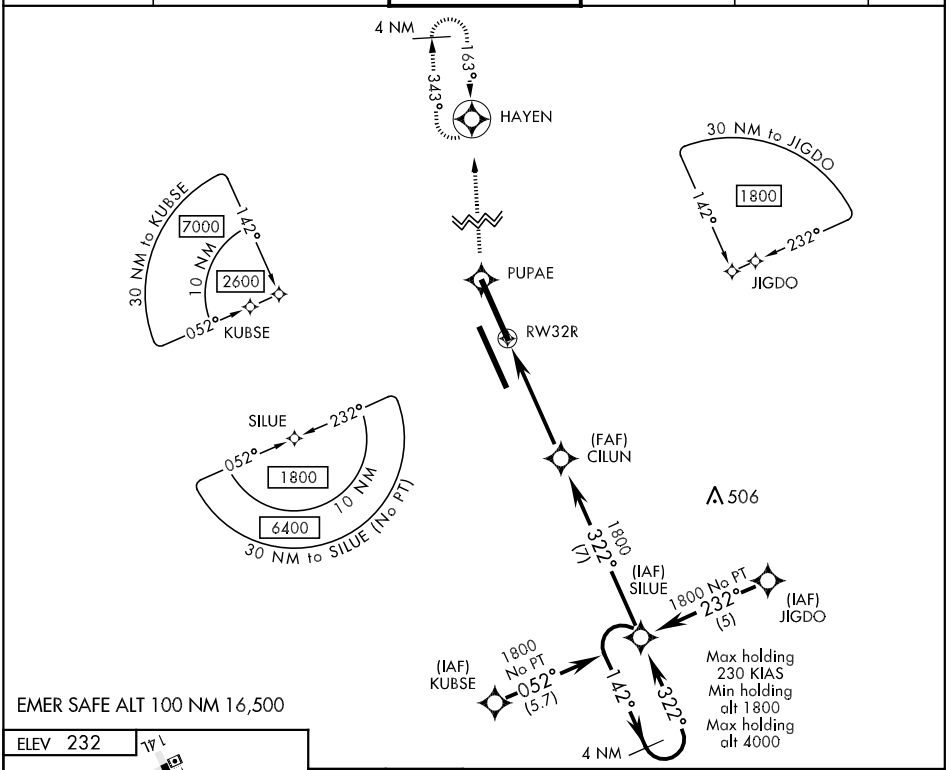
AL-5067 [USN] LEMOORE NAS (REEVES FLD) (KNLC)

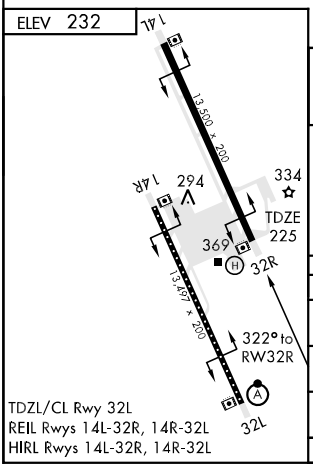
DME/DME RNP-0.3 NA

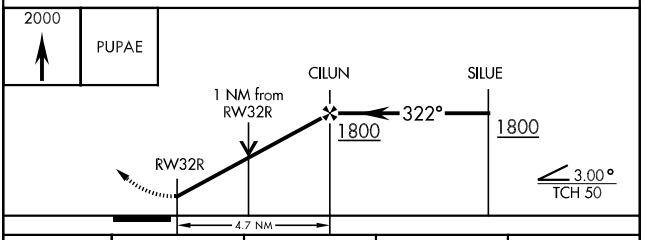
Baro VNAV NA below - 15.46°C (4.17°F)

MISSED APPROACH: Climb to 2000 direct PUPAE, then via track 343° to HAYEN and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 360.2	121.65 305.2	124.1 380.8	







CATEGORY	A	B	C	D
LNAV MDA	620/50	395	(400-1)	620/60 395 (400-1¼)
LNAV/ VNAV DA	620/60	395	(400-1¼)	620-1½ 395 (400-1½)
CIRCLING	680-1¼ 448 (500-1¼)	700-1¼ 468 (500-1¼)	700-1½ 468 (500-1½)	800-2 568 (600-2)
S-PAR 32R	325/24	100 (100-½)		GS 3.00°

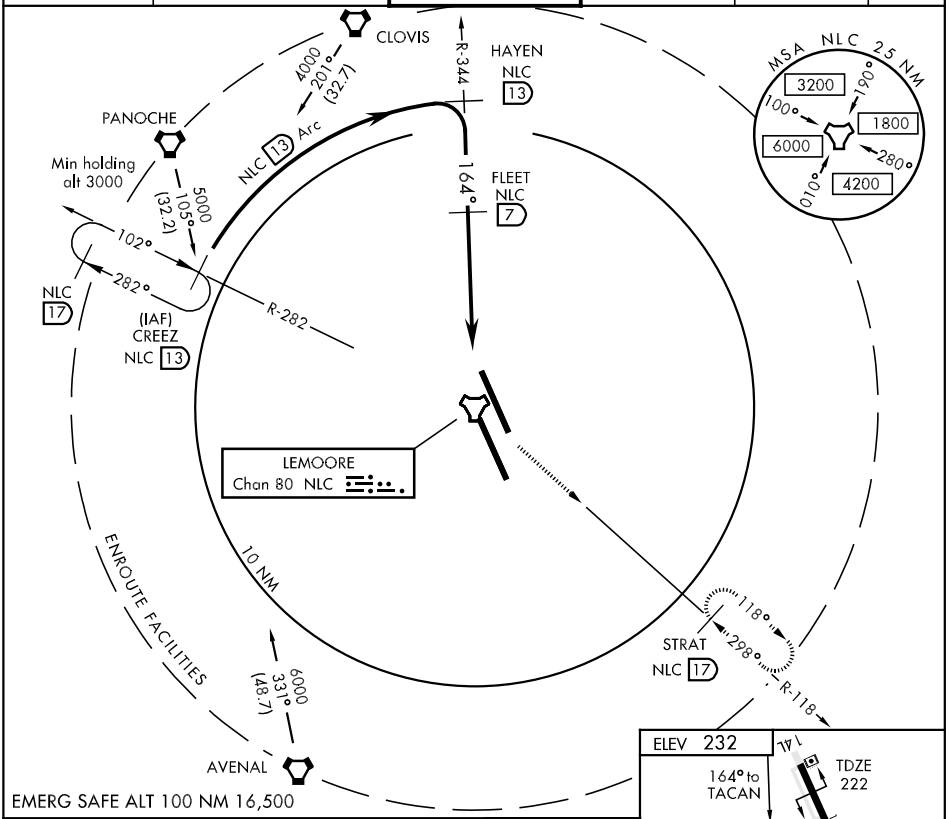
SW-2, 22 OCT 2009 to 19 NOV 2009

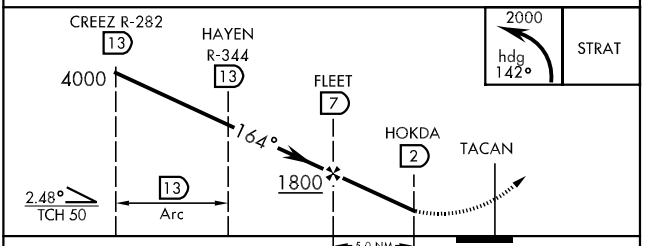
TACAN RWY 14L

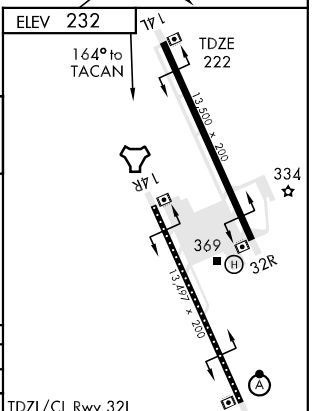
TACAN NLC Chan 80	APCH CRS 164°	Rwy ldg 13,500 TDZE 222 Arpt Elev 232	AL-5067 [USN]	LEMOORE NAS (REEVES FIELD) (KNLC)

MISSED APPROACH: Climbing left turn to 2000 via heading 142°, intercept R-118 to STRAT and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 340.2	121.65 305.2	124.1 380.8	







CATEGORY	A	B	C	D
S-14L	520-1	298	(300-1)	
CIRCLING	680-1 448 (500-1)	700-1 468 (500-1)	700-1½ 468 (500-1½)	800-2 568 (600-2)
S-PAR 14L	322-½	100	(100-½)	GS 3.0°

TDZL/CL Rwy 32L
REIL Rwys 14L-32R, 14R-32L
HIRL Rwys 14L-32R, 14R-32L

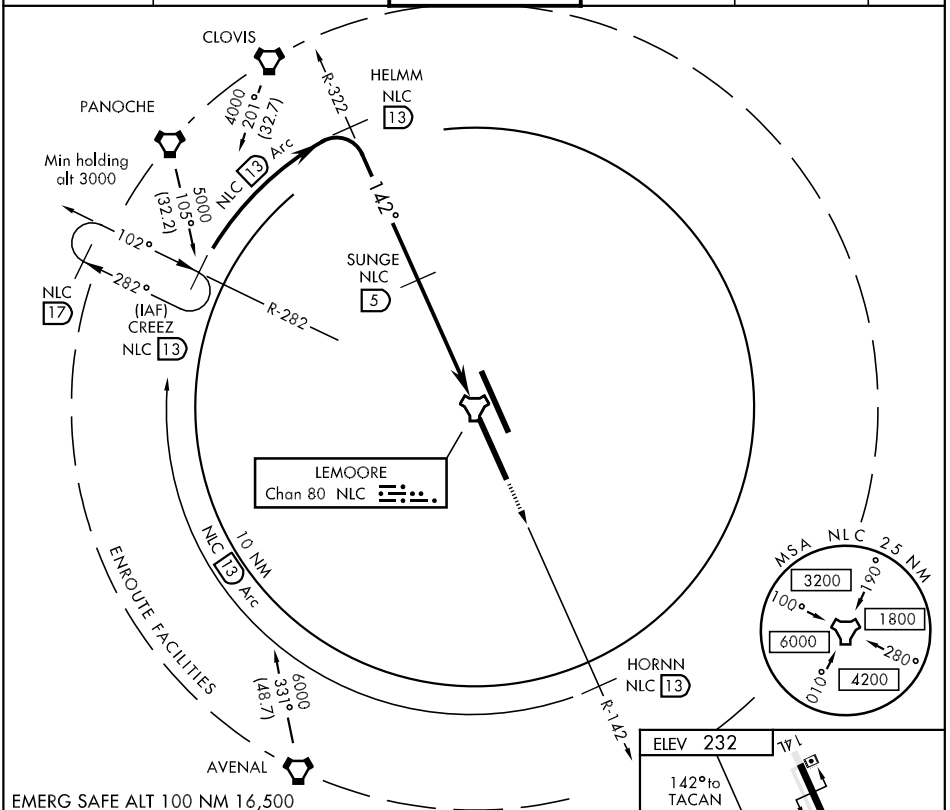
SW-2, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 14R

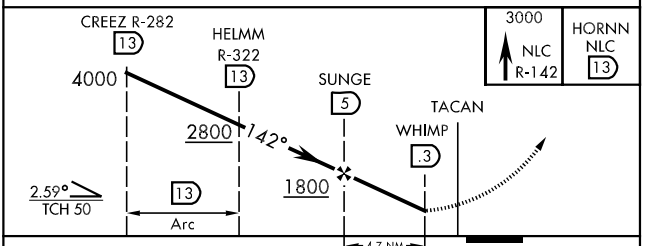
TACAN NLC Chan 80	APCH CRS 142°	Rwy ldg 13,497 TDZE 231 Arpt Elev 232	AL-5067 [USN]	LEMOORE NAS (REEVES FIELD) (KNLC)

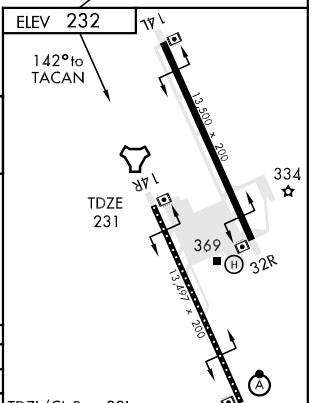
MISSED APPROACH: Climb to 3000 via R-142 to HORNN, then arc SW of NLC TACAN via the 13 DME Arc to CREEZ and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 360.2	121.65 305.2	124.1 380.8	



EMERG SAFE ALT 100 NM 16,500





CATEGORY	A	B	C	D
S-14R	520-1	289	(300-1)	
CIRCLING	680-1 448 (500-1)	700-1 468 (500-1)	700-1½ 468 (500-1½)	800-2 568 (600-2)
S-PAR 14R	331-½	100	(100-½)	GS 3.0°

TDZL/CL Rwy 32L
REIL Rwys 14L-32R, 14R-32L
HIRL Rwys 14L-32R, 14R-32L

SW-2, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 32L

TACAN	APCH CRS	Rwy Idg	TDZE	Arpt Elev
NLC Chan 80	322°	13,497	230	232

AL-5067 [USN]

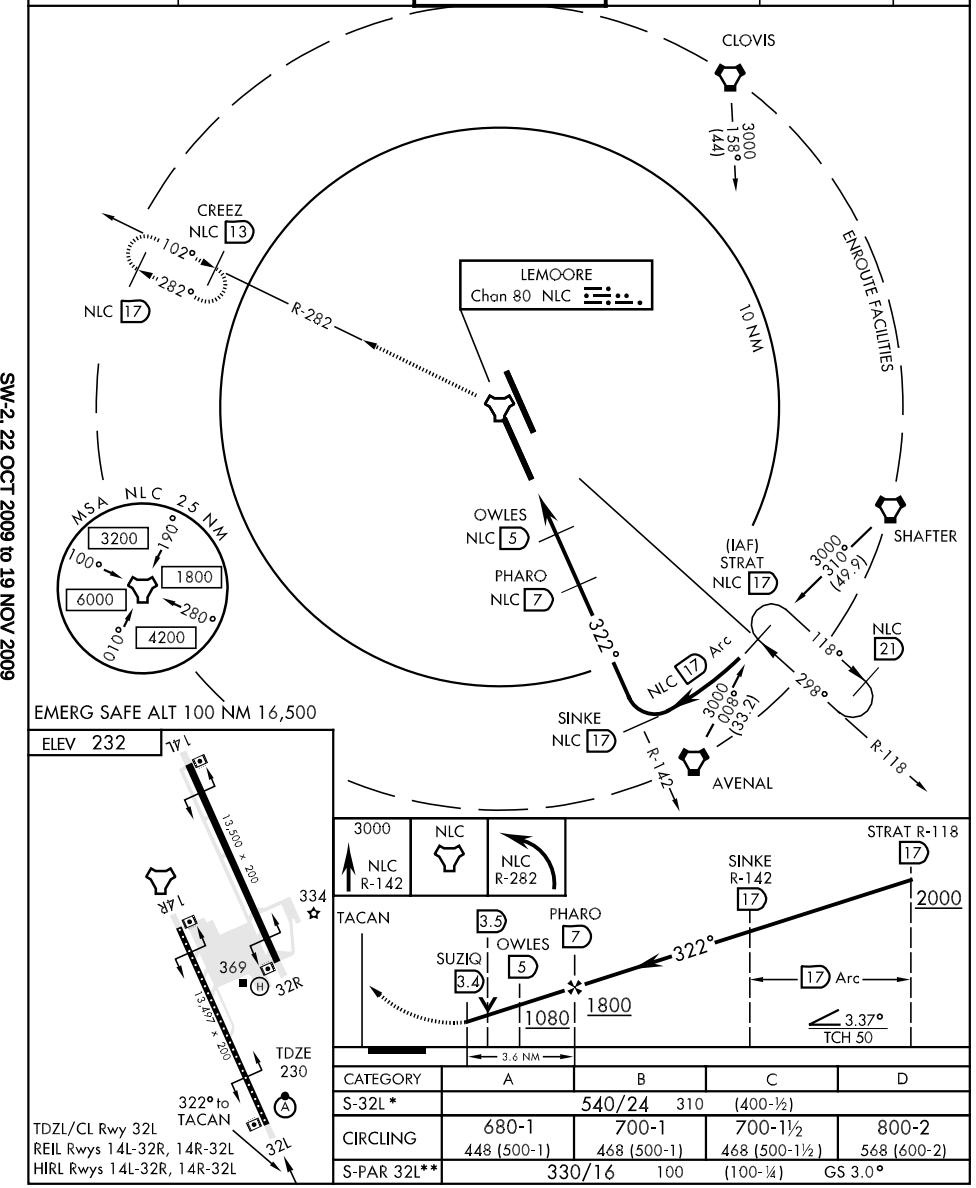
LEMOORE NAS (REEVES FIELD) (KNLC)

▼ * When ALS inop, increase CAT ABCD RVR to 50 and vis to 1 mile.
** When ALS inop, increase CAT ABCD RVR to 24 and vis to ½ mile.

ALSF-2

MISSED APPROACH: Climb to 3000 via R-142 to NLC TACAN, then via R-282 to CREEZ and hold.

ATIS ★	LEMOORE APP CON	LEMOORE TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 267.6	N 124.1 S 118.15 286.0	128.3 340.2	121.65 305.2	124.1 380.8	



CATEGORY	A	B	C	D
S-32L *	540/24 310 (400-½)			
CIRCLING	680-1 448 (500-1)	700-1 468 (500-1)	700-1½ 468 (500-1½)	800-2 568 (600-2)
S-PAR 32L**	330/16 100 (100-¼) GS 3.0°			

TDZL/CL Rwy 32L
REIL Rwys 14L-32R, 14R-32L
HIRL Rwys 14L-32R, 14R-32L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6001
148°	TDZE	121
	Apt Elev	121

GPS RWY 15

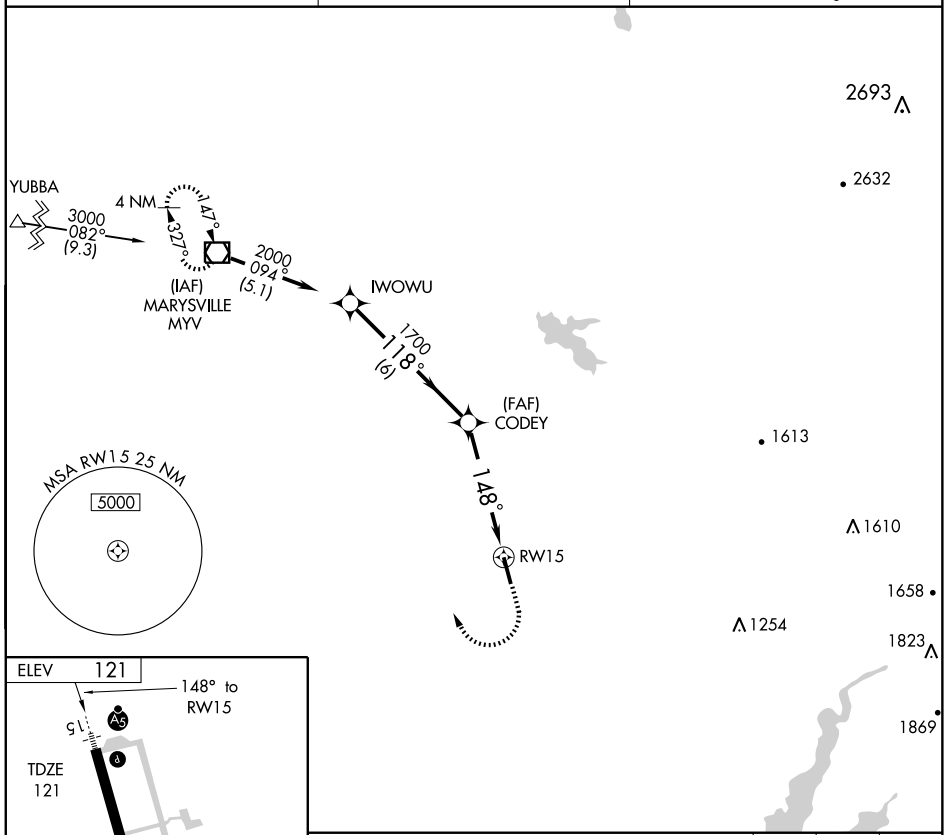
LINCOLN RGNL/KARL HARDER FIELD (LHM)

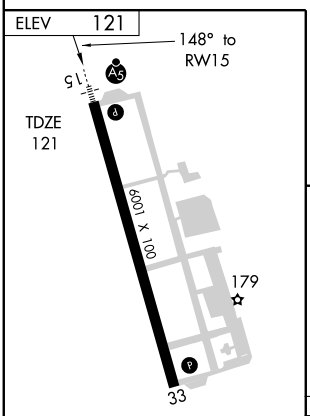
V NA — For inoperative MALSR increase S-15 A-C visibilities to 1, Category D to 1¼ .

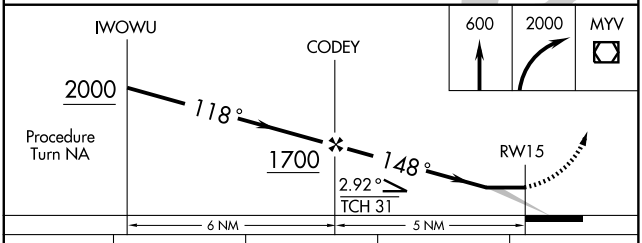
MALSR

MISSED APPROACH: Climb to 600 then climbing right turn to 2000, direct MYV VOR/DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
124.25	125.4 259.1	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-15	480- ¾ 359 (400-¾)			480-1 359 (400-1)
CIRCLING	500-1 379 (400-1)	580-1 459 (500-1)	580-1½ 459 (500-1½)	680-2 559 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6001
328°	TDZE	121
	Apt Elev	121

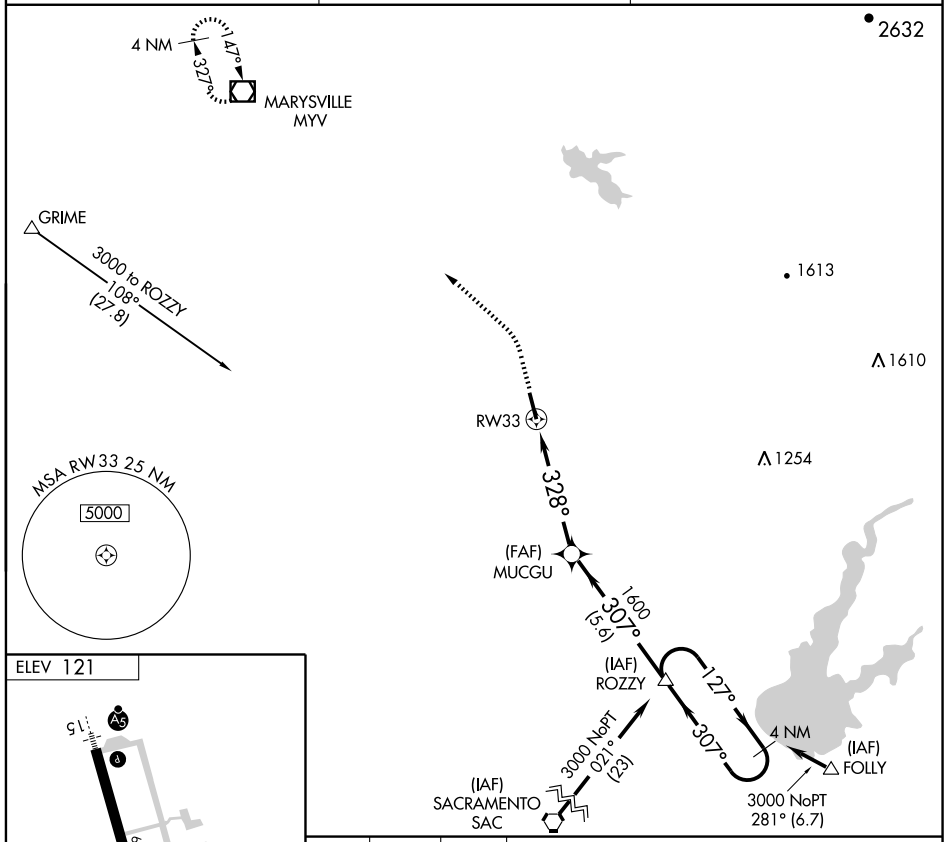
GPS RWY 33

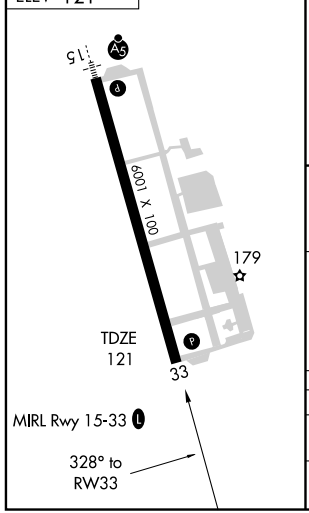
LINCOLN RGNL/ KARL HARDER FIELD (LHM)

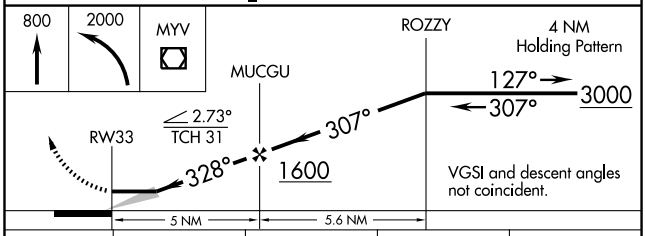
NA

MISSED APPROACH: Climb to 800 then climbing left turn to 2000 direct to MYV VOR/DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
124.25	125.4 259.1	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-33	720-1	599 (600-1)	720-1½ 599 (600-1½)	720-1¾ 599 (600-1¾)
CIRCLING	720-1	599 (600-1)	720-1½ 599 (600-1½)	720-2 599 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-LHM	APP CRS	Rwy Idg	6001
108.75	149°	TDZE	119
Chan 24 (Y)		Apt Elev	121

ILS RWY 15

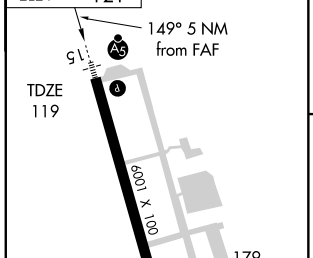
LINCOLN RGNL/KARL HARDER FIELD (LHM)

If local altimeter setting not received, use Beale AFB altimeter setting and increase all DH/MDAs 40 feet. When neither is received, procedure not authorized.
For inoperative MALSR, increase S-LOC 15 Cat. D visibility to 1 mile.

MALSR

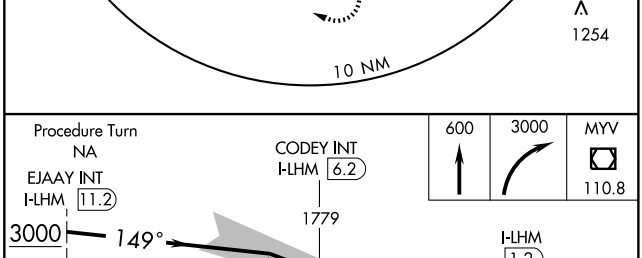
MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct MYV VOR/DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
124.25	125.4 259.1	123.0 (CTAF) L



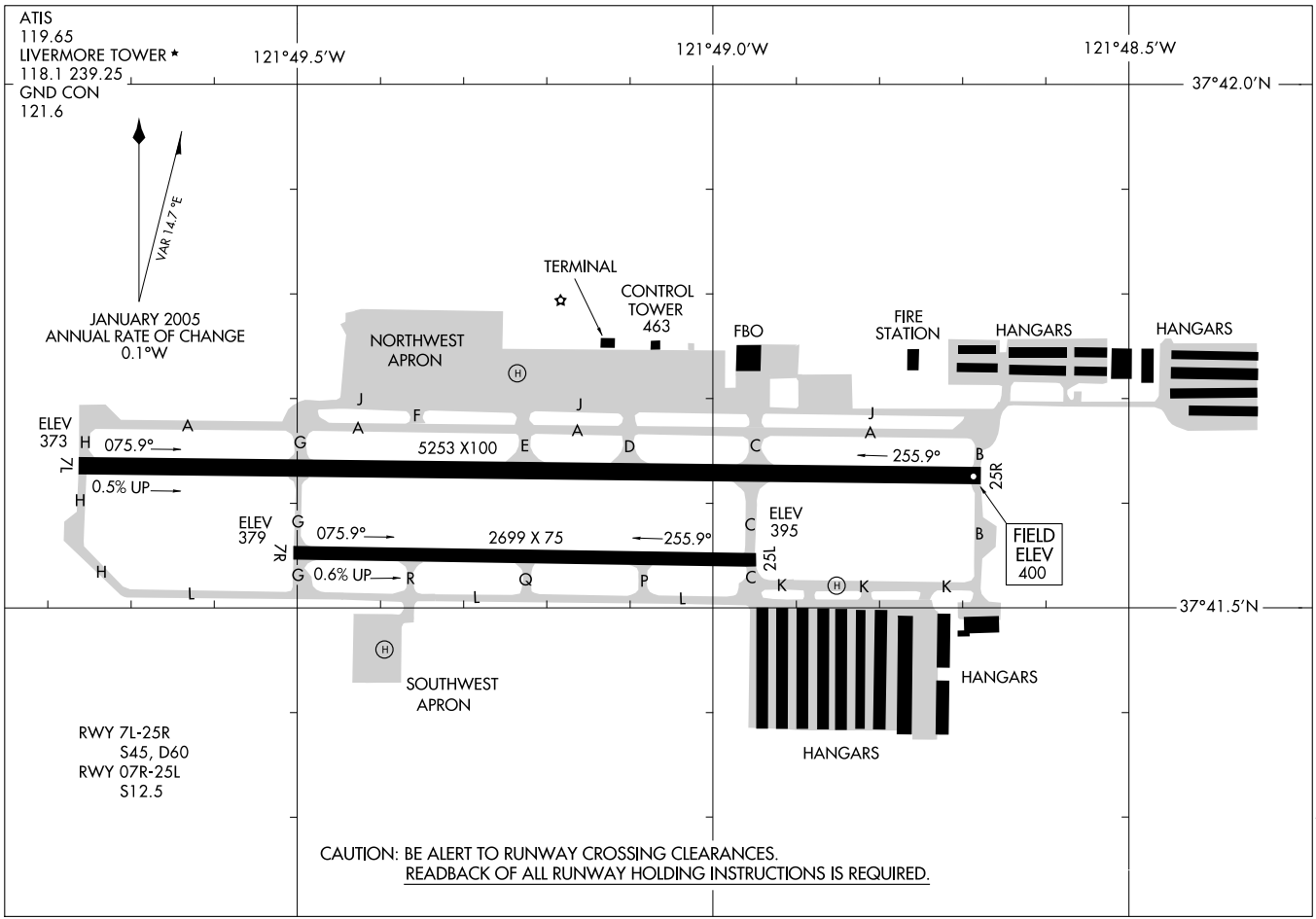
MIRL Rwy 15-33 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-ILS 15	319-½ 200 (200-½)			
S-LOC 15	460-½ 341 (400-½)			460-¾ 341 (400-¾)
CIRCLING	500-1 381 (400-1)	580-1 461 (500-1)	580-1½ 461 (500-1½)	680-2 561 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

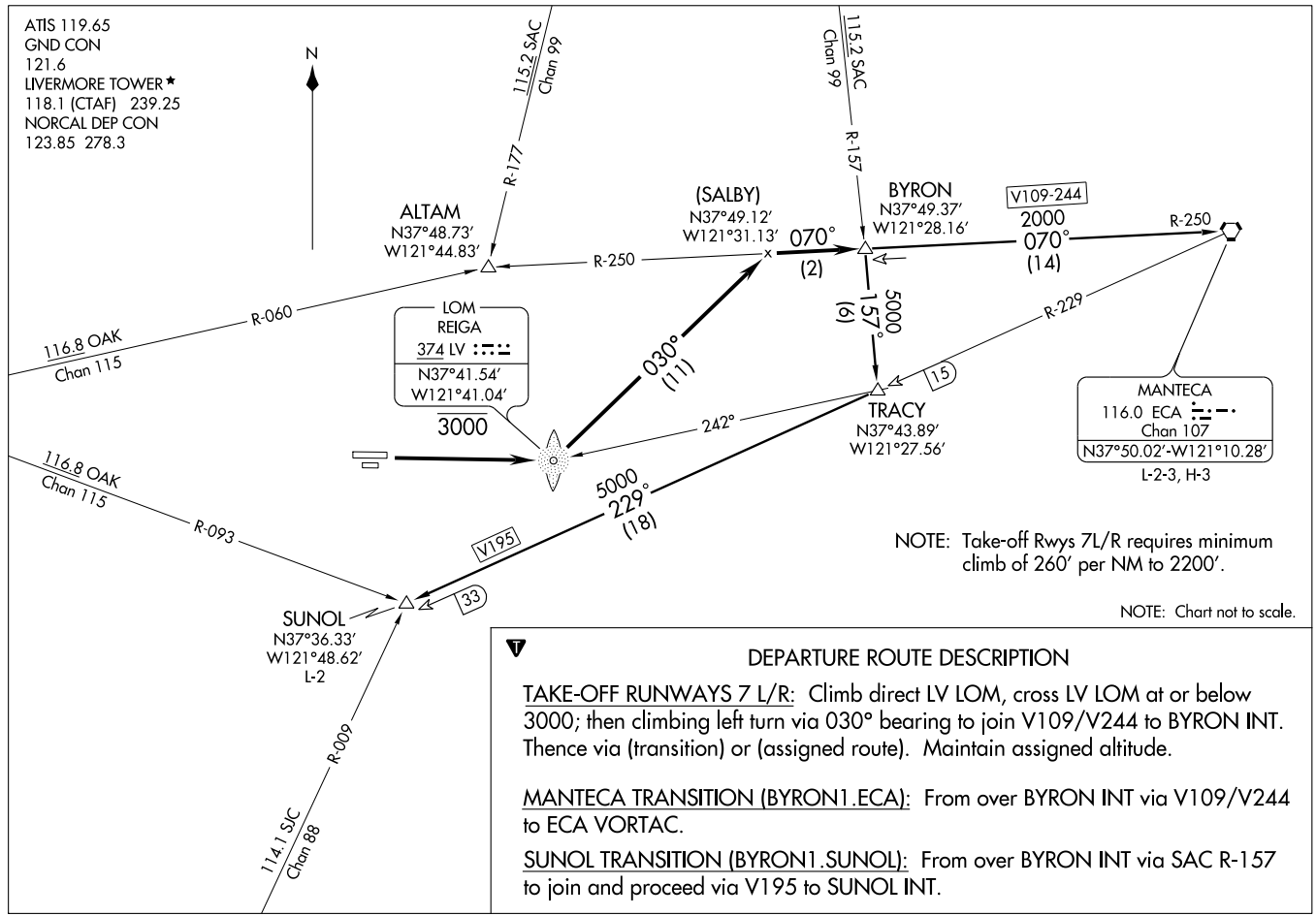


AIRPORT DIAGRAM

AL-6075 (FAA)

LIVERMORE MUNI (LVK)

LIVERMORE, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7 L/R: Climb direct LV LOM, cross LV LOM at or below 3000; then climbing left turn via 030° bearing to join V109/V244 to BYRON INT. Thence via (transition) or (assigned route). Maintain assigned altitude.

MANTECA TRANSITION (BYRON1.ECA): From over BYRON INT via V109/V244 to ECA VORTAC.

SUNOL TRANSITION (BYRON1.SUNOL): From over BYRON INT via SAC R-157 to join and proceed via V195 to SUNOL INT.

BYRON ONE DEPARTURE (BYRON1.BYRON) 09122

SI-6075 (FAA)

LIVERMORE MUNI (LVK)
LIVERMORE, CALIFORNIA

LIVERMORE, CALIFORNIA AL-6075 (FAA) 09295

GPS RWY 25R
LIVERMORE MUNI (LVK)

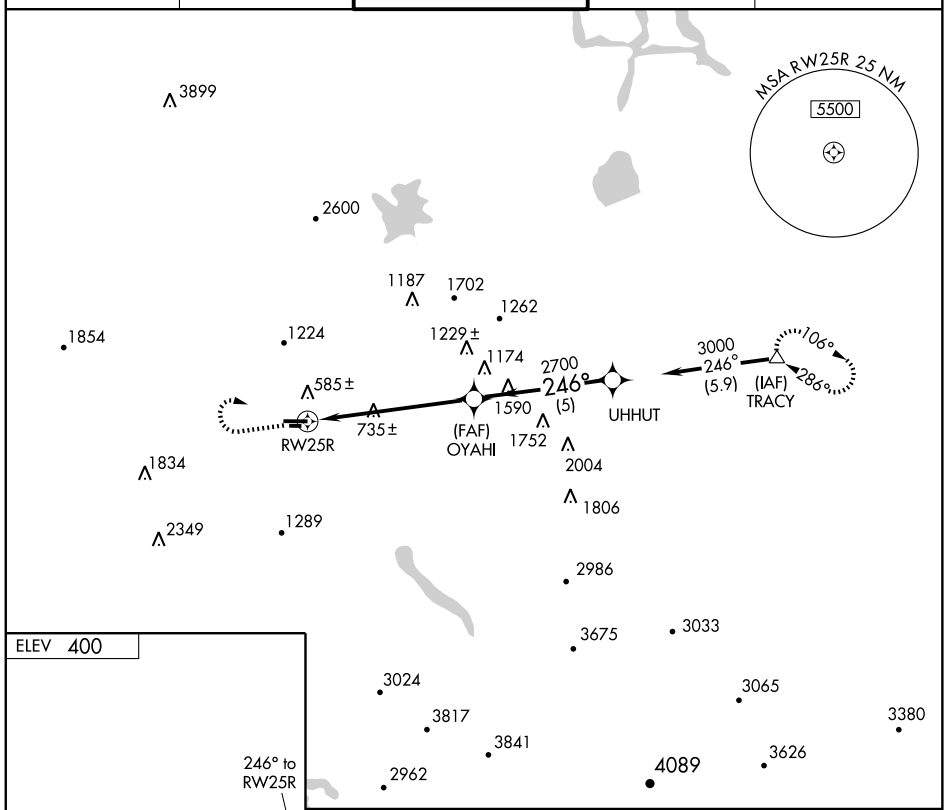
APP CRS	Rwy Idg	5253
246°	TDZE	400
	Apt Elev	400

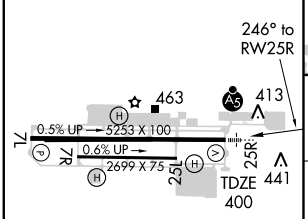
Circling NA north of Rwy 7L-25R.
NA
For inoperative MALSR, increase Cats A and B visiblility to 1 mile.
Visibility reduction by helicopters NA.

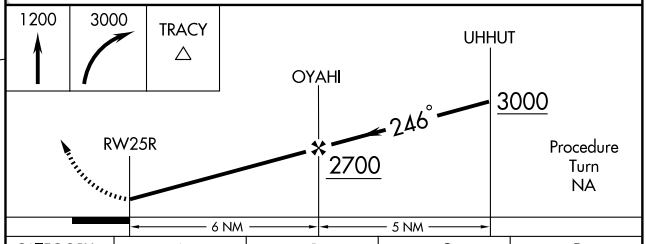
MALSR

MISSED APPROACH: Climb to 1200 then climbing right turn to 3000 direct TRACY and hold.

ATIS	NORCAL APP CON	LIVERMORE TOWER ★	GND CON	UNICOM
119.65	123.85 278.3	118.1 (CTAF) L 239.25	121.6	122.95







CATEGORY	A	B	C	D
S-25R	1060-¾	660 (700-¾)	1060-1¼ 660 (700-1¼)	1060-1½ 660 (700-1½)
CIRCLING	1060-1	660 (700-1)	1060-1¾ 660 (700-1¾)	1100-2¼ 700 (700-2¼)

MIRL Rwy 7L-25R L

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-LVK	APP CRS	Rwy Idg	5253
110.5	255°	TDZE	397
		Apt Elev	397

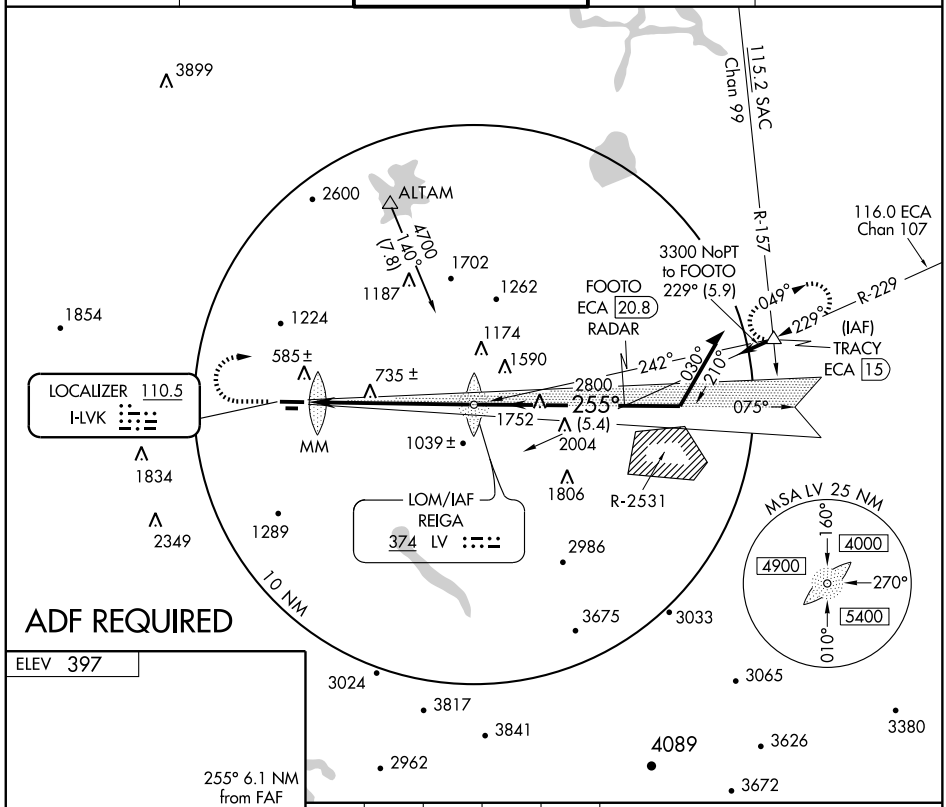
ILS RWY 25R
LIVERMORE MUNI (LVK)

Circling NA north of Rwy 7L-25R.
Autopilot coupled approaches NA below 1700.

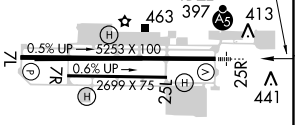
MALSR

MISSED APPROACH: Climb to 1100, then climbing right turn to 3000 direct REIGA LOM, then via REIGA LOM 062° bearing to TRACY Int and hold.

ATIS	NORCAL APP CON	LIVERMORE TOWER ★	GND CON	UNICOM
119.65	123.85 278.3	118.1 (CTAF) L 239.25	121.6	122.95

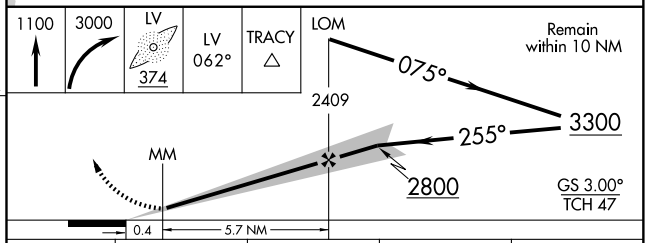


ELEV 397



MIRL Rwy 7L-25R L

FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02



CATEGORY	A	B	C	D
S-ILS 25R		597-½ 200 (200-½)		
S-LOC 25R	940-½ 543 (600-½)		940-1 543 (600-1)	940-1¼ 543 (600-1¼)
CIRCLING	940-1 543 (600-1)		940-1½ 543 (600-1½)	1100-2¼ 703 (800-2¼)

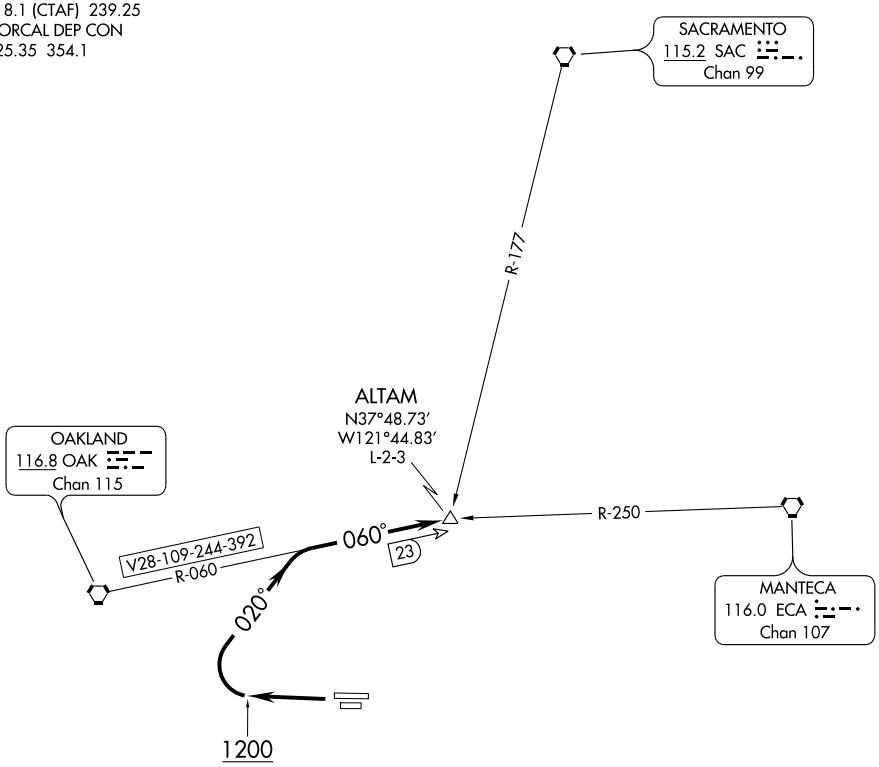
SW-2, 22 OCT 2009 to 19 NOV 2009

LIVERMORE ONE DEPARTURE

SL-6075 (FAA)

LIVERMORE MUNI (LVK)
LIVERMORE, CALIFORNIA

ATIS 119.65
GND CON
121.6
LIVERMORE TOWER*
118.1 (CTAF) 239.25
NORCAL DEP CON
125.35 354.1



TAKE-OFF MINIMUMS: 2300-2 or standard with a minimum climb of 375' per NM to 3100'.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 25 L/R: Climb runway heading to 1200, then climbing right turn heading 020° and OAK R-060 to ALTAM INT. Maintain assigned altitude.

SW-2, 22 OCT 2009 to 19 NOV 2009

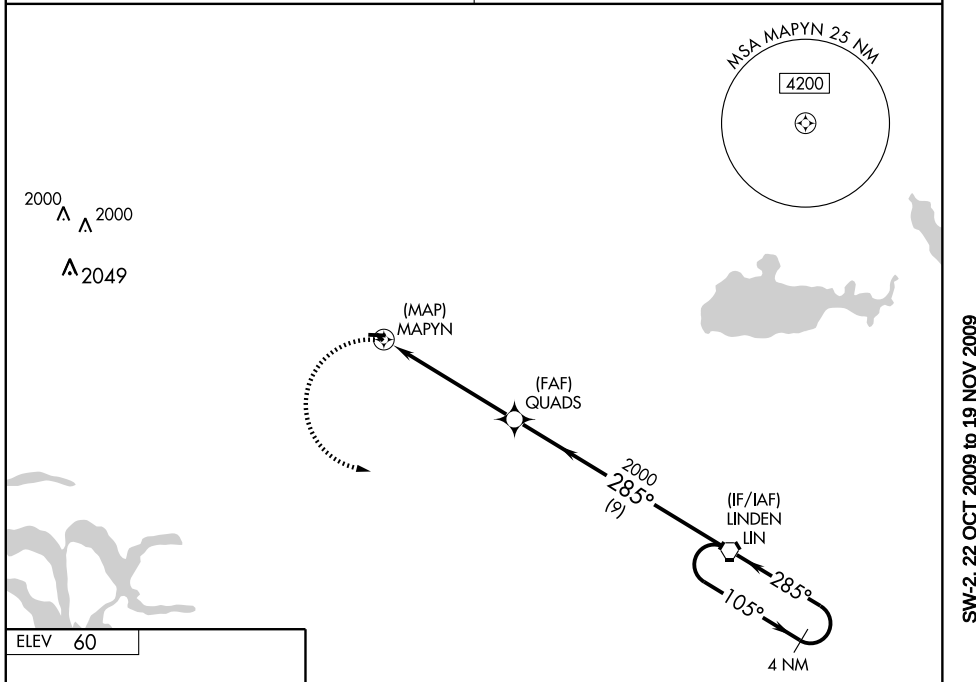
APP CRS	Rwy Idg	N/A
285°	TDZE	N/A
	Apt Elev	60

RNAV (GPS)-B
LODI (103)

DME/DME RNP-0.3 NA.
NA Use Stockton altimeter setting, when not received, use Sacramento Intl altimeter setting and increase all MDA 40 feet.

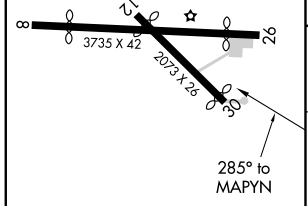
MISSED APPROACH: Climbing left turn to 2000 direct LIN VORTAC and hold.

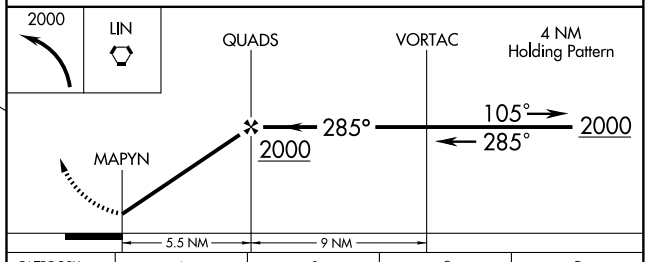
NORCAL APP CON	CTAF
125.1 363.2	122.9



NoPT for arrival on LIN VORTAC airway radials 124 CW 192.

ELEV 60





CATEGORY	A	B	C	D
CIRCLING	640-1 580 (600-1)		NA	

LIRL Rwy 8-26

SW-2, 22 OCT 2009 to 19 NOV 2009

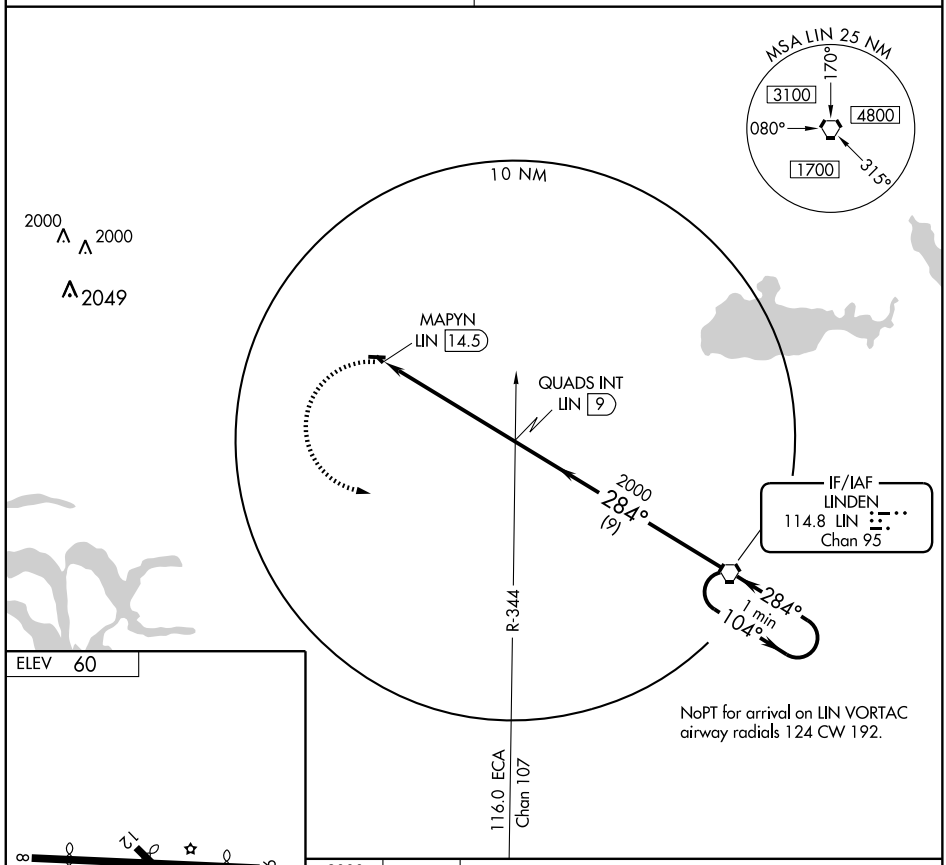
VORTAC LIN	APP CRS	Rwy Idg	N/A
114.8	284°	TDZE	N/A
Chan 95		Apt Elev	60

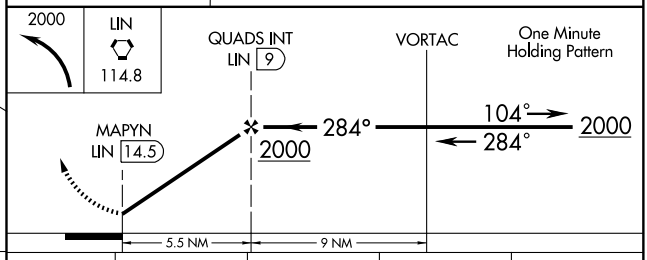
VOR-A
LODI (103)

Use Stockton altimeter setting, when not received, use Sacramento Intl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climbing left turn to 2000 direct LIN VORTAC and hold.

NORCAL APP CON	CTAF
125.1 363.2	122.9





LIRL Rwy 8-26

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

CATEGORY	A	B	C	D
CIRCLING	640-1 580 (600-1)		NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

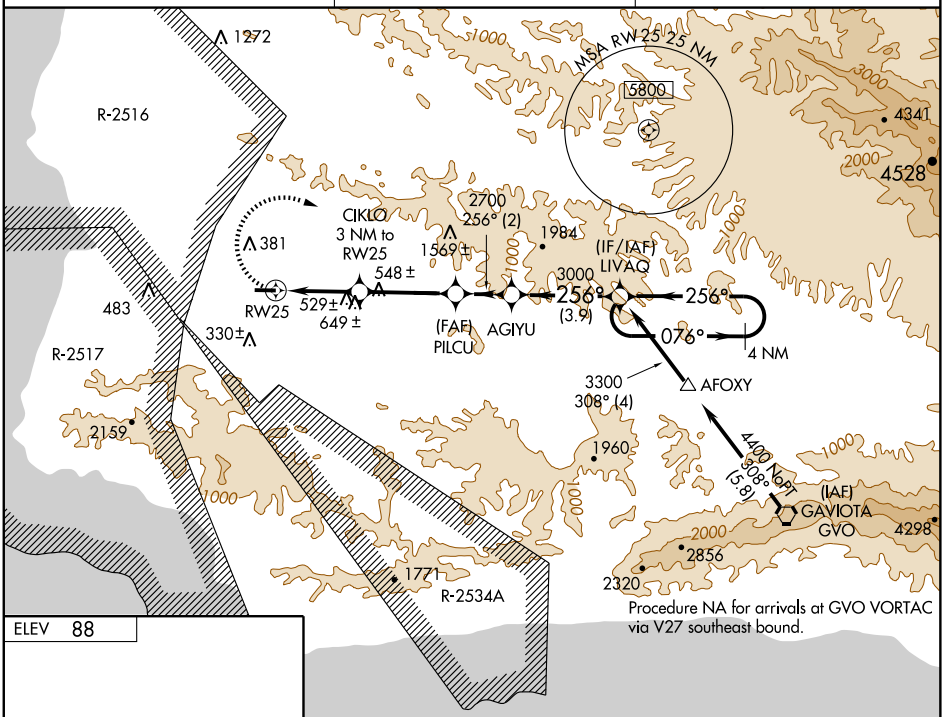
APP CRS	Rwy Idg	4600
256°	TDZE	88
	Apt Elev	88

RNAV (GPS) RWY 25
LOMPOC (LPC)

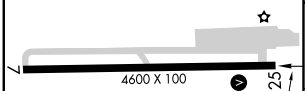
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Santa Maria Public/Captain G. Allan Hancock Field altimeter setting and increase all MDA 60 feet, and increase visibility LNAV and circling Cat B ¼ mile. VDP NA when using Santa Maria Public/Captain G. Allan Hancock Field altimeter setting.

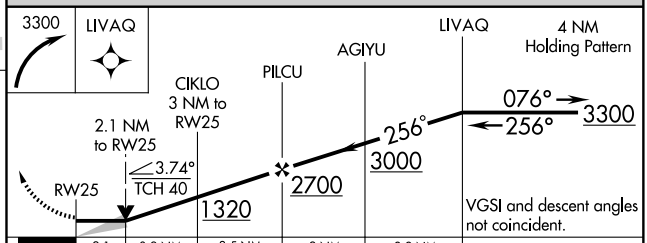
MISSED APPROACH: Climbing right turn to 3300 direct LIVAQ and hold.

AWOS-3	SANTA BARBARA APP CON★	UNICOM
133.875	124.15 327.8	122.7 (CTAF) L



ELEV 88





CATEGORY	A	B	C	D
LNAV MDA	780-1 692 (700-1)		NA	
CIRCLING	780-1 692 (700-1)		NA	

REIL Rwy 25 L
MIRL Rwy 7-25 L

SW-3, 22 OCT 2009 to 19 NOV 2009

LOMPOC, CALIFORNIA

AL-6346 (FAA)

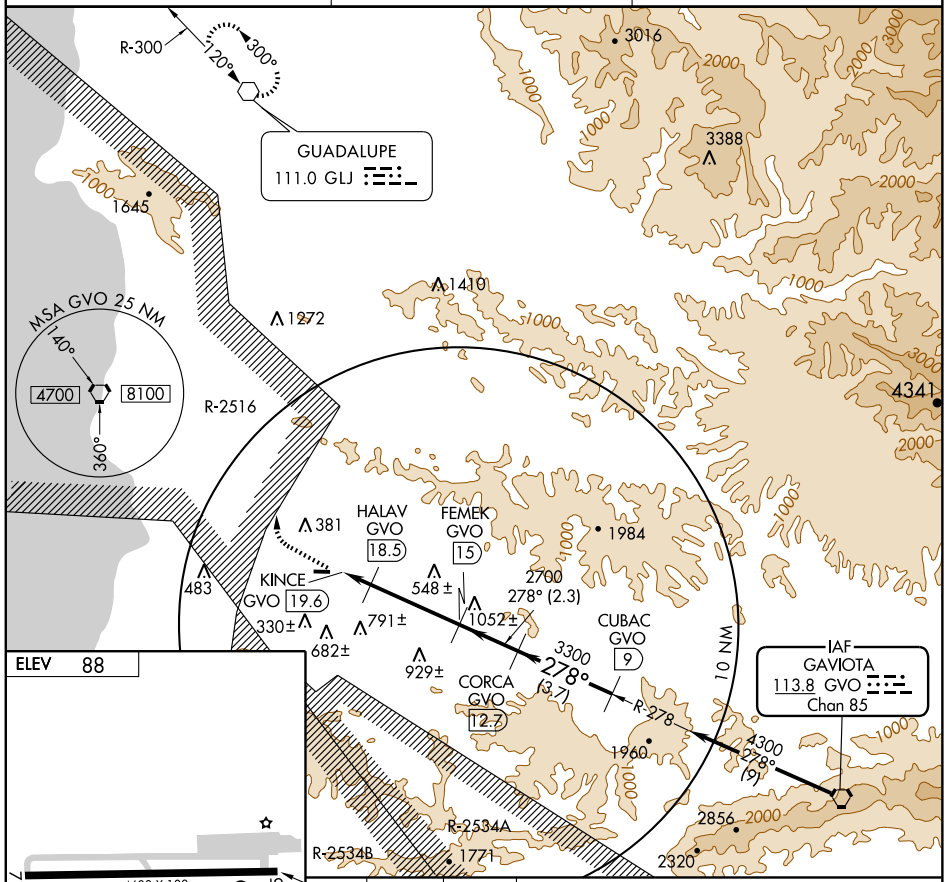
VORTAC GVO	APP CRS	Rwy Idg	N/A
113.8	278°	TDZE	N/A
Chan 85		Apt Elev	88

VOR/DME-A

LOMPOC (LPC)

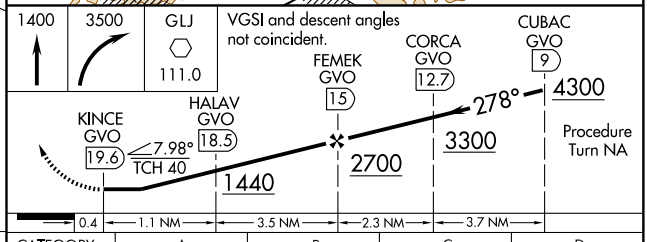
MISSED APPROACH: Climb to 1400, then climbing right turn to 3500 direct GLJ VOR and hold.

AWOS-3	SANTA BARBARA APP CON ★	UNICOM
133.875	124.15 327.8	122.7 (CTAF) L



REIL Rwy 25 L

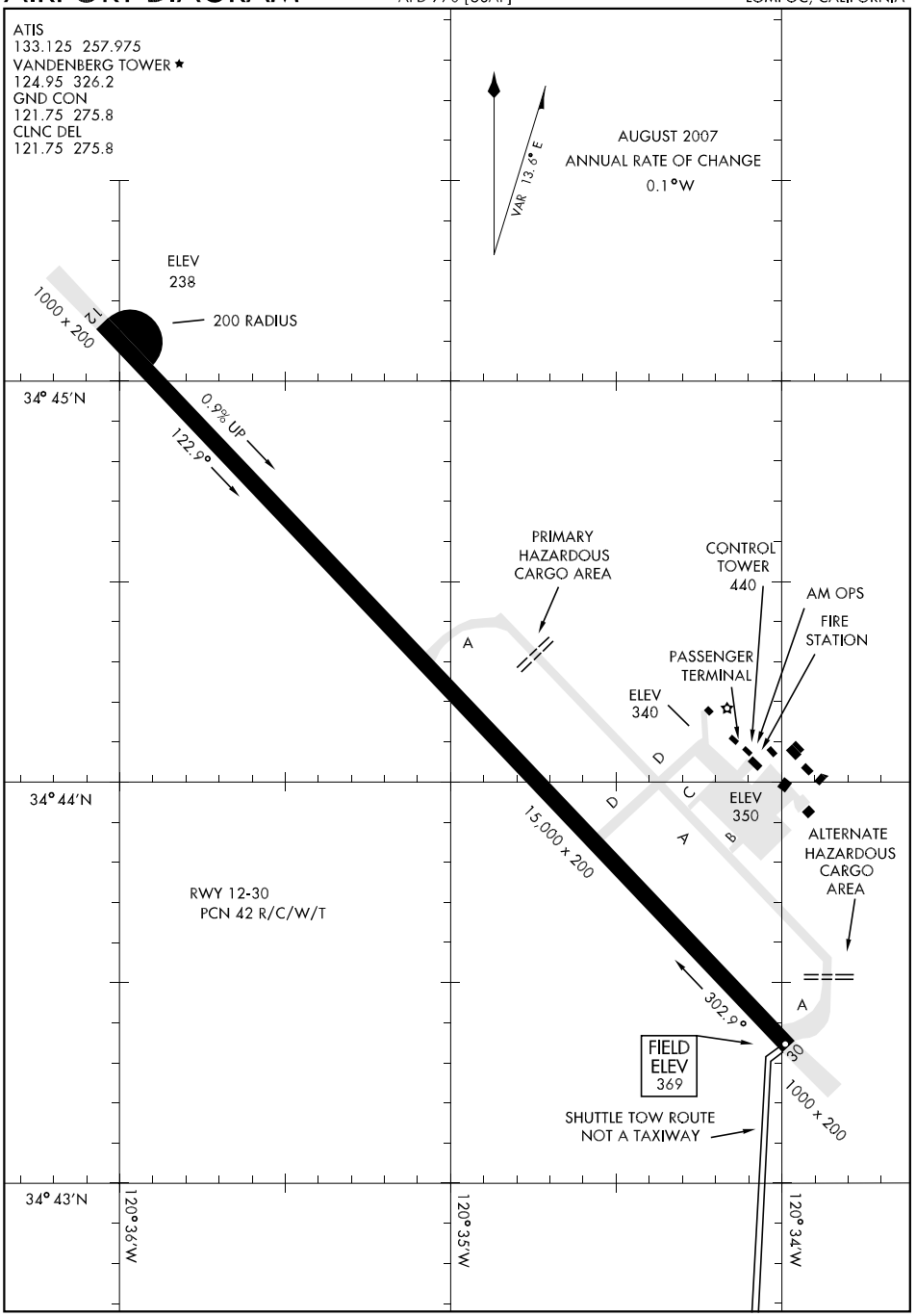
MIRL Rwy 7-25 L



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	920-1 832 (900-1)	920-1¼ 832 (900-1¼)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

GAVIOTA ONE DEPARTURE (GVO1.GVO)

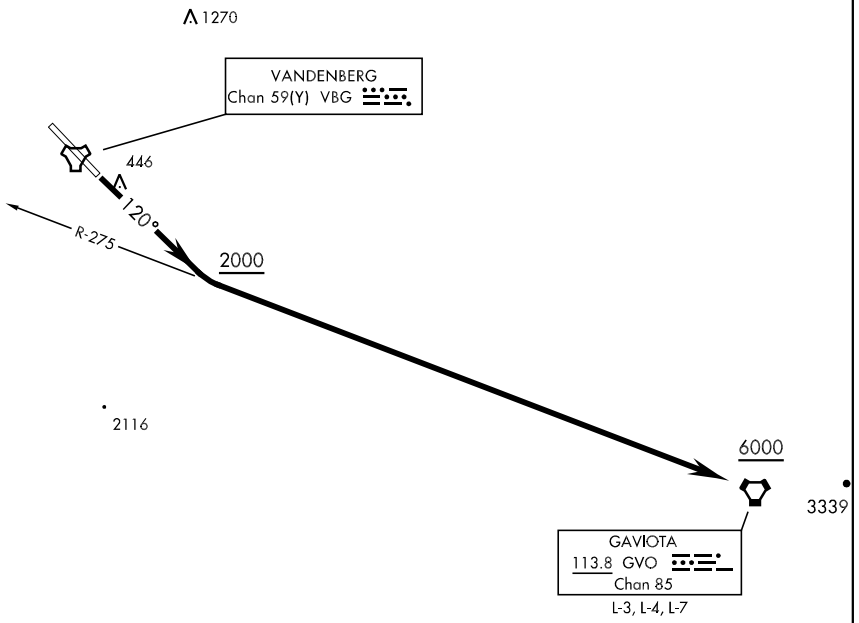
SL-770 [USAF]

LOMPOC, CALIFORNIA

Rwy	Knots	60	120	180	240
12	V/V(fpm)	280	560	840	1120

Minimum Climb Rate to 2000.

ATIS
133.125 257.975
GND CON
121.75 275.8
CLNC DEL
121.75 275.8
VANDENBERG TOWER
124.95 326.2
SANTA BARBARA DEP CON
124.15 327.8



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 12: Cross DER at or above 35' AGL/404' MSL, climb on track 120° to 2000 then turn left and intercept the GVO VORTAC R-275 inbound. Cross GVO at or above 6000. Expect vectors to first filed fix/route prior to GVO.

HI-ILS or LOC/DME RWY 12

LOC I-BVD	APCH CRS	Rwy ldg 15,000 / TDZE 267 / Arpt Elev 369
110.1	123°	

JAL-770 [USAF]

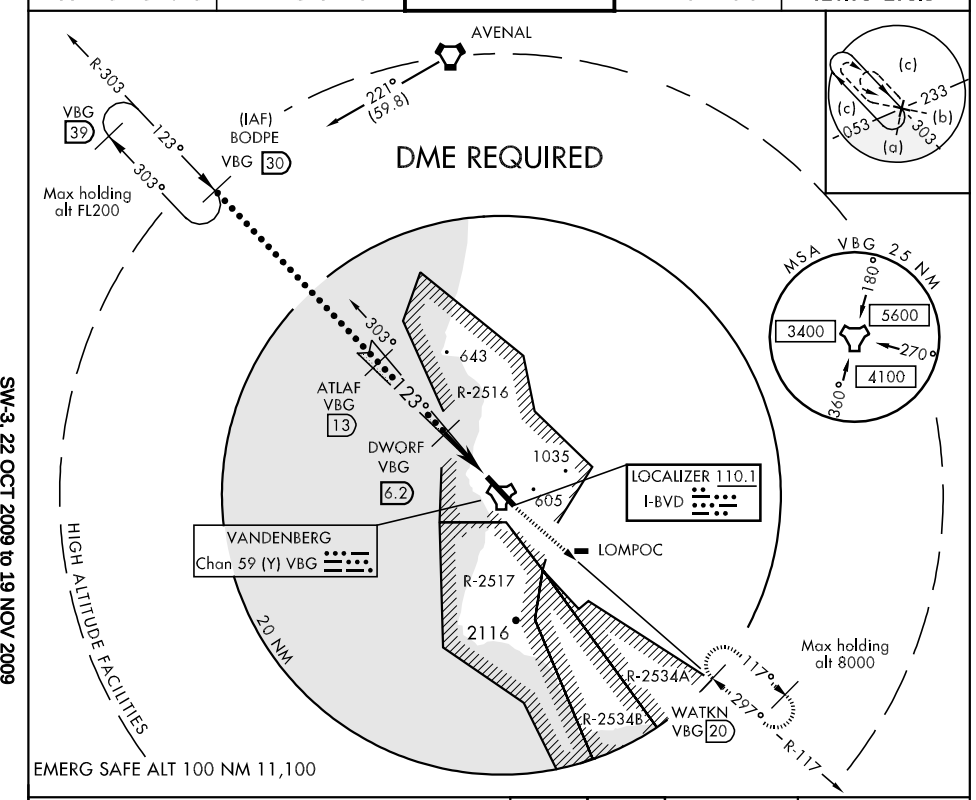
VANDENBERG AFB (KVBG)

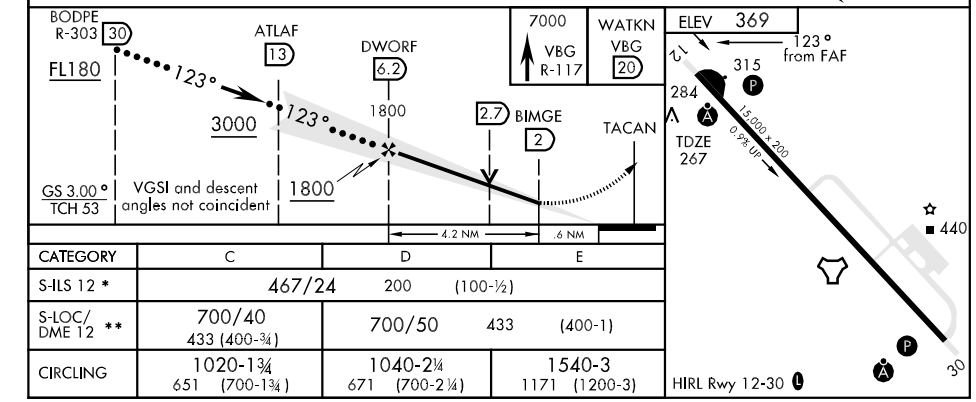
▼ * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ mile, CAT DE vis to 1½ mile.

ALSF-2

MISSED APPROACH: Climb out VBG TACAN R-117 until 20 DME (WATKN) and hold. Continue climb in hold maintain 7000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 L (CTAF) 326.2	121.75 275.8	121.75 275.8





CATEGORY	C	D	E
S-ILS 12 *	467/24 200 (100-½)		
S-LOC/DME 12 **	700/40 433 (400-¾)	700/50 433 (400-1)	
CIRCLING	1020-1¾ 651 (700-1¾)	1040-2¼ 671 (700-2¼)	1540-3 1171 (1200-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-ILS or LOC/DME RWY 30

LOC I-VBG	APCH CRS	Rwy ldg 15,000 / TDZE 369 / Arpt Elev 369
110.1	303°	

JAL-770 [USAF]

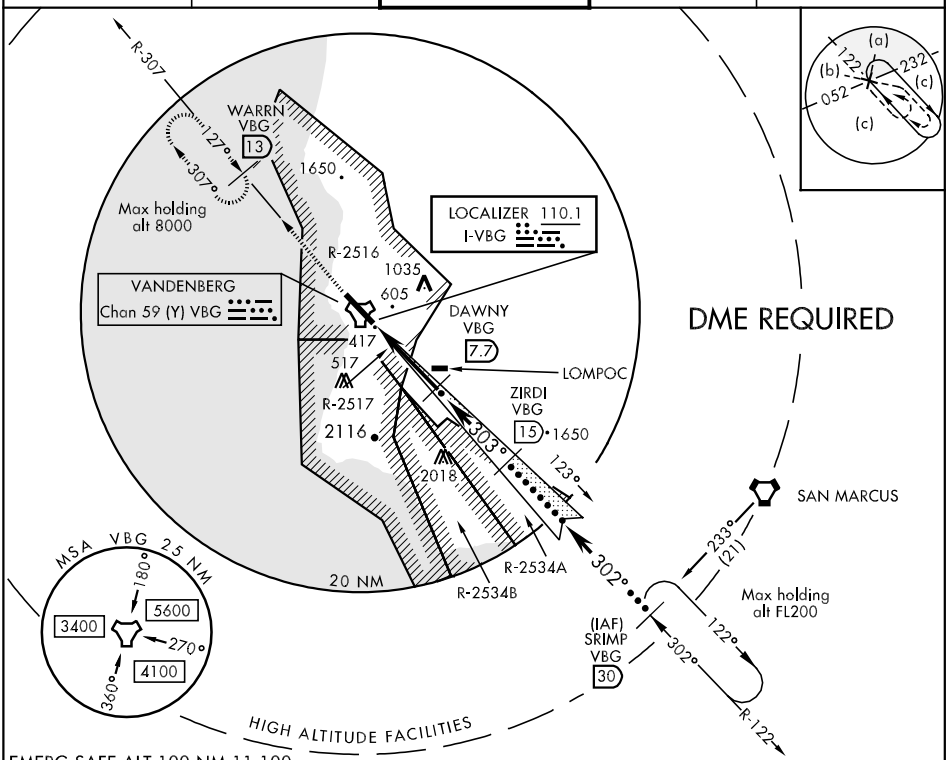
VANDENBERG AFB (KVBG)

* When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.

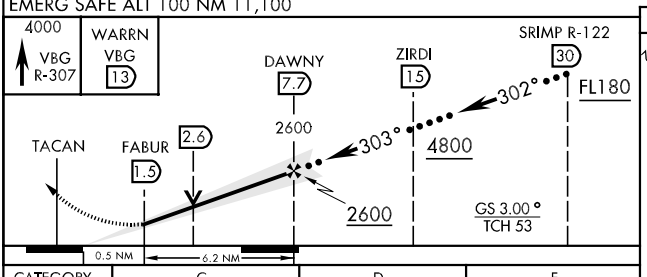
ALSF-2

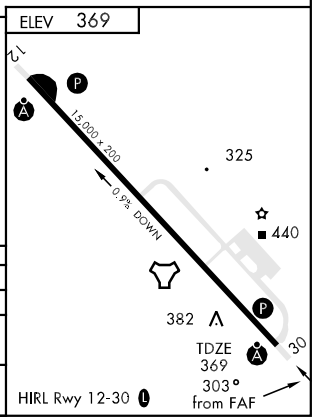
MISSED APPROACH: Climb out VBG TACAN R-307 to WARRN and hold. Continue climb in hold maintain 4000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 (L) (CTAF) 326.2	121.75 275.8	121.75 275.8



EMERG SAFE ALT 100 NM 11,100





CATEGORY	C	D	E
S-ILS 30 *	569/24	200 (200-½)	
S-LOC/DME 30 **	940/50 571 (600-1)	940/60 571 (600-1¼)	940-1½ 571 (600-1½)
CIRCLING	1020-1¾ 651 (700-1¾)	1040-2¼ 671 (700-2¼)	1540-3 1171 (1200-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 12

TACAN VBG Chan 59(Y)	APCH CRS 127°	Rwy Idg 15,000 TDZE 267 Arpt Elev 369

JAL-770 [USAF]

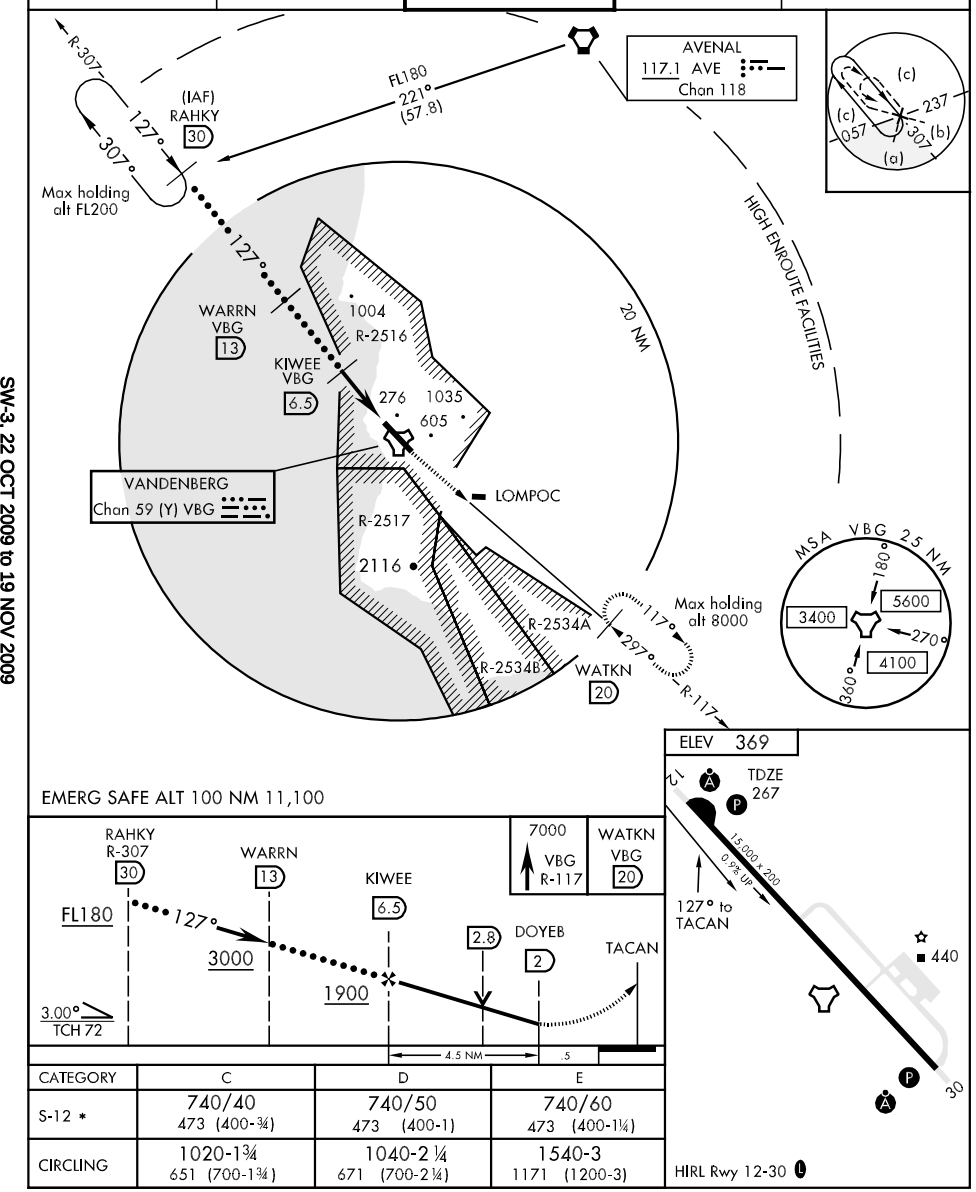
VANDENBERG AFB (KVBG)

▼ * When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT DE increase vis to 1½ miles.

ALSF-2

MISSED APPROACH: Climb out VBG TACAN R-117 until 20 DME (WATKN) and hold. Continue climb in hold maintain 7000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 (L) (CTAF) 326.2	121.75 275.8	121.75 275.8



CATEGORY	C	D	E
S-12 *	740/40 473 (400-¾)	740/50 473 (400-1)	740/60 473 (400-1¼)
CIRCLING	1020-1¾ 651 (700-1¾)	1040-2 ¼ 671 (700-2¼)	1540-3 1171 (1200-3)

HIRL Rwy 12-30 (L)

HI-TACAN RWY 30

TACAN VBG Chan 59(Y)	APCH CRS 297°	Rwy ldg 15,000 TDZE 369 Arpt Elev 369

JAL-770 [USAF]

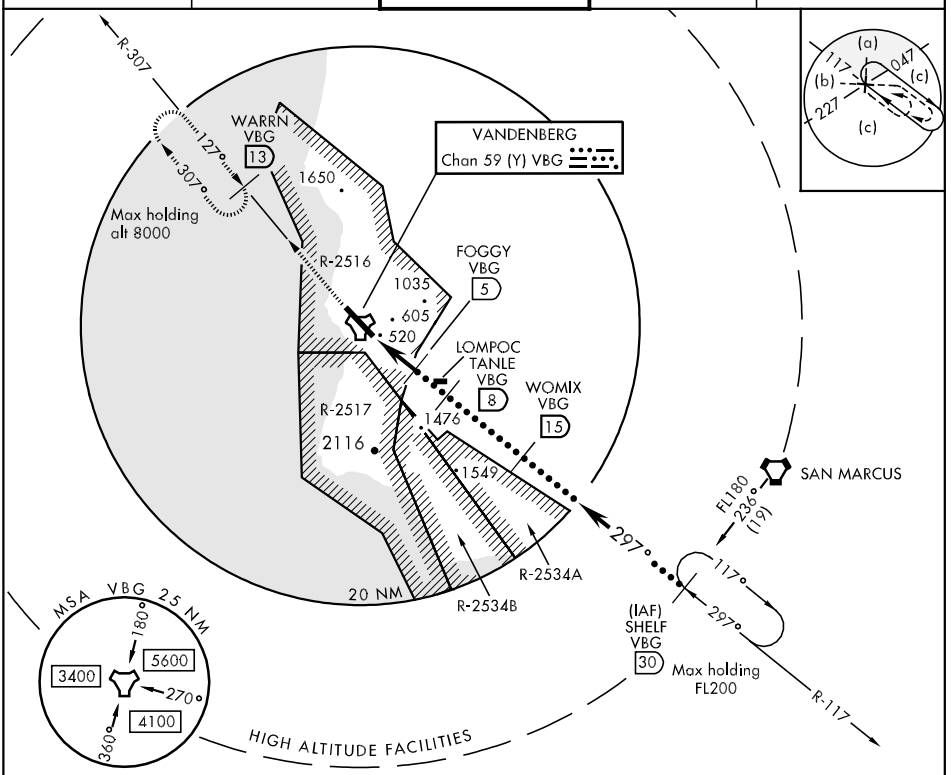
VANDENBERG AFB (KVBG)

▼ * When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, and CAT E vis to 2 miles.

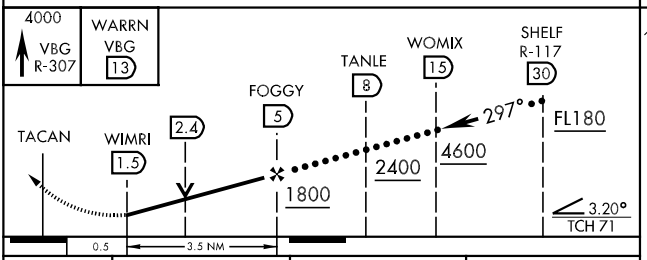
ALSF-2

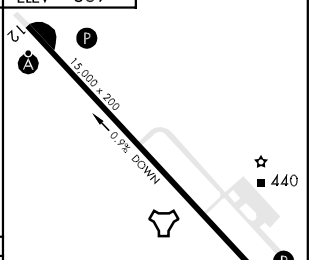
MISSED APPROACH: Climb out VBG TACAN R-307 to WARRN and hold. Continue climb in hold maintain 4000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 (L) (CTAF) 326.2	121.75 275.8	121.75 275.8



EMERG SAFE ALT 100 NM 11,100





CATEGORY	C	D	E
S-30 *	920/50 551 (600-1)	920/60 551 (600-1¼)	920-1½ 551 (600-1½)
CIRCLING	1020-1¾ 651 (700-1¾)	1040-2¼ 671 (700-2¼)	1540-3 1171 (1200-3)

ILS or LOC/DME RWY 12

LOC I-BVD	APCH CRS	Rwy ldg 15,000 / TDZE 267 / Arpt Elev 369
110.1	123°	

AL-770 [USAF]

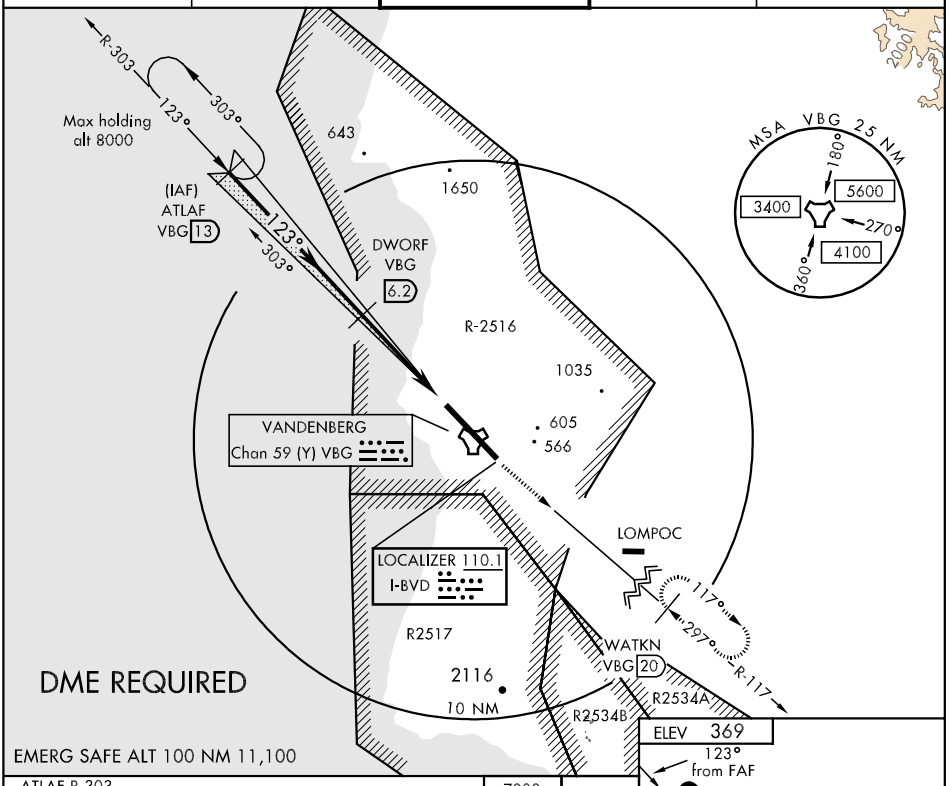
VANDENBERG AFB (KVBG)

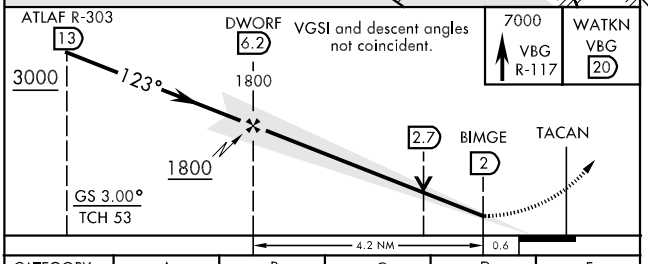
T * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ mile, CAT DE vis to 1½.

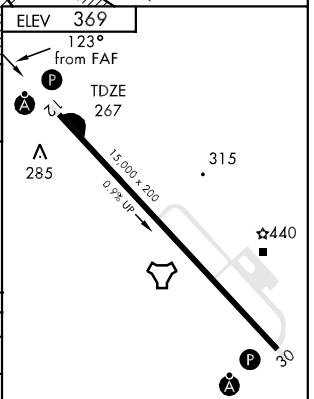
ALSF-2

MISSED APPROACH: Climb out VBG TACAN R-117 until 20 DME (WATKN) and hold. Continue climb in hold maintain 7000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 L (CTAF) 326.2	121.75 275.8	121.75 275.8







CATEGORY	A	B	C	D	E
S-ILS 12 *	467/24		200 (100-½)		
S-LOC/DME 12 **	700/24	433 (400-½)	700/40 433 (400-¾)	700/50	433 (400-1)
CIRCLING	980-1 611 (700-1)	1000-1 631 (700-1)	1020-1¾ 651 (700-1¾)	1040-2¼ 671 (700-2¼)	1540-3 1171(1200-3)

ILS or LOC/DME RWY 30

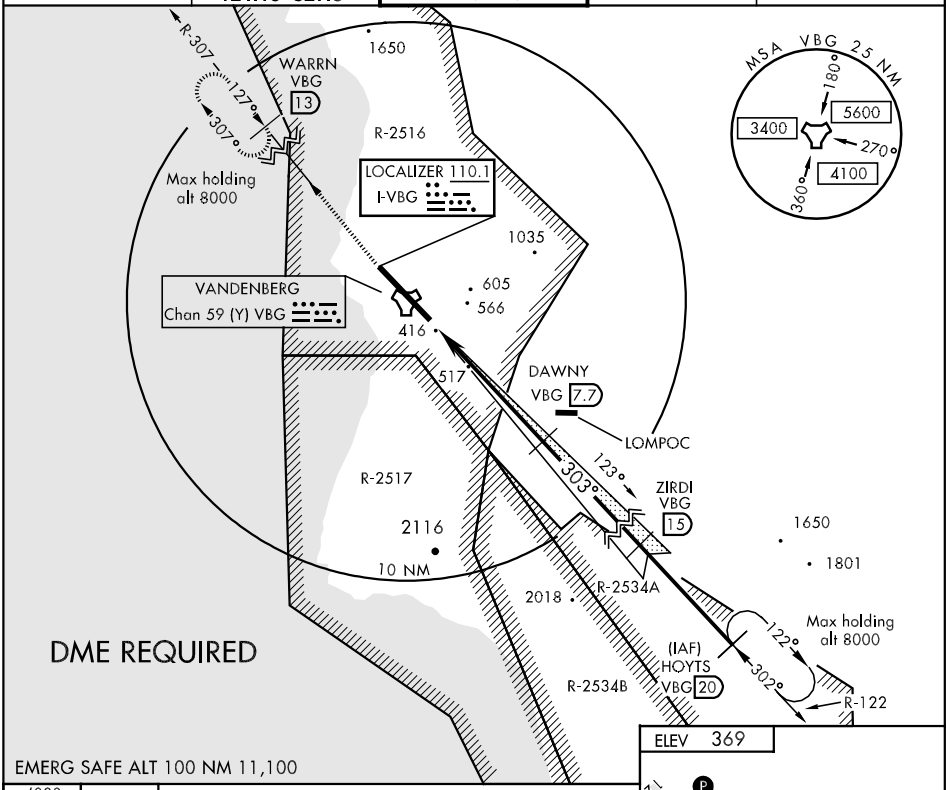
LOC I-VBG	APCH CRS	Rwy ldg 15,000 / TDZE 369 / Arpt Elev 369	AL-770 [USAF]	VANDENBERG AFB (KVBG)
110.1	303°			

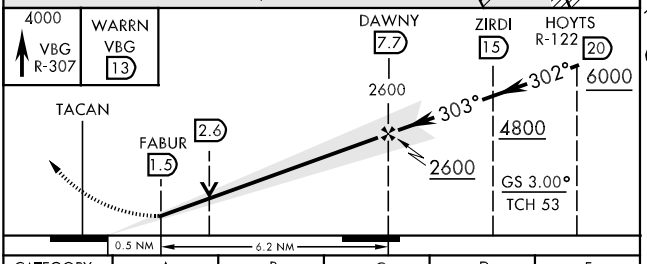
▼ * When ALS inop, increase CAT ABCDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.

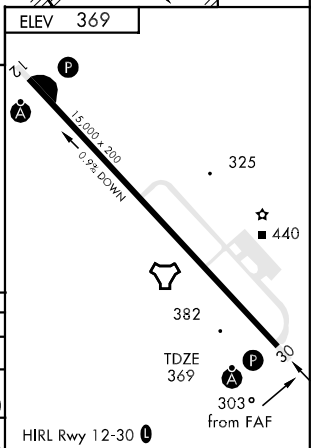
ALSF-2

MISSED APPROACH: Climb out VBG TACAN R-307 to WARRN and hold. Continue climb in hold maintain 4000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 (L) (CTAF) 326.2	121.75 275.8	121.75 275.8







CATEGORY	A	B	C	D	E
S-ILS 30 *	569/24		200 (200-½)		
S-LOC/DME 30 **	940/24	571 (600-½)	940/50 571 (600-1)	940/60 571 (600-1¼)	940-1½ 571 (600-1½)
CIRCLING	980-1 611 (700-1)	1000-1 631 (700-1)	1020-1¾ 651 (700-1¾)	1040-2¼ 671 (700-2¼)	1540-3 1171(1200-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 12

TACAN VBG Chan 59(Y)	APCH CRS 127°	Rwy ldg 15,000 TDZE 267 Arpt Elev 369

AL-770 [USAF]

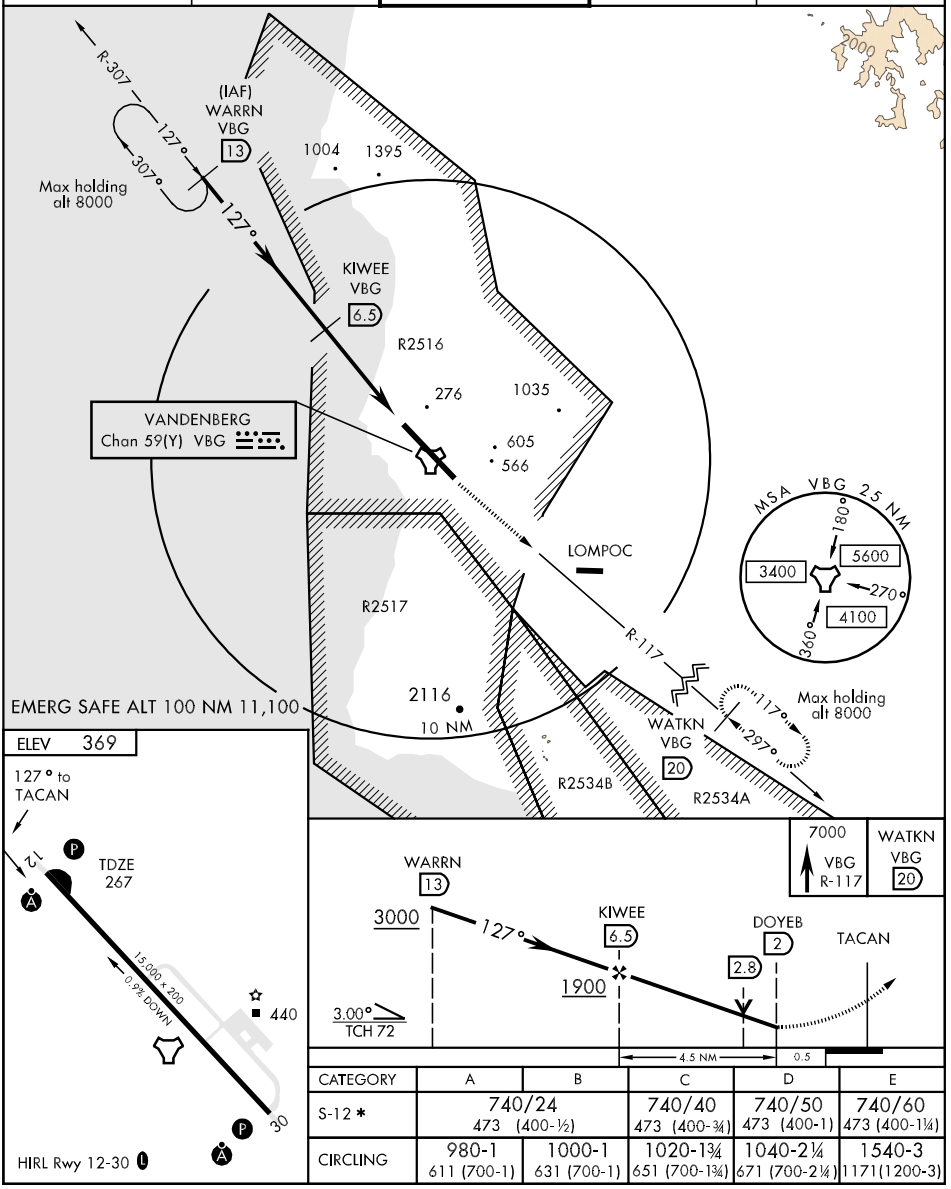
VANDENBERG AFB (KVBG)

* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT DE increase vis to 1½ miles.

ALSF-2

MISSED APPROACH: Climb out VBG TACAN R-117 until 20 DME (WATKN) and hold. Continue climb in hold maintain 7000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 L (CTAF) 326.2	121.75 275.8	121.75 275.8



CATEGORY	A	B	C	D	E
S-12 *	740/24 473 (400-½)		740/40 473 (400-¾)	740/50 473 (400-1)	740/60 473 (400-1¼)
CIRCLING	980-1 611 (700-1)	1000-1 631 (700-1)	1020-1¾ 651 (700-1¾)	1040-2¼ 671 (700-2¼)	1540-3 1171(1200-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 30

TACAN VBG Chan 59(Y)	APCH CRS 297°	Rwy ldg 15,000 TDZE 369 Arpt Elev 369

AL-770 [USAF]

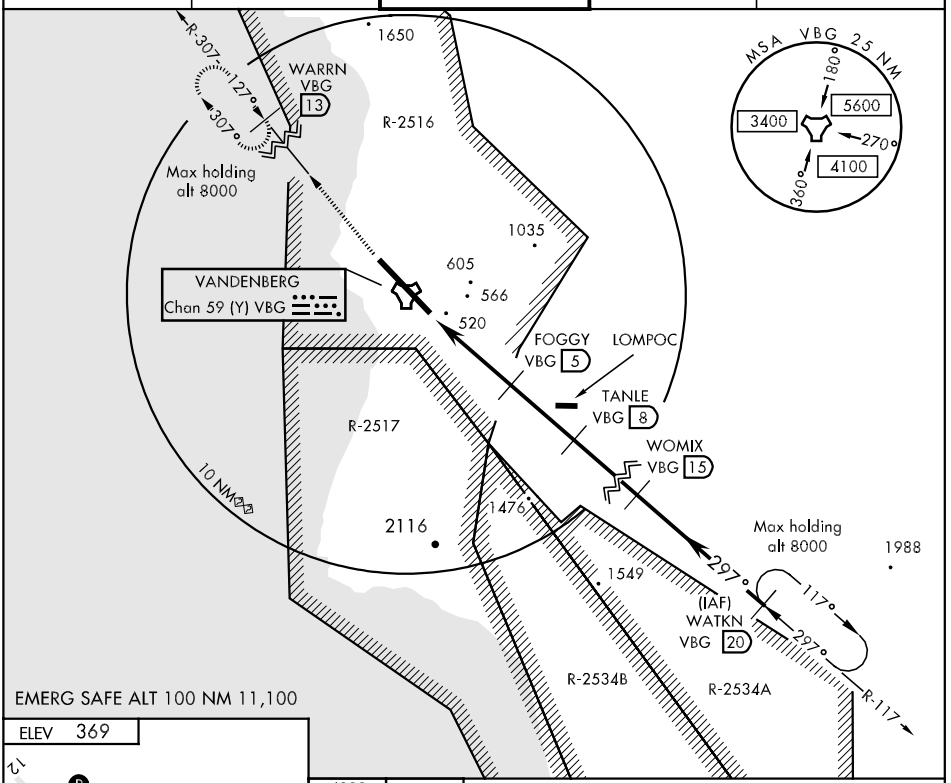
VANDENBERG AFB (KVBG)

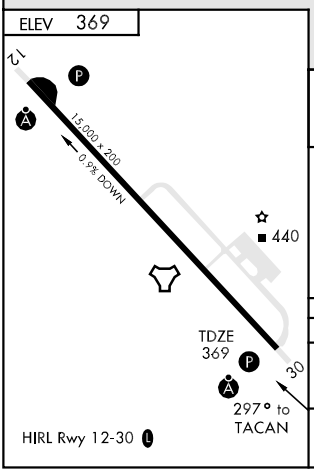
▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles and CAT E vis to 2 miles.

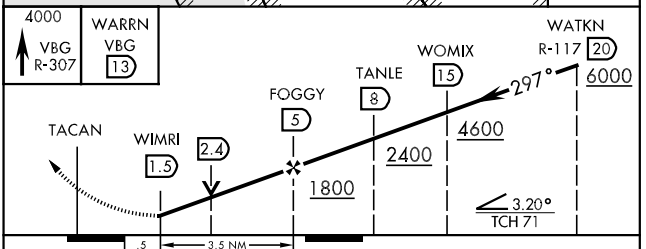
ALSF-2

MISSED APPROACH: Climb out VBG TACAN R-307 to WARRN and hold. Continue climb in hold maintain 4000.

ATIS	SANTA BARBARA APP/DEP CON	VANDENBERG TOWER ★	GND CON	CLNC DEL
133.125 257.975	124.15 327.8	124.95 (L) (CTAF) 326.2	121.75 275.8	121.75 275.8







CATEGORY	A	B	C	D	E
S-30 *	920/24 551 (600-½)		920/50 551 (600-1)	920/60 551(600-1¼)	920-1½ 551(600-1½)
CIRCLING	980-1 611 (700-1)	1000-1 631 (700-1)	1020-1¾ 651(700-1¾)	1040-2¼ 671(700-2¼)	1540-3 1171(1200-3)

VANDENBERG ONE DEPARTURE (VBG1.MQO)

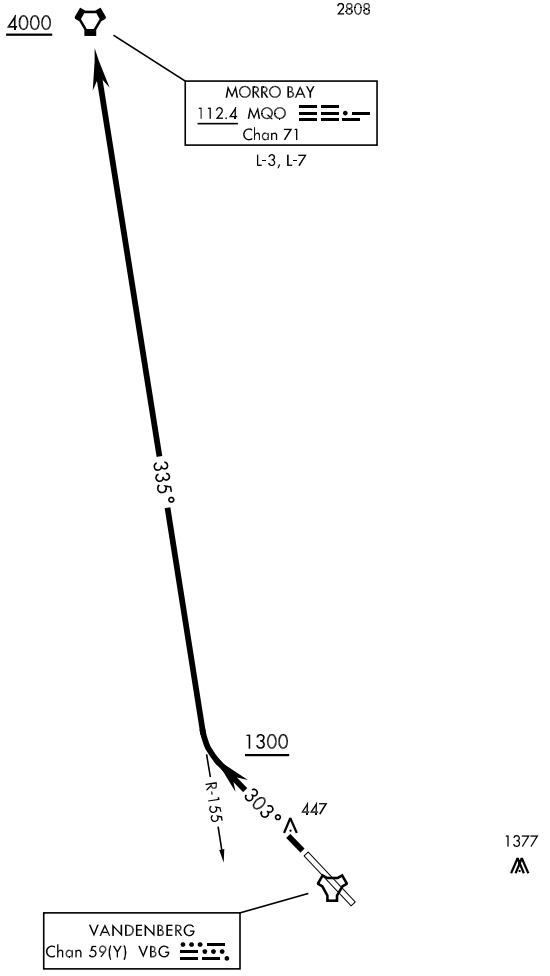
LOMPOC, CALIFORNIA

ATIS
133.125 257.975
GND CON
121.75 275.8
CLNC DEL
121.75 275.8
VANDENBERG TOWER
124.95 326.2
SANTA BARBARA DEP CON
124.15 327.8

SL-770 [USAF]

Rwy	Knots	60	120	180	240
30	V/V(fpm)	230	460	690	920

● Minimum Climb Rate to 700.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 30: Cross DER at or above 35' AGL/274' MSL, climb on track 303° to join MQO VORTAC R-155 at or above 1300, direct MQO. Cross MQO at or above 4000. Expect vectors to first filed fix/route prior to MQO.

VANDENBERG ONE DEPARTURE (VBG1.MQO)

LOMPOC, CALIFORNIA

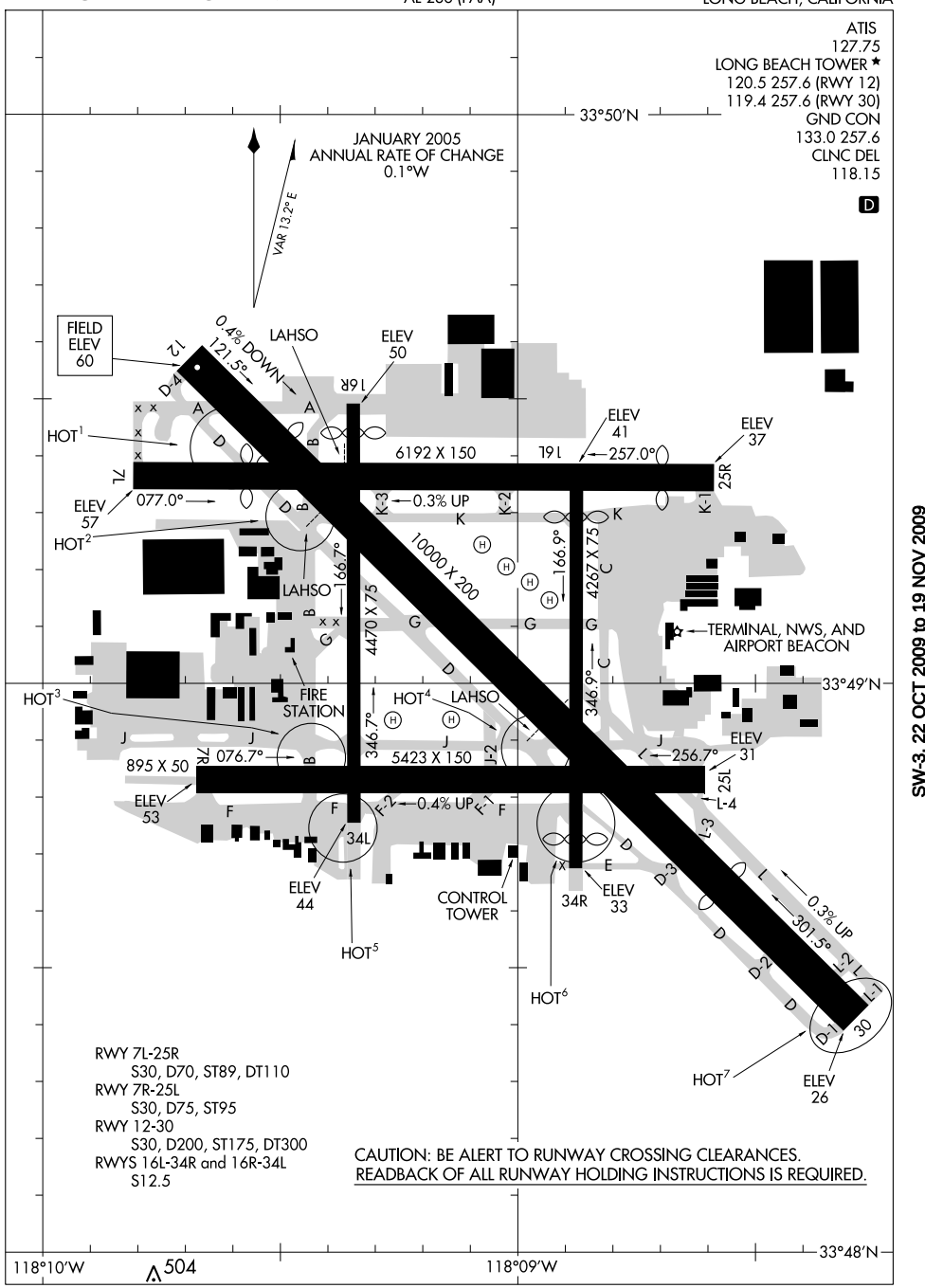
09295

AIRPORT DIAGRAM

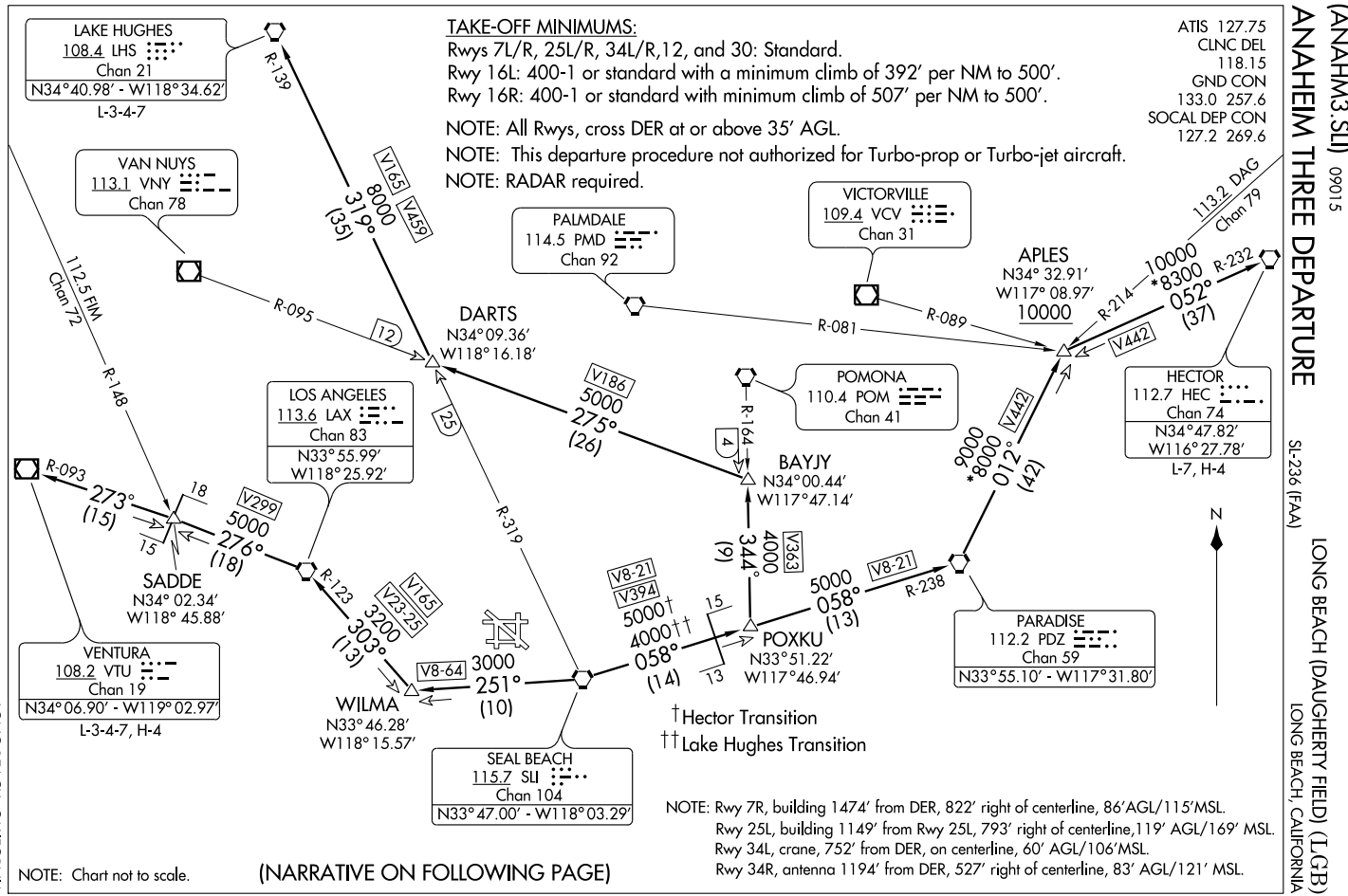
AL-236 (FAA)

LONG BEACH (DAUGHERTY FIELD) (LGB)

LONG BEACH, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009


ANAHEIM THREE DEPARTURE (ANAHM3.SLI) 09015
LONG BEACH (DAUGHERTY FIELD) (LGB)
LONG BEACH, CALIFORNIA
SL-236 (FAA)
TAKE-OFF MINIMUMS:
Rwys 7L/R, 25L/R, 34L/R,12, and 30: Standard.
Rwy 16L: 400-1 or standard with a minimum climb of 392' per NM to 500'.
Rwy 16R: 400-1 or standard with minimum climb of 507' per NM to 500'.
NOTE: All Rwys, cross DER at or above 35' AGL.
NOTE: This departure procedure not authorized for Turbo-prop or Turbo-jet aircraft.
NOTE: RADAR required.
ATIS 127.75
CLNC DEL 118.15
GND CON 133.0 257.6
SOCAL DEP CON 127.2 269.6
LAKE HUGHES
108.4 LHS
Chan 21
N34°40.98' - W118°34.62'
L-3-4-7
VAN NUYS
113.1 VNY
Chan 78
PALMDALE
114.5 PMD
Chan 92
VICTORVILLE
109.4 VCV
Chan 31
113.2 DAG
Chan 79
APLES
N34° 32.91'
W117° 08.97'
10000
DARTS
N34°09.36'
W118°16.18'
POMONA
110.4 POM
Chan 41
HECTOR
112.7 HEC
Chan 74
N34°47.82'
W116°27.78'
L-7, H-4
LOS ANGELES
113.6 LAX
Chan 83
N33°55.99'
W118°25.92'
BAYJY
N34°00.44'
W117°47.14'
SADDE
N34° 02.34'
W118° 45.88'
PARADISE
112.2 PDZ
Chan 59
N33°55.10' - W117°31.80'
VENTURA
108.2 VTU
Chan 19
N34°06.90' - W119°02.97'
L-3-4-7, H-4
WILMA
N33°46.28'
W118°15.57'
POXKU
N33°51.22'
W117°46.94'
SEAL BEACH
115.7 SLI
Chan 104
N33°47.00' - W118°03.29'
112.5 FIM
Chan 72
R-139
R-095
R-148
R-093
R-123
R-319
R-081
R-089
R-214
R-232
R-164
R-238
V165
V459
V186
V299
V165
V23-25
V8-64
V8-21
V394
V363
V442
12
25
18
15
4
13
N
†Hector Transition
††Lake Hughes Transition
NOTE: Rwy 7R, building 1474' from DER, 822' right of centerline, 86'AGL/115'MSL.
Rwy 25L, building 1149' from Rwy 25L, 793' right of centerline,119' AGL/169' MSL.
Rwy 34L, crane, 752' from DER, on centerline, 60' AGL/106'MSL.
Rwy 34R, antenna 1194' from DER, 527' right of centerline, 83' AGL/121' MSL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

HECTOR or LAKE HUGHES TRANSITION: Climb runway heading to 800′ then fly assigned heading for radar vectors to SLI VORTAC. Thence. . . .

VENTURA TRANSITION: Climb runway heading to 800′ then fly assigned heading for radar vectors to LAX VORTAC. Thence. . . .

. . . .via (transition) or (assigned route). Maintain assigned altitude. Expect clearance to filed altitude 10 minutes after departure.

HECTOR TRANSITION (ANAHM3.HEC): From over SLI VORTAC via SLI R-058 and PDZ R-238 to PDZ VORTAC, then via PDZ R-012 and HEC R-232 to HEC VORTAC.

LAKE HUGHES TRANSITION (ANAHM3.LHS): From over SLI VORTAC via SLI R-058 and PDZ R-238 to POXKU INT, then via POM R-164 to BAYJY INT, then via VNY R-095 to DARTS INT. Thence via SLI R-319 and LHS R-139 to LHS VORTAC.

VENTURA TRANSITION (ANAHM3.VTU): From over SLI VORTAC via SLI R-251 to WILMA INT, then via LAX R-123 to LAX VORTAC, then via LAX R-276 and VTU R-093 to VTU VOR/DME.

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-LGB	APP CRS	Rwy Idg	8000
110.3	301°	TDZE	38
		Apt Elev	60

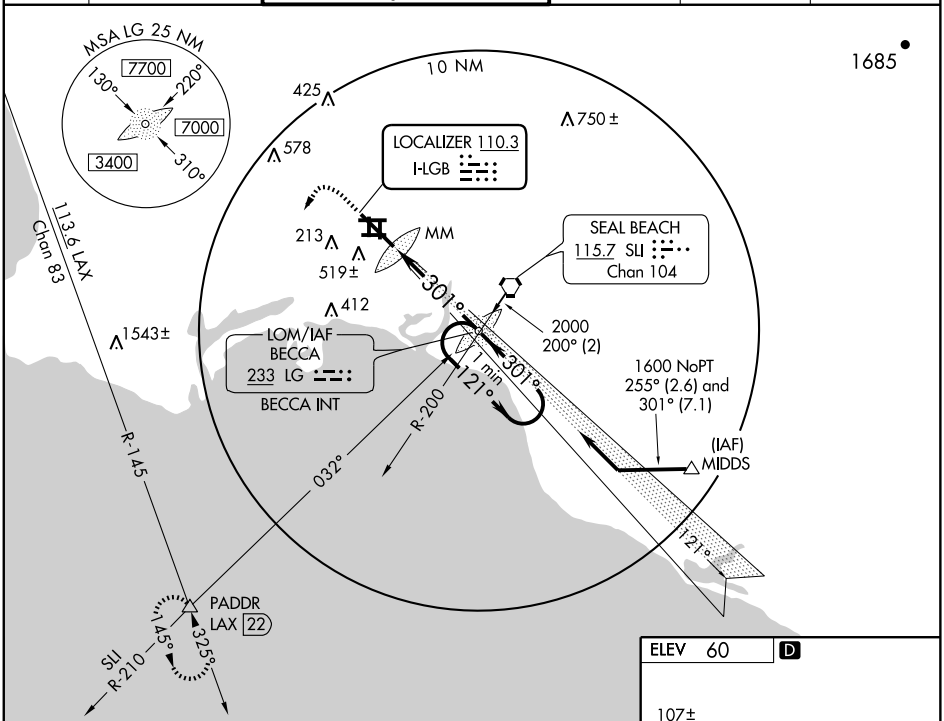
ILS or LOC RWY 30

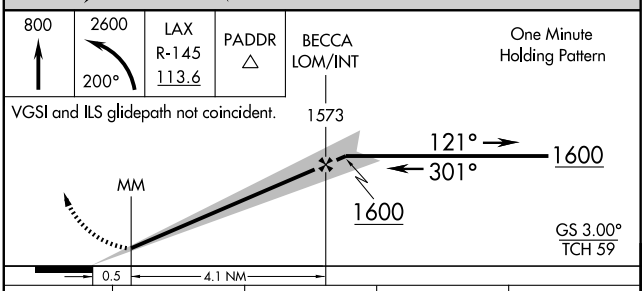
LONG BEACH (DAUGHERTY FIELD) (LGB)

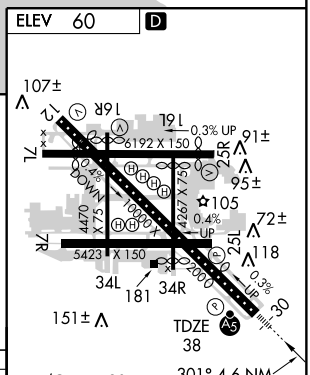
MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 2600 via heading 200° and LAX R-145 to PADDR INT/LAX 22 DME and hold.

ATIS	SOCAL APP CON	LONG BEACH TOWER★	GND CON	CLNC DEL	UNICOM
127.75	124.65 316.125	120.5 257.6 (Rwy 12) 119.4 (CTAF) L 257.6 (Rwy 30)	133.0 257.6	118.15	122.95







CATEGORY	A	B	C	D
S-ILS 30	250/18 212 (200-½)			
S-LOC 30	520/24 482 (500-½)		520/40 482 (500-¾)	520/50 482 (500-1)
CIRCLING	880-1 820 (900-1)	880-1¼ 820 (900-1¼)	880-2½ 820 (900-2½)	880-2¾ 820 (900-2¾)

TDZ/CL Rwy 30
MIRL Rwy 7L-25R
REIL Rwys 12, 25L, and 25R
HIRL Rwys 7R-25L and 12-30

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

SW-3, 22 OCT 2009 to 19 NOV 2009

KAYOH FOUR ARRIVAL

SOCAL APP CON
133.85 346.35
FULLERTON MUNI ATIS
125.05
LONG BEACH ATIS
127.75
ORANGE COUNTY ATIS
126.0
TORRANCE MUNI ATIS
125.6

HECTOR TRANSITION (HEC.KAYOH4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to DAWNA INT, then via HDF R-353 to HDF VOR then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

PALM SPRINGS TRANSITION (PSP.KAYOH4): From over PSP VORTAC via PSP R-260 to BANDS INT, then via HDF R-054 to HDF VOR, then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

....From over KAYOH INT via SLI R-075 to SLI VORTAC.

Expect radar vectors to final approach course.

HECTOR
112.7 HEC
Chan 74
N34°47.82′
W116°27.78′
L-7, H-4

V8-21-283-587
10,500
211°
(46)

31
44

DAWNA
N34°15.90′-W117°06.78′
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojet: Expect clearance to cross at 13,000′.
Non-Turbojet: Expect clearance to cross at 12,000′.

PARADISE
112.2 PDZ
Chan 59

29

R-030

V283-587
10,500
173°
(29)

POMONA
110.4 POM
Chan 41

KAYOH
N33°46.82′
W117°35.41′
VERTICAL NAVIGATION PLANNING INFORMATION

210K

FULLERTON MUNI

LONG BEACH (DAUGHERTY FIELD)

R-164

R-185

R-154

R-353

V283-372

8000
257°
(16)

V372
8000
234°
(18)

13,000
260°
(21)

V16-370-372

R-054

ZAMPERINI FIELD

R-075 4000
(14)

6000
255°
(9)

19
23
24
(5)

LOS ALAMITOS AAF

JOGIT
N33°46.91′
W117°46.85′

BANDS
N33°53.38′-W116°50.97′
VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at 14,000′.

JOHN WAYNE ARPT-ORANGE COUNTY

DEJAY
N33°46.77′
W117°29.86′

HOMELAND
113.4 HDF
N33°46.58′-W117°11.12′

R-021

SEAL BEACH
115.7 SLI
Chan 104
N33°47.00′-W118°03.29′

VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or above 8000′.

N

PALM SPRINGS
115.5 PSP
Chan 102
N33°52.20′-W116°25.79′
L-4, H-4

OCEANSIDE
115.3 OCN
Chan 100

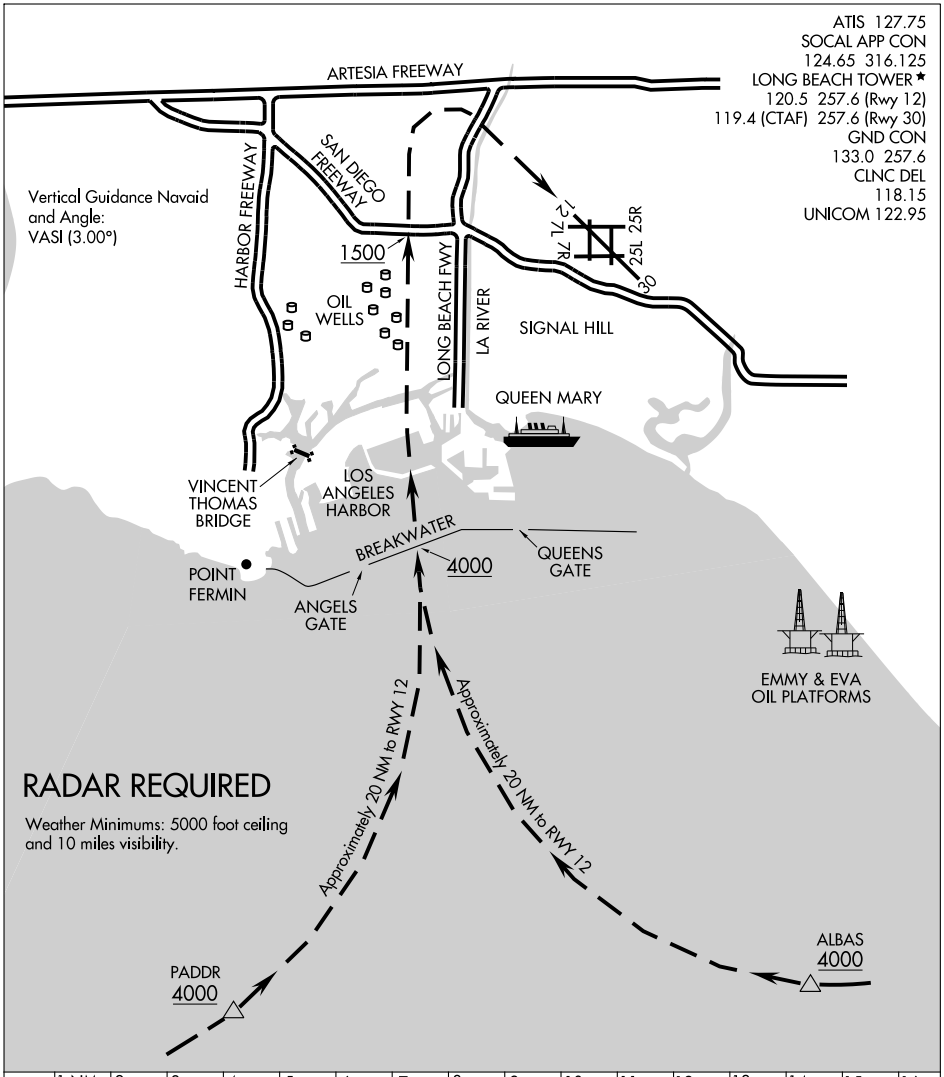
NOTE: Chart not to scale.

LA RIVER VISUAL RWY 12

AL-236 (FAA)

LONG BEACH (DAUGHERTY FIELD) (LGB)
LONG BEACH, CALIFORNIA

ATIS 127.75
SOCAL APP CON
124.65 316.125
LONG BEACH TOWER ★
120.5 257.6 (Rwy 12)
119.4 (CTAF) 257.6 (Rwy 30)
GND CON
133.0 257.6
CLNC DEL
118.15
UNICOM 122.95



PROCEDURE NOT AUTHORIZED AT NIGHT.

WAAS CH 90120 W30A	APP CRS 301°	Rwy Idg 8000 TDZE 38 Apt Elev 60

RNAV (GPS) Z RWY 30

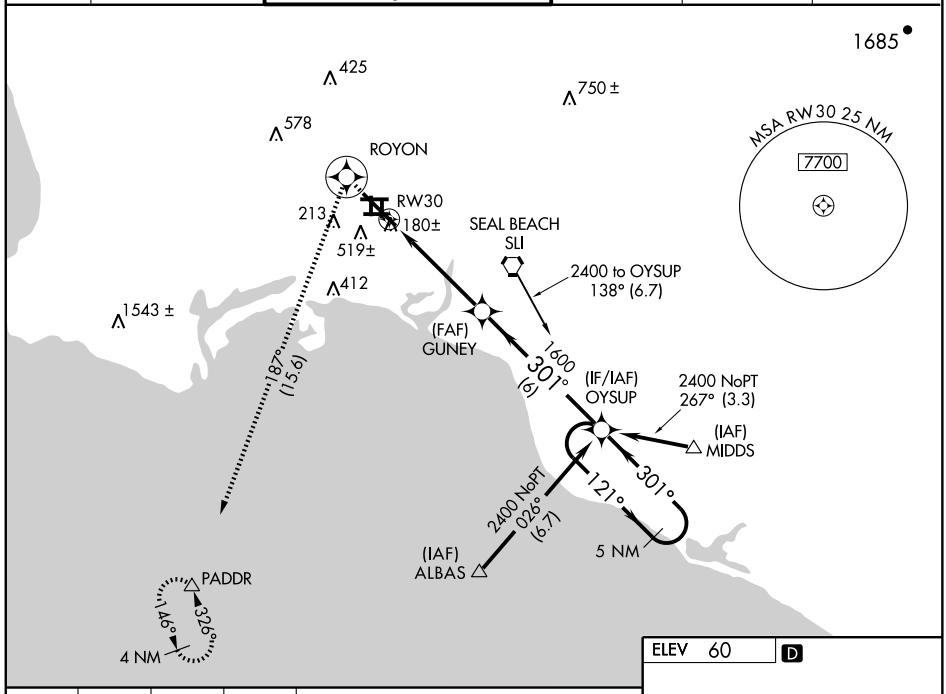
LONG BEACH (DAUGHERTY FIELD) (LGB)

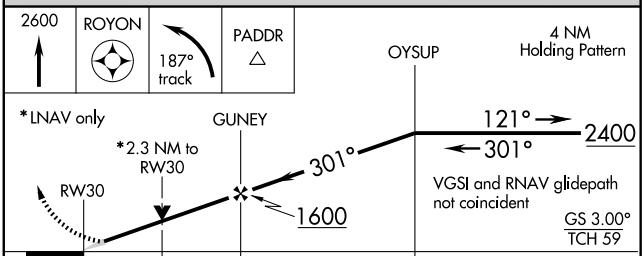
T A W Baro-VNAV NA below -15°C (5°F).
DME/DME RNP- 0.3 NA.

MALSR

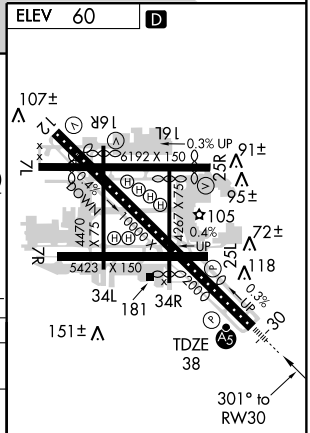
MISSED APPROACH: Climb to 2600 direct ROYON and left turn via 187° track to PADDR and hold.

ATIS	SOCAL APP CON	LONG BEACH TOWER★	GND CON	CLNC DEL	UNICOM
127.75	124.65 316.125	120.5 257.6 (Rwy 12) 119.4 (CTAF) L 257.6 (Rwy 30)	133.0 257.6	118.15	122.95





CATEGORY	A	B	C	D
LPV DA	290/24 252 (300-½)			
LNAV/VNAV DA	657-1¾ 619 (600-1¾)			
LNAV MDA	820/24 782 (800-½)	820/40 782 (800-¾)	820-1¾ 782 (800-1¾)	820-2 782 (800-2)
CIRCLING	880-2¼ 820 (900-2¼)		880-2½ 820 (900-2½)	880-2¾ 820 (900-2¾)



TDZ/CL Rwy 30
MIRL Rwys 7L-25R
REIL Rwys 12, 25L, and 25R
HIRL Rwys 7R-25L and 12-30

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8650
121°	TDZE	53
	Apt Elev	60

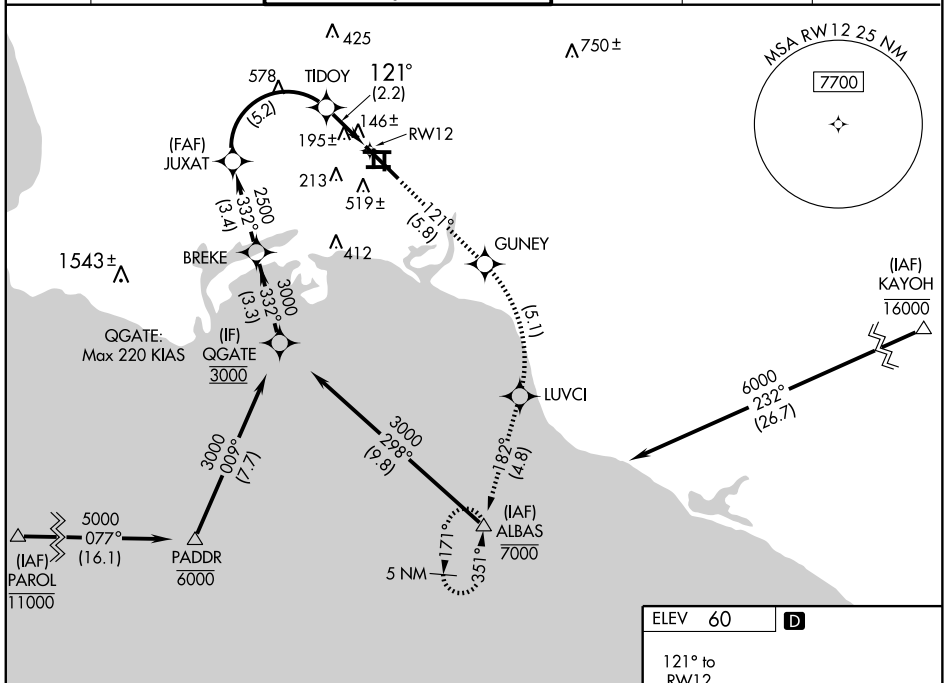
RNAV (RNP) RWY 12

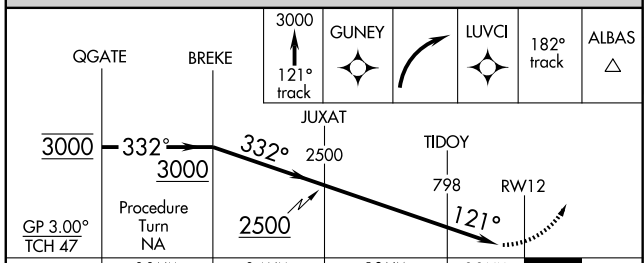
LONG BEACH (DAUGHERTY FIELD) (LGB)

RF and GPS required.
Procedure NA when control tower closed.
For uncompensated Baro-VNAV systems, procedure NA below 3°C (37°F) or above 49°C (121°F).
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 via 121° track to GUNEY, right radius turn to LUVCI, 182° track to ALBAS and hold.

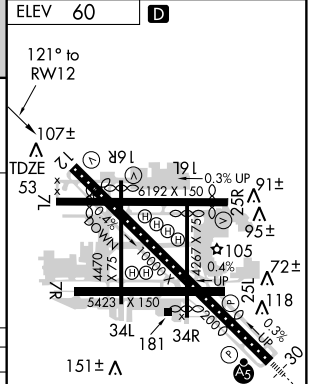
ATIS	SOCAL APP CON	LONG BEACH TOWER★	GND CON	CLNC DEL	UNICOM
127.75	124.65 316.125	120.5 257.6 (Rwy 12) 119.4 (CTAF) L 257.6 (Rwy 30)	133.0 257.6	118.15	122.95





CATEGORY	A	B	C	D
RNP 0.13 DA	371-1 318 (400-1)			
RNP 0.19 DA	388-1¼ 335 (400-1¼)			
RNP 0.30 DA	478-1½ 425 (500-1½)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwy 30
MIRL Rwy 7L-25R
REIL Rwys 12, 25L, and 25R
HIRL Rwys 7R-25L and 12-30

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5661
256°	TDZE	48
	Apt Elev	60

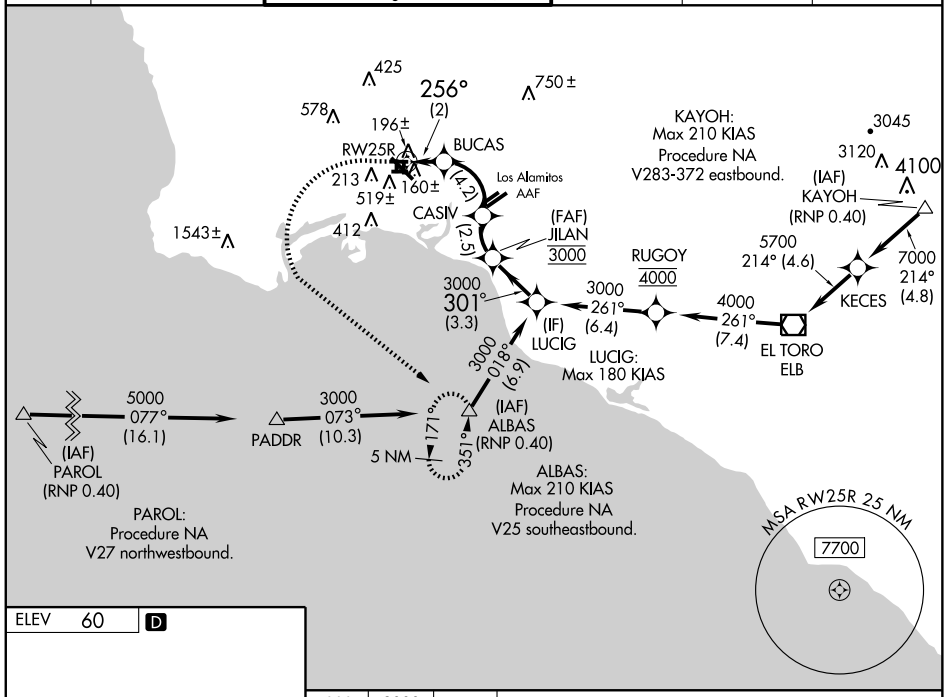
RNAV (RNP) RWY 25R

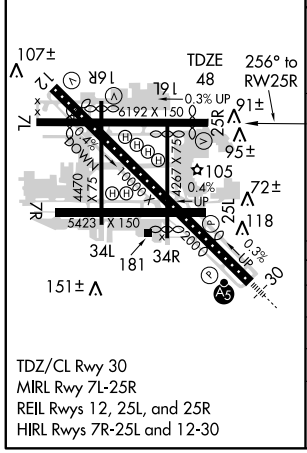
LONG BEACH (DAUGHERTY FIELD) (LGB)

RF and GPS required. Procedure NA when control tower closed. For uncompensated Baro-VNAV systems, procedure NA below 3°C (38°F) or above 39°C (102°F).
*NA at night. Visibility reduction by helicopters NA.
#Missed approach requires minimum climb of 370 feet per NM to 500.

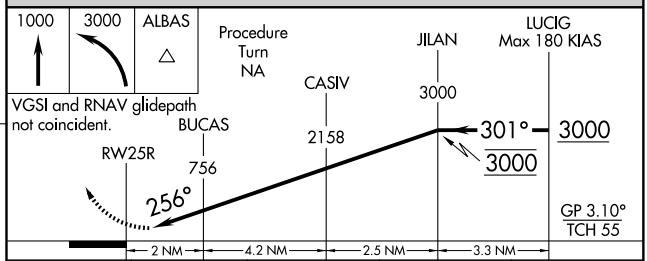
MISSED APPROACH: Climb to 1000, then climbing left turn to 3000 direct ALBAS and hold.

ATIS	SOCAL APP CON	LONG BEACH TOWER*	GND CON	CLNC DEL	UNICOM
127.75	124.65 316.125	120.5 257.6 (Rwy 12) 119.4 (CTAF) 257.6 (Rwy 30)	133.0 257.6	118.15	122.95





TDZ/CL Rwy 30
MIRL Rwy 7L-25R
REIL Rwys 12, 25L, and 25R
HIRL Rwys 7R-25L and 12-30



CATEGORY	A	B	C	D
RNP 0.15 DA*#	352-1 304 (300-1)			
RNP 0.30 DA*	403-1¼ 355 (400-1¼)			
RNP 0.30 DA	460-1½ 412 (400-1½)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8000
301°	TDZE	38
	Apt Elev	60

RNAV (RNP) Y RWY 30

LONG BEACH (DAUGHERTY FIELD) (LGB)

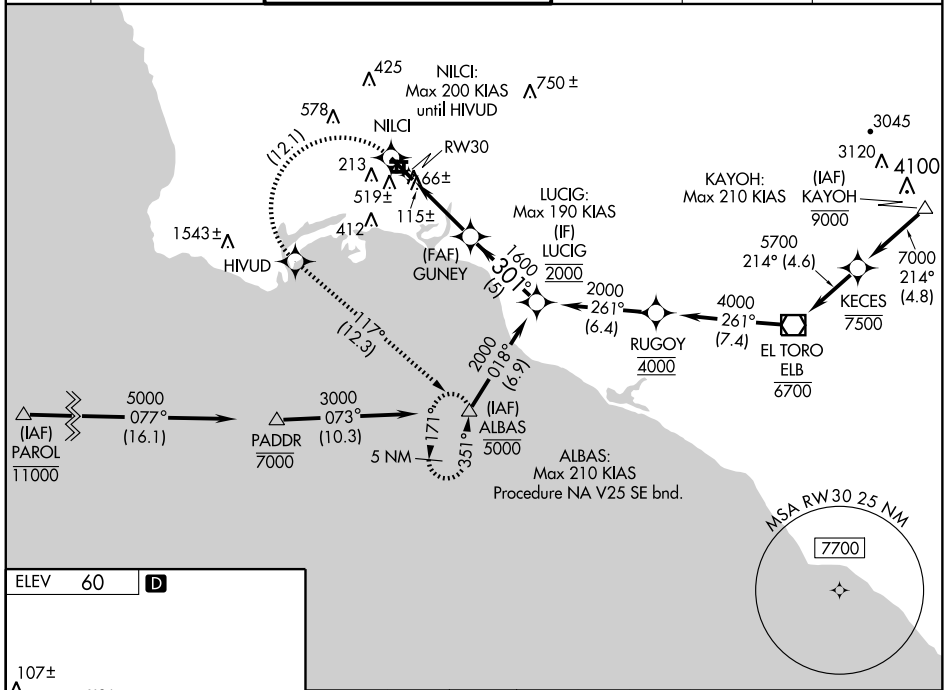
NA

RF and GPS required. Procedure NA when control tower closed.
For uncompensated Baro-VNAV systems, procedure NA below 3° C (37° F) or above 48° C (119° F).
Missed approach requires RNP less than 1.0.
For inoperative MALSR, increase RNP 0.13 visibility to RVR 5000, and RNP 0.30 visibility to RVR 6000.
* When VGSI inoperative, procedure NA at night.

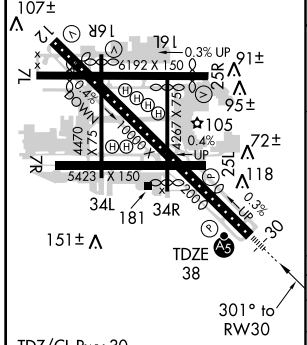
MALSR

MISSED APPROACH: Climb to 3000 via 301° track to NILCI, left radius turn to HIVUD, 117° track to ALBAS and hold.

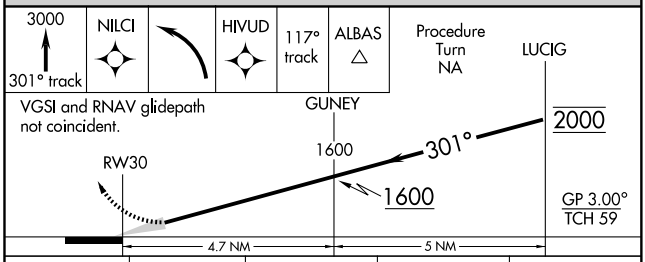
ATIS	SOCAL APP CON	LONG BEACH TOWER*	GND CON	CLNC DEL	UNICOM
127.75	124.65 316.125	120.5 257.6 (Rwy 12) 119.4 (CTAF) L 257.6 (Rwy 30)	133.0 257.6	118.15	122.95



ELEV 60 D



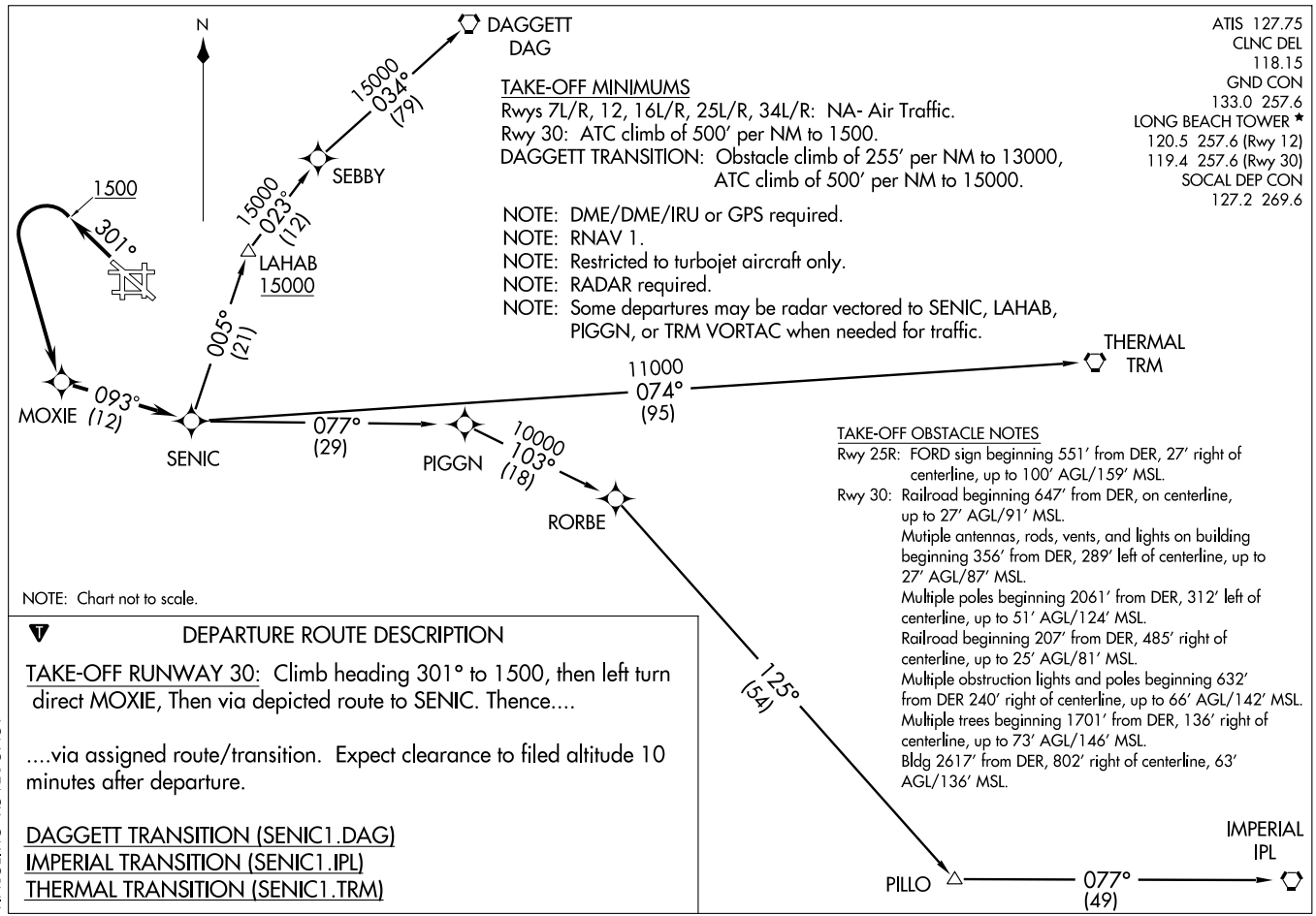
TDZ/CL Rwy 30
MIRL Rwy 7L-25R
REIL Rwys 12, 25L, and 25R
HIRL Rwys 7R-25L and 12-30



CATEGORY	A	B	C	D
RNP 0.13 DA	358/40	320 (300-¾)		
RNP 0.30 DA*	408/40	370 (400-¾)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009



ATIS 127.75
CLNC DEL 118.15
GND CON 133.0 257.6
LONG BEACH TOWER ★ 120.5 257.6 (Rwy 12) 119.4 257.6 (Rwy 30)
SOCAL DEP CON 127.2 269.6

TAKE-OFF MINIMUMS
Rwys 7L/R, 12, 16L/R, 25L/R, 34L/R: NA- Air Traffic.
Rwy 30: ATC climb of 500′ per NM to 1500.
DAGGETT TRANSITION: Obstacle climb of 255′ per NM to 13000, ATC climb of 500′ per NM to 15000.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: Restricted to turbojet aircraft only.
NOTE: RADAR required.
NOTE: Some departures may be radar vectored to SENIC, LAHAB, PIGGN, or TRM VORTAC when needed for traffic.

TAKE-OFF OBSTACLE NOTES
Rwy 25R: FORD sign beginning 551′ from DER, 27′ right of centerline, up to 100′ AGL/159′ MSL.
Rwy 30: Railroad beginning 647′ from DER, on centerline, up to 27′ AGL/91′ MSL.
Mutiple antennas, rods, vents, and lights on building beginning 356′ from DER, 289′ left of centerline, up to 27′ AGL/87′ MSL.
Multiple poles beginning 2061′ from DER, 312′ left of centerline, up to 51′ AGL/124′ MSL.
Railroad beginning 207′ from DER, 485′ right of centerline, up to 25′ AGL/81′ MSL.
Multiple obstruction lights and poles beginning 632′ from DER 240′ right of centerline, up to 66′ AGL/142′ MSL.
Multiple trees beginning 1701′ from DER, 136′ right of centerline, up to 73′ AGL/146′ MSL.
Bldg 2617′ from DER, 802′ right of centerline, 63′ AGL/136′ MSL.

NOTE: Chart not to scale.

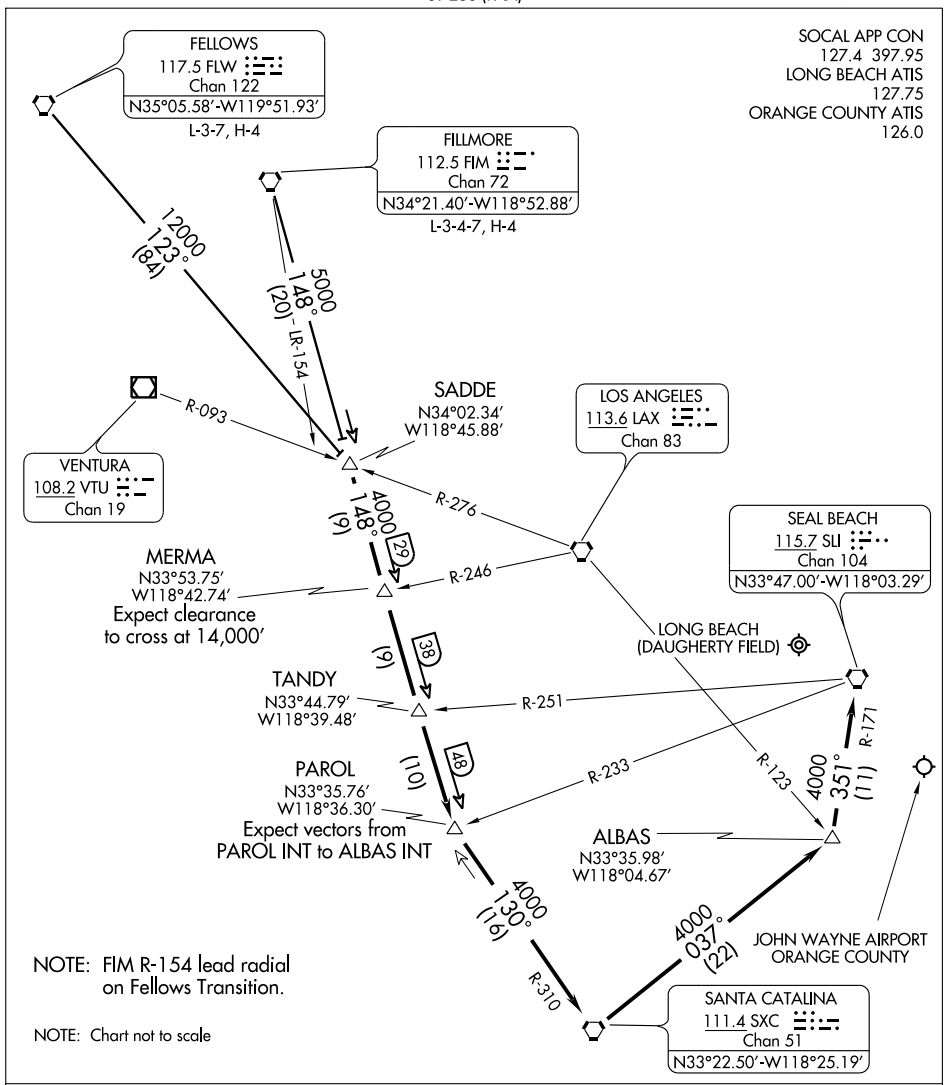
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 30: Climb heading 301° to 1500, then left turn direct MOXIE, Then via depicted route to SENIC. Thence....

....via assigned route/transition. Expect clearance to filed altitude 10 minutes after departure.

DAGGETT TRANSITION (SENIC1.DAG)
IMPERIAL TRANSITION (SENIC1.IPL)
THERMAL TRANSITION (SENIC1.TRM)

TANDY THREE ARRIVAL



FELLOWS TRANSITION (FLW.TANDY3): From over FLW VORTAC via FLW R-123 to SADDE INT. Thence....

FILLMORE TRANSITION (FIM.TANDY3): From over FIM VORTAC via FIM R-148 to SADDE INT. Thence....

....From over SADDE INT via FIM R-148 to PAROL INT. From over PAROL INT via SXC R-310 to SXC VORTAC. Then from over SXC VORTAC via SXC R-037 and SLI R-171 to SLI VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC SLI	APP CRS	Rwy Idg	8000
115.7	275°	TDZE	38
Chan 104		Apt Elev	60

VOR or TACAN RWY 30

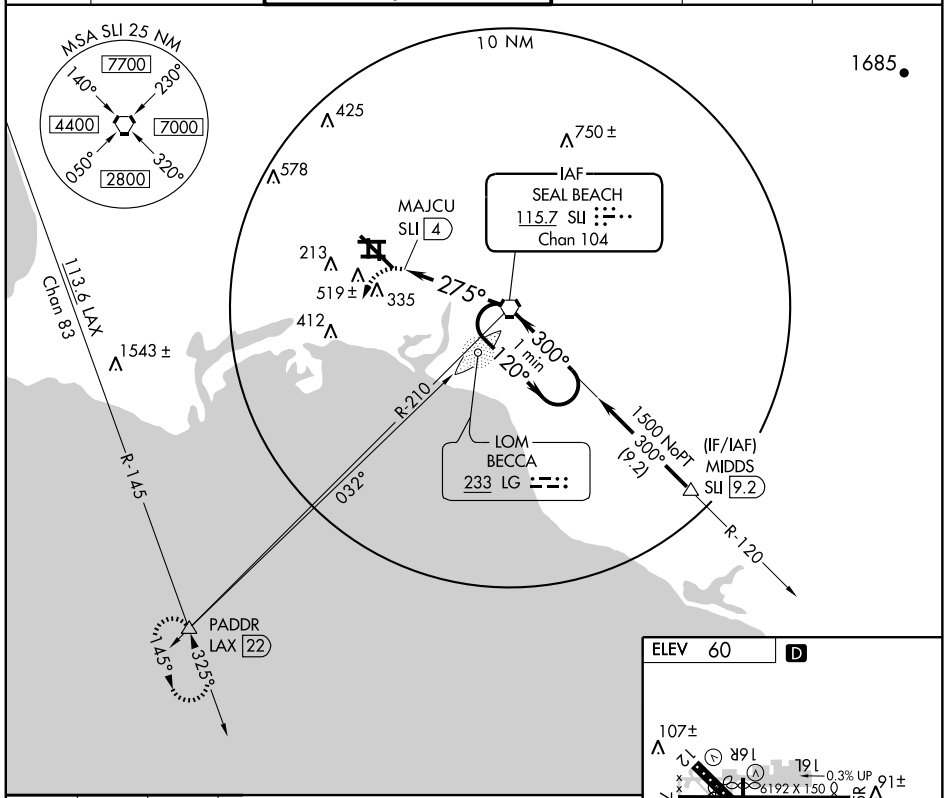
LONG BEACH (DAUGHERTY FIELD) (LGB)

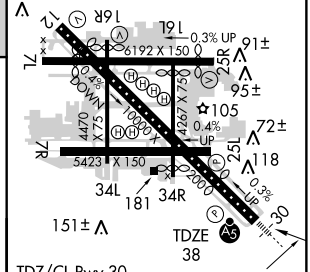
T A Inoperative table does not apply. Visibility reduction by helicopters NA.

MALSR

MISSED APPROACH: Climbing left turn to 2500 via heading 200° and LAX R-145 to PADDR Int/LAX 22 DME and hold.

ATIS	SOCAL APP CON	LONG BEACH TOWER ★	GND CON	CLNC DEL	UNICOM
127.75	124.65 316.125	120.5 257.6 (Rwy 12) 119.4 (CTAF) L 257.6 (Rwy 30)	133.0 257.6	118.15	122.95

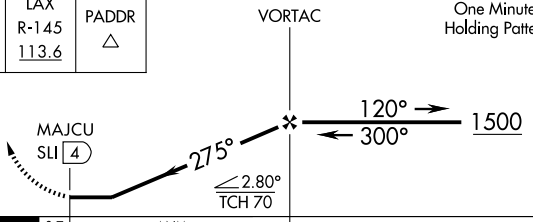




FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

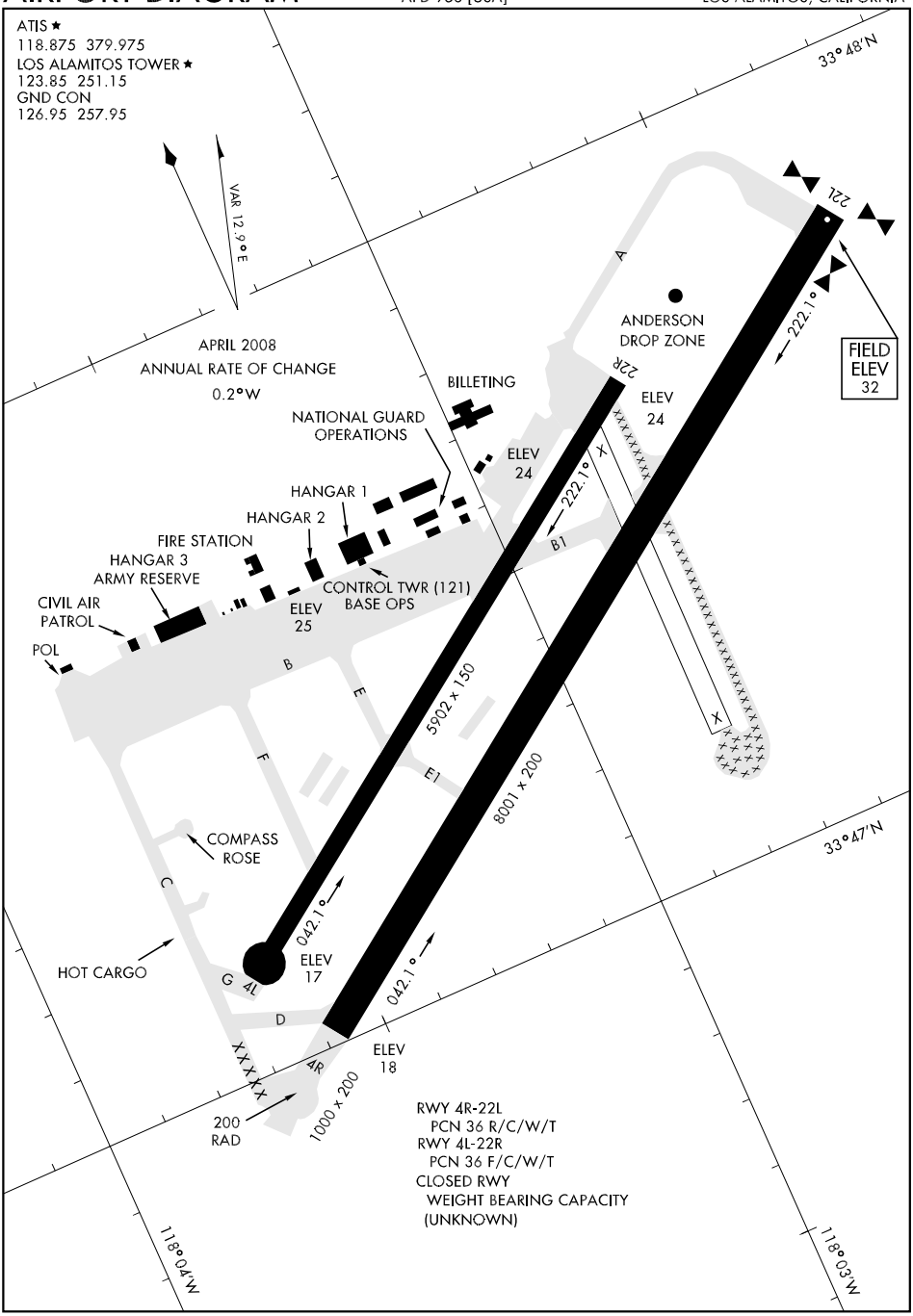
2500 200°

LAX	PADDR
R-145	△
113.6	

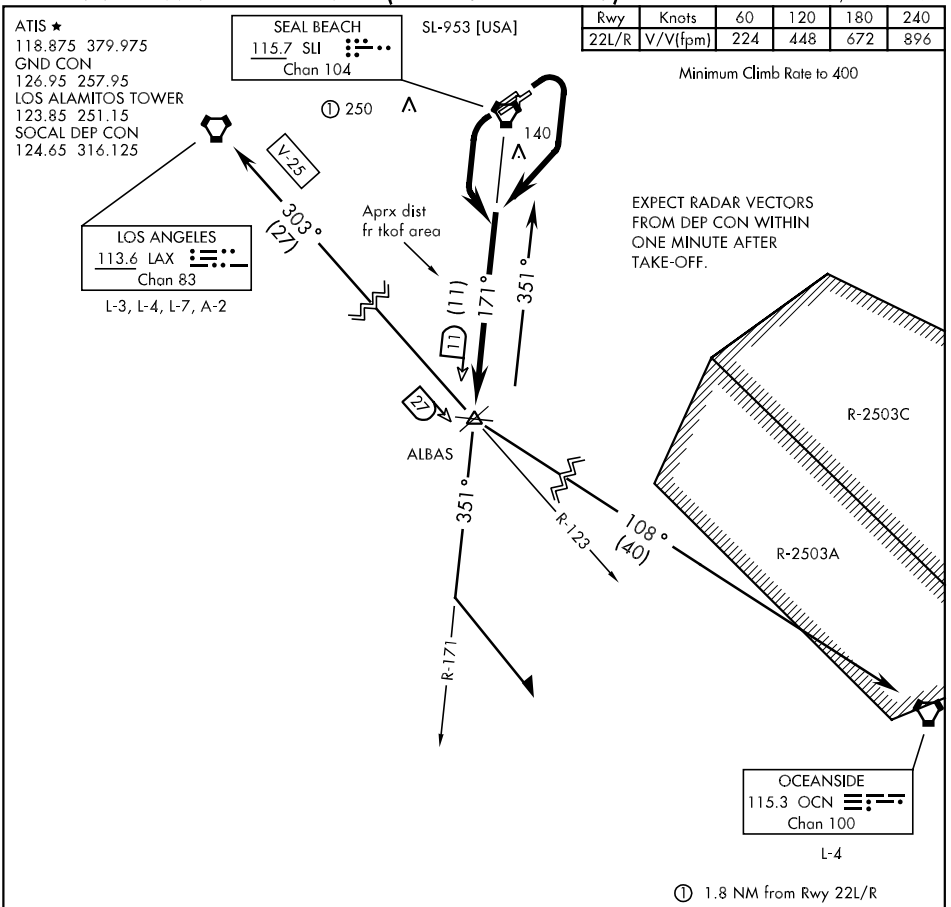


CATEGORY	A	B	C	D
S-30	640/50 602 (600-1)		640-1¾ 602 (600-1¾)	640-2 602 (600-2)
CIRCLING	880-1 820 (900-1)	880-1¼ 820 (900-1¼)	880-2½ 820 (900-2½)	880-2¾ 820 (900-2¾)

SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 4L/R: Immediate climb to assigned alt. Maintain rwy hdg until passing 400′. Aircraft under VFR conditions maintain rwy hdg until end of rwy approach lights. Turn right hdg 180° for one minute. Thence ....

TAKE-OFF RWY 22L/R: Immediate climb to assigned altitude. Maintain rwy hdg until passing 400′. Aircraft under VFR conditions maintain rwy hdg until end of rwy. Turn left to hdg 180° for one minute. Thence ....

.... intercept and proceed via SLI R-171 to ALBAS INT. Cross ALBAS INT at as assigned, then via transition or assigned route.

LOS ANGELES TRANSITION: Via LAX R-123 to LAX (ALBAS 2•LAX).

OCEANSIDE TRANSITION: Via direct OCN (ALBAS 2•OCN).

SEAL BEACH TRANSITION: Procedure turn East of course, then inbound via SLI R-171 to SLI. (ALBAS 2•SLI).

ALBACOR-TWO DEPARTURE (ALBAS 2•ALBAS) LOS ALAMITOS, CALIFORNIA

KAYOH FOUR ARRIVAL

SOCAL APP CON
133.85 346.35
FULLERTON MUNI ATIS
125.05
LONG BEACH ATIS
127.75
ORANGE COUNTY ATIS
126.0
TORRANCE MUNI ATIS
125.6

HECTOR TRANSITION (HEC.KAYOH4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to DAWNA INT, then via HDF R-353 to HDF VOR then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

PALM SPRINGS TRANSITION (PSP.KAYOH4): From over PSP VORTAC via PSP R-260 to BANDS INT, then via HDF R-054 to HDF VOR, then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

....From over KAYOH INT via SLI R-075 to SLI VORTAC.

Expect radar vectors to final approach course.

HECTOR
112.7 HEC
Chan 74
N34°47.82′
W116°27.78′
L-7, H-4

V8-21-283-587
10,500
211°
(46)

31
44

DAWNA
N34°15.90′-W117°06.78′
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojet: Expect clearance to cross at 13,000′.
Non-Turbojet: Expect clearance to cross at 12,000′.

PARADISE
112.2 PDZ
Chan 59

29

R-030

V283-587
10,500
173°
(29)

POMONA
110.4 POM
Chan 41

KAYOH
N33°46.82′
W117°35.41′
VERTICAL NAVIGATION PLANNING INFORMATION

210K

FULLERTON MUNI

LONG BEACH (DAUGHERTY FIELD)

R-164

R-185

R-154

R-353

V283-372

8000
257°
(16)

V372
8000
234°
(18)

13,000
260°
(21)

V16-370-372

R-054

ZAMPERINI FIELD

R-075 4000
(14)

6000
255°
(9)

19
23
24
(5)

LOS ALAMITOS AAF

JOGIT
N33°46.91′
W117°46.85′

BANDS
N33°53.38′-W116°50.97′
VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at 14,000′.

JOHN WAYNE ARPT-ORANGE COUNTY

DEJAY
N33°46.77′
W117°29.86′

HOMELAND
113.4 HDF
N33°46.58′-W117°11.12′

R-021

SEAL BEACH
115.7 SLI
Chan 104
N33°47.00′-W118°03.29′

VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or above 8000′.

N

PALM SPRINGS
115.5 PSP
Chan 102
N33°52.20′-W116°25.79′
L-4, H-4

OCEANSIDE
115.3 OCN
Chan 100

NOTE: Chart not to scale.

NDB RWY 22L

LOM LG	APCH CRS	Rwy ldg 8001 / TDZE 32 / Arpt Elev 32	AL-953 [USA]	LOS ALAMITOS AAF (KSLI)
233	206°			

▼ * When ALS inop, increase CAT D vis ¼ mile.
▲ NA ** Circling not authorized N of Rwy 4L-22R.
*** When ALS inop, increase CAT CD vis to 1 mile.

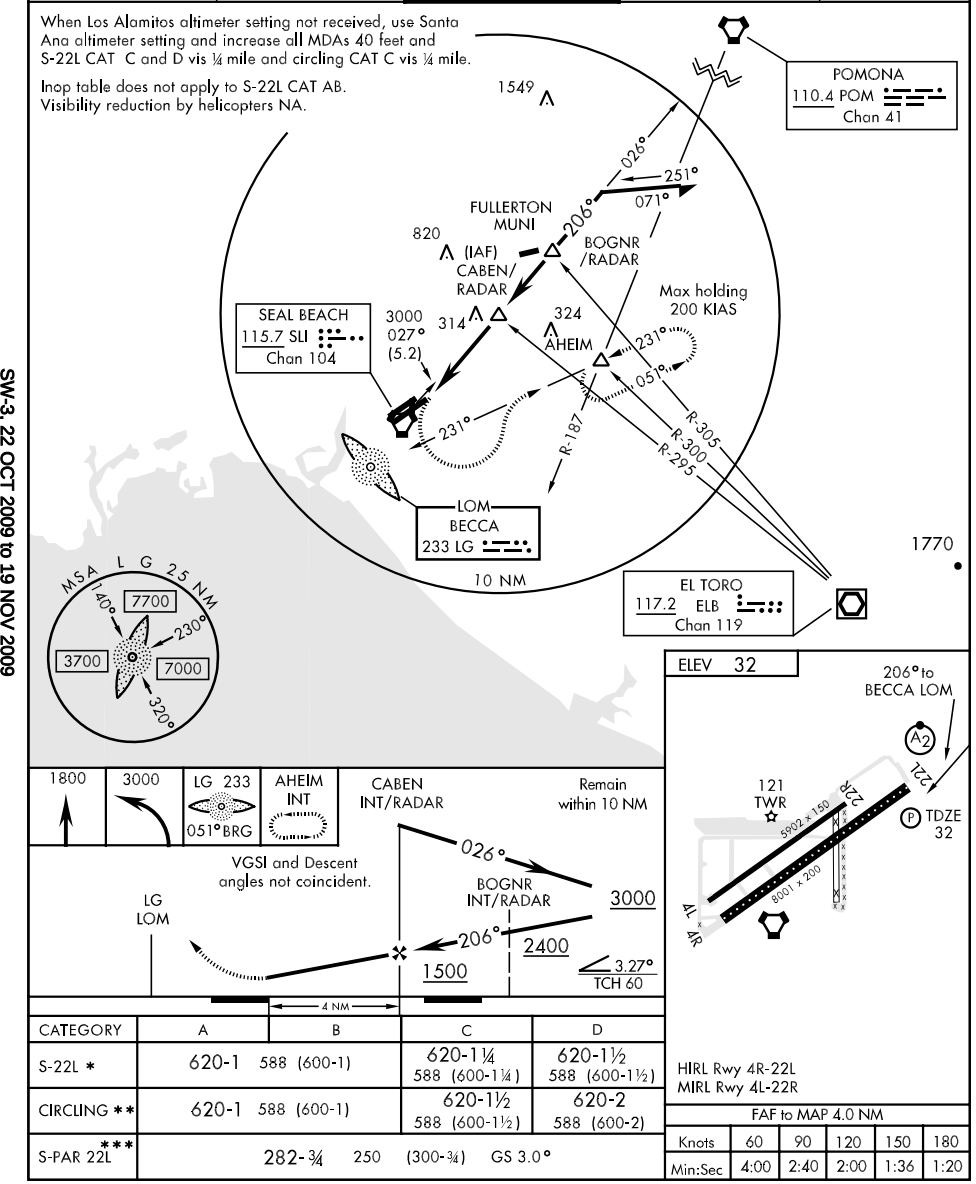
SALSF (A2)

MISSED APROACH: Climb to 1800 then climbing left turn to 3000 via BECCA LOM 051° bearing to AHEIM INT and hold.

ATIS ★	SOCAL APP CON	LOS ALAMITOS TOWER ★	GND CON	PAR
118.875 379.975	124.65 316.125	123.85 251.15	126.95 257.95	

When Los Alamitos altimeter setting not received, use Santa Ana altimeter setting and increase all MDAs 40 feet and S-22L CAT C and D vis ¼ mile and circling CAT C vis ¼ mile.

Inop table does not apply to S-22L CAT AB.
Visibility reduction by helicopters NA.



CATEGORY	A	B	C	D
S-22L *	620-1 588 (600-1)		620-1¼ 588 (600-1¼)	620-1½ 588 (600-1½)
CIRCLING **	620-1 588 (600-1)		620-1½ 588 (600-1½)	620-2 588 (600-2)
S-PAR 22L ***	282-¾ 250 (300-¾) GS 3.0°			

HIRL Rwy 4R-22L
MIRL Rwy 4L-22R

FAF to MAP 4.0 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 22L

APCH CRS	Rwy ldg	8001
220°	TDZE	32
	Arpt Elev	32

AL-953 [USA]

LOS ALAMITOS AAF (KSLI)

▼ * When ALS inop, increase CAT D vis ¼ mile.
** Circling not authorized N of Rwy 4L-22R.
▲ NA *** When ALS inop, increase CAT CD vis to 1 mile.

SALSF

† MISSED APPROACH: Climbing left turn to 3200 direct AHEIM and hold.

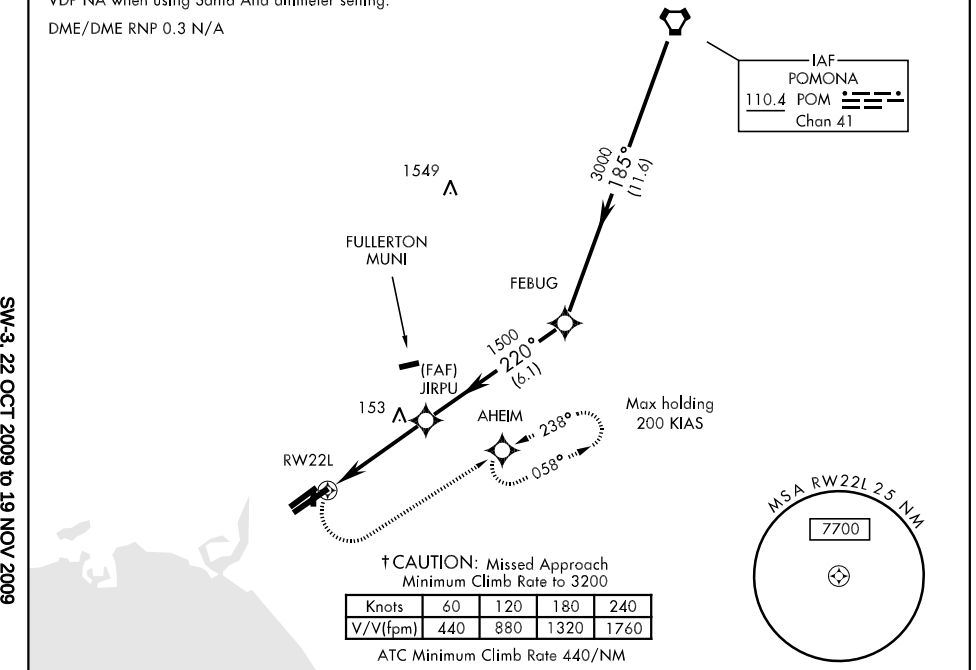
ATIS ★	SOCAL APP CON	LOS ALAMITOS TOWER ★	GND CON	PAR
118.875 379.975	124.65 316.125	123.85 251.15	126.95 257.95	

When Los Alamitos altimeter setting not available, use Santa Ana altimeter setting and increase MDAs 40'.

VDP NA when using Santa Ana altimeter setting.

DME/DME RNP 0.3 N/A

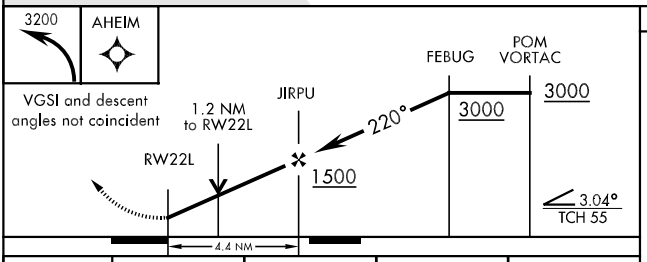
Procedure NA for arrivals at POM VORTAC on airway radials 164°CW 225°.



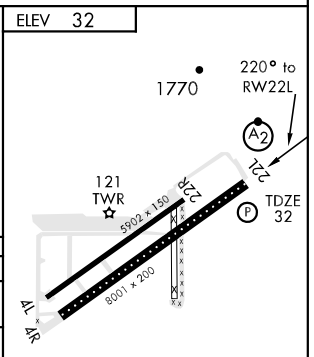
†CAUTION: Missed Approach Minimum Climb Rate to 3200

Knots	60	120	180	240
V/V(fpm)	440	880	1320	1760

ATC Minimum Climb Rate 440/NM



ELEV 32



CATEGORY	A	B	C	D
LNAV/MDA*	480- ¾ 448 (500- ¾)		480-1 448 (500-1)	480-1¼ 448 (500-1¼)
CIRCLING **	480-1 448 (500-1)	500-1 468 (500-1)	500-1½ 468 (500-1½)	600-2 568 (600-2)
S-PAR 22L***	282- ¾ 250 (300- ¾) GS 3.0°			

HIRL Rwy 4R-22L
MIRL Rwy 4L-22R

VOR or TACAN RWY 22L

VORTAC SLI 115.7 Chan 104	APCH CRS 214°	Rwy ldg 8001 TDZE 32 Arpt Elev 32

AL-953 [USA]

LOS ALAMITOS AAF (KSLI)

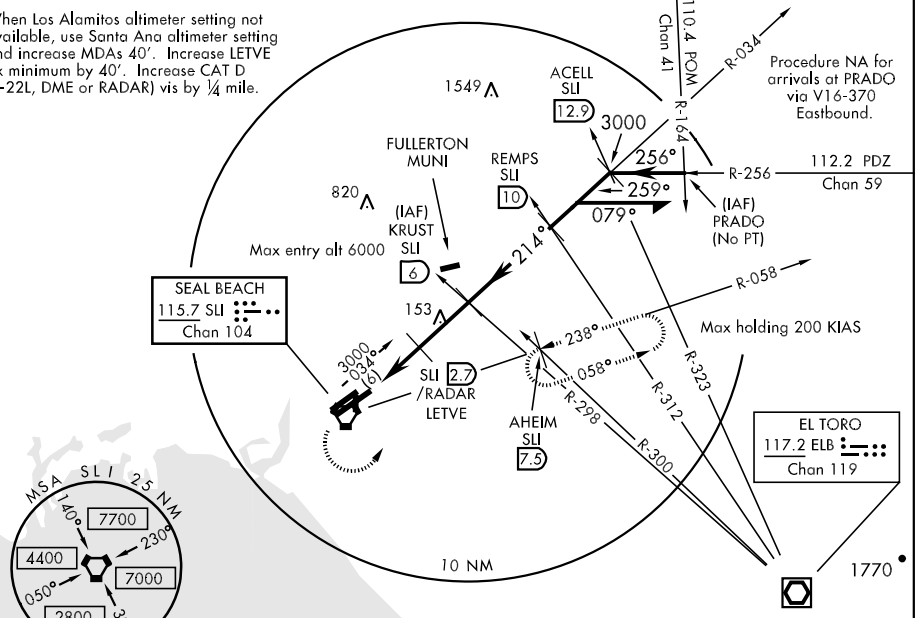
* When ALS inop, increase vis CAT D ¼ mile.
** When ALS inop, increase CAT CD vis to 1 mile.
*** Circling not authorized N of Rwy 4L-22R.

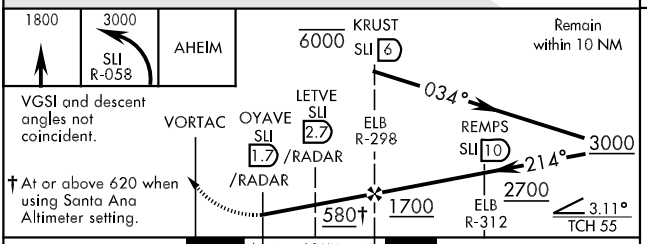
SALSF

MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 via SLI VORTAC R-058 to AHEIM INT and hold.

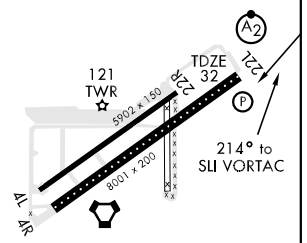
ATIS ★	SOCAL APP CON	LOS ALAMITOS TOWER ★	GND CON	PAR
118.875 379.975	124.65 316.125	123.85 251.15	126.95 257.95	

When Los Alamitos altimeter setting not available, use Santa Ana altimeter setting and increase MDAs 40'. Increase LETVE fix minimum by 40'. Increase CAT D (S-22L, DME or RADAR) vis by ¼ mile.





ELEV 32



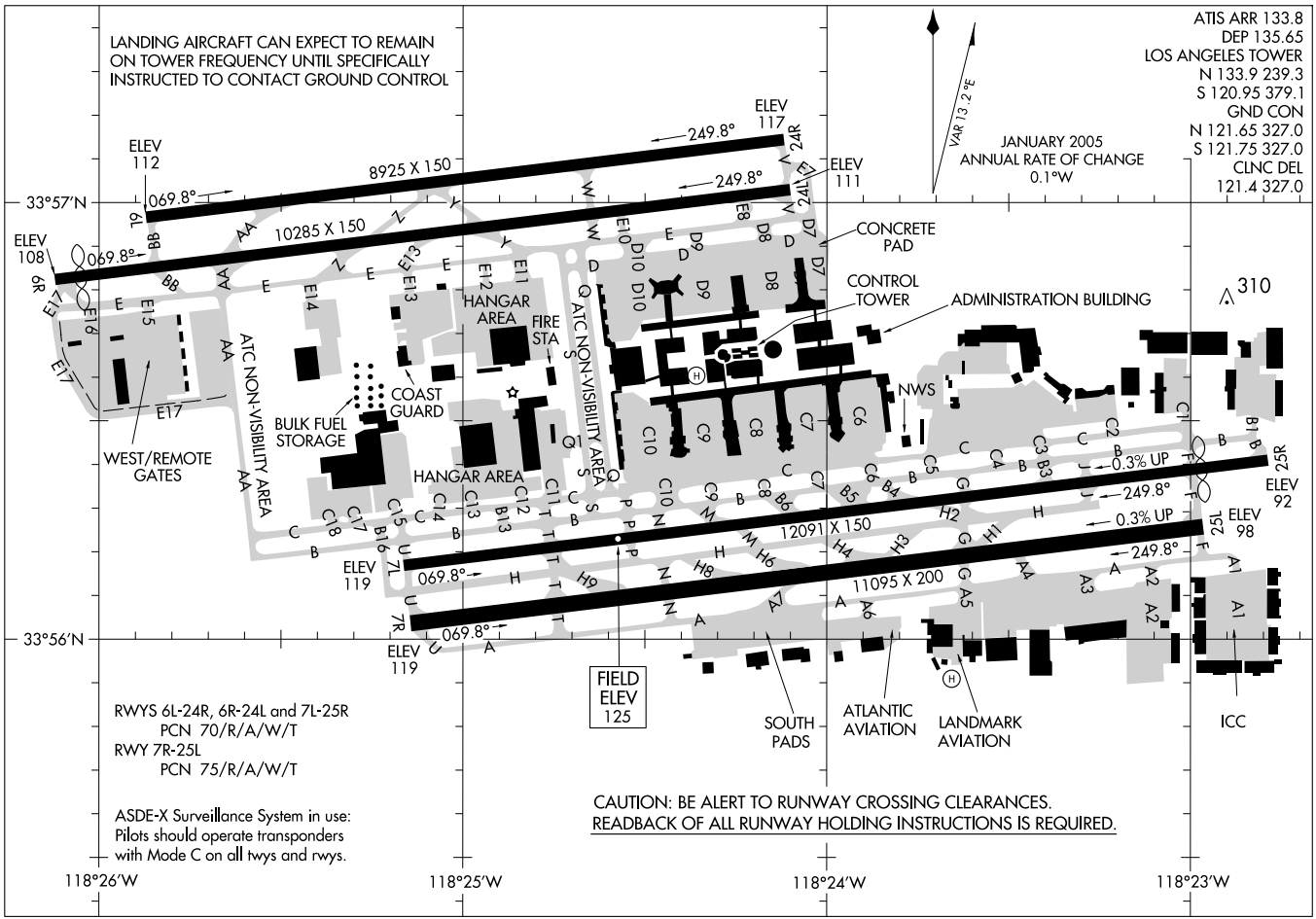
CATEGORY	A	B	C	D
S-22L	580-¾ 548 (600-¾)		580-1¼ 548 (600-1¼)	580-1½ 548 (600-1½)
CIRCLING***	580-1 548 (600-1)		580-1½ 548 (600-1½)	600-2 568 (600-2)
DME or RADAR				
S-22L*	440-¾ 408 (500-¾)		440-1 408 (500-1)	440-1¼ 408 (500-1¼)
CIRCLING***	440-1 408 (500-1)	500-1 468 (500-1)	500-1½ 468 (500-1½)	600-2 568 (600-2)
S-PAR 22L**	282-¾ 250 (300-¾) GS 3.0°			

HIRL Rwy 4R-22L
MIRL Rwy 4L-22R

FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

SW-3, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-237 (FAA)

LOS ANGELES INTL (LAX)

LOS ANGELES, CALIFORNIA

SW-3, 22 OCT 2009 to 19 NOV 2009

BASET THREE ARRIVAL

LOS ANGELES INTL
LOS ANGELES, CALIFORNIA

SOCAL APP CON
124.3 363.2 (APCH FM WEST)
124.5 235.975 (225°-044°)
124.9 269.0 (090°-224°)
128.5 360.7 (045°-089°)
ATIS
133.8

N

SANTA MONICA
110.8 SMO
Chan 45

LOS ANGELES
113.6 LAX
Chan 83
N33°55.99′
W118°25.92′

HECTOR
112.7 HEC
Chan 74
N34°47.82′-W116°27.78′
L-7, H-4

PEACH SPRINGS
112.0 PGS
Chan 57
N35°37.48′-W113°32.67′
L-8, H-4

REEDR
N33°56.94′
W118°16.55′
9000

BASET
N33°58.72′
W117°58.71′

DOWNE
N33°57.86′
W118°07.42′
10000

ARNES
N33°59.93′
W117°45.92′
13000
10000

BINDY
N34°00.72′
W117°38.16′
12000

CIVET
N34°02.07′
W117°23.45′
14000

DAWNA
N34°15.90′
W117°06.78′

RESOR
N34°23.40′
W116°57.68′

EMMEY
N34°24.96′
W116°24.91′

BUGGA
N34°43.13′
W115°43.11′

DIKES
N34°36.17′
W115°59.22′

GRAMM
N34°06.55′
W117°06.41′

RUSTT
N34°02.89′
W117°14.55′

(IPHIW)
N34°00.56′
W116°27.44′

TWENTYNINE PALMS
114.2 TNP
Chan 89
N34°06.73′-W115°46.19′
L-4, H-4

CACTS
N33°56.14′
W117°38.90′
13000
10000

(ZUSGI)
N33°48.46′
W118°26.71′
8000

TANDY
N33°44.79′
W118°39.48′

(CUGBA)
N33°45.36′
W118°30.40′

TRTLE
N33°56.65′
W117°13.87′
16000

KONZL
N33°57.26′
W117°06.69′

ARRVD
N33°59.13′
W116°43.96′

PARADISE
112.2 PDZ
Chan 59
N33°55.10′-W117°31.80′
12000

SEAL BEACH
115.7 SLI
Chan 104

HOMELAND
113.4 HDF

112.5 FIM
Chan 72

R-084 R-068 R-170 R-148 R-251 R-297 R-327 R-003 R-277 R-302 R-030 R-046 R-069 R-005 R-353

MAA 17999
7000
248°
(8)

MAA FL450
7000
265°
(6)

MAA FL450
14000
(39)

MAA FL450
FL 230

MAA FL450
10500
211°
(35)

MAA FL450
FL250
229°
(120)

MAA 17999
16000
245°
(35)

MAA FL450
16000
(19)

MAA FL450
12000

210°
(111)

226°
(15)

249°
(14)

(NARRATIVE ON FOLLOWING PAGE)

NOTE: DME and RADAR required.
NOTE: Chart not to scale.

ARRIVAL DESCRIPTION

HECTOR TRANSITION (HEC.BASET3): From over HEC VORTAC via HEC R-211 and PDZ R-030 to CIVET INT, then via LAX R-068 to BASET INT. Thence....

PEACH SPRINGS TRANSITION (PGS.BASET3): From over PGS VORTAC via PGS R-229 and PDZ R-046 to RUSTT INT, then via LAX R-068 to BASET INT. Thence....

TWENTYNINE PALMS TRANSITION (TNP.BASET3): From over TNP VORTAC via TNP R-245 and PDZ R-069 to PDZ VORTAC, then via PDZ R-265 to BASET INT. Thence....

.... From over BASET INT/DME via LAX R-068 to cross DOWNE INT/DME at or above 10,000′ and cross REEDR INT/DME at or above 9,000′. Depart REEDR via heading 210° for radar vectors to final approach course for Runways 6L/R or 7L/R.

LOST COMMUNICATIONS: Depart REEDR heading 210° to intercept the SLI R-251 to TANDY INT/SLI 30 DME.

SW-3, 22 OCT 2009 to 19 NOV 2009

CASTA TWO DEPARTURE (RNAV)

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

TAKE-OFF MINIMUMS

Rwys 6L, 6R, 7L, 7R, NA - ATC.
Rwys 24L, 24R, 25L, 25R, Standard with a minimum climb of 500′ per NM to 1800. ATC climb of 350′ per NM to 6200.

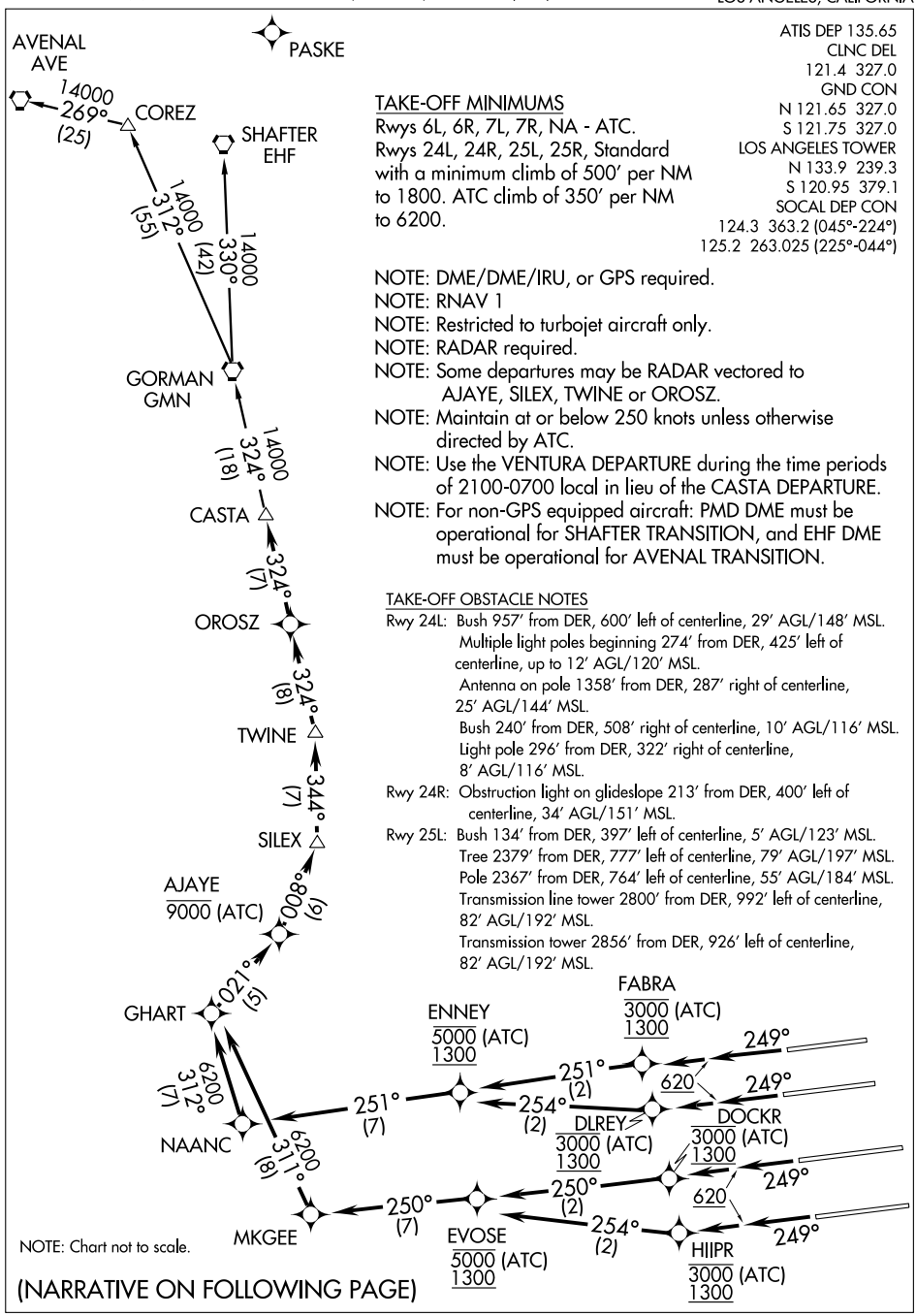
NOTE: DME/DME/IRU, or GPS required.
NOTE: RNAV 1
NOTE: Restricted to turbojet aircraft only.
NOTE: RADAR required.
NOTE: Some departures may be RADAR vectored to AJAYE, SILEX, TWINE or OROSZ.
NOTE: Maintain at or below 250 knots unless otherwise directed by ATC.
NOTE: Use the VENTURA DEPARTURE during the time periods of 2100-0700 local in lieu of the CASTA DEPARTURE.
NOTE: For non-GPS equipped aircraft: PMD DME must be operational for SHAFTER TRANSITION, and EHF DME must be operational for AVENAL TRANSITION.

TAKE-OFF OBSTACLE NOTES

Rwy 24L: Bush 957′ from DER, 600′ left of centerline, 29′ AGL/148′ MSL.
Multiple light poles beginning 274′ from DER, 425′ left of centerline, up to 12′ AGL/120′ MSL.
Antenna on pole 1358′ from DER, 287′ right of centerline, 25′ AGL/144′ MSL.
Bush 240′ from DER, 508′ right of centerline, 10′ AGL/116′ MSL.
Light pole 296′ from DER, 322′ right of centerline, 8′ AGL/116′ MSL.

Rwy 24R: Obstruction light on glideslope 213′ from DER, 400′ left of centerline, 34′ AGL/151′ MSL.

Rwy 25L: Bush 134′ from DER, 397′ left of centerline, 5′ AGL/123′ MSL.
Tree 2379′ from DER, 777′ left of centerline, 79′ AGL/197′ MSL.
Pole 2367′ from DER, 764′ left of centerline, 55′ AGL/184′ MSL.
Transmission line tower 2800′ from DER, 992′ left of centerline, 82′ AGL/192′ MSL.
Transmission tower 2856′ from DER, 926′ left of centerline, 82′ AGL/192′ MSL.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 24R: Climb heading 249° to 620, then direct to cross FABRA at or below 3000/1300, then via track 251° to cross ENNEY at or below 5000/1300, then via depicted route to CASTA, thence....

TAKE-OFF RUNWAY 24L: Climb heading 249° to 620, then direct to cross DLREY at or below 3000/1300, then via track 254° to cross ENNEY at or below 5000/1300, then via depicted route to CASTA, thence....

TAKE-OFF RUNWAY 25R: Climb heading 249° to 620, then direct to cross DOCKR at or below 3000/1300, then via track 250° to cross EVOSE at or below 5000/1300, then via depicted route to CASTA, thence....

TAKE-OFF RUNWAY 25L: Climb heading 249° to 620, then direct to cross HIIPR at or below 3000/1300, then via track 254° to cross EVOSE at or below 5000/1300, then via depicted route to CASTA, thence....

....via transition. Expect further clearance to filed altitude three minutes after departure.

AVENAL TRANSITION (CASTA2.AVE)
GORMAN TRANSITION (CASTA2.GMN)
SHAFTER TRANSITION (CASTA2.EHF)

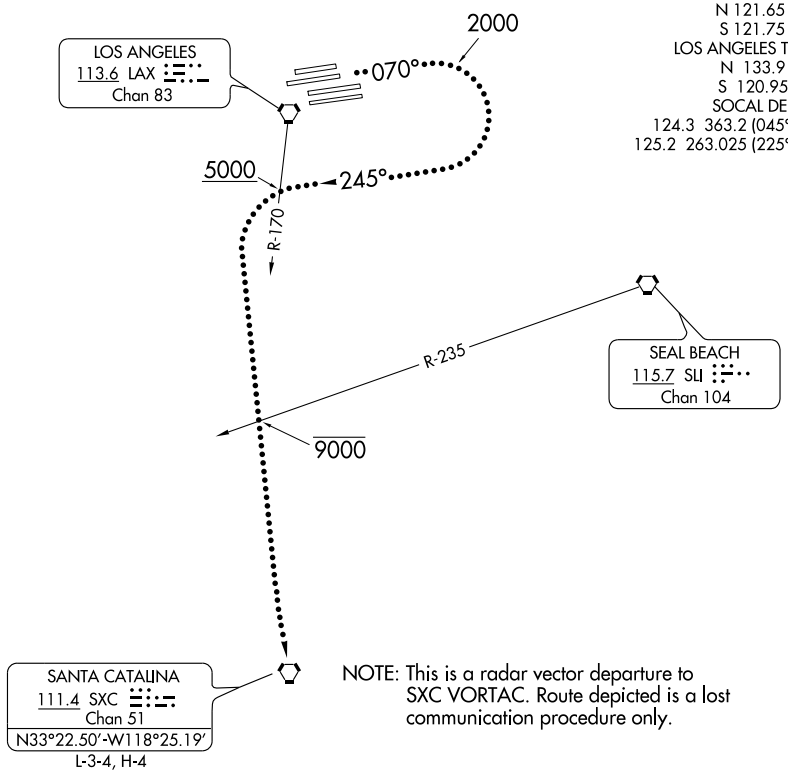
SW-3, 22 OCT 2009 to 19 NOV 2009

CATALINA FIVE DEPARTURE

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/7: Climb via heading 070° for vector to SXC VORTAC. Then via (assigned route). All aircraft expect further clearance to filed altitude three minutes after departure.

LOST COMMUNICATIONS

Take-off Runways 6/7: If not in contact with Departure Control after reaching 2000', turn right heading 245°. Cross LAX R-170 at or above 5000', then turn left proceed direct SXC VORTAC. Cross SLI R-235 at or below 9000'.

SW-3, 22 OCT 2009 to 19 NOV 2009

CHATY TWO DEPARTURE

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

GORMAN
116.1 GMN
Chan 108
N34°48.24'-W118°51.68'
L-3-4-7, H-4

SAN MARCUS
114.9 RZS
Chan 96
N34°30.57'-W119°46.26'
L-3-4-7, H-4

FILLMORE
112.5 FIM
Chan 72
N34°21.40'
W118°52.88'

CASTA
N34°31.97'
W118°43.60'
8300

DEANO
N34°19.00'
W119°24.99'

HENER
N34°19.86'
W119°13.66'
L-3-4-7

(IPFOV)
N34°15.55'
W118°35.50'

GAVIOTA
113.8 GVO
Chan 85

KWANG
N34°18.55'
W119°30.85'
L-3-4-7

VAN NUYS
113.1 VNY
Chan 78

CHATY
N34°14.54'
W118°35.00'
5400

VENTURA
108.2 VTU
Chan 19

LOS ANGELES
113.6 LAX
Chan 83

R-142
322° (18)
V23
R-109
6000 289° (21)
V25-186
R-119
R-099
V27-186
(5)
32
27
(9)
22
R-289
R-282
R-311
V186
6000 250° (17)
R-021
20
36
9500 323° (18)
V23
V186-597
6000 277° (16)
R-097
R-100
(1)
6000 323°
R-269
20
270°
V23
R-323
040°
7
070°
7
N

NOTE: DME required.

NOTE: Runway 6L/R take-off minimums 400/2 or standard with a minimum climb of 330 feet per NM to 1500 feet.

NOTE: Procedure for non turbojet aircraft only.

NOTE: Expect clearance to filed altitude 3 minutes after departure.

NOTE: Chart not to scale.

(Continued on next page)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L/R: Climb via heading 040° for vector to V23; thence via (transition) or (assigned route).

TAKE-OFF RUNWAYS 7L/R: Climb via heading 070° for vector to V23; thence via (transition) or (assigned route).

LOST COMMUNICATIONS

RUNWAYS 6L/R and 7L/R: If no transmissions are received upon reaching the LAX 7 DME, turn left heading 270°, intercept V23 to CHATY INT and resume the CHATY TWO DEPARTURE. Continue climb on course.

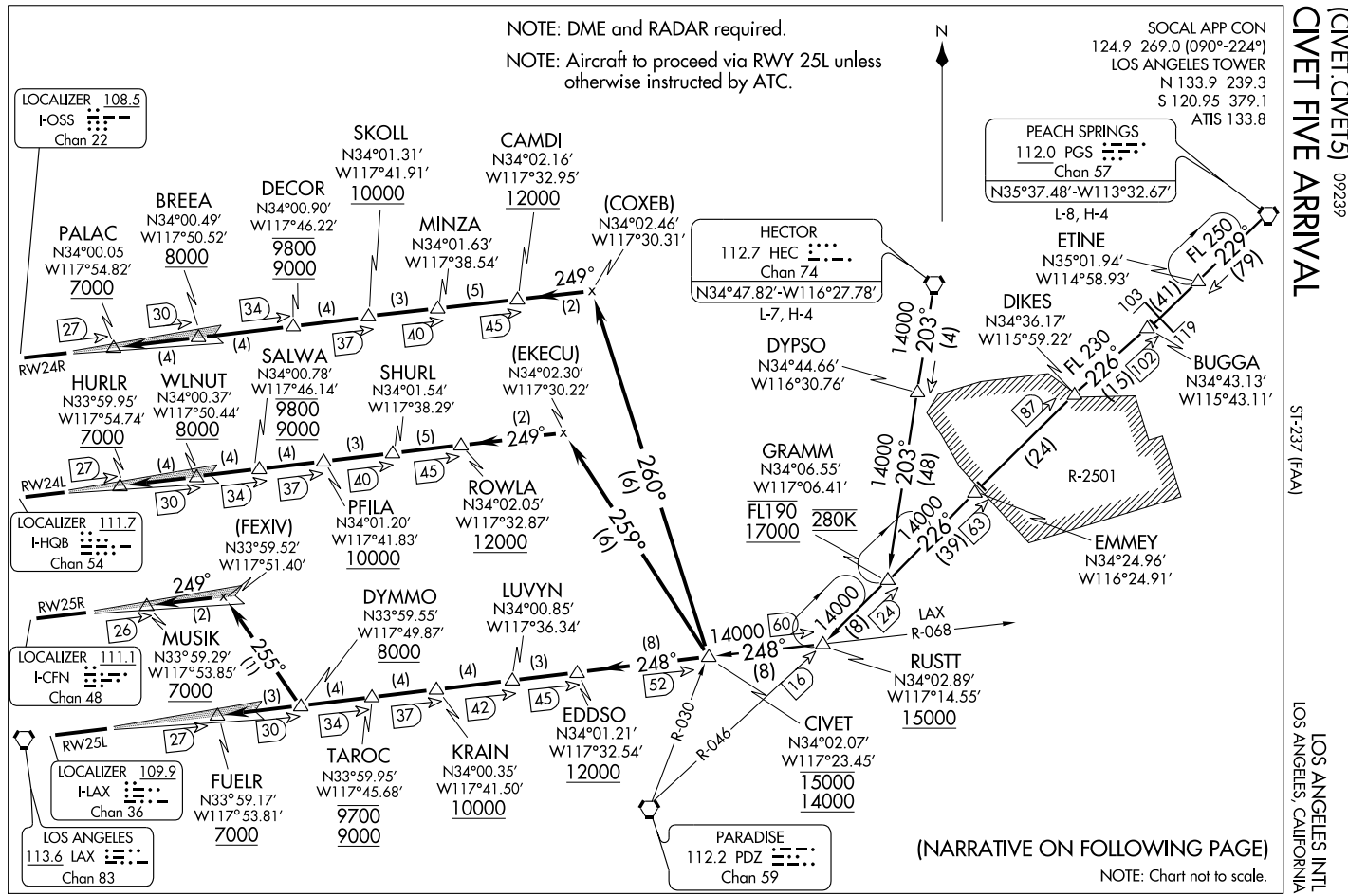
GORMAN TRANSITION (CHATY2.GMN): From over CHATY INT via V23 to GMN VORTAC. Cross CHATY INT at or above 5400′, and CASTA INT at or above 8300′.

HENER TRANSITION (CHATY2.HENER): From over CHATY INT via V23 and FIM R-097 to FIM VORTAC. Cross CHATY INT at or above 5400′. Then proceed via FIM R-250 to HENER INT.

KWANG TRANSITION (CHATY2.KWANG): From over CHATY INT via V23 and FIM R-097 to FIM VORTAC. Cross CHATY INT at or above 5400′. Then proceed via FIM R-250 to KWANG INT.

SAN MARCUS TRANSITION (CHATY2.RZS): From over CHATY INT via V23 and FIM R-097 to FIM VORTAC. Cross CHATY INT at or above 5400′. Then proceed via FIM R-250 and RZS R-109 to RZS VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009


NOTE: DME and RADAR required.
NOTE: Aircraft to proceed via RWY 25L unless otherwise instructed by ATC.
N
SOCAL APP CON
124.9 269.0 (090°-224°)
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
ATIS 133.8
CIVET FIVE ARRIVAL
(CIVET.CIVET5) 09239
ST-237 (FAA)
LOS ANGELES INTL
LOS ANGELES, CALIFORNIA
LOCALIZER 108.5
I-OSS
Chan 22
PALAC
N34°00.05
W117°54.82′
7000
BREEA
N34°00.49′
W117°50.52′
8000
DECOR
N34°00.90′
W117°46.22′
9800
9000
SKOLL
N34°01.31′
W117°41.91′
10000
MINZA
N34°01.63′
W117°38.54′
CAMDI
N34°02.16′
W117°32.95′
12000
(COXEB)
N34°02.46′
W117°30.31′
RW24R
RW24L
RW25R
RW25L
HURLR
N33°59.95′
W117°54.74′
7000
WLNUT
N34°00.37′
W117°50.44′
8000
SALWA
N34°00.78′
W117°46.14′
9800
9000
SHURL
N34°01.54′
W117°38.29′
(EKECU)
N34°02.30′
W117°30.22′
PFILA
N34°01.20′
W117°41.83′
10000
ROWLA
N34°02.05′
W117°32.87′
12000
LOCALIZER 111.7
I-HQB
Chan 54
(FEXIV)
N33°59.52′
W117°51.40′
LOCALIZER 111.1
I-CFN
Chan 48
MUSIK
N33°59.29′
W117°53.85′
7000
DYMMO
N33°59.55′
W117°49.87′
8000
LUVYN
N34°00.85′
W117°36.34′
LOCALIZER 109.9
I-LAX
Chan 36
FUELR
N33°59.17′
W117°53.81′
7000
TAROC
N33°59.95′
W117°45.68′
9700
9000
KRAIN
N34°00.35′
W117°41.50′
10000
EDDSO
N34°01.21′
W117°32.54′
12000
LOS ANGELES
113.6 LAX
Chan 83
HECTOR
112.7 HEC
Chan 74
N34°47.82′-W116°27.78′
L-7, H-4
PEACH SPRINGS
112.0 PGS
Chan 57
N35°37.48′-W113°32.67′
L-8, H-4
ETINE
N35°01.94′
W114°58.93′
DIKES
N34°36.17′
W115°59.22′
BUGGA
N34°43.13′
W115°43.11′
DYPSO
N34°44.66′
W116°30.76′
GRAMM
N34°06.55′
W117°06.41′
FL190
17000
280K
R-2501
EMMEY
N34°24.96′
W116°24.91′
LAX
R-068
RUSTT
N34°02.89′
W117°14.55′
15000
CIVET
N34°02.07′
W117°23.45′
15000
14000
PARADISE
112.2 PDZ
Chan 59
R-030
R-046
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Chart not to scale.

CIVET FIVE ARRIVAL

ARRIVAL DESCRIPTION

HECTOR TRANSITION (HEC.CIVET5): From over HEC VORTAC via HEC R-203 and PDZ R-046 to RUSTT DME, then via LAX R-068 to CIVET DME. Thence....

PEACH SPRINGS TRANSITION (PGS.CIVET5): From over PGS VORTAC via PGS R-229 and PDZ R-046 to RUSTT DME, then via LAX R-068 to CIVET DME. Thence....

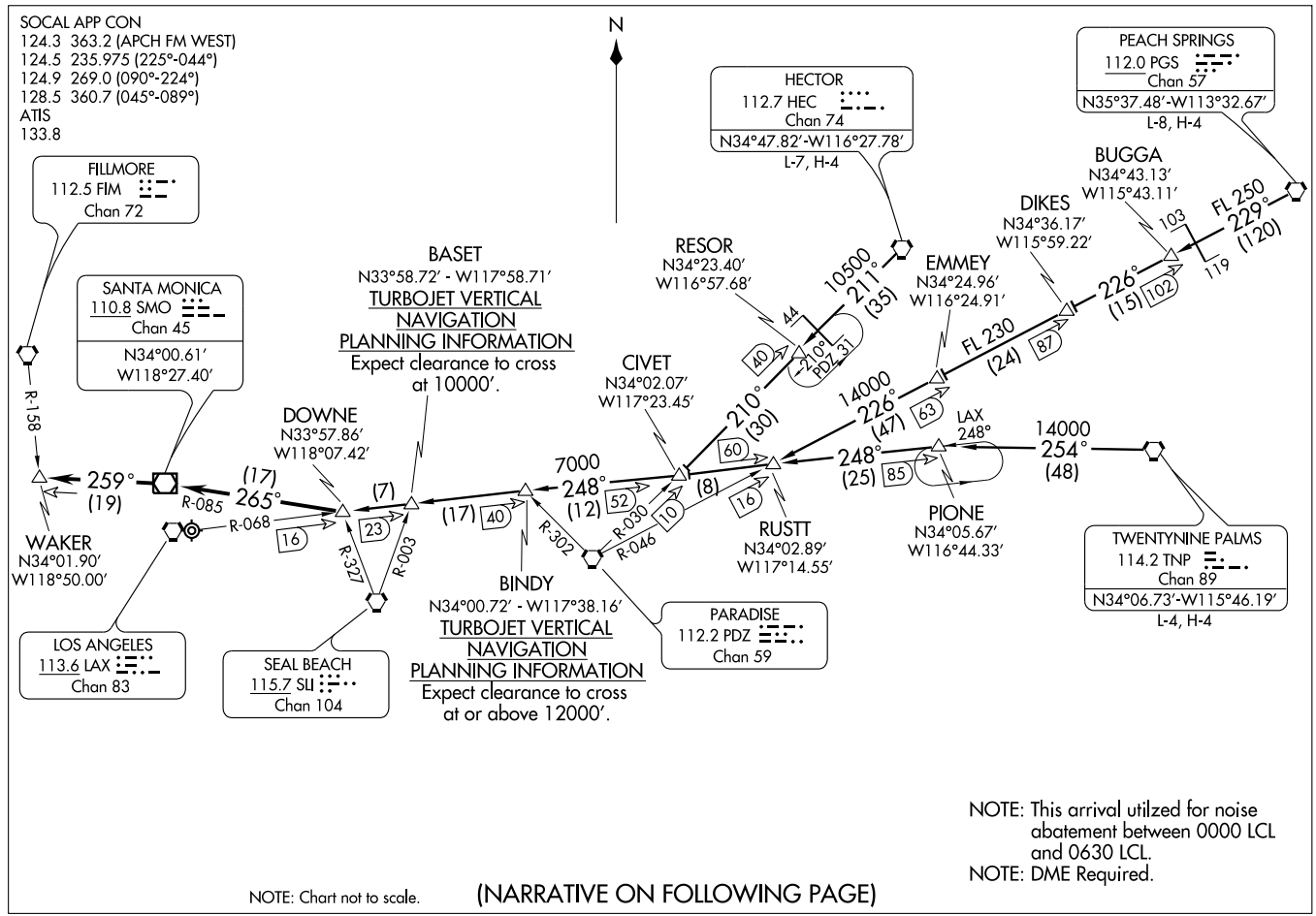
Landing Rwy 25L: . . . . From over CIVET, via LAX R-068 to FUELR. Expect ILS RWY 25L approach.

Landing Rwy 25R: . . . . From over CIVET, via LAX R-068 to DYMMO, then via heading 255° and the I-CFN localizer course to MUSIK. Expect ILS RWY 25R approach.

Landing Rwy 24L: . . . . From over CIVET via heading 259° and the I-HQB localizer course to ROWLA, thence as depicted to HURLR. Expect ILS RWY 24L approach.

Landing Rwy 24R: . . . . From over CIVET via heading 260° and the I-OSS localizer course to CAMDI, thence as depicted to PALAC. Expect ILS RWY 24R approach.

SW-3, 22 OCT 2009 to 19 NOV 2009



(DOWNE.DOWNE4) 09239
DOWNE FOUR ARRIVAL
ST-237 (FAA)
LOS ANGELES INTL
LOS ANGELES, CALIFORNIA

ARRIVAL DESCRIPTION

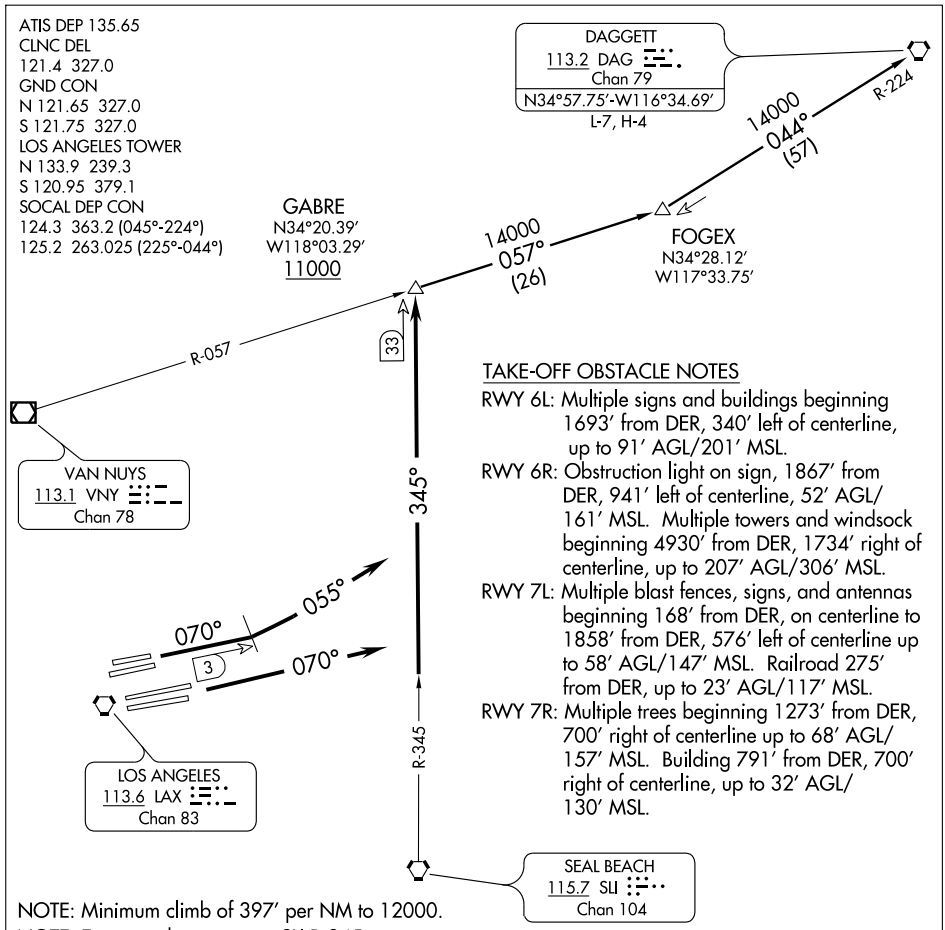
HECTOR TRANSITION (HEC.DOWNE4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to CIVET INT, then LAX R-068 to DOWNE INT. Thence....
PEACH SPRINGS TRANSITION (PGS.DOWNE4): From over PGS VORTAC via PGS R-229 and PDZ R-046 to RUSTT INT, then LAX R-068 to DOWNE INT. Thence....
TWENTYNINE PALMS TRANSITION (TNP.DOWNE4): From over TNP VORTAC via TNP R-254 to PIONE DME, then LAX R-068 to DOWNE INT.Thence....
....From DOWNE INT via SMO R-085 to SMO VOR/DME, then via SMO R-259 to WAKER INT, expect vector to final approach course for runways 6 and 7.

SW-3, 22 OCT 2009 to 19 NOV 2009

GABRE SIX DEPARTURE

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA



TAKE-OFF OBSTACLE NOTES

RWY 6L: Multiple signs and buildings beginning 1693' from DER, 340' left of centerline, up to 91' AGL/201' MSL.

RWY 6R: Obstruction light on sign, 1867' from DER, 941' left of centerline, 52' AGL/161' MSL. Multiple towers and windsock beginning 4930' from DER, 1734' right of centerline, up to 207' AGL/306' MSL.

RWY 7L: Multiple blast fences, signs, and antennas beginning 168' from DER, on centerline to 1858' from DER, 576' left of centerline up to 58' AGL/147' MSL. Railroad 275' from DER, up to 23' AGL/117' MSL.

RWY 7R: Multiple trees beginning 1273' from DER, 700' right of centerline up to 68' AGL/157' MSL. Building 791' from DER, 700' right of centerline, up to 32' AGL/130' MSL.

NOTE: Minimum climb of 397' per NM to 12000.
NOTE: Expect radar vectors to SLI R-345.
NOTE: RADAR Required.
NOTE: DME Required.
NOTE: RWY 24L/R, 25L/R NA - Air Traffic.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 6L/R: Climb heading 070° until the LAX VORTAC 3 DME, then turn left heading 055° for vector to SLI R-345. Thence....

TAKE-OFF RUNWAY 7L/R: Climb heading 070° for vector to SLI R-345. Thence....

....via SLI R-345 to GABRE INT. Then via (transition) or (assigned route).

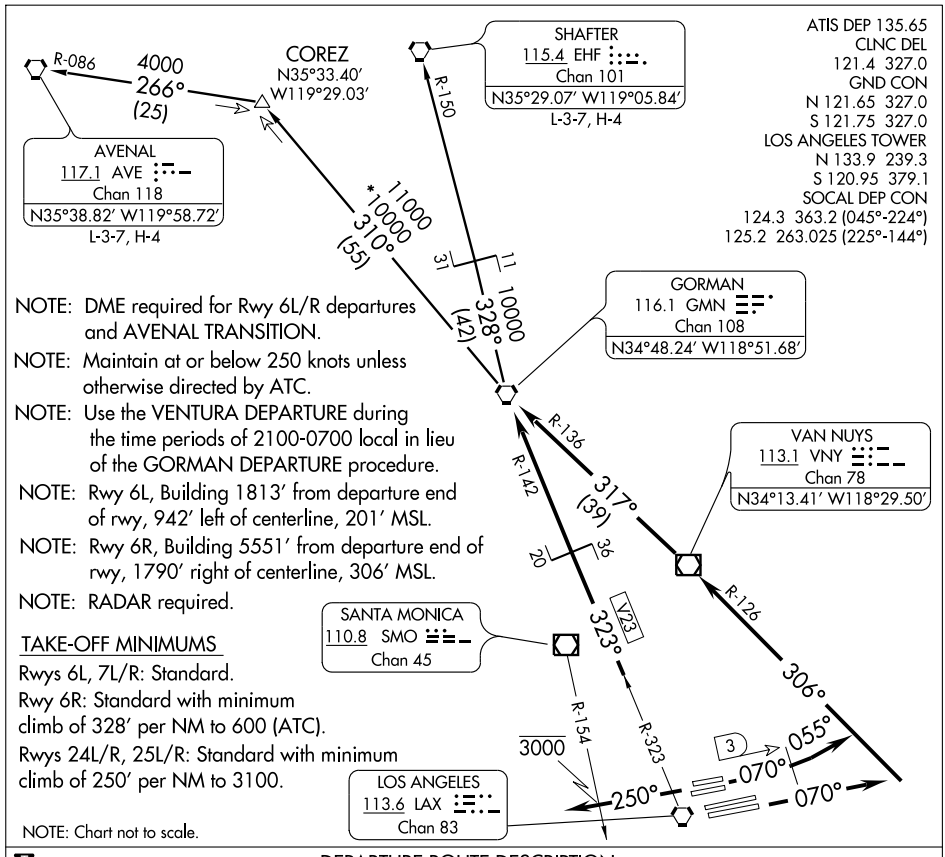
DAGGETT TRANSITION (GABRE6.DAG): From over GABRE INT via VNY R-057 and DAG R-224 to DAG VORTAC.

(GMN4.GMN) 09239

GORMAN FOUR DEPARTURE

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA



ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-144°)

NOTE: DME required for Rwy 6L/R departures and AVENAL TRANSITION.

NOTE: Maintain at or below 250 knots unless otherwise directed by ATC.

NOTE: Use the VENTURA DEPARTURE during the time periods of 2100-0700 local in lieu of the GORMAN DEPARTURE procedure.

NOTE: Rwy 6L, Building 1813' from departure end of rwy, 942' left of centerline, 201' MSL.

NOTE: Rwy 6R, Building 5551' from departure end of rwy, 1790' right of centerline, 306' MSL.

NOTE: RADAR required.

TAKE-OFF MINIMUMS

Rwys 6L, 7L/R: Standard.

Rwy 6R: Standard with minimum climb of 328' per NM to 600 (ATC).

Rwys 24L/R, 25L/R: Standard with minimum climb of 250' per NM to 3100.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L/R: Climb via heading 070° until LAX VORTAC 3 DME, then turn left heading 055° for vector to join VNY R-126 to VNY VOR/DME, then via VNY R-317 and GMN R-136 to GMN VORTAC. Thence....

TAKE-OFF RUNWAYS 7L/R: Climb via heading 070° for vector to join VNY R-126 to VNY VOR/DME, then via VNY R-317 and GMN R-136 to GMN VORTAC. Thence....

TAKE-OFF RUNWAYS 24L/R,25L/R: Climb via heading 250° to cross SMO R-154 at or below 3000, then via radar vectors to proceed via LAX R-323 and GMN R-142 to GMN VORTAC. Thence....

....via (assigned transition) or (assigned route). All aircraft expect further clearance to filed flight level three minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control within five minutes after departure, climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

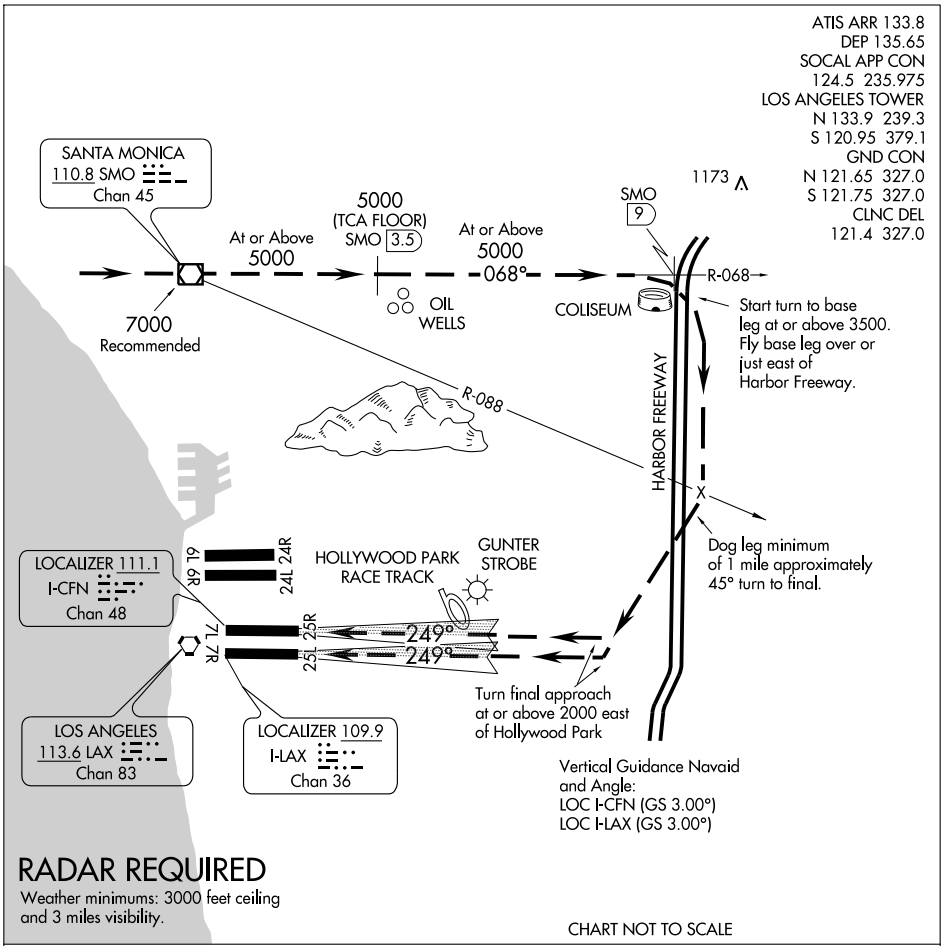
AVENAL TRANSITION (GMN4.AVE): From over GMN VORTAC via GMN R-310 and AVE R-086 to AVE VORTAC.

SHAFTER TRANSITION (GMN4.EHF): From over GMN VORTAC via GMN R-328 and EHF R-150 to EHF VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

HARBOR VISUAL RWY 25L/R

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA



RADAR REQUIRED

Weather minimums: 3000 feet ceiling and 3 miles visibility.

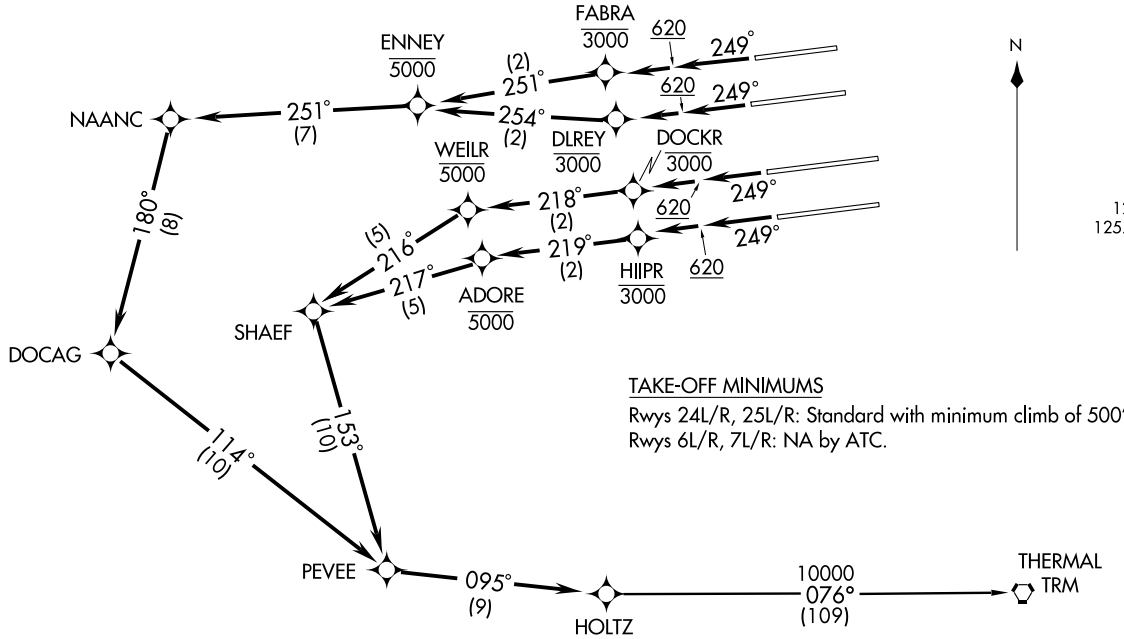
CHART NOT TO SCALE

HARBOR VISUAL APPROACH

When visual approaches to Runways 25L/R are in progress, clearances to aircraft from the north and northwest will be given utilizing the following phraseology:

"(IDENT) CLEARED FOR HARBOR VISUAL RUNWAY 25 LEFT/RIGHT APPROACH."

A descent profile of approximately 3° starting at 7000 over SMO VOR/DME may be made with reference to the minimum altitudes above.



TAKE-OFF MINIMUMS

Rwys 24L/R, 25L/R: Standard with minimum climb of 500′ per NM to 620.
Rwys 6L/R, 7L/R: NA by ATC.

TAKE-OFF OBSTACLE NOTES

Rwy 24L: Bush 957′ from DER, 601′ left of centerline, 29′ AGL/148′ MSL.
Light pole 273′ from DER, 547′ left of centerline, 12′AGL/120′ MSL.
Light pole 301′ from DER, 425′ left of centerline, 10′ AGL/118′ MSL
Antenna on pole 1358′ from DER, 287′ right of centerline 25′ AGL/144′ MSL.
Bush 240′ feet from DER, 508′ right of centerline, 10′ AGL/116′ MSL.
Light pole 296′ from DER, 321′ right of centerline, 8′ AGL/116′ MSL.
Rwy 24R: OL on glideslope 213′ from DER, 400′ left of centerline, 34′ AGL/151′ MSL.
Rwy 25L: Pole 2366′ from DER, 765′ left of centerline, 55′ AGL/184′ MSL.
T-L tower 2800′ from DER, 993′ left of centerline, 82′ AGL/192′ MSL.
Transmission tower 2856′ from DER, 927′ left of centerline, 82′ AGL/192′ MSL.
Tree 2379′ from DER, 778′ left of centerline, 79′ AGL/197′ MSL.
Bush 134′ from DER, 397′ left of centerline, 5′ AGL/123′ MSL.

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.

NOTE: For non-GPS equipped aircraft departing Rwy 25R or 25L, SLI must be operational.

NOTE: Rwys 24L, 24R departures expect radar vector to PEVEE prior to NAANC.

NOTE: RADAR Required.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

HOLTZ NINE DEPARTURE (RNAV) (HOLTZ9.HOLTZ) 09239

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 24R: Climb heading 249° to 620, then direct to cross FABRA at or below 3000, then via 251° track to cross ENNEY at or below 5000, then via depicted route to HOLTZ, Thence....
TAKE-OFF RUNWAY 24L: Climb heading 249° to 620, then direct to cross DLREY at or below 3000, then via 254° track to cross ENNEY at or below 5000, then via depicted route to HOLTZ, Thence....
TAKE-OFF RUNWAY 25R: Climb heading 249° to 620, then direct to cross DOCKR at or below 3000, then via 218° track to cross WEILR at or below 5000, then via depicted route to HOLTZ, Thence....
TAKE-OFF RUNWAY 25L: Climb heading 249° to 620, then direct to cross HIIPR at or below 3000, then via 219° track to cross ADORE at or below 5000, then via depicted route to HOLTZ, Thence....

. . . . . via THERMAL TRANSITION. Expect further clearance to filed altitude three minutes after departure.

THERMAL TRANSITION (HOLTZ9.TRM)

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-UWU	APP CRS	Rwy Idg 6L	8925	Rwy Idg 6R	9954
108.5	069°	TDZE	117	TDZE	114
Chan 22		Apt Elev	126	Apt Elev	126

ILS or LOC RWY 6L

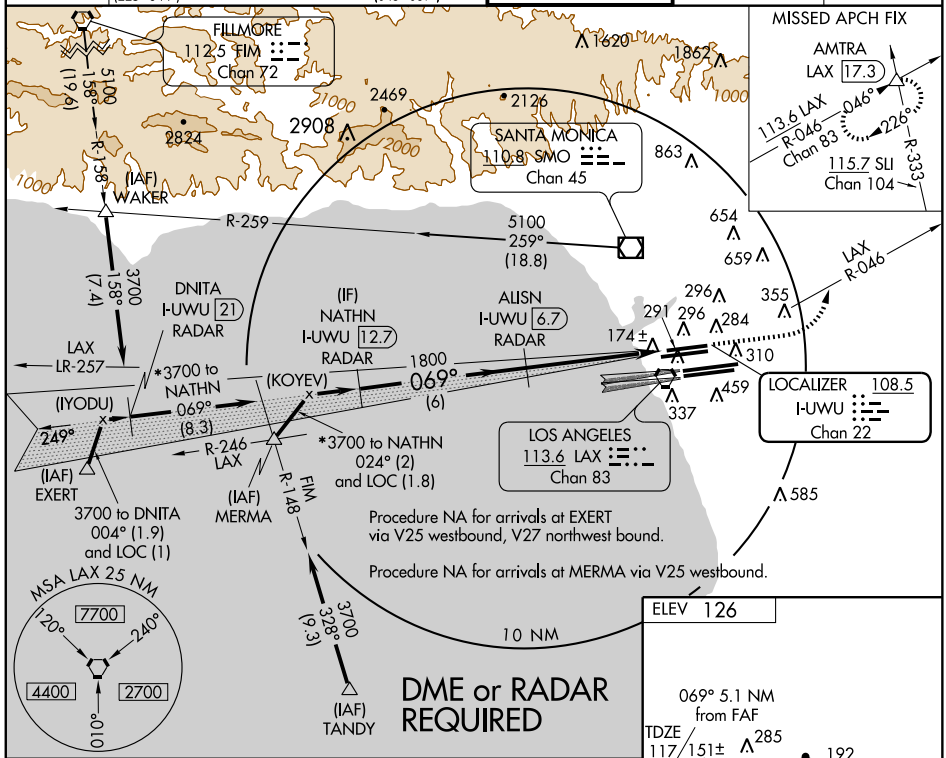
LOS ANGELES INTL (LAX)

Simultaneous approach authorized with Rwy 7L/R.
LOC procedure NA during simultaneous operations.
Inoperative table does not apply to S-ILS 6L and S-LOC 6L all Cats, Sidestep 6R Cats A/B.
For inoperative MALSR, increase Sidestep 6R Cat C visibility to 1½ mile and Cat D to 2 miles. Visibility reduction by helicopters NA.

MALSR Rwys 6L and 6R

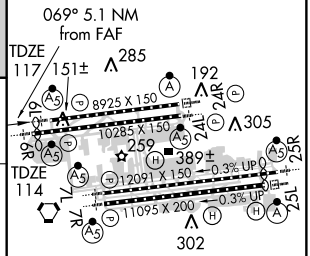
MISSED APPROACH: Climb to 600 then climbing left turn to 3000 via LAX VORTAC R-046 to AMTRA INT/LAX 17.3 DME and hold.

ATIS	SOCAL APP CON	LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)	124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)	128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	

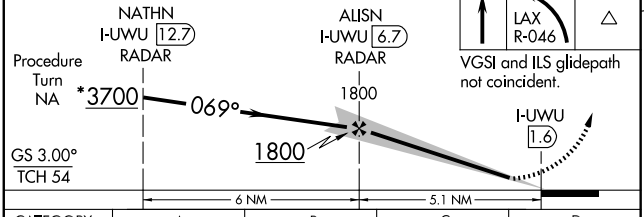


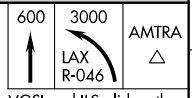
SW-3, 22 OCT 2009 to 19 NOV 2009

ELEV 126



* When assigned by ATC, intercept glidepath at NATHN, 3700.





VGSI and ILS glidepath not coincident.

CATEGORY	A	B	C	D
S-ILS 6L	367/50 250 (300-1)			
S-LOC 6L	440/50 323 (400-1)			
SIDESTEP RWY 6R	440/60 326 (400-1¼)			440-1¾ 326 (400-1¾)

TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

LOC/DME I-GPE	APP CRS	Rwy Idg 6R	9954	Rwy Idg 6L	8925
111.7	069°	TDZE	114	TDZE	117
Chan 54		Apt Elev	126	Apt Elev	126

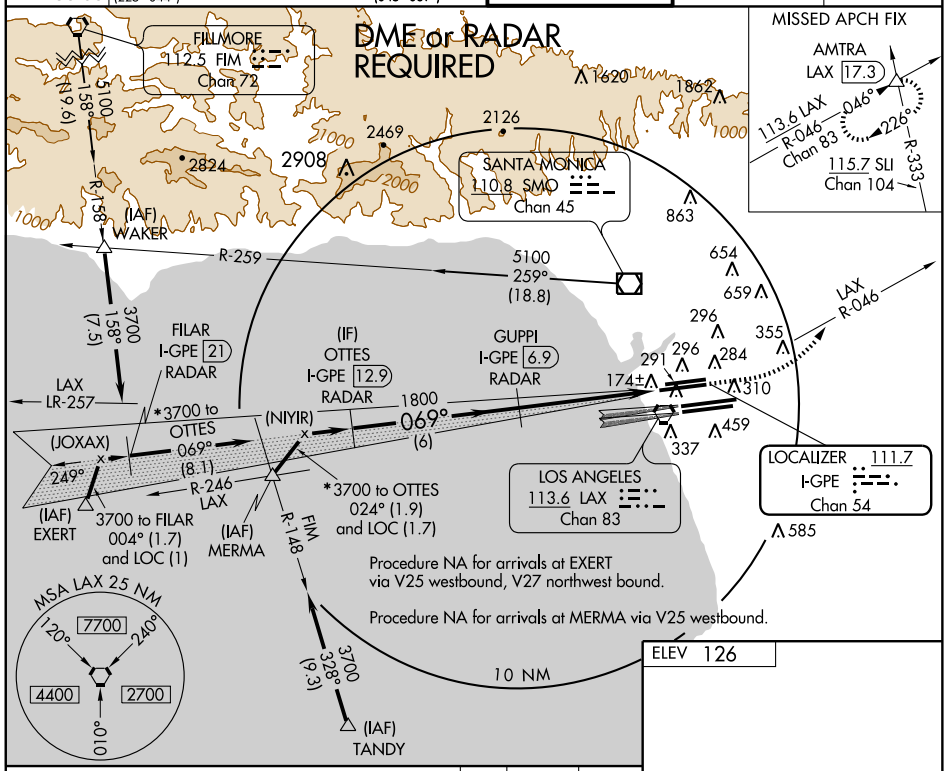
ILS or LOC RWY 6R
LOS ANGELES INTL (LAX)

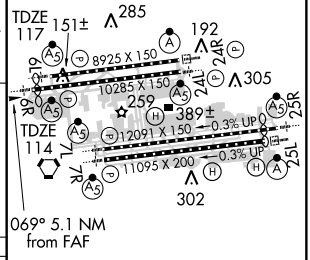
Inoperative table does not apply to Sidestep Rwy 6L Cats A and B.
Simultaneous approach authorized with Rwy 7L/R.
LOC procedure NA during simultaneous operations.

MALSR Rwy 6R | MALSR Rwy 6L

MISSED APPROACH: Climb to 600 then climbing left turn to 3000 via LAX VORTAC R-046 to AMTRA INT/LAX 17.3 DME and hold.

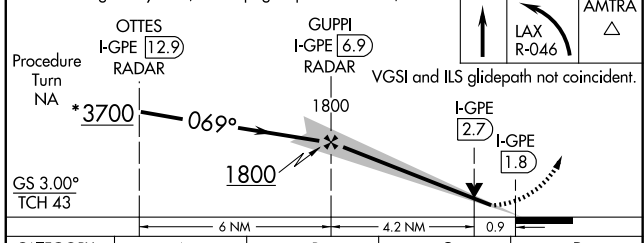
ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	





*When assigned by ATC, intercept glidepath at OTTES, 3700.

600 | 3000 LAX R-046 | AMTRA



CATEGORY	A	B	C	D
S-ILS 6R	314/18 200 (200-½)			
S-LOC 6R	460/24 346 (400-½)			460/40 346 (400-¾)
SIDESTEP RWY 6L	460/50 343 (400-1)			460-1½ 343 (400-1½)

TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SW-3, 22 OCT 2009 to 19 NOV 2009

LOS ANGELES, CALIFORNIA AL-237 (FAA)

LOC/DME I-IAS	APP CRS	Rwy Idg 7L 12091	Rwy Idg 7R 11095
111.1 Chan 48	069°	TDZE 126	TDZE 125
		Apt Elev 126	Apt Elev 126

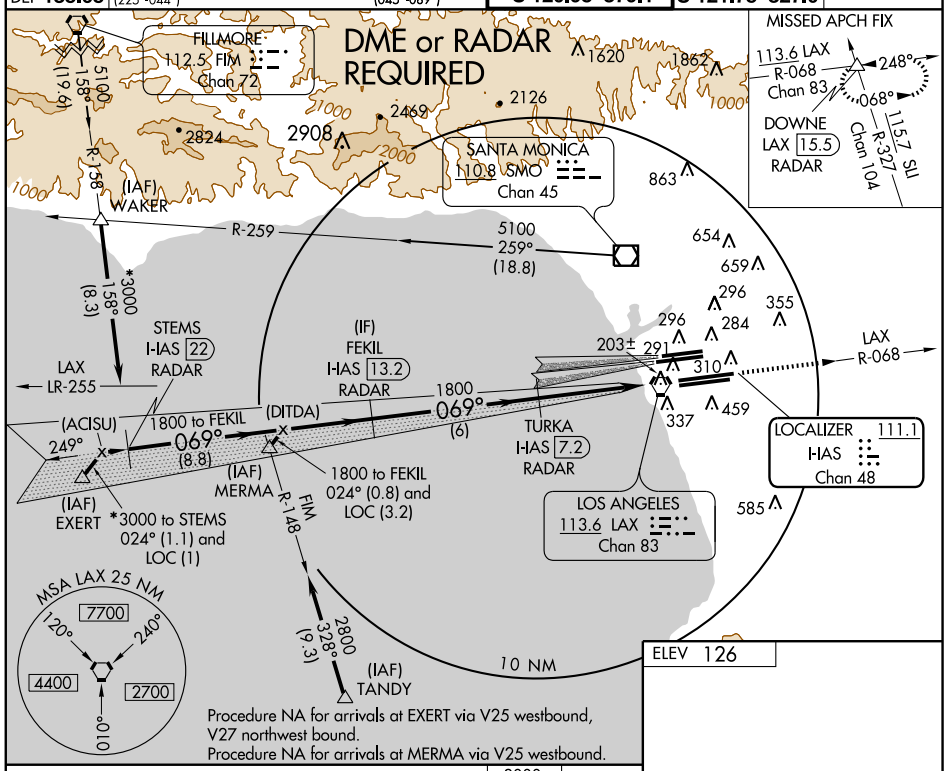
ILS or LOC RWY 7L
LOS ANGELES INTL (LAX)

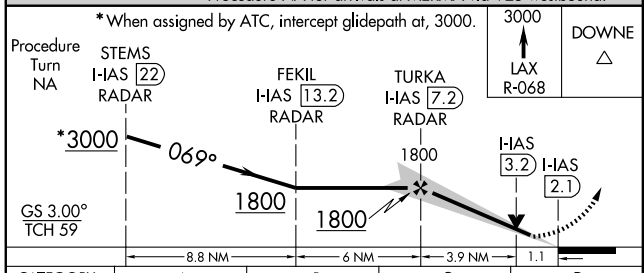
Inoperative table does not apply to Sidestep Rwy 7R Cats. A and B.
Simultaneous approach authorized with Rwy 6L/R.
LOC procedure NA during simultaneous operations.

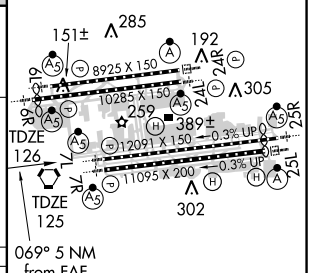
MALSR Rwy 7L (A5) MALSR Rwy 7R (A5)

MISSED APPROACH: Climb to 3000 via LAX VORTAC R-068 to DOWNE INT/ LAX 15.5 DME/RADAR and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	







CATEGORY	A	B	C	D
S-ILS 7L	327/18 201 (300-½)			
S-LOC 7L	520/24 394 (400-½)			520/40 394 (400-¾)
SIDESTEP RWY 7R	520/50 395 (400-1)			520-1½ 395 (400-1½)

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-3, 22 OCT 2009 to 19 NOV 2009

LOS ANGELES, CALIFORNIA AL-237 (FAA)

LOC/DME I-MKZ	APP CRS	Rwy Idg 7R	11095	Rwy Idg 7L	12091
109.9	069°	TDZE	125	TDZE	126
Chan 36		Apt Elev	126	Apt Elev	126

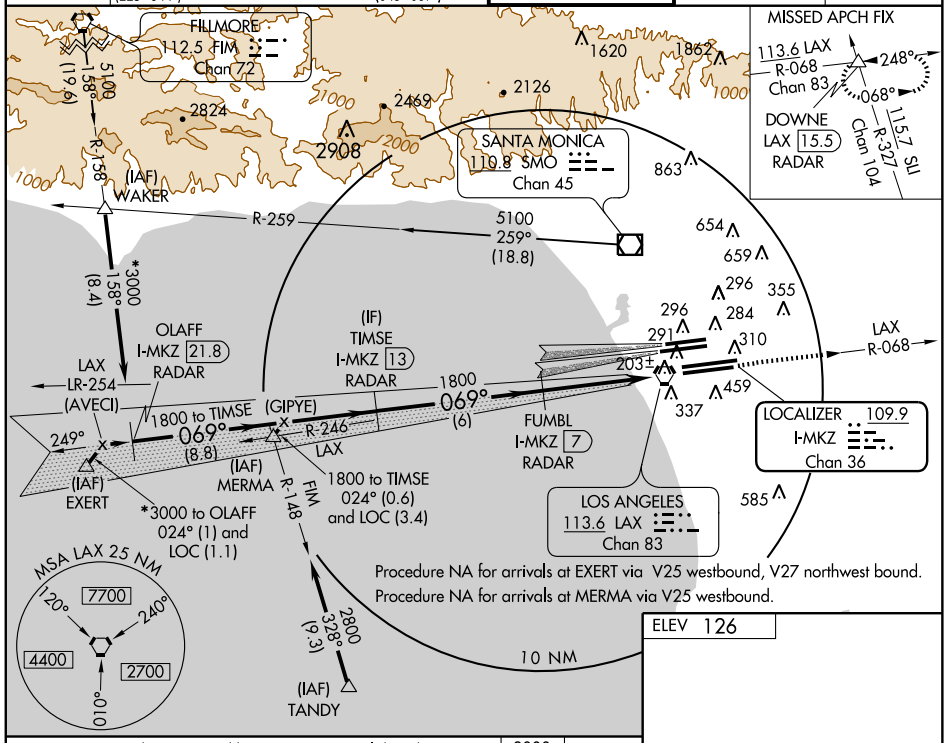
ILS or LOC RWY 7R
LOS ANGELES INTL (LAX)

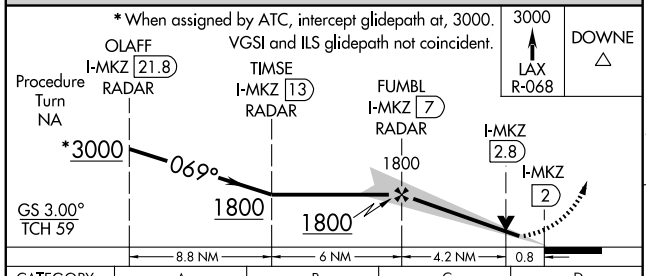
For inoperative MALSR, increase S-LOC 7R Cat. D visibility to RVR 5000.
Inoperative table does not apply to Sidestep Rwy 7L Cat. A/B.
Simultaneous approach authorized with Rwy 6L/R.
LOC procedure NA during simultaneous operations.
DME or RADAR required. Autopilot coupled approach NA below 264.

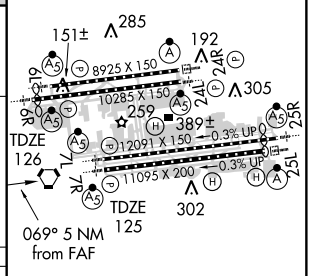
MALSR Rwys 7R and 7L

MISSED APPROACH: Climb to 3000 via LAX VORTAC R-068 to DOWNE INT/LAX 15.5 DME/RADAR and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	







CATEGORY	A	B	C	D
S-ILS 7R	325/24 200 (200-½)			
S-LOC 7R	460/24 335 (400-½)			460/40 335 (400-¾)
SIDESTEP RWY 7L	520/50 395 (400-1)			520-1½ 395 (400-1½)

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-HQB	APP CRS	Rwy Idg 24L	Rwy Idg 24R
111.7 Chan 54	249°	10285 TDZE 121 Apt Elev 126	8925 TDZE 120 Apt Elev 126

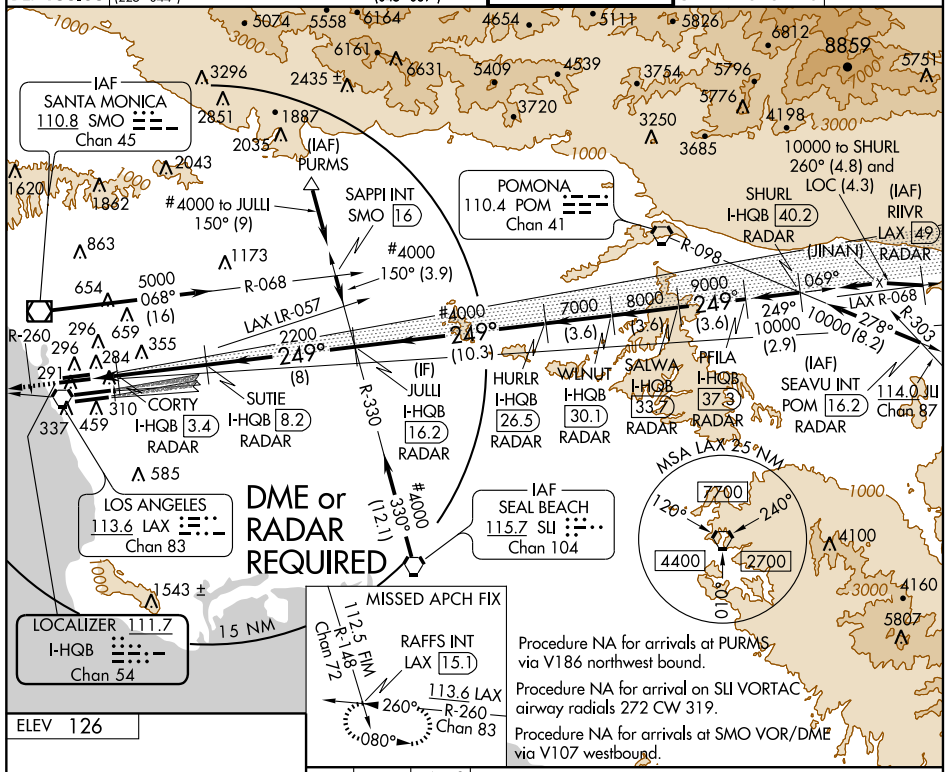
ILS or LOC RWY 24L
LOS ANGELES INTL (LAX)

Simultaneous approach authorized with Rwy 25L/R.
LOC procedure NA during simultaneous operations.
Inoperative table does not apply to Sidestep Rwy 24R Cats. A/B.

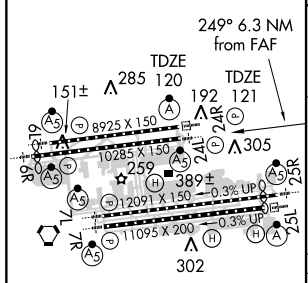
MALSR Rwy 24L | ALSF-2 Rwy 24R

MISSED APPROACH: Climb to 2000 via heading 249° and LAX VORTAC R-260 to RAFFS INT/LAX 15.1 DME and hold.

ATIS			LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8 DEP 135.65	124.3 363.2 (APCH FM WEST) 124.5 235.975 (225°-044°)	SOCAL APP CON 124.9 269.0 (090°-224°) 128.5 360.7 (045°-089°)	N 133.9 239.3 S 120.95 379.1	N 121.65 327.0 S 121.75 327.0	121.4 327.0

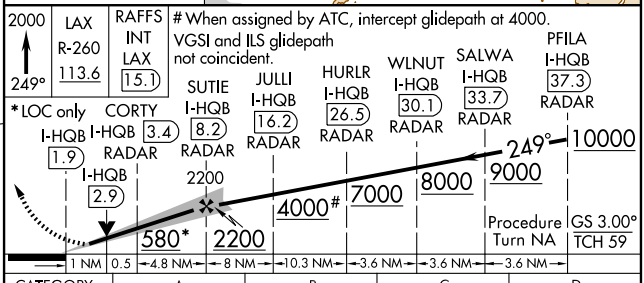


ELEV 126



TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys

FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06



CATEGORY	A	B	C	D
S-ILS 24L	321/24 200 (200-½)			
S-LOC 24L	500/24 379 (400-½)			500/40 379 (400-¾)
SIDESTEP RWY 24R	580/50 460 (500-1)			580-1½ 460 (500-1½)

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-OSS	APP CRS	Rwy Idg 24R	TDZE	Apt Elev	Rwy Idg 24L	TDZE	Apt Elev
108.5 Chan 22	249°	8925	120	126	10285	121	126

ILS or LOC RWY 24R

LOS ANGELES INTL (LAX)

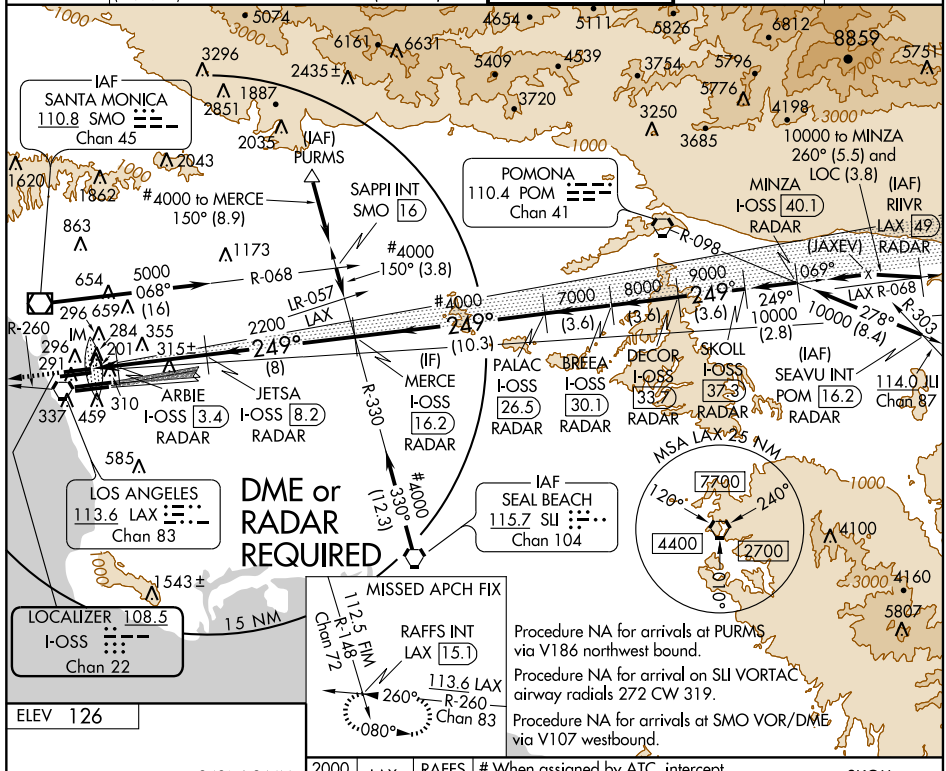
Inoperative table does not apply to Sidestep Rwy 24L Cats A/B. For inoperative MALSR, increase S-LOC Rwy 24R Cat D visibility to RVR 5000. LOC procedure NA during simultaneous operation. Simultaneous approach authorized with Rwy 25L/R.

ALSF-2 Rwy 24R (A)

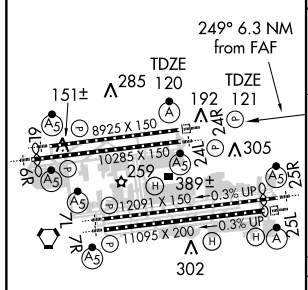
MALSR Rwy 24L (A5)

MISSED APPROACH: Climb to 2000 via heading 249° and LAX R-260 to RAFFS INT/ LAX 15.1 DME and hold.

ATIS	SOCAL APP CON	LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8 DEP 135.65	124.3 363.2 (APCH FM WEST) 124.5 235.975 (225°-044°) 124.9 269.0 (090°-224°) 128.5 360.7 (045°-089°)	N 133.9 239.3 S 120.95 379.1	N 121.65 327.0 S 121.75 327.0	121.4 327.0

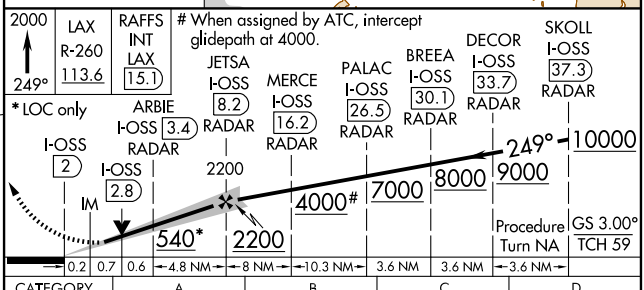


ELEV 126



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06



CATEGORY	A	B	C	D
S-ILS 24R	320/18 200 (200-½)			
S-LOC 24R	460/24 340 (400-½)			460/40 340 (400-¾)
SIDESTEP RWY 24L	580/50 459 (500-1)			580-1½ 459 (500-1½)

SW-3, 22 OCT 2009 to 19 NOV 2009

LOS ANGELES, CALIFORNIA AL-237 (FAA)

ILS or LOC RWY 25L

LOS ANGELES INTL (LAX)

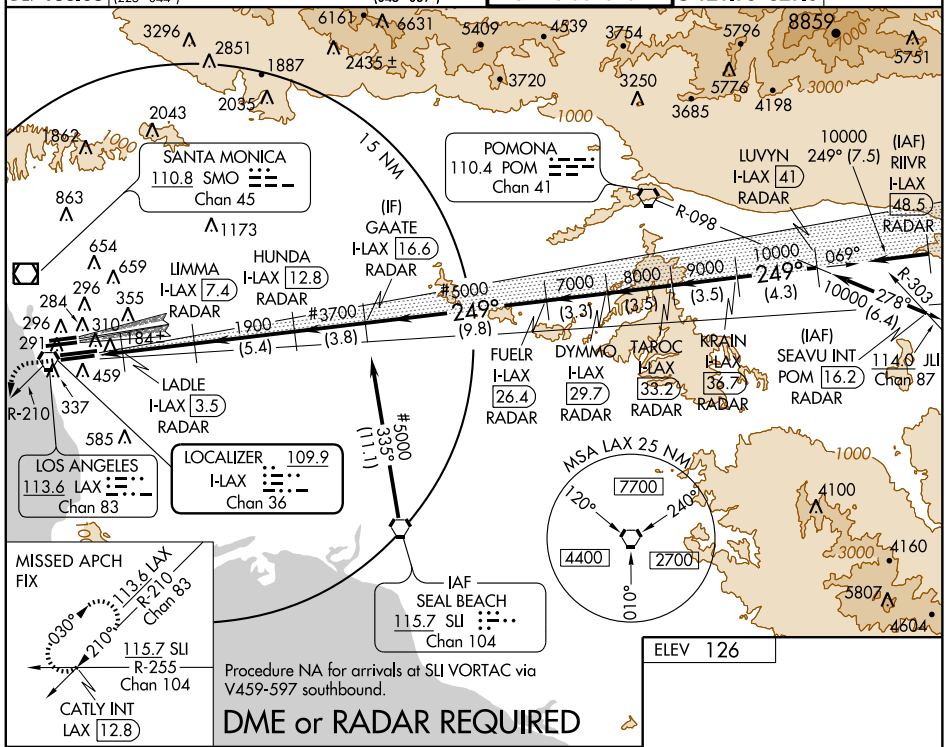
LOC/DME I-LAX	APP CRS	Rwy Idg 25L 11095	Rwy Idg 25R 11134
109.9	249°	TDZE 104	TDZE 102
Chan 36		Apt Elev 126	Apt Elev 126

Inoperative table does not apply to Sidestep Rwy 25R Cats. A and B.
Simultaneous approach authorized with Rwy 24L/R.
LOC procedure NA during simultaneous operations.

ALSF-2 Rwy 25L (A) MALSR Rwy 25R (A5)

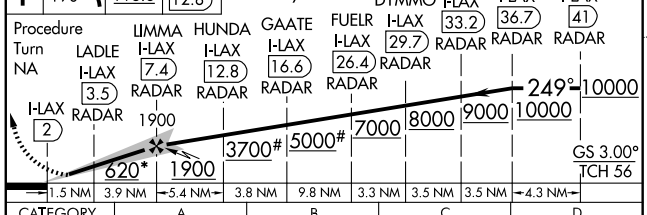
MISSED APPROACH: Climb to 800 then climbing left turn to 2000 via heading 190° and LAX VORTAC R-210 to CATLY INT/ LAX 12.8 DME and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	

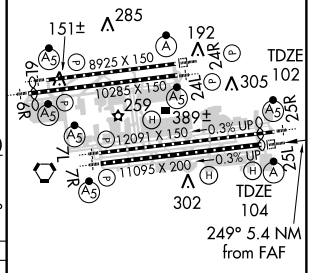


800	2000	LAX R-210 113.6	CATLY INT LAX 12.8
	190°		

When assigned by ATC, intercept glidepath at 3700 or 5000.
*LOC only



ELEV 126



CATEGORY	A	B	C	D
S-ILS 25L	304/18 200 (200-½)			
S-LOC 25L	540/24 436 (500-½)		540/40 436 (500-¾)	540/50 436 (500-1)
SIDESTEP RWY 25R	620/50 518 (500-1)			620-1½ 518 (500-1½)

TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-CFN	APP CRS	Rwy Idg 25R	Rwy Idg 25L
111.1 Chan 48	249°	TDZE 102	TDZE 104
		Apt Elev 126	Apt Elev 126

ILS or LOC RWY 25R

LOS ANGELES INTL (LAX)

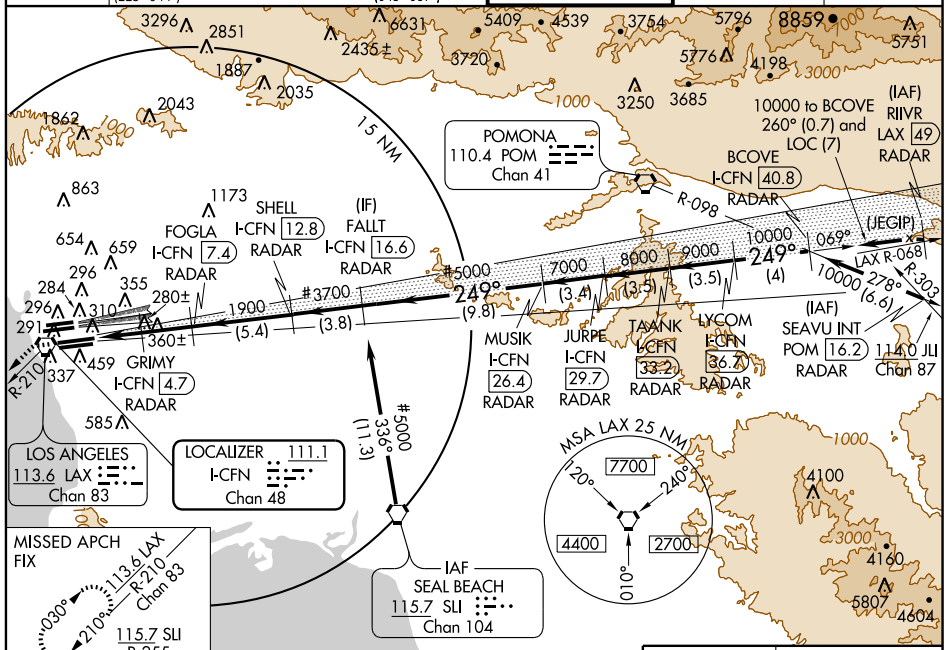
Simultaneous approach authorized with Rwy 24L/R.
LOC procedure NA during simultaneous operations.
Inoperative table does not apply to Sidestep Rwy 25L Cat A/B.
** RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR Rwy 25R

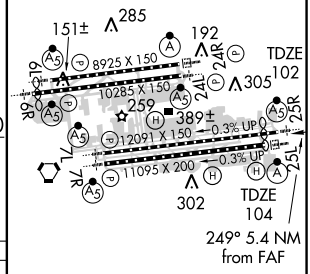
ALSF-2 Rwy 25L

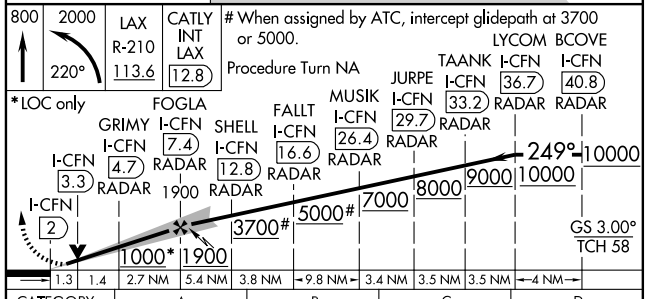
MISSED APPROACH: Climb to 800 then climbing left turn to 2000 via heading 220° and LAX VORTAC R-210 to CATLY INT/LAX 12.8 DME and hold.

ATIS		SOCAL APP CON	LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)	124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)	128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



ELEV 126





CATEGORY	A	B	C	D
S-ILS 25R	**302/24 200 (200-½)			
S-LOC 25R	560/24 458 (500-½)		560/40 458 (500-¾)	560/50 458 (500-1)
SIDESTEP RWY 25L	620/50 516 (500-1)			620-1½ 516 (500-1½)

TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-OSS	APP CRS	Rwy Idg	8925
108.5	249°	TDZE	120
Chan 22		Apt Elev	126

ILS RWY 24R (CAT II)

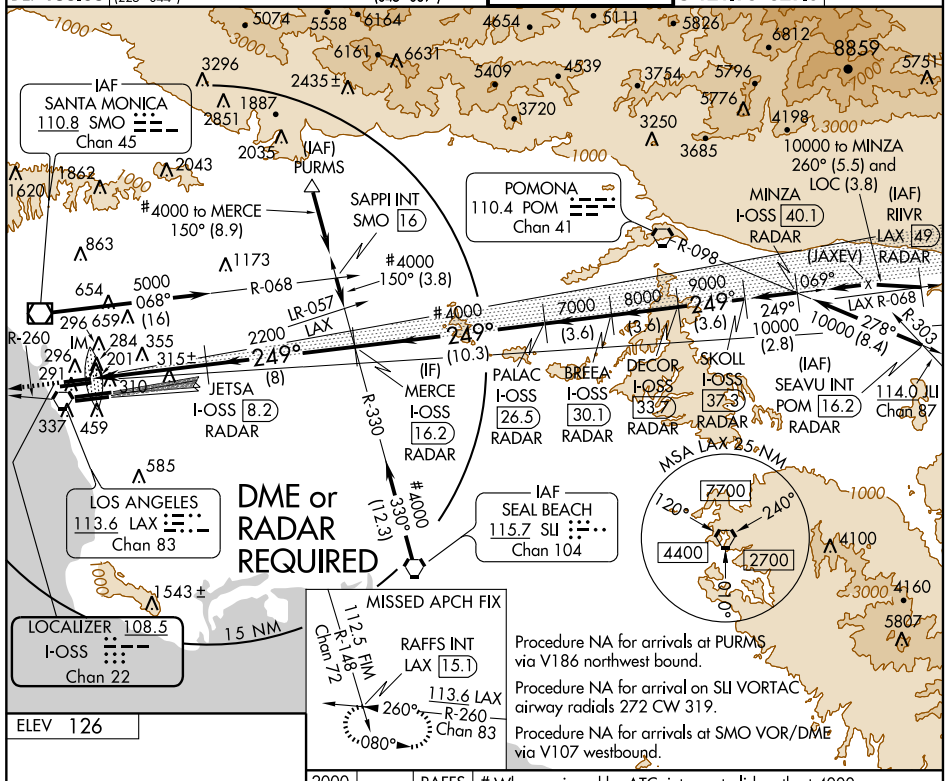
LOS ANGELES INTL (LAX)

Simultaneous approach authorized with Rwy 25L/R.

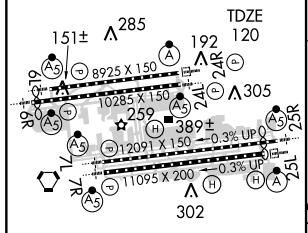
ALSF-2

MISSED APPROACH: Climb to 2000 via heading 249° and LAX R-260 to RAFFS INT/LAX 15.1 DME and hold.

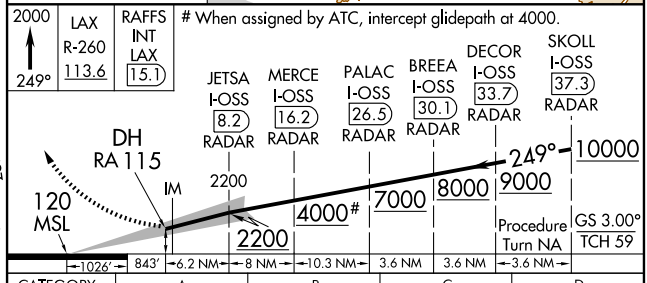
ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



ELEV 126



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys



CATEGORY	A	B	C	D
S-ILS 24R	220/12 100 RA 115			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-OSS	APP CRS	Rwy Idg	8925
108.5	249°	TDZE	120
Chan 22		Apt Elev	126

ILS RWY 24R (CAT III)

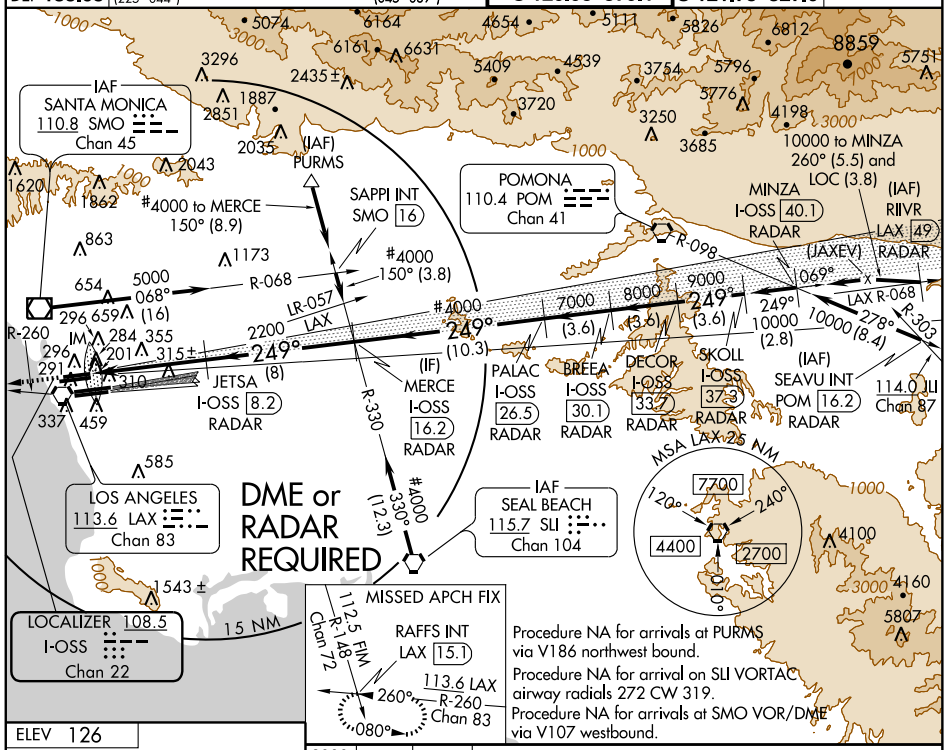
LOS ANGELES INTL (LAX)

Simultaneous approach authorized with Rwy 25L/R.

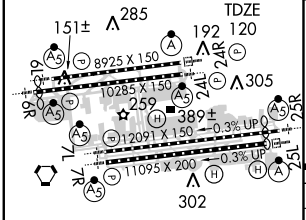
ALSF-2

MISSED APPROACH: Climb to 2000 via heading 249° and LAX R-260 to RAFFS INT/LAX 15.1 DME and hold.

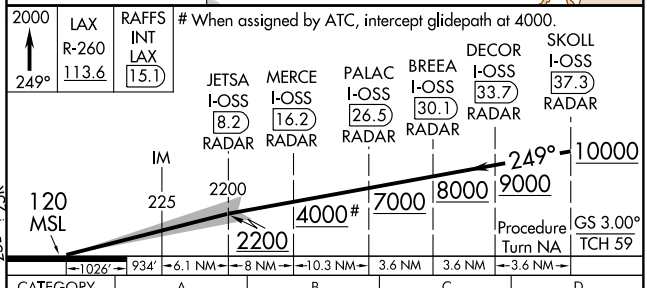
ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



ELEV 126



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys



CATEGORY	A	B	C	D
S-ILS 24R	CAT IIIa		RVR 07	
S-ILS 24R	CAT IIIb		RVR 06	
S-ILS 24R	CAT IIIc		NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-LAX	APP CRS	Rwy Idg 11095
109.9	249°	TDZE 104
Chan 36		Apt Elev 126

ILS RWY 25L (CAT II)

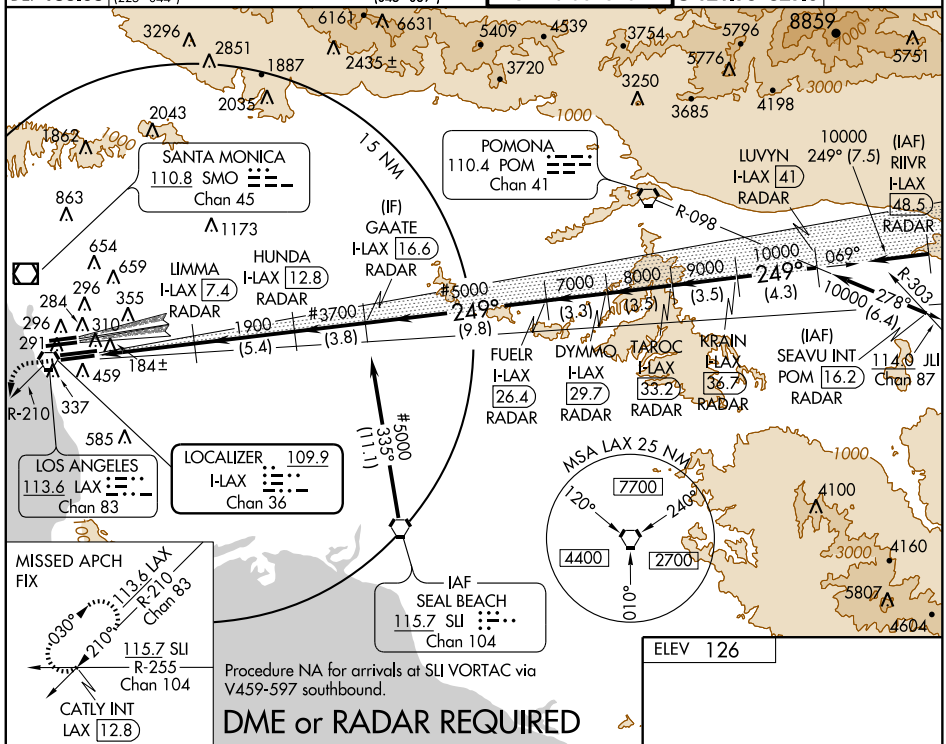
LOS ANGELES INTL (LAX)

Simultaneous approach authorized with Rwy 24L/R.

ALSF-2

MISSED APPROACH: Climb to 800 then climbing left turn to 2000 via heading 190° and LAX VORTAC R-210 to CATLY INT/LAX 12.8 DME and hold.

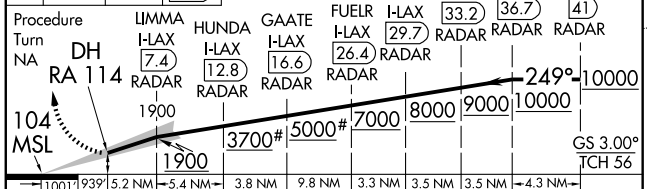
ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



ELEV 126

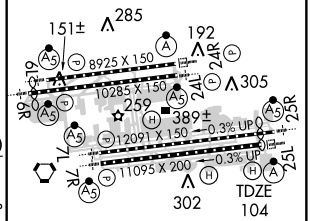
800	2000	LAX R-210 113.6	CATLY INT LAX 12.8
	190°		

When assigned by ATC, intercept glidepath at 3700 or 5000.



CATEGORY	A	B	C	D
S-ILS 25L	204/12 100 RA 114			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

LOS ANGELES, CALIFORNIA AL-237 (FAA)

LOC/DME I-LAX	APP CRS	Rwy Idg 11095
109.9	249°	TDZE 104
Chan 36		Apt Elev 126

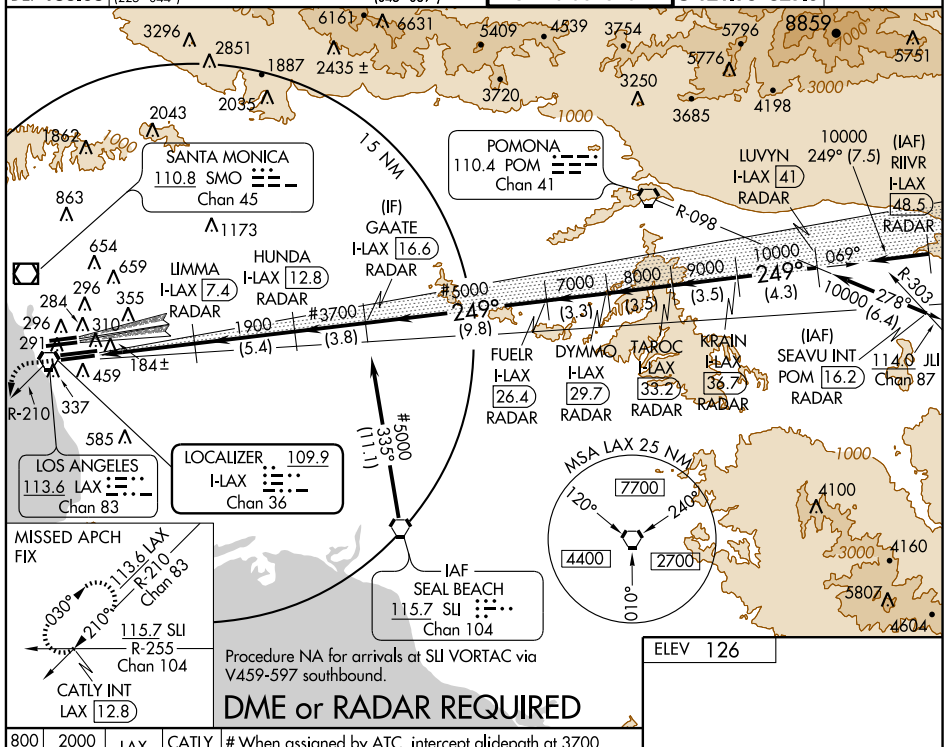
ILS RWY 25L (CAT III)
LOS ANGELES INTL (LAX)

Simultaneous approach authorized with Rwy 24L/R.

ALSF-2

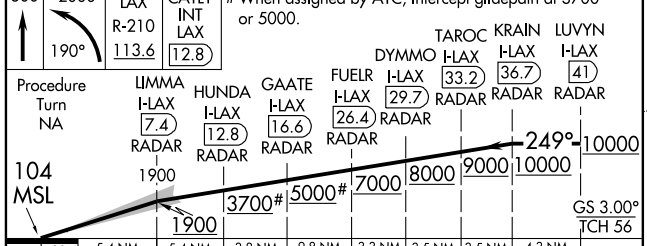
MISSED APPROACH: Climb to 800 then climbing left turn to 2000 via heading 190° and LAX VORTAC R-210 to CATLY INT/LAX 12.8 DME and hold.

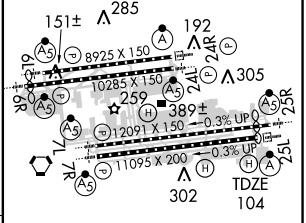
ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



800	2000	LAX R-210 113.6	CATLY INT LAX 12.8
	190°		

When assigned by ATC, intercept glidepath at 3700 or 5000.





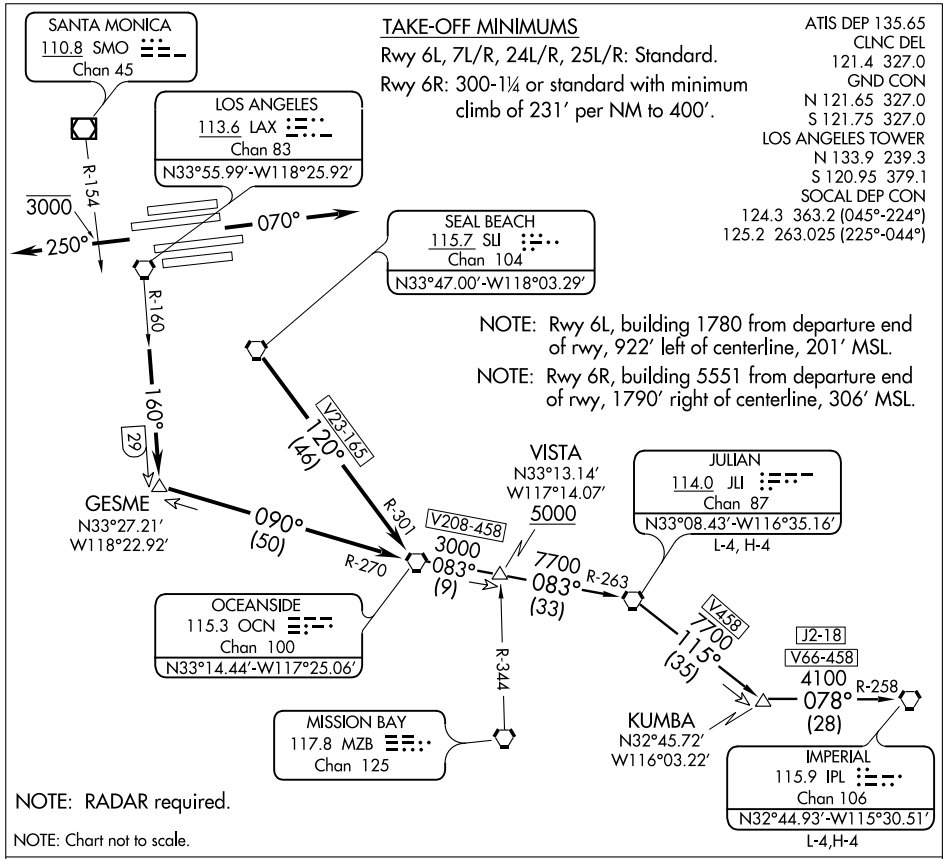
CATEGORY	A	B	C	D
S-ILS 25L	CAT IIIa RVR 07			
S-ILS 25L	CAT IIIb RVR 06			
S-ILS 25L	CAT IIIc NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

IMPER ONE DEPARTURE



TAKE-OFF MINIMUMS

Rwy 6L, 7L/R, 24L/R, 25L/R: Standard.

Rwy 6R: 300-1¼ or standard with minimum climb of 231′ per NM to 400′.

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

NOTE: Rwy 6L, building 1780 from departure end of rwy, 922′ left of centerline, 201′ MSL.

NOTE: Rwy 6R, building 5551 from departure end of rwy, 1790′ right of centerline, 306′ MSL.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L/R, 7L/R: Climb via heading 070° for vector to SLI VORTAC, then via SLI R-120 and OCN R-301 to OCN VORTAC. Thence. . . .

TAKE-OFF RUNWAYS 24L/R, 25L/R: Climb via heading 250° to cross SMO R-154 at or below 3000. Then via radar vectors to join LAX R-160 to GESME INT. Then via OCN R-270 to OCN VORTAC. Thence. . . .

. . . .via (assigned transition) or (assigned route). All aircraft expect further clearance to filed flight level three minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control within five minutes after departure, climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

IMPERIAL TRANSITION (IMPER1.IPL): From over OCN VORTAC via OCN R-083 and JLI R-263 to JLI VORTAC. Then via JLI R-115 and IPL R-258 to IPL VORTAC.

JULIAN TRANSITION (IMPER1.JLI): From over OCN VORTAC via OCN R-083 and JLI R-263 to JLI VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

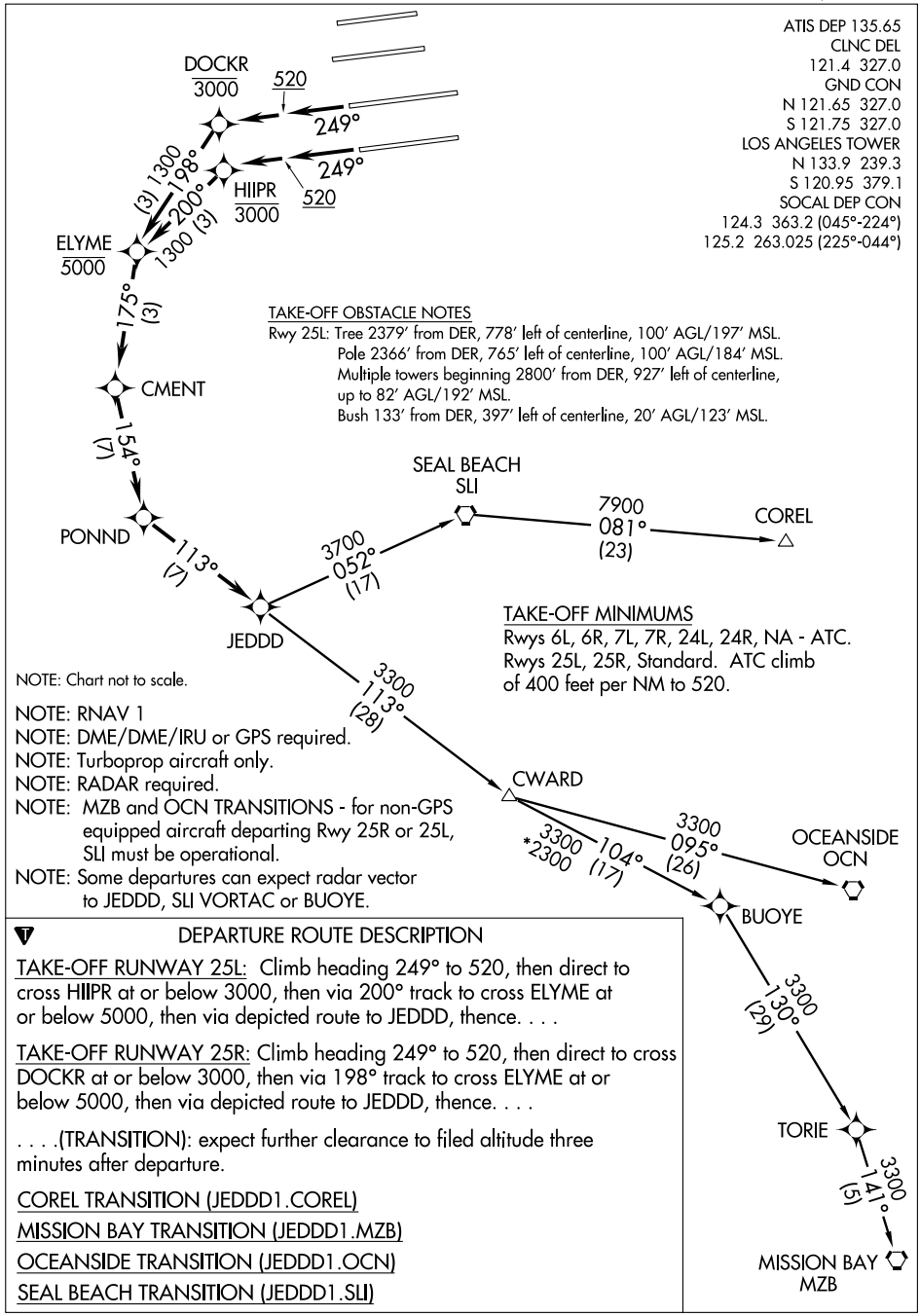
(JEDDD1.JEDDD) 09239

JEDDD ONE DEPARTURE (RNAV)

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)



TAKE-OFF OBSTACLE NOTES

Rwy 25L: Tree 2379′ from DER, 778′ left of centerline, 100′ AGL/197′ MSL.
Pole 2366′ from DER, 765′ left of centerline, 100′ AGL/184′ MSL.
Multiple towers beginning 2800′ from DER, 927′ left of centerline, up to 82′ AGL/192′ MSL.
Bush 133′ from DER, 397′ left of centerline, 20′ AGL/123′ MSL.

TAKE-OFF MINIMUMS

Rwys 6L, 6R, 7L, 7R, 24L, 24R, NA - ATC.
Rwys 25L, 25R, Standard. ATC climb of 400 feet per NM to 520.

NOTE: Chart not to scale.

NOTE: RNAV 1
NOTE: DME/DME/IRU or GPS required.
NOTE: Turboprop aircraft only.
NOTE: RADAR required.
NOTE: MZB and OCN TRANSITIONS - for non-GPS equipped aircraft departing Rwy 25R or 25L, SLI must be operational.
NOTE: Some departures can expect radar vector to JEDDD, SLI VORTAC or BUOYE.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 25L: Climb heading 249° to 520, then direct to cross HIIPR at or below 3000, then via 200° track to cross ELYME at or below 5000, then via depicted route to JEDDD, thence. . . .

TAKE-OFF RUNWAY 25R: Climb heading 249° to 520, then direct to cross DOCKR at or below 3000, then via 198° track to cross ELYME at or below 5000, then via depicted route to JEDDD, thence. . . .

. . . .(TRANSITION): expect further clearance to filed altitude three minutes after departure.

COREL TRANSITION (JEDDD1.COREL)

MISSION BAY TRANSITION (JEDDD1.MZB)

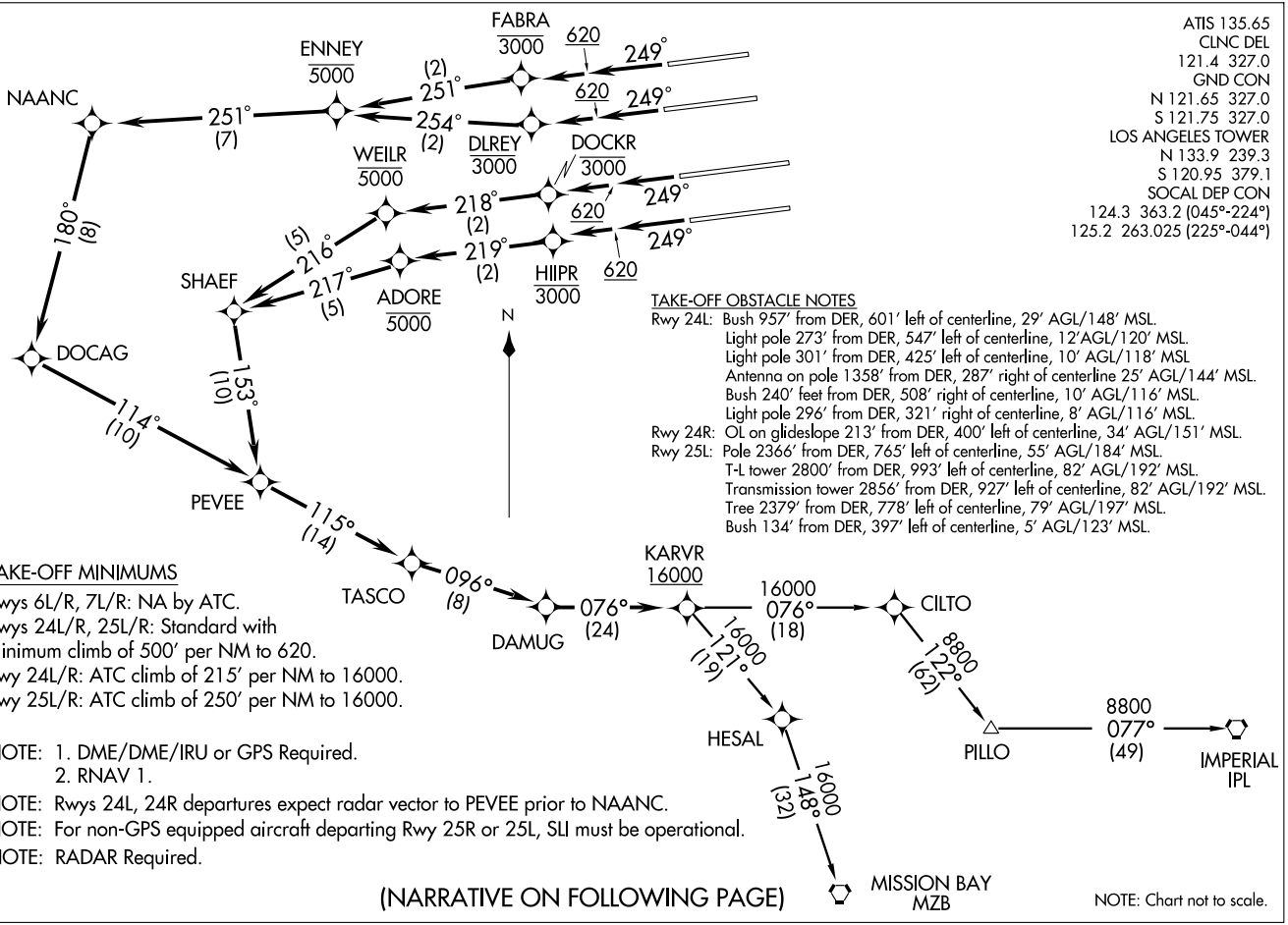
OCEANSIDE TRANSITION (JEDDD1.OCN)

SEAL BEACH TRANSITION (JEDDD1.SLI)

SW-3, 22 OCT 2009 to 19 NOV 2009

KARVR THREE DEPARTURE (RNAV)

ATIS 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)



TAKE-OFF OBSTACLE NOTES

Rwy 24L: Bush 957′ from DER, 601′ left of centerline, 29′ AGL/148′ MSL.
Light pole 273′ from DER, 547′ left of centerline, 12′AGL/120′ MSL.
Light pole 301′ from DER, 425′ left of centerline, 10′ AGL/118′ MSL
Antenna on pole 1358′ from DER, 287′ right of centerline 25′ AGL/144′ MSL.
Bush 240′ feet from DER, 508′ right of centerline, 10′ AGL/116′ MSL.
Light pole 296′ from DER, 321′ right of centerline, 8′ AGL/116′ MSL.
Rwy 24R: OL on glideslope 213′ from DER, 400′ left of centerline, 34′ AGL/151′ MSL.
Rwy 25L: Pole 2366′ from DER, 765′ left of centerline, 55′ AGL/184′ MSL.
T-L tower 2800′ from DER, 993′ left of centerline, 82′ AGL/192′ MSL.
Transmission tower 2856′ from DER, 927′ left of centerline, 82′ AGL/192′ MSL.
Tree 2379′ from DER, 778′ left of centerline, 79′ AGL/197′ MSL.
Bush 134′ from DER, 397′ left of centerline, 5′ AGL/123′ MSL.

TAKE-OFF MINIMUMS

Rwys 6L/R, 7L/R: NA by ATC.
Rwys 24L/R, 25L/R: Standard with minimum climb of 500′ per NM to 620.
Rwy 24L/R: ATC climb of 215′ per NM to 16000.
Rwy 25L/R: ATC climb of 250′ per NM to 16000.

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.
NOTE: Rwys 24L, 24R departures expect radar vector to PEVEE prior to NAANC.
NOTE: For non-GPS equipped aircraft departing Rwy 25R or 25L, SLI must be operational.
NOTE: RADAR Required.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 24R: Climb heading 249° to 620, then direct to cross FABRA at or below 3000, then via 251° track to cross ENNEY at or below 5000, then via depicted route to cross KARVR at or above 16000. Thence....
TAKE-OFF RUNWAY 24L: Climb heading 249° to 620, then direct to cross DLREY at or below 3000, then via 254° track to cross ENNEY at or below 5000, then via depicted route to cross KARVR at or above 16000. Thence....
TAKE-OFF RUNWAY 25R: Climb heading 249° to 620, then direct to cross DOCKR at or below 3000, then via 218° track to cross WEILR at or below 5000, then via depicted route to cross KARVR at or above 16000. Thence....
TAKE-OFF RUNWAY 25L: Climb heading 249° to 620, then direct to cross HIIPR at or below 3000, then via 219° track to cross ADORE at or below 5000, then via depicted route to cross KARVR at or above 16000. Thence....

. . . . . via TRANSITION. Expect further clearance to filed altitude five minutes after departure.

IMPERIAL TRANSITION (KARVR3.IPL)

MISSION BAY TRANSITION (KARVR3.MZB)

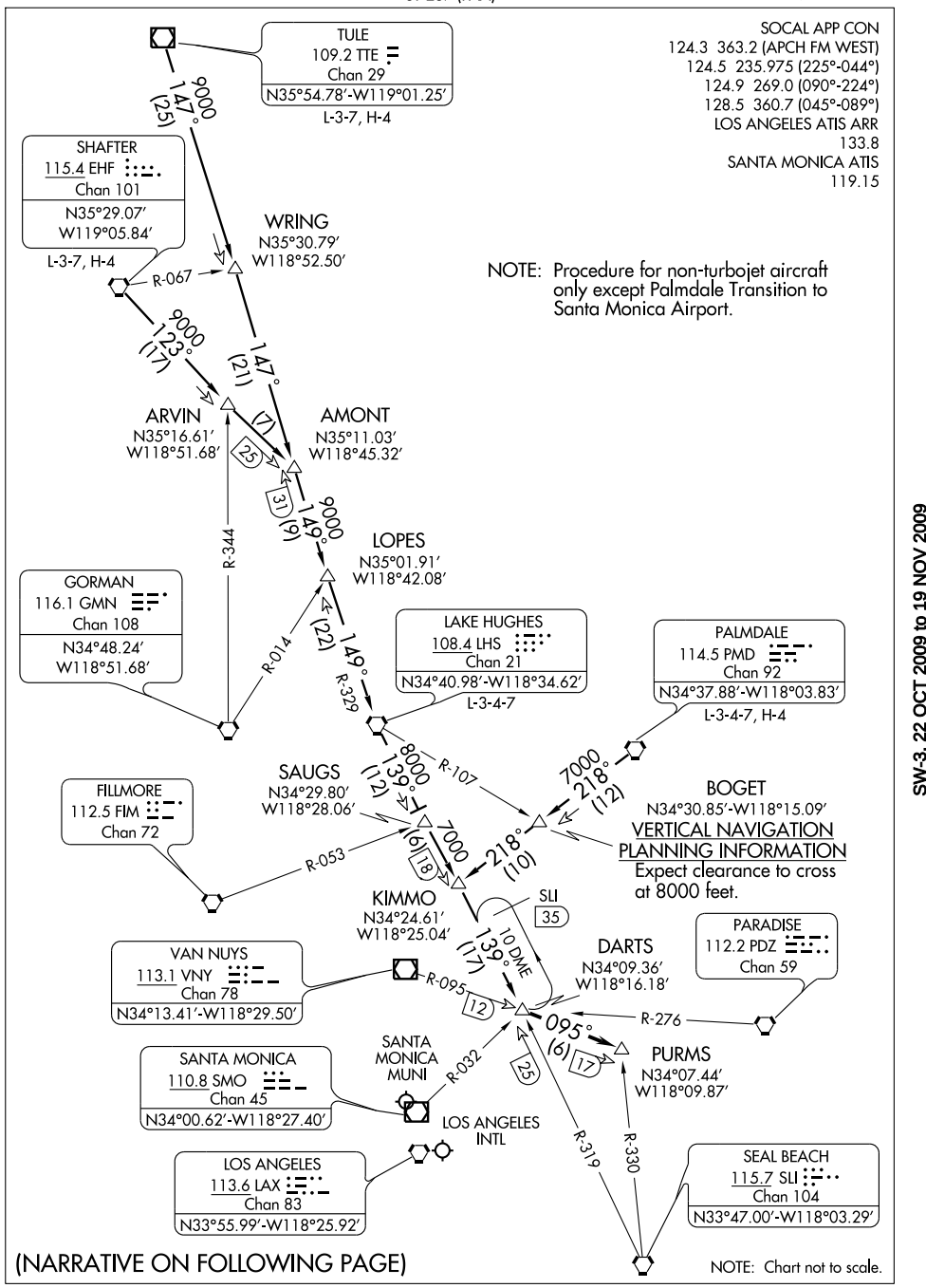
SW-3, 22 OCT 2009 to 19 NOV 2009

(DARTS.KIMMO2) 09239

KIMMO TWO ARRIVAL

ST-237 (FAA)

LOS ANGELES, CALIFORNIA



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-3, 22 OCT 2009 to 19 NOV 2009

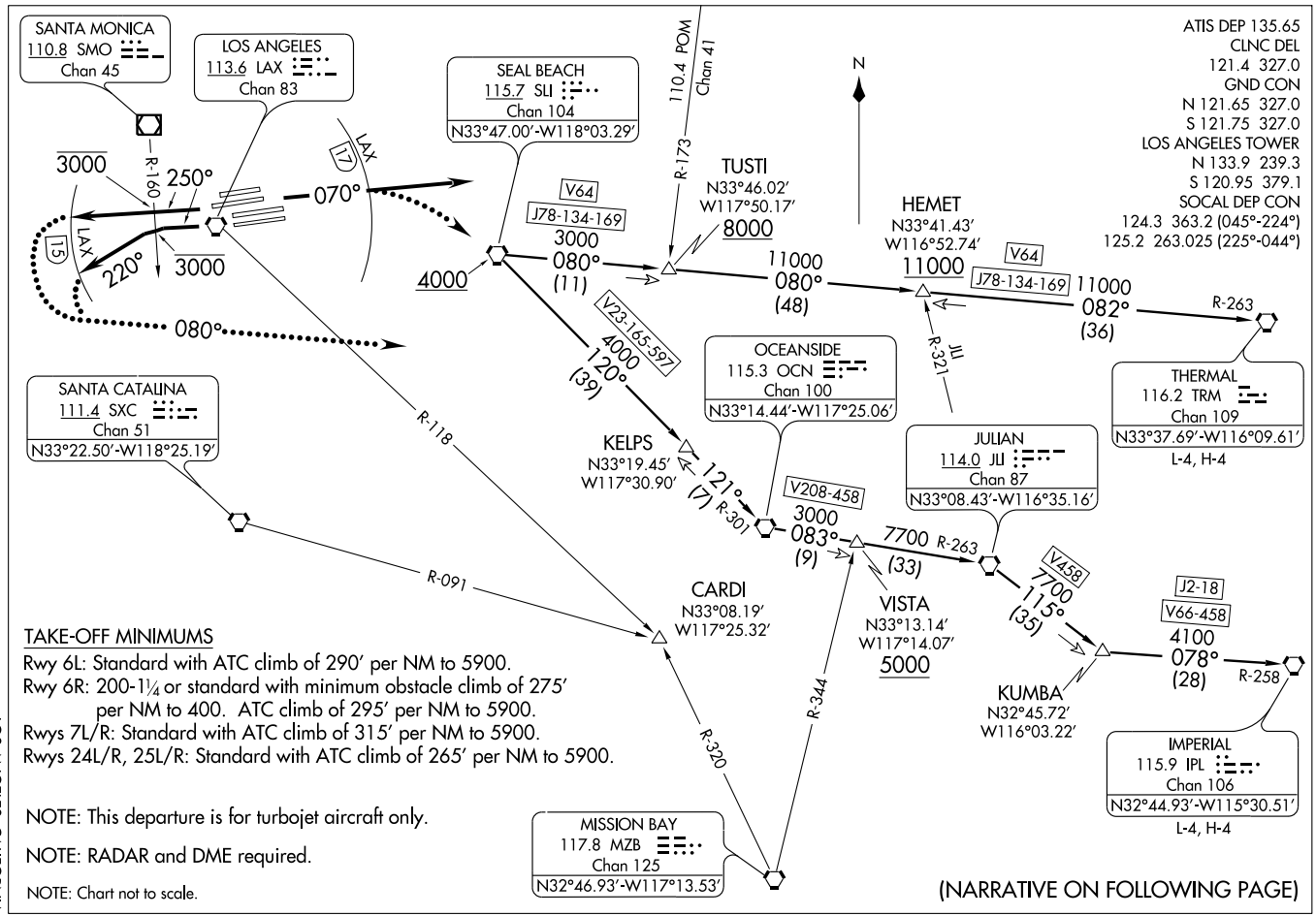
KIMMO TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

LAKE HUGHES TRANSITION (LHS.KIMMO2): From over LHS VORTAC via LHS R-139 to DARTS INT. Thence....
PALMDALE TRANSITION (PMD.KIMMO2): From over PMD VORTAC via PMD R-218 to KIMMO INT, then via LHS R-139 to DARTS INT. Thence....
SHAFTER TRANSITION (EHF.KIMMO2): From over EHF VORTAC via EHF R-123 and LHS R-329 to LHS VORTAC, then via LHS R-139 to DARTS INT. Thence....
TULE TRANSITION (TTE.KIMMO2): From over TTE VOR/DME via TTE R-147 and LHS R-329 to LHS VORTAC, then via LHS R-139 to DARTS INT. Thence....

....LANDING LOS ANGELES INTL: From over DARTS INT via VNY R-095 to PURMS INT. Expect radar vectors to final approach course.
....LANDING SANTA MONICA MUNI: From over DARTS INT expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009


SANTA MONICA
110.8 SMO
Chan 45
LOS ANGELES
113.6 LAX
Chan 83
SEAL BEACH
115.7 SLI
Chan 104
N33°47.00'-W118°03.29'
110.4 POM
Chan 41
R-173
N
ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)
3000
R-160
250°
070°
LAX
I7
LAX
I5
220°
3000
080°
4000
V64
J78-134-169
3000
080°
(11)
TUSTI
N33°46.02'
W117°50.17'
8000
11000
080°
(48)
HEMET
N33°41.43'
W116°52.74'
11000
V64
J78-134-169
11000
082°
(36)
R-263
THERMAL
116.2 TRM
Chan 109
N33°37.69'-W116°09.61'
L-4, H-4
JLI
R-321
V23-165-597
4000
120°
(39)
OCEANSIDE
115.3 OCN
Chan 100
N33°14.44'-W117°25.06'
JULIAN
114.0 JLI
Chan 87
N33°08.43'-W116°35.16'
SANTA CATALINA
111.4 SXC
Chan 51
N33°22.50'-W118°25.19'
R-118
KELPS
N33°19.45'
W117°30.90'
121°
(7)
R-301
V208-458
3000
083°
(9)
7700
(33)
R-263
V458
7700
115°
(35)
J2-18
V66-458
4100
078°
(28)
R-258
R-091
CARDI
N33°08.19'
W117°25.32'
VISTA
N33°13.14'
W117°14.07'
5000
KUMBA
N32°45.72'
W116°03.22'
IMPERIAL
115.9 IPL
Chan 106
N32°44.93'-W115°30.51'
L-4, H-4
R-320
R-344
MISSION BAY
117.8 MZB
Chan 125
N32°46.93'-W117°13.53'
TAKE-OFF MINIMUMS
Rwy 6L: Standard with ATC climb of 290' per NM to 5900.
Rwy 6R: 200-1¼ or standard with minimum obstacle climb of 275' per NM to 400. ATC climb of 295' per NM to 5900.
Rwys 7L/R: Standard with ATC climb of 315' per NM to 5900.
Rwys 24L/R, 25L/R: Standard with ATC climb of 265' per NM to 5900.
NOTE: This departure is for turbojet aircraft only.
NOTE: RADAR and DME required.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
(LAXX6.LAX) 09239
LAXX SIX DEPARTURE
SL-237 (FAA)
LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 24L/R: Climb heading 250° to cross SMO R-160 at or below 3000, then via radar vectors to assigned route/fix/transition. Thence....

TAKE-OFF RUNWAYS 25L/R: Climb heading 250° to cross SMO R-160 at or below 3000, then via heading 220° for radar vectors to assigned route/fix/transition. Thence....

TAKE-OFF RUNWAYS 6L/R, 7L/R: Climb heading 070° for vectors to SLI VORTAC. Thence....

....all aircraft expect further clearance to filed flight level three minutes after departure.

LOST COMMUNICATIONS:

RUNWAYS 24L/R, 25L/R: If not in contact with departure control by 15 DME west of LAX VORTAC, then turn left heading 080°, climb to FL230 or filed altitude whichever is lower, and when able proceed direct filed or assigned route. Aircraft filed FL240 or above, maintain FL230 for five minutes then continue climb to filed altitude.

RUNWAYS 6L/R, 7 L/R: If not in contact with departure control by 17 DME east of LAX VORTAC, climb to FL230 or filed altitude whichever is lower, turn right direct SLI and proceed via assigned route. Aircraft filed FL240 or above, maintain FL230 for five minutes then continue climb to filed altitude.

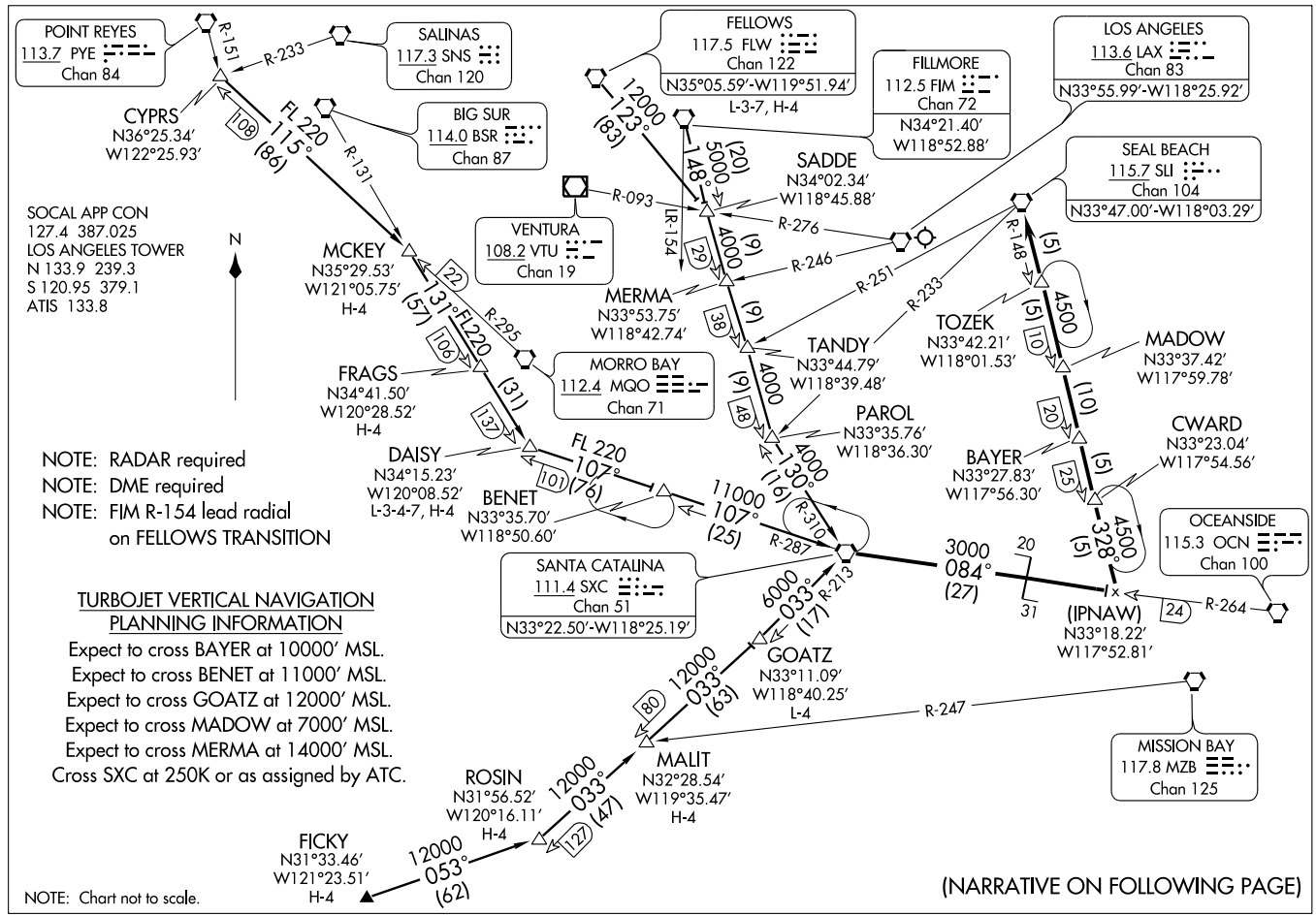
THERMAL TRANSITION (LAXX6.TRM): From over SLI VORTAC via SLI R-080 and TRM R-263 to TRM VORTAC.

IMPERIAL TRANSITION (LAXX6.IPL): From over SLI VORTAC via SLI R-120 and OCN R-301 to OCN VORTAC, then via OCN R-083 and JLI R-263 to JLI VORTAC, then via JLI R-115 and IPL R-258 to IPL VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 6L: Buildings and signs beginning 1693′ from DER, 339′ left of centerline, up to 50′ AGL/201′ MSL.
RWY 6R: Antenna on building 560′ from DER, 479′ right of centerline, 18′ AGL/127′ MSL.
OL on building 5550′ from DER, 1791′ right of centerline, 202′ AGL/306′ MSL.
OL on sign and sign beginning 1866′ from DER, 920′ left of centerline, up to 49′ AGL/161′ MSL.
RWY 7L: OL on blast fence 168′ from DER, 33′ left of centerline, 14′ AGL/106′ MSL.
Poles beginning 1290′ from DER, 505′ left of centerline, up to 55′ AGL/147′ MSL.
Antenna on building 1576′ from DER, 315′ left of centerline, 55′ AGL/147′ MSL.
Sign and railroad beginning 351′ from DER, 10′ left of centerline, up to 29′ AGL/124′ MSL.
Railroad 275′ from DER, 500′ right of centerline, 23′ AGL/115′ MSL.
App light and OL on LOC beginning 979′ from DER, on rwy centerline, up to 27′ AGL/119′ MSL.
RWY 7R: Trees and building beginning 790′ from DER, 606′ right of centerline, up to 58′ AGL/157′ MSL.
RWY 24L: Bush 956′ from DER, 600′ left of centerline, 40′ AGL/148′ MSL.
Light poles beginning 273′ from DER, 425′ left of centerline, up to 10′ AGL/120′ MSL.
Antenna on pole 1357′ from DER, 286′ right of centerline, 36′ AGL/144′ MSL.
Light poles and bushes beginning 239′ from DER, 321′ right of centerline, up to 8′ AGL/116′ MSL.
RWY 24R: OL on GS, 212′ from DER, 399′ left of centerline, 39′ AGL/151′ MSL.
RWY 25L: Tree and pole beginning 2366′ from DER, 764′ left of centerline, up to 80′ AGL/197′ MSL.
Trmsn towers beginning 2800′ from DER, 926′ left of centerline, up to 71′ AGL/192′ MSL.
Bush 133′ from DER, 397′ left of centerline, 4′ AGL/123′ MSL.

SW-3, 22 OCT 2009 to 19 NOV 2009



(SXC.LEENA4) 07298

LEENA FOUR ARRIVAL

ST-237 (FAA)

LOS ANGELES INTL
LOS ANGELES, CALIFORNIA

ARRIVAL DESCRIPTION

CYPRS TRANSITION (CYPRS.LEENA4): From over CYPRS INT via MQO R-295 to MCKEY INT, then via BSR R-131 to DAISY INT, and SXC R-287 to SXC VORTAC. Thence....

DAISY TRANSITION (DAISY.LEENA4): From over DAISY INT via SXC R-287 to SXC VORTAC. Thence....

FELLOWS TRANSITION (FLW.LEENA4): From over FLW VORTAC via FLW R-123 to SADDE INT, then via FIM R-148 to PAROL INT, and SXC R-310 to SXC VORTAC. Thence....

FICKY TRANSITION (FICKY.LEENA4): From over FICKY direct ROSIN DME, then via SXC R-213 to SXC VORTAC. Thence....

FILLMORE TRANSITION (FIM.LEENA4): From over FIM VORTAC via FIM R-148 to PAROL INT, then via SXC R-310 to SXC VORTAC. Thence....

FRAGS TRANSITION (FRAGS.LEENA4): From over FRAGS INT via BSR R-131 to DAISY INT, and SXC R-287 to SXC VORTAC. Thence....

GOATZ TRANSITION (GOATZ.LEENA4): From over GOATZ DME via SXC R-213 to SXC VORTAC. Thence....

MALIT TRANSITION (MALIT.LEENA4): From over MALIT DME via SXC R-213 to SXC VORTAC. Thence....

MCKEY TRANSITION (MCKEY.LEENA4): From over MCKEY INT via BSR R-131 to DAISY INT, and SXC R-287 to SXC VORTAC. Thence....

ROSIN TRANSITION (ROSIN.LEENA4): From over ROSIN DME via SXC R-213 to SXC VORTAC. Thence....

....From over SXC VORTAC via SXC R-084 and OCN R-264 to (IPNAW) to intercept the SLI R-148 to CWARD INT. From CWARD INT via SLI R-148 to SLI VORTAC. Expect radar vectors to ILS approach for Rwy 25L.

SW-3, 22 OCT 2009 to 19 NOV 2009

LOOP FOUR DEPARTURE

SL-237 (FAA)

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

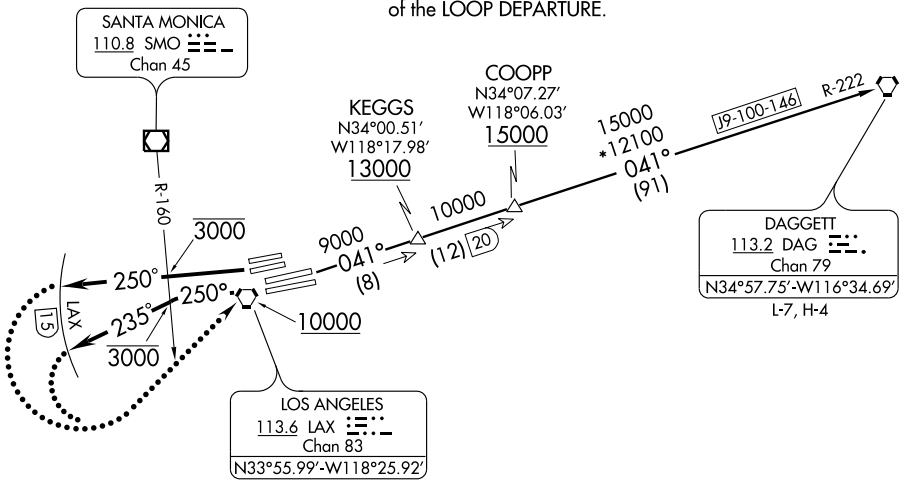
TAKE-OFF MINIMUMS

Rwys 24L/R, 25L/R: Standard.
Rwys 6L/R, 7L/R: NA- Air Traffic.

NOTE: RADAR and DME Required.

NOTE: ATC minimum climb of 500′ per NM to 10,000 required. If unable, use LAXX DEPARTURE.

NOTE: Use LAXX DEPARTURE, DAGGETT TRANSITION, during the period 2100-0700 local time in lieu of the LOOP DEPARTURE.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 24L/R: Climb via heading 250° to cross SMO R-160 at or below 3000, then via radar vectors to LAX VORTAC. Expect left turn direct LAX VORTAC. Thence....

TAKE-OFF RUNWAYS 25L/R: Climb via heading 250° to cross SMO R-160 at or below 3000, then turn left heading 235° for vector to LAX VORTAC. Expect left turn direct LAX VORTAC. Thence....

.... via (assigned transition) or (assigned route). All aircraft expect further clearance to filed flight level three minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control by 15 DME west of LAX VORTAC, turn left and proceed direct LAX VORTAC, climb to FL230 or filed altitude whichever is lower, and when able proceed via filed or assigned route/fix/transition. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

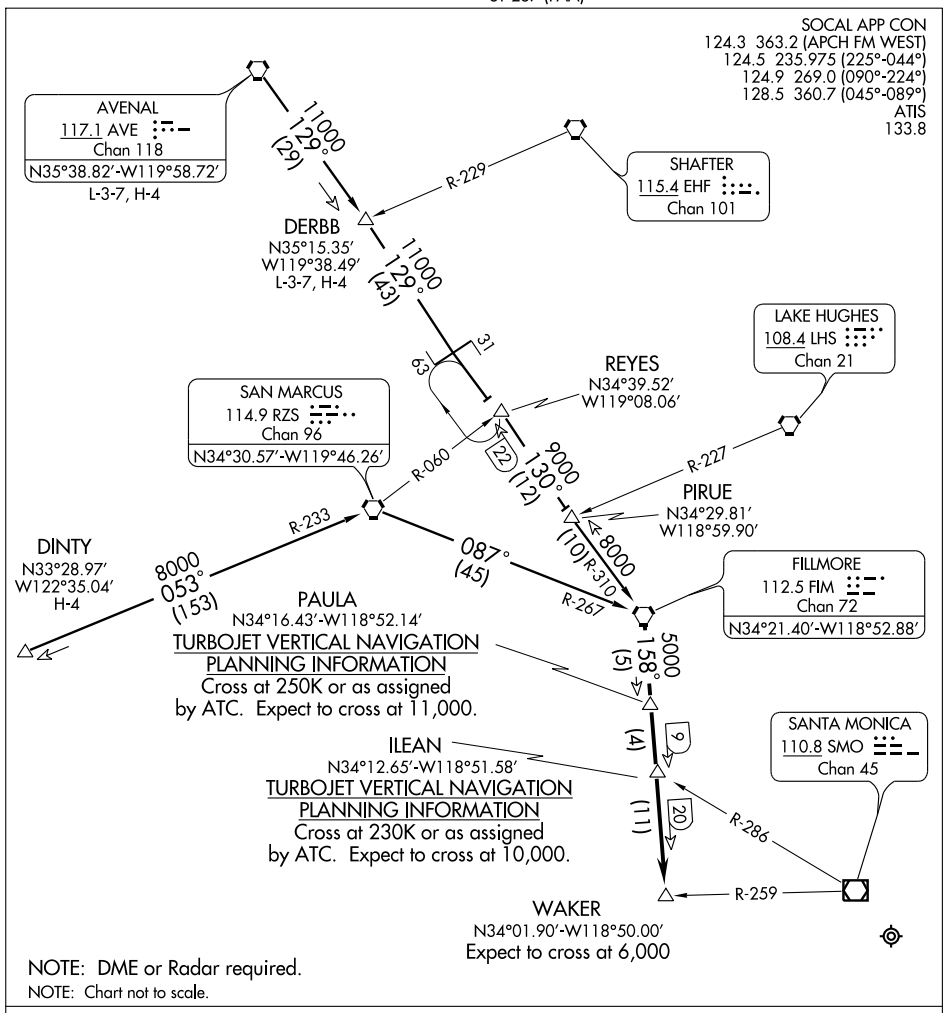
DAGGETT TRANSITION (LOOP4.DAG): From over LAX VORTAC via LAX R-041 and DAG R-222 to DAG VORTAC.

(FIM.MOOR3) 09239

MOORPARK THREE ARRIVAL

ST-237 (FAA)

LOS ANGELES INTL
LOS ANGELES, CALIFORNIA



AVENAL TRANSITION (AVE.MOOR3): From over AVE VORTAC via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

DERBB TRANSITION (DERBB.MOOR3): From over DERBB INT via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

DINTY TRANSITION (DINTY.MOOR3): From over DINTY INT via RZS R-233 to RZS VORTAC. Then via RZS R-087 and FIM R-267 to FIM VORTAC. Thence....

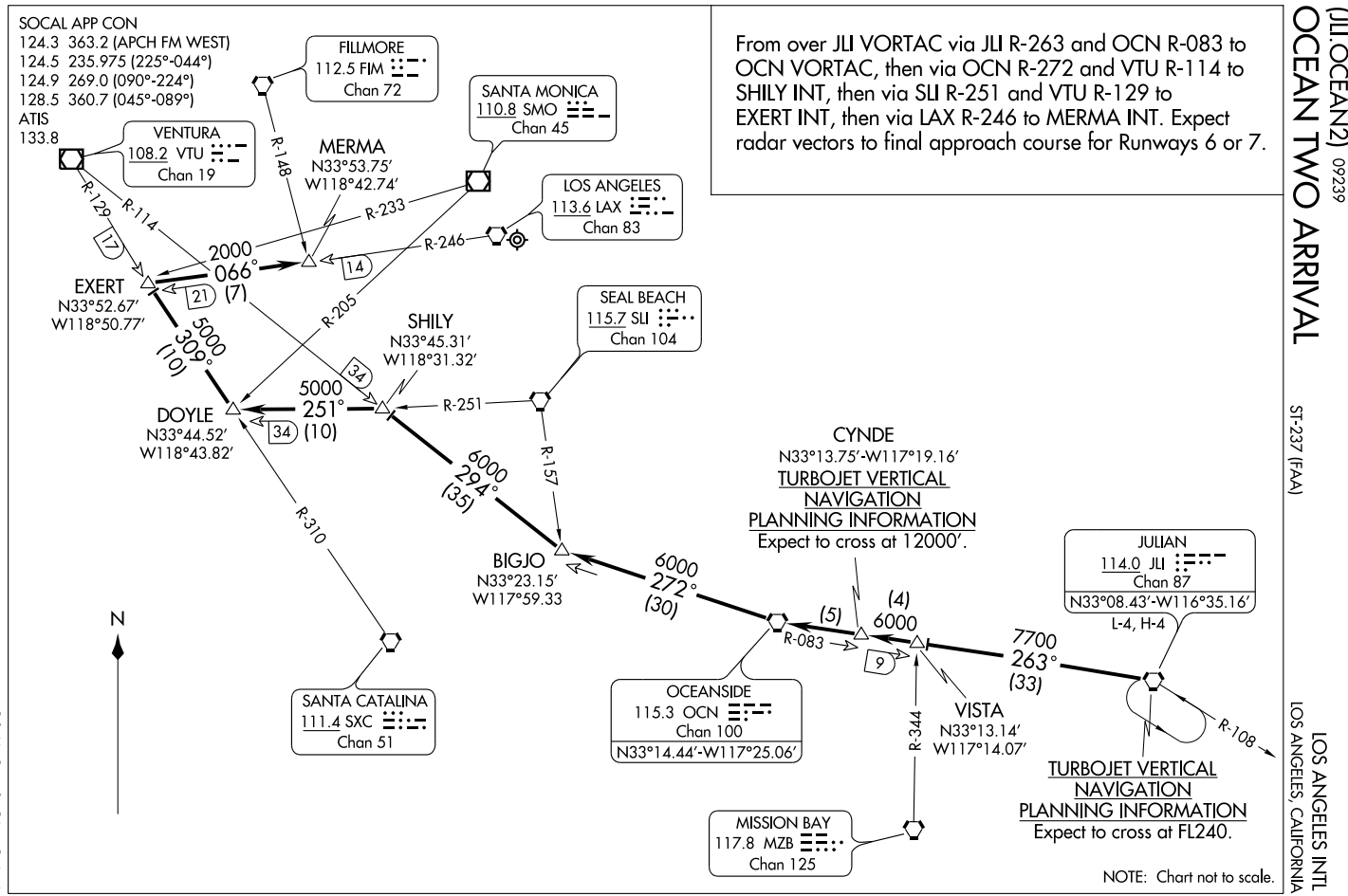
....From over FIM VORTAC via FIM R-158 to WAKER INT. For Runways 6L/R or 7L/R: From WAKER INT expect vector to final approach course for LOS ANGELES INTERNATIONAL AIRPORT.

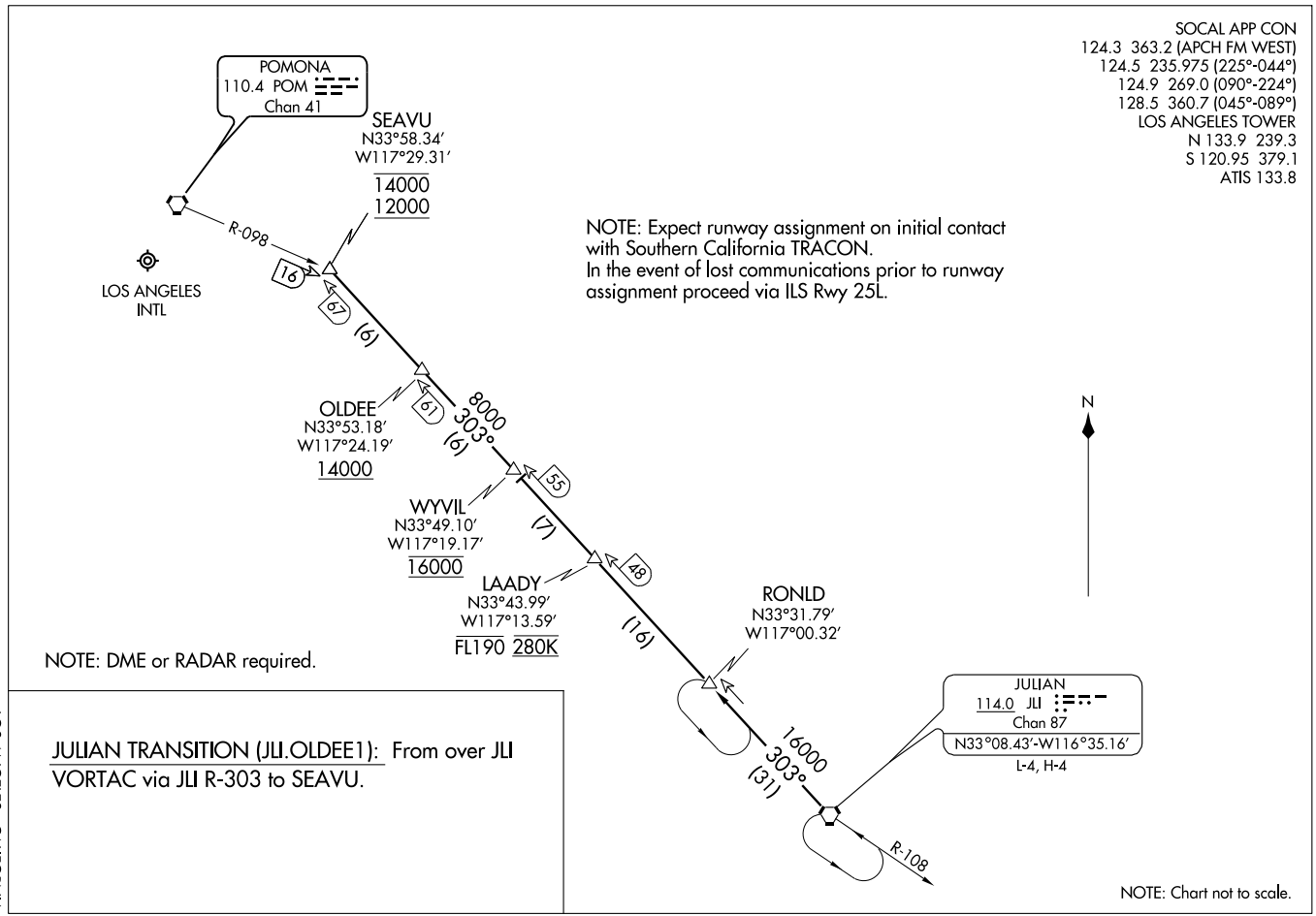
SW-3, 22 OCT 2009 to 19 NOV 2009

OCEAN TWO ARRIVAL

SOCAL APP CON
124.3 363.2 (APCH FM WEST)
124.5 235.975 (225°-044°)
124.9 269.0 (090°-224°)
128.5 360.7 (045°-089°)
ATIS
133.8

From over JLI VORTAC via JLI R-263 and OCN R-083 to OCN VORTAC, then via OCN R-272 and VTU R-114 to SHILY INT, then via SLI R-251 and VTU R-129 to EXERT INT, then via LAX R-246 to MERMA INT. Expect radar vectors to final approach course for Runways 6 or 7.





(OLDEE.OLDEE1) OLDEE ONE ARRIVAL

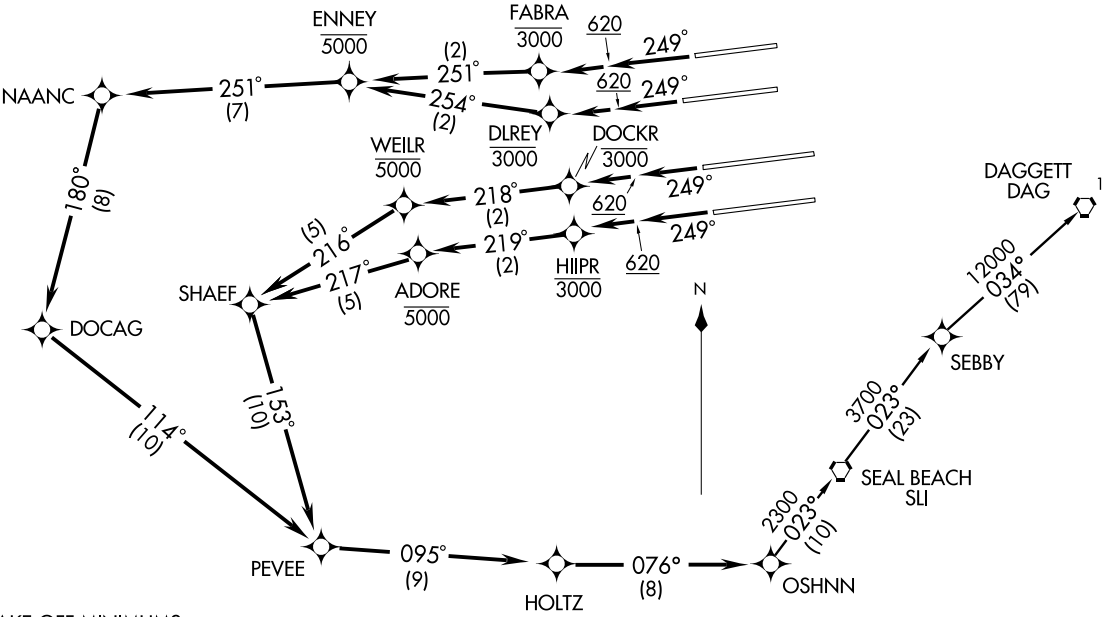
09239

ST-237 (FAA)

LOS ANGELES INTL

LOS ANGELES, CALIFORNIA

NOTE: Chart not to scale.



ATIS 135.65
CLNC DEL 121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

OSHNN THREE DEPARTURE (RNAV) SL-237 (FAA)

[OSHNN3.OSHNN) 09239

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA

TAKE-OFF MINIMUMS

Rwys 24L/R, 25L/R: Standard with minimum climb of 500′ per NM to 620.
Rwys 6L/R, 7L/R: NA by ATC.

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.

NOTE: For non-GPS equipped aircraft departing Rwy 25R or 25L, SLI must be operational.

NOTE: Rwys 24L, 24R departure expect radar vector to PEVEE prior to NAANC.

NOTE: RADAR Required.

(NARRATIVE ON FOLLOWING PAGE)

TAKE-OFF OBSTACLE NOTES

Rwy 24L: Bush 957′ from DER, 601′ left of centerline, 29′ AGL/148′ MSL.
Light pole 273′ from DER, 547′ left of centerline, 12′AGL/120′ MSL.
Light pole 301′ from DER, 425′ left of centerline, 10′ AGL/118′ MSL
Antenna on pole 1358′ from DER, 287′ right of centerline 25′ AGL/144′ MSL.
Bush 240′ feet from DER, 508′ right of centerline, 10′ AGL/116′ MSL.
Light pole 296′ from DER, 321′ right of centerline, 8′ AGL/116′ MSL.
Rwy 24R: OL on glideslope 213′ from DER, 400′ left of centerline, 34′ AGL/151′ MSL.
Rwy 25L: Pole 2366′ from DER, 765′ left of centerline, 55′ AGL/184′ MSL.
T-L tower 2800′ from DER, 993′ left of centerline, 82′ AGL/192′ MSL.
Transmission tower 2856′ from DER, 927′ left of centerline, 82′ AGL/192′ MSL.
Tree 2379′ from DER, 778′ left of centerline, 79′ AGL/197′ MSL.
Bush 134′ from DER, 397′ left of centerline, 5′ AGL/123′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 24R: Climb heading 249° to 620, then direct to cross FABRA at or below 3000, then via 251° track to cross ENNEY at or below 5000, then via depicted route to OSHNN, Thence....
TAKE-OFF RUNWAY 24L: Climb heading 249° to 620, then direct to cross DLREY at or below 3000, then via 254° track to cross ENNEY at or below 5000, then via depicted route to OSHNN, Thence....
TAKE-OFF RUNWAY 25R: Climb heading 249° to 620, then direct to cross DOCKR at or below 3000, then via 218° track to cross WEILR at or below 5000, then via depicted route to OSHNN, Thence....
TAKE-OFF RUNWAY 25L: Climb heading 249° to 620, then direct to cross HIIPR at or below 3000, then via 219° track to cross ADORE at or below 5000, then via depicted route to OSHNN, Thence....

. . . . . via DAGGETT TRANSITION. Expect further clearance to filed altitude five minutes after departure.

DAGGETT TRANSITION (OSHNN3.DAG)

SW-3, 22 OCT 2009 to 19 NOV 2009

PERCH NINE DEPARTURE

SL-237 (FAA)

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

TAKE-OFF MINIMUMS

Rwys 6L, 7L/R, 24L/R, 25L/R: Standard.

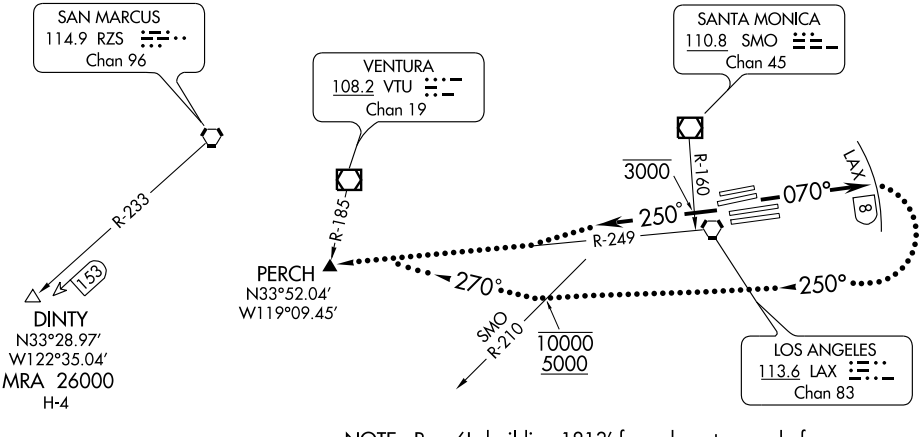
Rwy 6R: 300-1¼ or standard with minimum climb of 231′ per NM to 400′.

NOTE: MRA DINTY DME FL 310 to receive LAX and RZS DME.

NOTE: RZS R-233/153 DME fix DINTY DME FIX MRA 26000.

NOTE: Route depicted is a LOST COMMUNICATION PROCEDURE ONLY.

NOTE: RADAR and DME required.



NOTE: Rwy 6L, building 1813′ from departure end of runway, 942′ left of centerline, 201′ MSL.

NOTE: Rwy 6R, building, 5551′ from departure end of runway, 1790′ right of centerline, 306′ MSL.

NOTE: Chart not to scale.

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L/R, 7L/R: Climb via heading 070° for vector to DINTY INT or FICKY INT. Thence....

TAKE-OFF RUNWAYS 24L/R, 25L/R: Climb via heading 250° to cross SMO R-160 at or below 3000, then via radar vectors to DINTY INT or FICKY INT. Thence ....

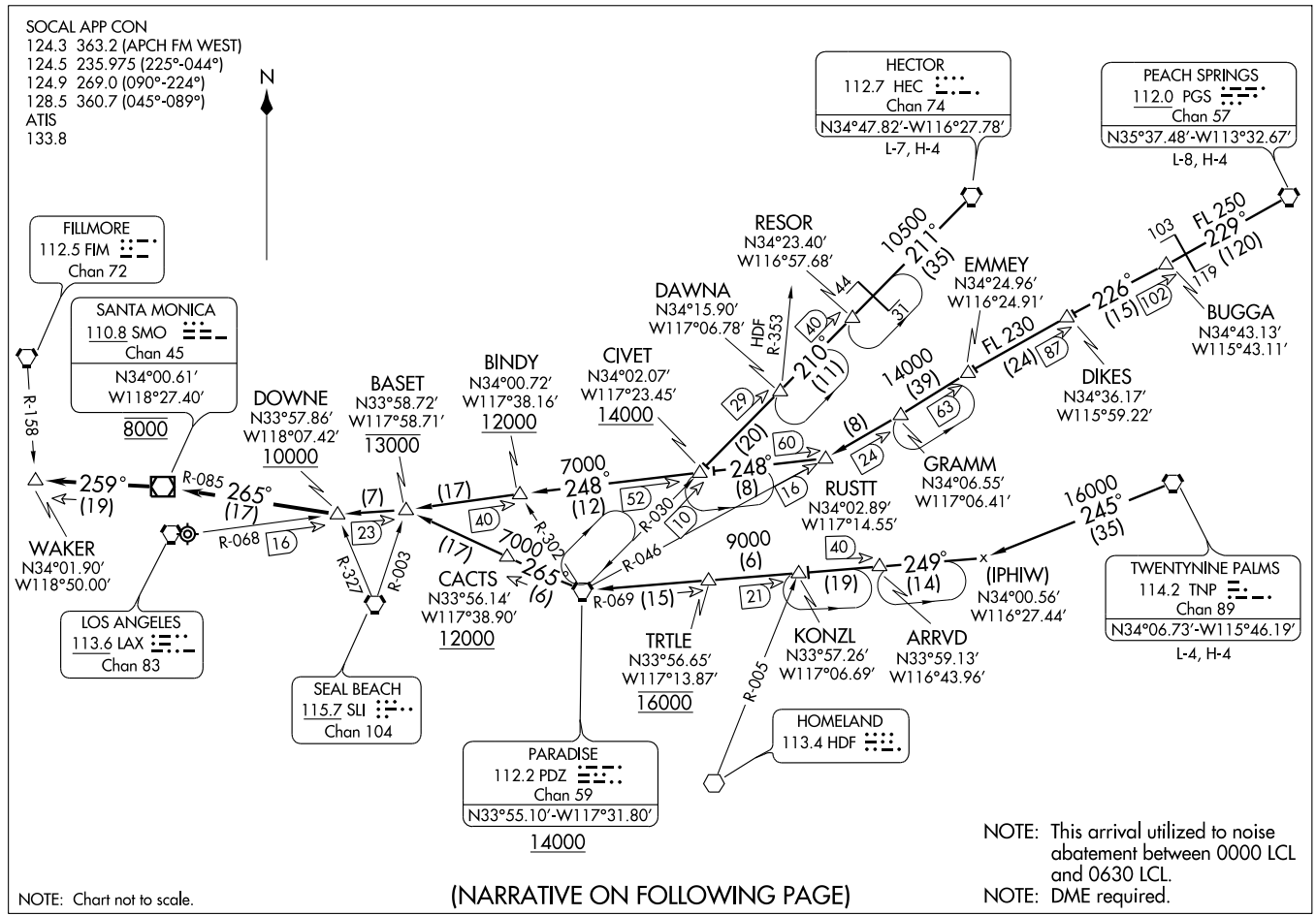
....via (assigned route). All aircraft expect further clearance to filed flight level three minutes after departure.

LOST COMMUNICATIONS:

TAKE-OFF RUNWAYS 6L/R, 7L/R: If not in contact with Departure Control upon reaching LAX 8 DME, turn right heading 250°. Cross SMO R-210 at or above 5000′ and at or below 10000′. After leaving 10000′, turn right heading 270° to intercept and proceed via LAX R-249 to PERCH INT.

TAKE-OFF RUNWAYS 24L/R, 25L/R: If not in contact with Departure Control within five minutes after departure, proceed to PERCH INT via LAX R-249.

Climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after depature.



REDEYE TWO ARRIVAL

(DOWNE.RDEYE2) 09239

ST-237 (FAA)

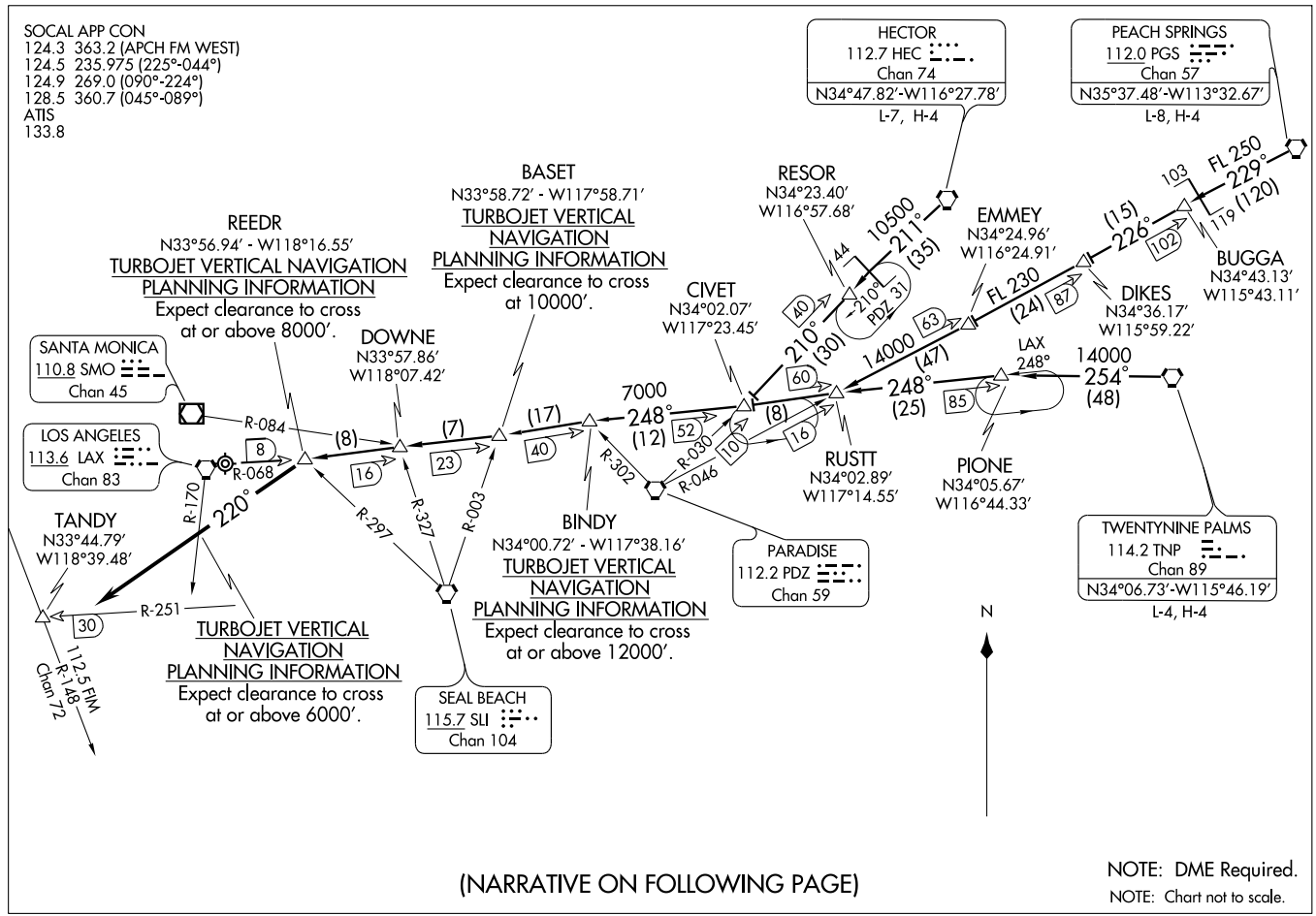
LOS ANGELES INTL

LOS ANGELES, CALIFORNIA

ARRIVAL DESCRIPTION

HECTOR TRANSITION (HEC.RDEYE2): From over HEC VORTAC via HEC R-211 and PDZ R-030 to CIVET INT, then LAX R-068 to DOWNE INT. Thence....
PEACH SPRINGS TRANSITION (PGS.RDEYE2): From over PGS VORTAC via PGS R-229 and PDZ R-046 to RUSTT INT, then LAX R-068 to DOWNE INT. Thence....
TWENTYNINE PALMS TRANSITION (TNP.RDEYE2): From over TNP VORTAC via TNP R-245 and PDZ R-069 to PDZ VORTAC, then PDZ R-265 to BASET INT, then LAX R-068 to DOWNE INT. Thence....
....From DOWNE INT via SMO R-085 to SMO VOR/DME, then via SMO R-259 to WAKER INT. Expect vector to final approach course for runways 6 and 7.

SW-3, 22 OCT 2009 to 19 NOV 2009



(REEDR, REEDR3) 09239

REEDR THREE ARRIVAL

ST-237 (FAA)

LOS ANGELES INTL
LOS ANGELES, CALIFORNIA

ARRIVAL DESCRIPTION

HECTOR TRANSITION (HEC.REEDR3): From over HEC VORTAC via HEC R-211 and PDZ R-030 to CIVET INT, then LAX R-068 to REEDR INT. Thence....
PEACH SPRINGS TRANSITION (PGS.REEDR3): From over PGS VORTAC via PGS R-229 and PDZ R-046 to RUSTT INT, then LAX R-068 to REEDR INT. Thence....
TWENTYNINE PALMS TRANSITION (TNP.REEDR3): From over TNP VORTAC via TNP R-254 to PIONE INT, then LAX R-068 to REEDR INT. Thence....
....From over REEDR INT via heading 220° for radar vector to final approach course for Runways 6 or 7.

LOST COMMUNICATIONS: Depart REEDR INT heading 220° to intercept the SLI R-251 to TANDY INT/SLI 30 DME.

SW-3, 22 OCT 2009 to 19 NOV 2009

NOTE: DME or RADAR required.

NOTE: Expect runway assignment on initial contact with Southern California TRACON. In the event of lost communications prior to runway assignment, proceed via ILS RWY 25L.

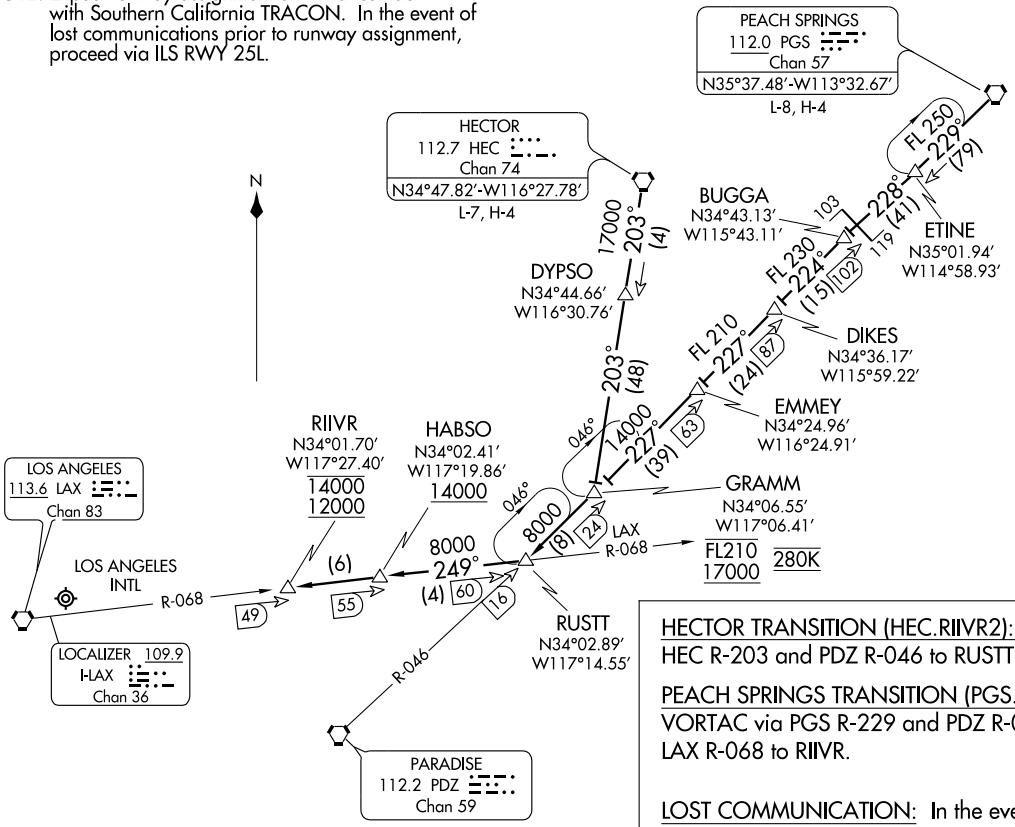
SOCAL APP CON
124.3 363.2 (APCH FM WEST)
124.5 235.975 (225°-044°)
124.9 269.0 (090°-224°)
128.5 360.7 (045°-089°)
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
ATIS 133.8

RIIVR TWO ARRIVAL

(RIIVR.RIIVR2) 09239

ST-237 (FAA)

LOS ANGELES INTL
LOS ANGELES, CALIFORNIA



NOTE: Chart not to scale.

HECTOR TRANSITION (HEC.RIIVR2): From over HEC VORTAC via HEC R-203 and PDZ R-046 to RUSTT, then via LAX R-068 to RIIVR.

PEACH SPRINGS TRANSITION (PGS.RIIVR2): From over PGS VORTAC via PGS R-229 and PDZ R-046 to RUSTT, then via LAX R-068 to RIIVR.

LOST COMMUNICATION: In the event of lost communications prior to runway assignment proceeed via ILS Rwy 25L.

WAAS	APP CRS	Rwy Idg	8925
CH 82507	069°	TDZE	117
W06A		Apt Elev	126

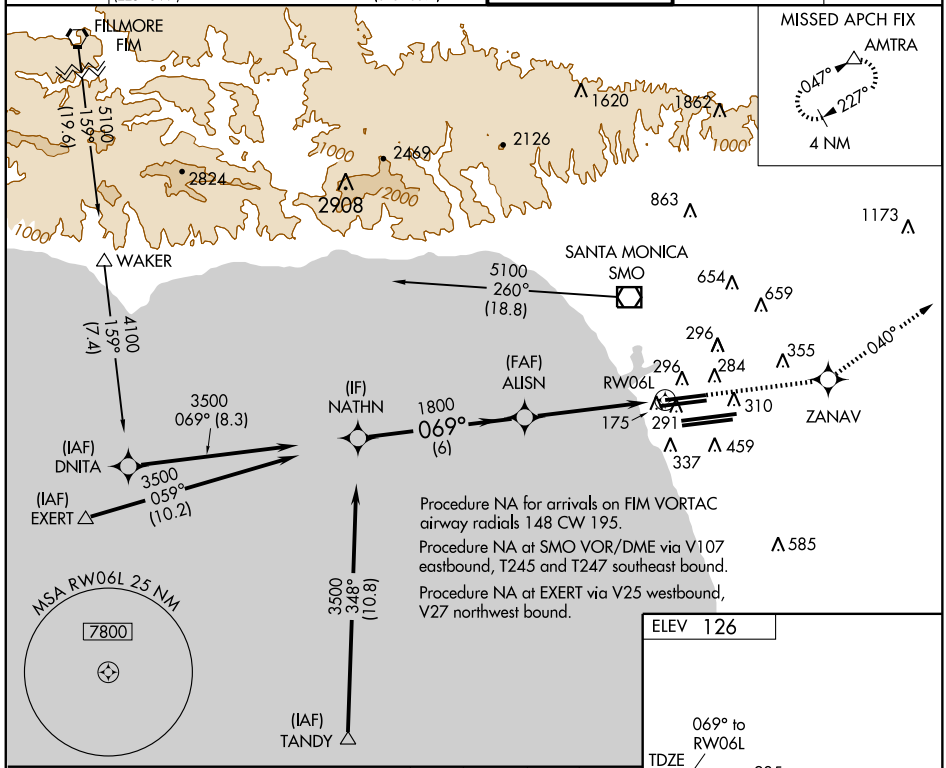
RNAV (GPS) Y RWY 6L
LOS ANGELES INTL (LAX)

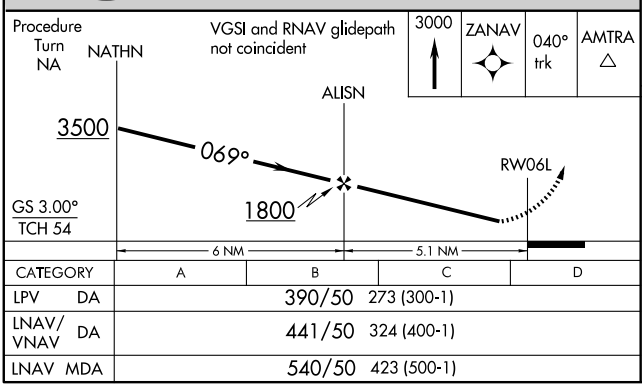
T W Inoperative table does not apply to LPV, LNAV/VNAV, and LNAV Cat A and B. For inoperative MALSR, increase LNAV Cat C and D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MALSR

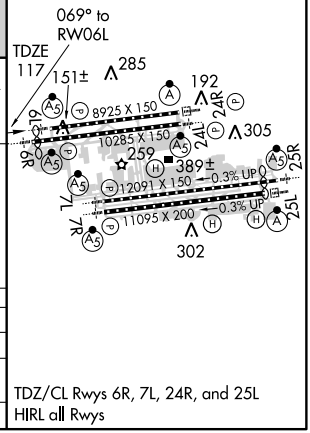
MISSED APPROACH: Climb to 3000 direct ZANAV and via 040° track to AMTRA and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	





CATEGORY	A	B	C	D
LPV DA	390/50	273 (300-1)		
LNAV/VNAV DA	441/50	324 (400-1)		
LNAV MDA	540/50	423 (500-1)		



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	9954
CH 61207	069°	TDZE	114
W06B		Apt Elev	126

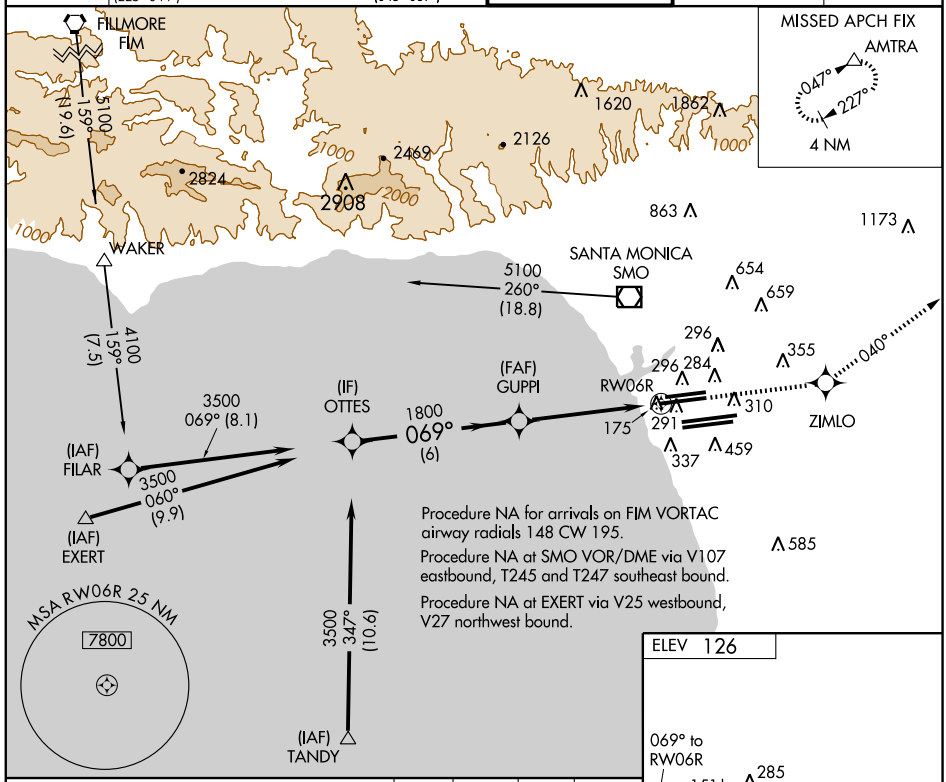
RNAV (GPS) Y RWY 6R
LOS ANGELES INTL (LAX)

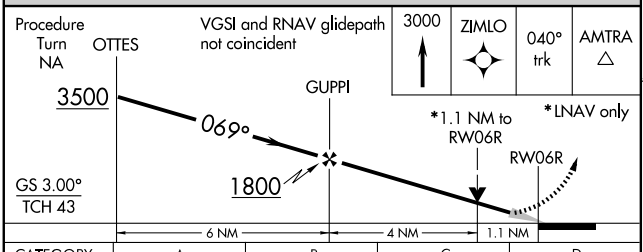
For inoperative MALSR, increase LPV all Cats and LNAV/VNAV Cat D visibility to RVR 5000, and increase LNAV Cat D visibility to RVR 6000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

MALSR

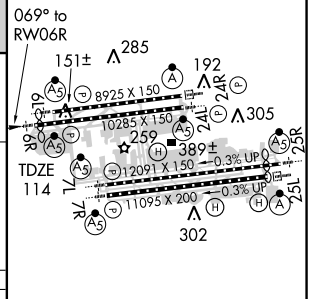
MISSED APPROACH: Climb to 3000 direct ZIMLO and via 040° track to AMTRA and hold.

ATIS				LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)	SOCAL APP CON	124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	





CATEGORY	A	B	C	D
LPV DA	364/24 250 (300-½)			
LNAV/VNAV DA	425/24 311 (300-½)			425/40 311 (300-¾)
LNAV MDA	520/24 406 (400-½)		520/40 406 (400-¾)	520/50 406 (400-1)



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	12091
CH 42504	069°	TDZE	126
W07A		Apt Elev	126

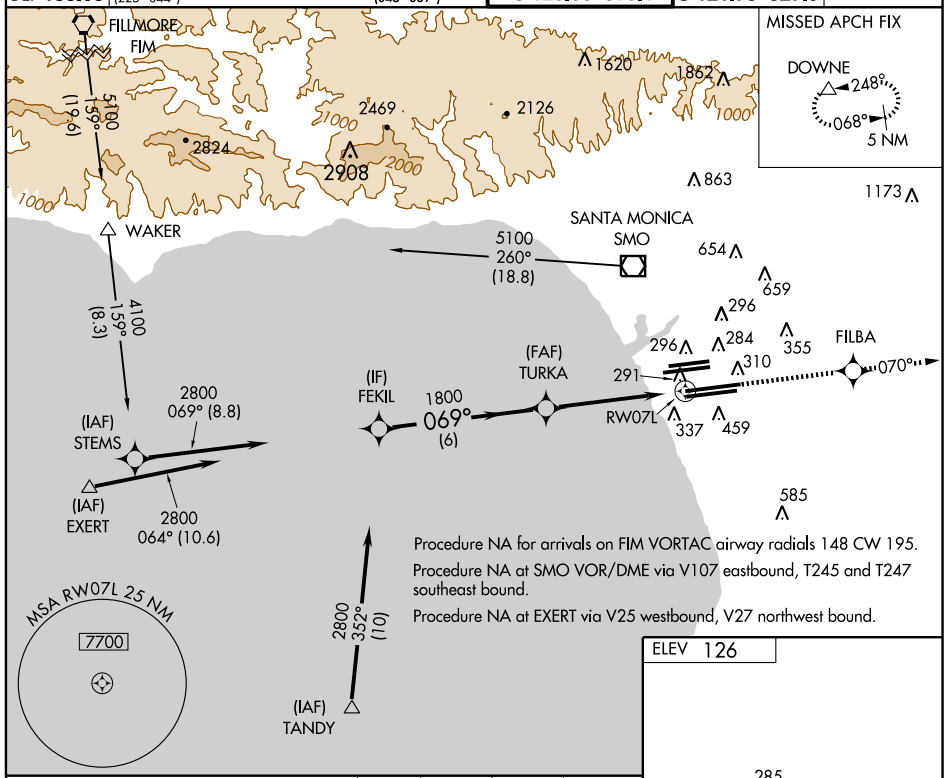
RNAV (GPS) Y RWY 7L
LOS ANGELES INTL (LAX)

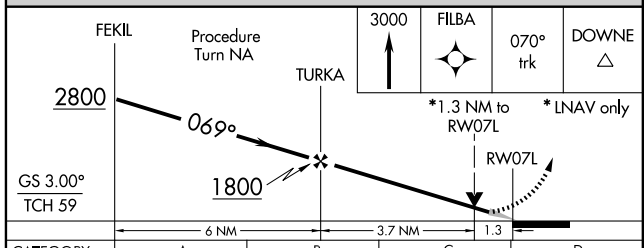
T For inoperative MALSR, increase LPV all Cats visibility to RVR 5000.
W For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.

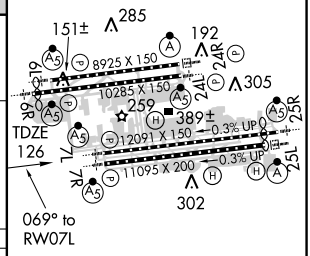
MALSR

MISSED APPROACH: Climb to 3000 direct FILBA then via 070° track to DOWNE and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	







CATEGORY	A	B	C	D
LPV DA	432/24 306 (400-½)			
LNAV/VNAV DA	582/50 456 (500-1)			
LNAV MDA	600/24 474 (500-½)		600/40 474 (500-¾)	600/50 474 (500-1)

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	11095
CH 69603	069°	TDZE	125
W07B		Apt Elev	126

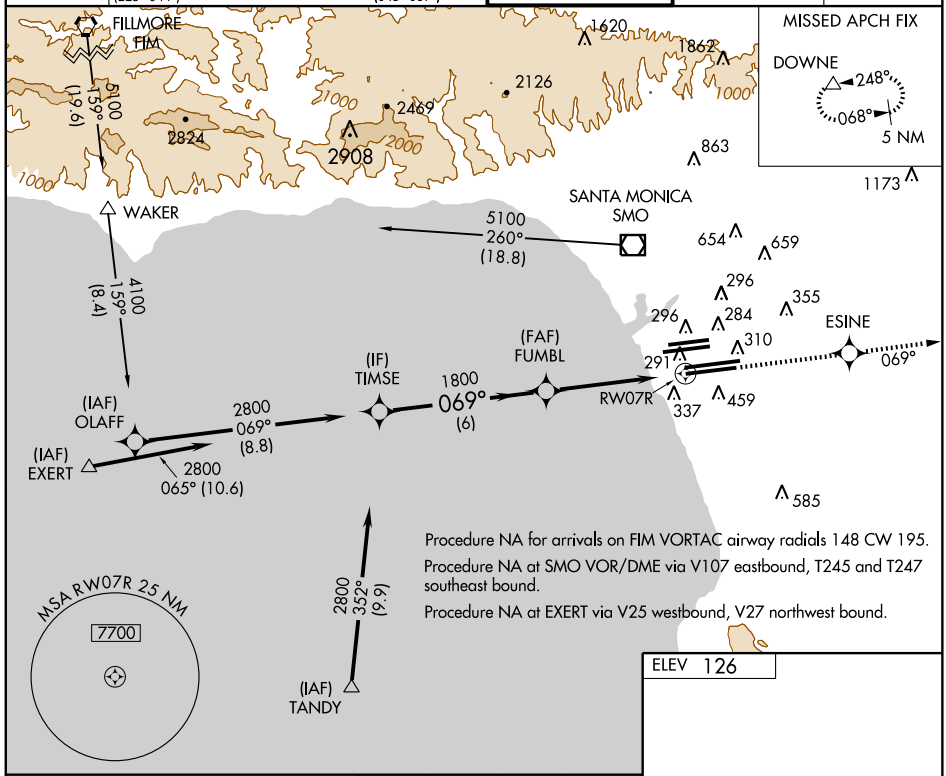
RNAV (GPS) Y RWY 7R
LOS ANGELES INTL (LAX)

T W For inoperative MALSR, increase LPV all Cats. visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

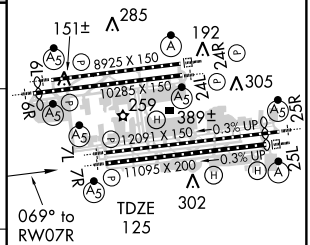
MALSR (A5)

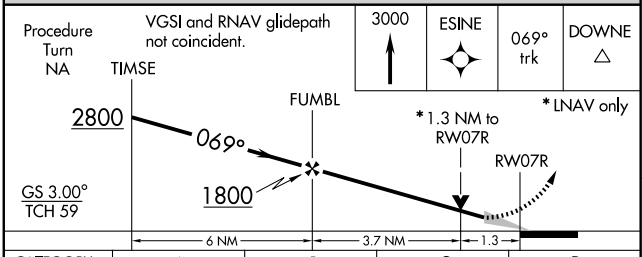
MISSED APPROACH: Climb to 3000 direct ESINE and via 069° track to DOWNE and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



ELEV 126





CATEGORY	A	B	C	D
LPV DA	417/24 292 (300-½)			
LNAV/VNAV DA	582/50 457 (500-1)			
LNAV MDA	600/24 475 (500-½)		600/40 475 (500-¾)	600/50 475 (500-1)

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10285
CH 56407	249°	TDZE	121
W24B		Apt Elev	126

RNAV (GPS) Y RWY 24L
LOS ANGELES INTL (LAX)

T For inoperative MALSR, increase LPV all Cats visibility to RVR 6000.
W For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP- 0.3 NA.

MALSR

MISSED APPROACH: Climb to 2000 direct JAKOS and via 261° track to RAFFS and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	

MISSED APCH FIX
RAFFS 260° 080° 4 NM JAKOS 261°

Procedure NA for arrival at PURMS via V186 northwest bound.

(IAF) PURMS 4000 151° (9)
(IF) JULLI 4000 249° (10.3)
(FAF) SUTIE 2200 249° (8)
RW24L
(IAF) RIIVR 10000 255° (9.1)
(IAF) SEAVU 10000 279° (8.2)
HURLR 7000 249° (3.6)
WLNUT 8000 249° (3.6)
SALWA 9000 249° (3.6)
PFILA 10000 249° (2.9)
SHURL

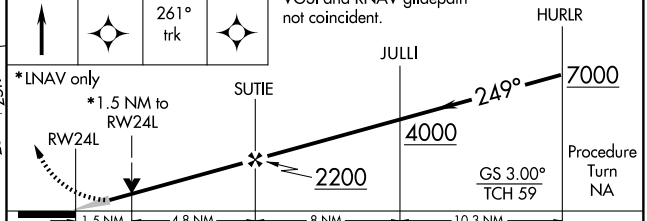
(IAF) SEAL BEACH SLI 4000 331° (12.1)
Procedure NA for arrival on SLI VORTAC airway radials 272 CW 319.

MSA RW24L 25 NM 7800

ELEV 126
249° to RW24L
TDZE 121
8925 X 150
10285 X 150
12091 X 150 -0.3% UP
11095 X 200 -0.3% UP

2000	JAKOS	261° trk	RAFFS

VGSI and RNAV glidepath not coincident.



CATEGORY	A	B	C	D
LPV DA	469/40 348 (400-¾)			
LNAV/VNAV DA	606/60 485 (500-1¼)			
LNAV MDA	660/24 539 (600-½)		660/50 539 (600-1)	660/60 539 (600-1¼)

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8925
CH 69307	249°	TDZE	120
W24A		Apt Elev	126

RNAV (GPS) Y RWY 24R
LOS ANGELES INTL (LAX)

DME/DME RNP- 0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).

ALSF-2

MISSED APPROACH: Climb to 2000 direct IGUPE and via 261° track to RAFFS and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	

MISSED APCH FIX
RAFFS
260°
080°
4 NM
261°
IGUPE

Procedure NA for arrivals at PURMS via V186 northwest bound.

(IAF) PURMS
4000 151° (8)
(IF) MERCE
4000 249° (10.3)
(FAF) JETSA
2200 249° (8)
PALAC
BREEA
DECOR
SKOLL
MINZA
10000 256° (9.3)
(IAF) RIIVR
7000 249° (3.6)
8000 249° (3.6)
9000 249° (3.6)
10000 249° (2.8)
10000 279° (8.4)
(IAF) SEAVU
RW24R
(IAF) SEAL BEACH SLI
4000 331° (12.3)
MSA RW24R 25 NM
7800

Procedure NA for arrival on SLI VORTAC airway radials 272 CW 319.

ELEV 126
TDZE 120
249° to RW24R
8925 X 150
10285 X 150
12091 X 150 -0.3% UP
11095 X 200 -0.3% UP

2000 | IGUPE | 261° trk | RAFFS

VGSI and RNAV glidepath not coincident.

*LNAV only
*1.5 NM to RW24R
RW24R
JETSA
MERCE
PALAC
249°
7000
4000
2200
Procedure Turn NA
GS 3.00°
TCH 59
1.5 NM | 4.8 NM | 8 NM | 10.3 NM

CATEGORY	A	B	C	D
LPV DA	374/24 254 (300-½)			
LNAV/VNAV DA	604/60 484 (500-1¼)			
LNAV MDA	660/24 540 (600-½)		660/50 540 (600-1)	660/60 540 (600-1¼)

TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	11095
CH 53507	249°	TDZE	104
W25A		Apt Elev	126

RNAV (GPS) Y RWY 25L

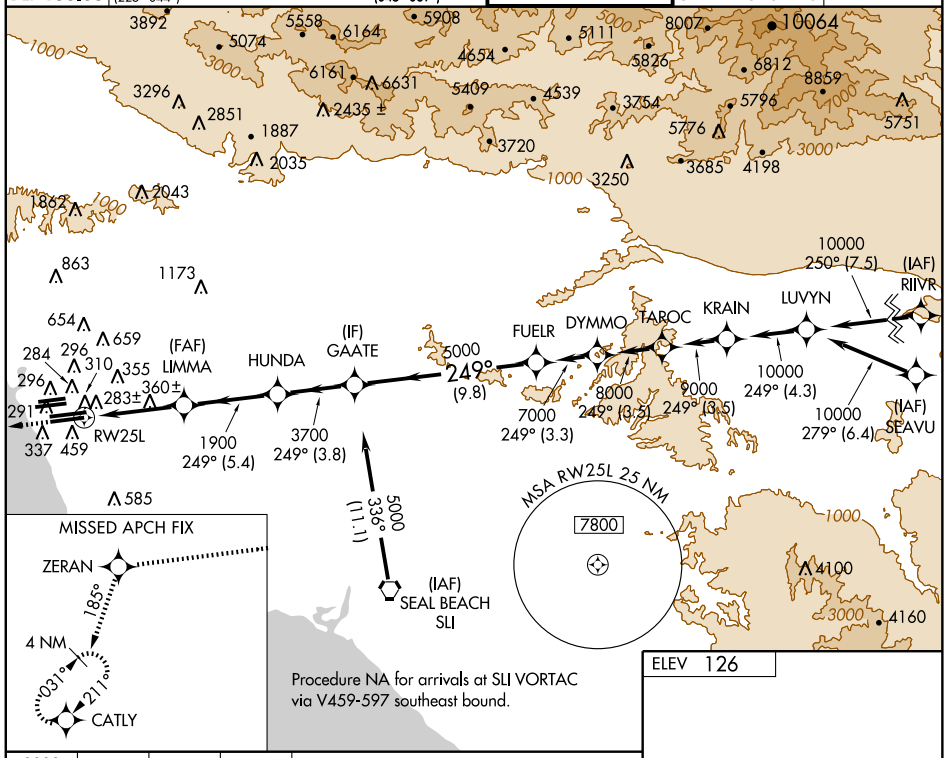
LOS ANGELES INTL (LAX)

For inoperative ALSF-2, increase LPV all Cats. visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP- 0.3 NA.

ALSF-2

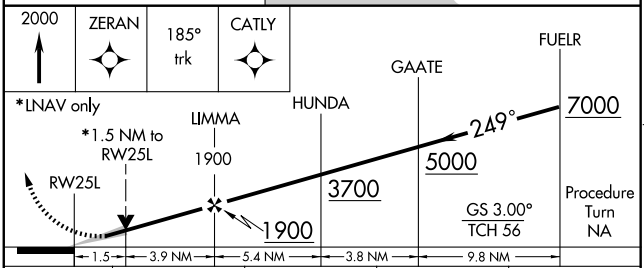
MISSED APPROACH: Climb to 2000 direct ZERAN and via 185° track to CATLY and hold.

ATIS			GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST) SOCAL APP CON 124.9 269.0 (090°-224°)	LOS ANGELES TOWER N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°) 128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	

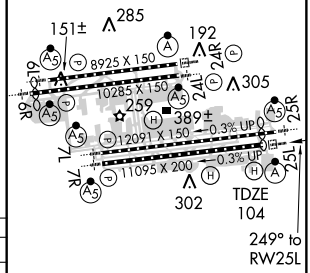


Procedure NA for arrivals at SLI VORTAC via V459-597 southeast bound.

ELEV 126



CATEGORY	A	B	C	D
LPV DA	365/24 261 (300-½)			
LNAV/VNAV DA	575/60 471 (500-1¼)			
LNAV MDA	640/24 536 (600-½)		640/50 536 (600-1)	640/60 536 (600-1¼)



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	11134
CH 49007	249°	TDZE	102
W25B		Apt Elev	126

RNAV (GPS) Y RWY 25R

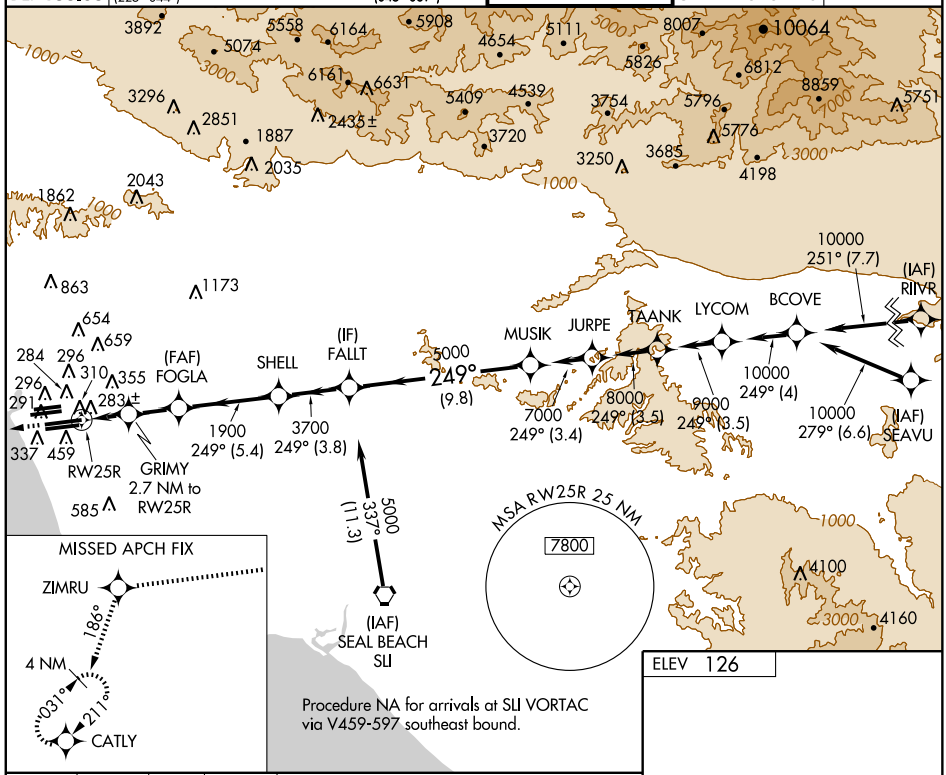
LOS ANGELES INTL (LAX)

For inoperative MALSR, increase LPV all Cats visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

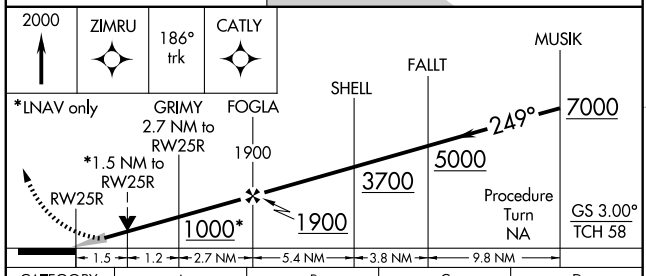
MALSR

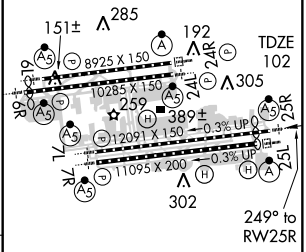
MISSED APPROACH: Climb to 2000 direct ZIMRU and via 186° track to CATLY and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



ELEV 126





CATEGORY	A	B	C	D
LPV DA	369/24 267 (300-½)			
LNAV/VNAV DA	576/60 474 (500-1¼)			
LNAV MDA	640/24 538 (600-½)		640/50 538 (600-1)	640/60 538 (600-1¼)

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8925
069°	TDZE	117
	Apt Elev	126

RNAV (RNP) Z RWY 6L

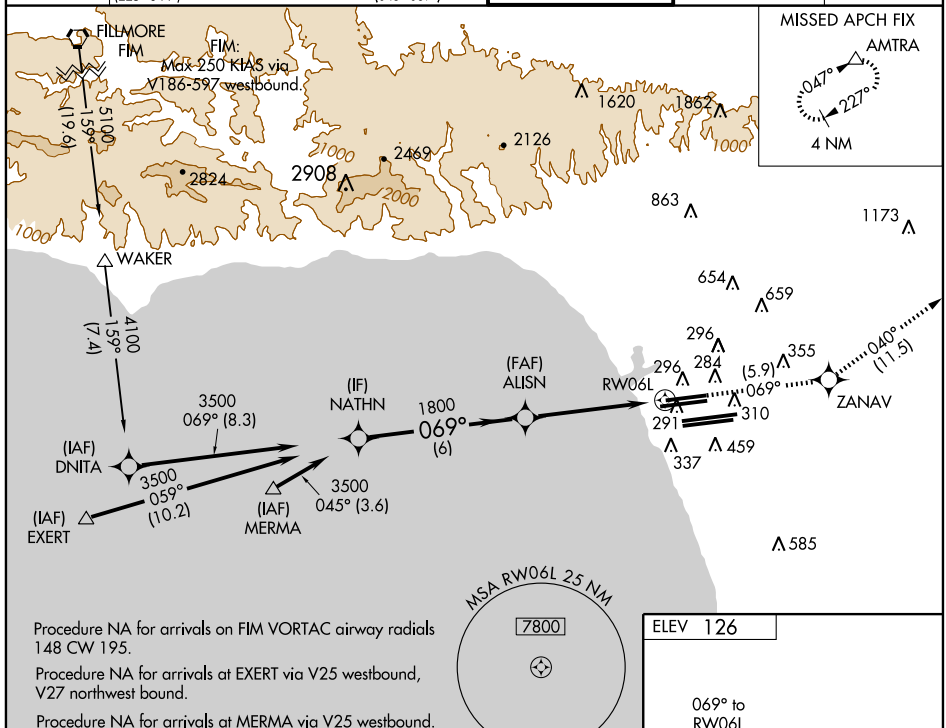
LOS ANGELES INTL (LAX)

GPS required.
NA For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F), or above 48°C (119°F).
Inoperative table does not apply.
Visiblity reduction by helicopters NA.

MALSR

MISSED APPROACH: Climb to 3000 via 069° track to ZANAV and via 040° track to AMTRA and hold.

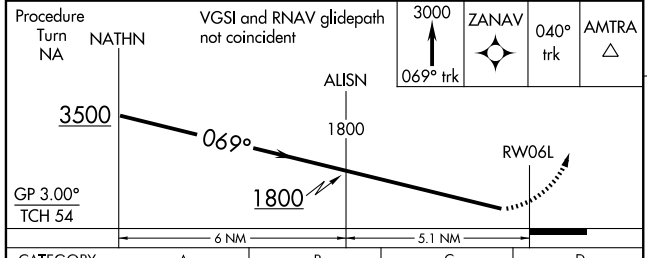
ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



Procedure NA for arrivals on FIM VORTAC airway radials 148 CW 195.

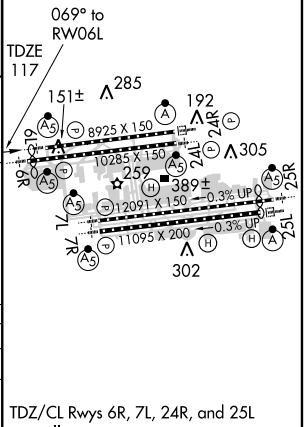
Procedure NA for arrivals at EXERT via V25 westbound, V27 northwest bound.

Procedure NA for arrivals at MERMA via V25 westbound.



CATEGORY	A	B	C	D
RNP 0.30 DA	436/50	319 (400-1)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9954
069°	TDZE	114
	Apt Elev	126

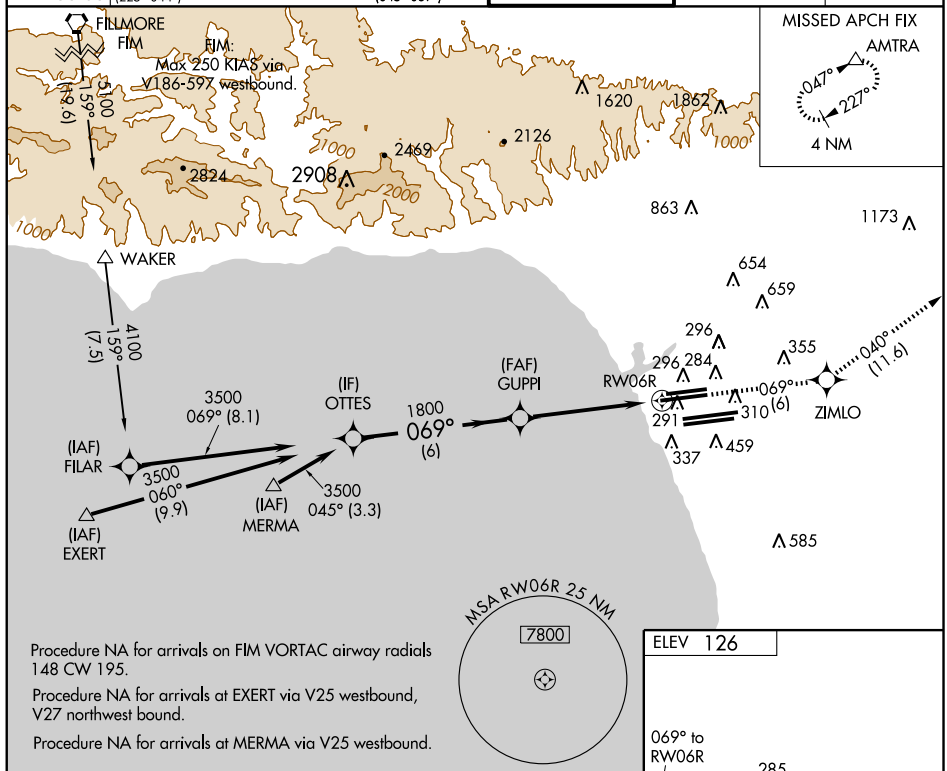
RNAV (RNP) Z RWY 6R
LOS ANGELES INTL (LAX)

T NA GPS required. Visibility reduction by helicopters NA.
For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F), or above 48°C (119°F).
For inoperative MALSR, increase RNP 0.30 visibility to RVR 5000 all Cats.

MALSR

MISSED APPROACH: Climb to 3000 via 069° track to ZIMLO and via 040° track to AMTRA and hold.

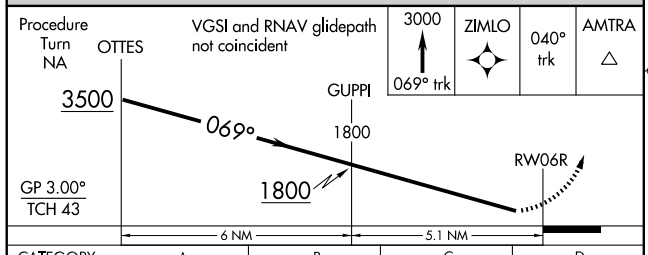
ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



Procedure NA for arrivals on FIM VORTAC airway radials 148 CW 195.

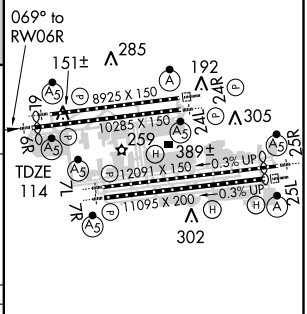
Procedure NA for arrivals at EXERT via V25 westbound, V27 northwest bound.

Procedure NA for arrivals at MERMA via V25 westbound.



CATEGORY	A	B	C	D
RNP 0.30 DA	413/40	299 (300-¾)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12091
069°	TDZE	126
	Apt Elev	126

RNAV (RNP) Z RWY 7L

LOS ANGELES INTL (LAX)

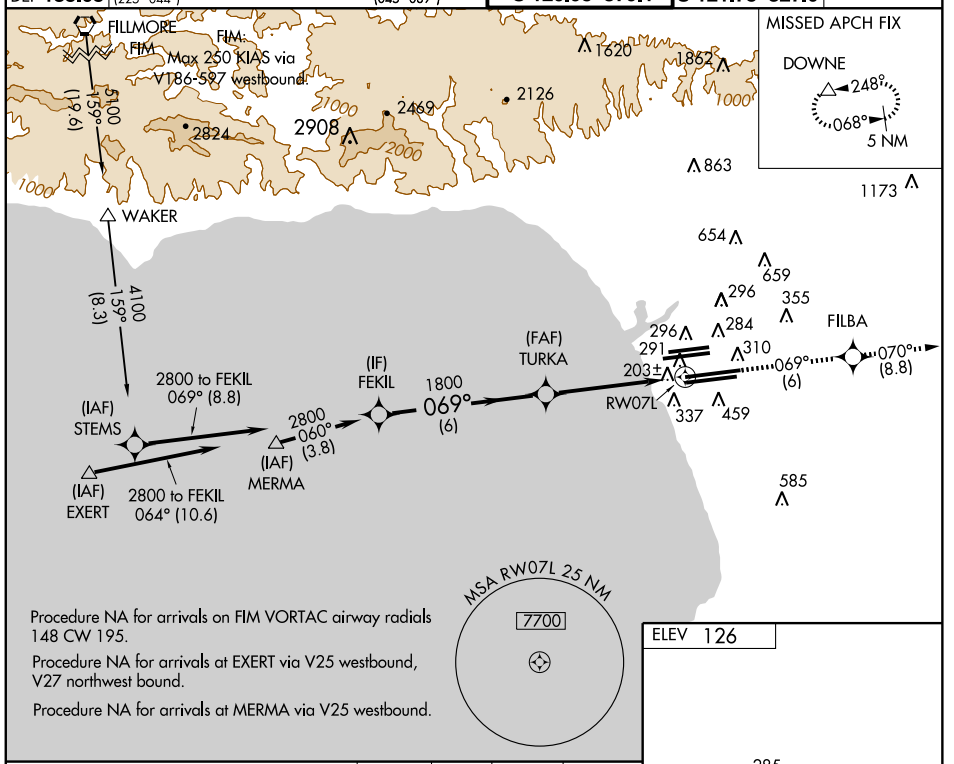
NA

GPS required.
For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F), or above 48°C (118°F).
For inoperative MALSR, increase RNP 0.12 visibility to RVR 5000 and RNP 0.30 visibility to RVR 6000.

MALSR

MISSED APPROACH: Climb to 3000 via 069° track to FILBA and via 070° track to DOWNE and hold.

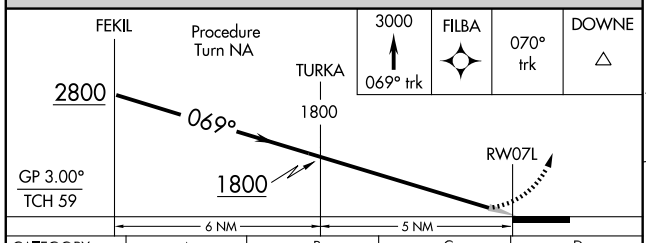
ATIS	ARR 133.8	DEP 135.65
124.3 363.2 (APCH FM WEST)	124.5 235.975 (225°-044°)	
SOCAL APP CON	124.9 269.0 (090°-224°)	128.5 360.7 (045°-089°)
LOS ANGELES TOWER	N 133.9 239.3	S 120.95 379.1
GND CON	N 121.65 327.0	S 121.75 327.0
CLNC DEL	121.4 327.0	



Procedure NA for arrivals on FIM VORTAC airway radials 148 CW 195.

Procedure NA for arrivals at EXERT via V25 westbound, V27 northwest bound.

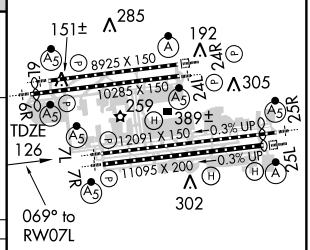
Procedure NA for arrivals at MERMA via V25 westbound.



CATEGORY	A	B	C	D
RNP 0.12 DA		440/24	314 (400-½)	
RNP 0.30 DA		483/40	357 (400-¾)	

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

ELEV 126



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	11095
069°	TDZE	125
	Apt Elev	126

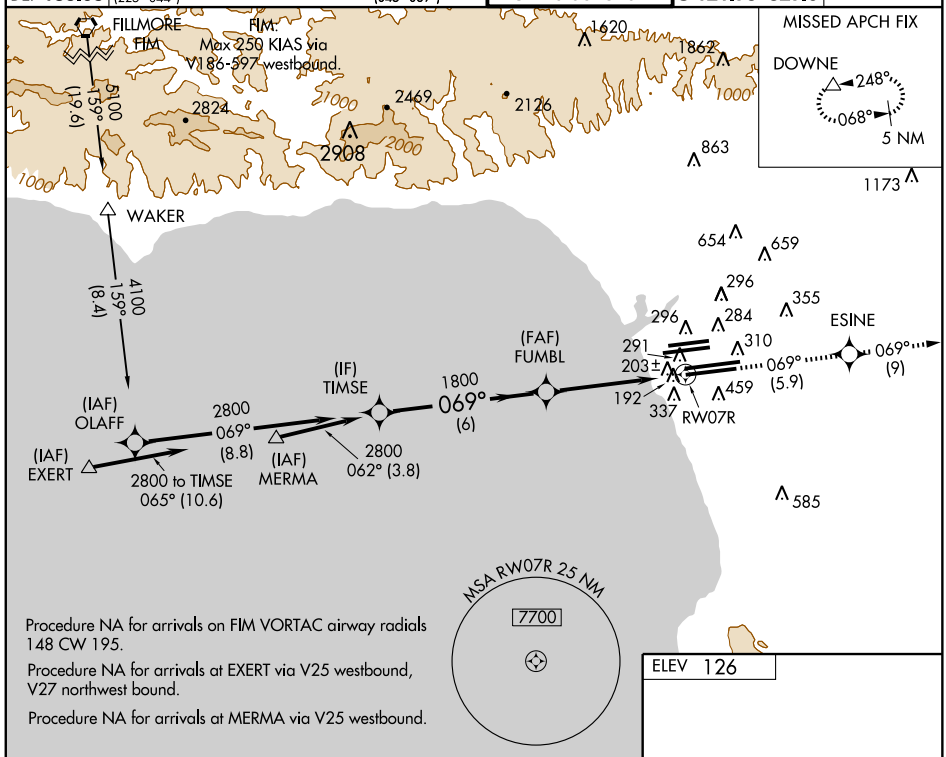
RNAV (RNP) Z RWY 7R
LOS ANGELES INTL (LAX)

NA — For inoperative MALSR, increase RNP 0.12 visibility to RVR 5000 all Cats., and RNP 0.30 visibility to RVR 6000 all Cats. For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 48°C (119°F). GPS Required.

MALSR

MISSED APPROACH: Climb to 3000 via 069° track to ESINE and 069° track to DOWNE and hold.

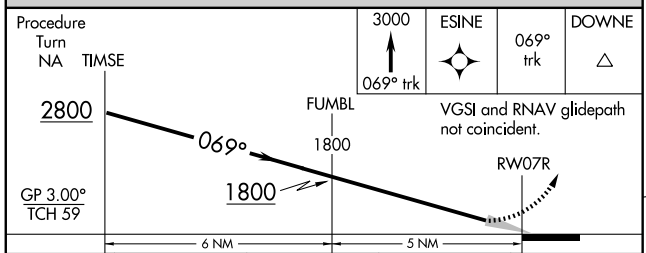
ATIS		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST) SOCAL APP CON 124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°) 128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	



Procedure NA for arrivals on FIM VORTAC airway radials 148 CW 195.

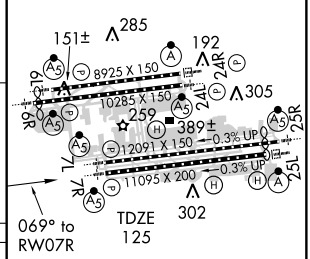
Procedure NA for arrivals at EXERT via V25 westbound, V27 northwest bound.

Procedure NA for arrivals at MERMA via V25 westbound.



CATEGORY	A	B	C	D
RNP 0.12 DA	418/24	293 (300-½)		
RNP 0.30 DA	483/40	358 (400-¾)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10285
249°	TDZE	121
	Apt Elev	126

RNAV (RNP) Z RWY 24L

LOS ANGELES INTL (LAX)

For inoperative MALSR, increase visibility RNP 0.15 and RNP 0.30 all Cats to 1½.
For uncompensated Baro-VNAV systems, procedure NA below 5°C (40°F) or above 48°C (119°F).
Visibility reduction by helicopters NA. GPS required.

NA

MALSR

MISSED APPROACH: Climb to 2000 via 249° track to JAKOS and via 261° track to RAFFS and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	

MISSED APCH FIX

RAFFS

JAKOS

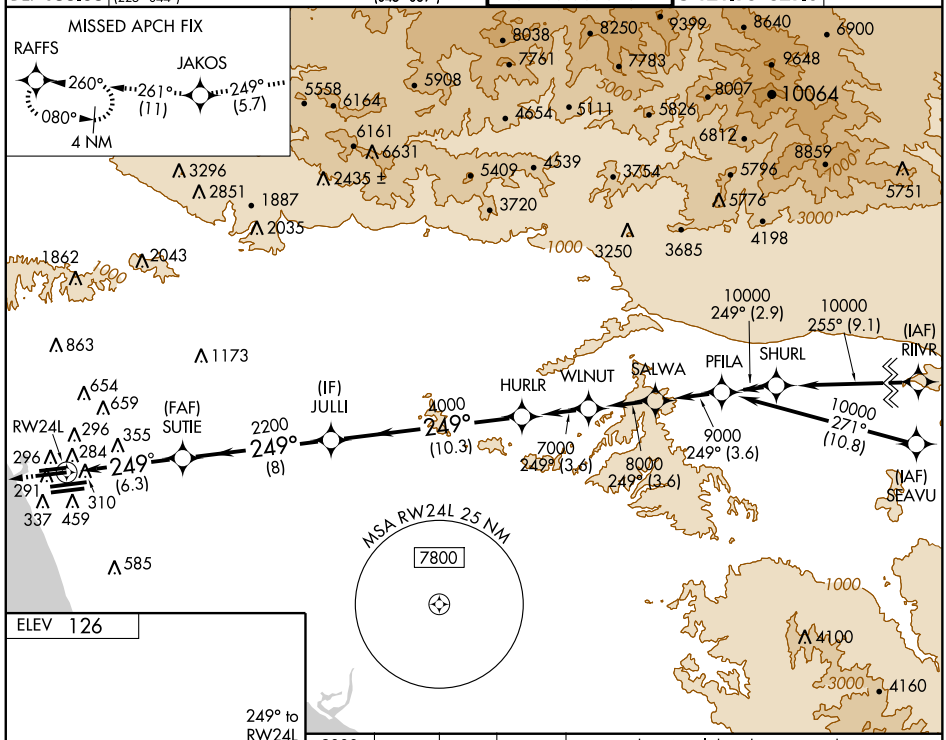
260°

261° (11)

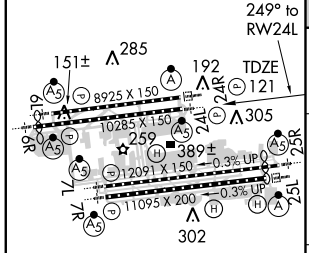
249° (5.7)

080°

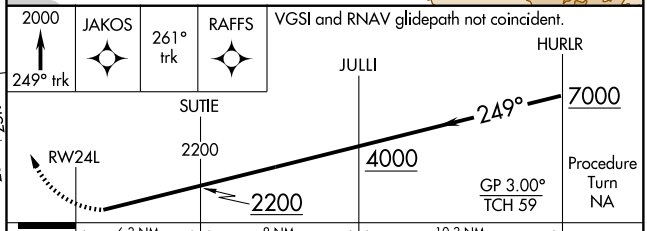
4 NM



ELEV 126



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys



CATEGORY	A	B	C	D
RNP 0.15 DA	538/50 417 (500-1)			
RNP 0.30 DA	582/60 461 (500-1¼)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8925
249°	TDZE	120
	Apt Elev	126

RNAV (RNP) Z RWY 24R

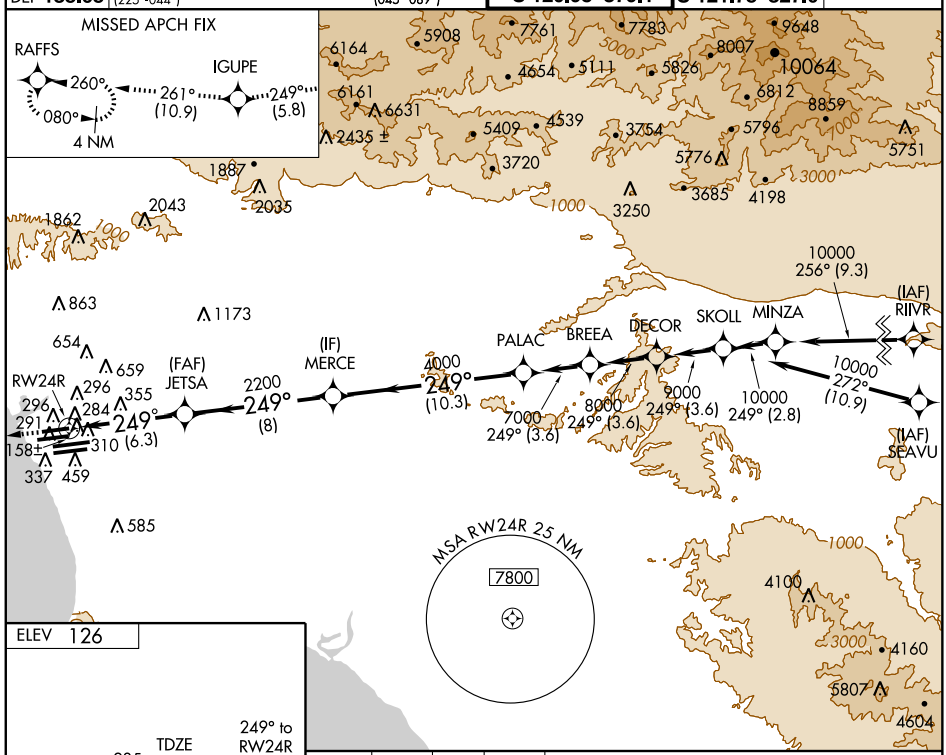
LOS ANGELES INTL (LAX)

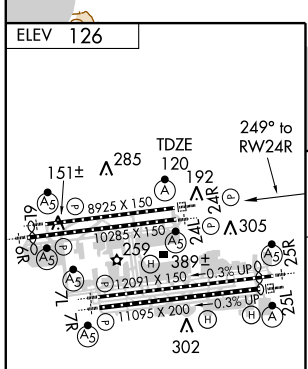
For uncompensated Baro-VNAV systems, procedure NA below 5°C (40°F) or above 48°C (119°F).
For inoperative ALSF-2 increase RNP 0.16 visibility to RVR 6000 and RNP 0.30 to 1½ miles.
GPS required. Visibility reduction by helicopters NA.

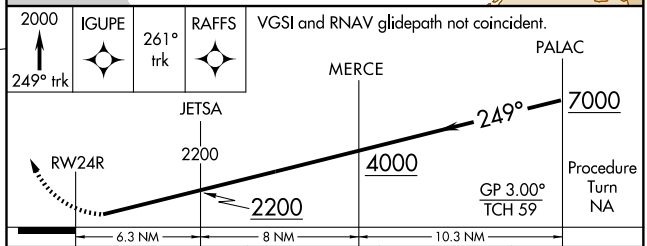
ALSF-2

MISSED APPROACH: Climb to 2000 via 249° track to IGUPE and via 261° track to RAFFS and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	







CATEGORY	A	B	C	D
RNP 0.16 DA	485/40 365 (400-¾)			
RNP 0.30 DA	584/60 464 (500-1¼)			

TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	11095
249°	TDZE	104
	Apt Elev	126

RNAV (RNP) Z RWY 25L

LOS ANGELES INTL (LAX)

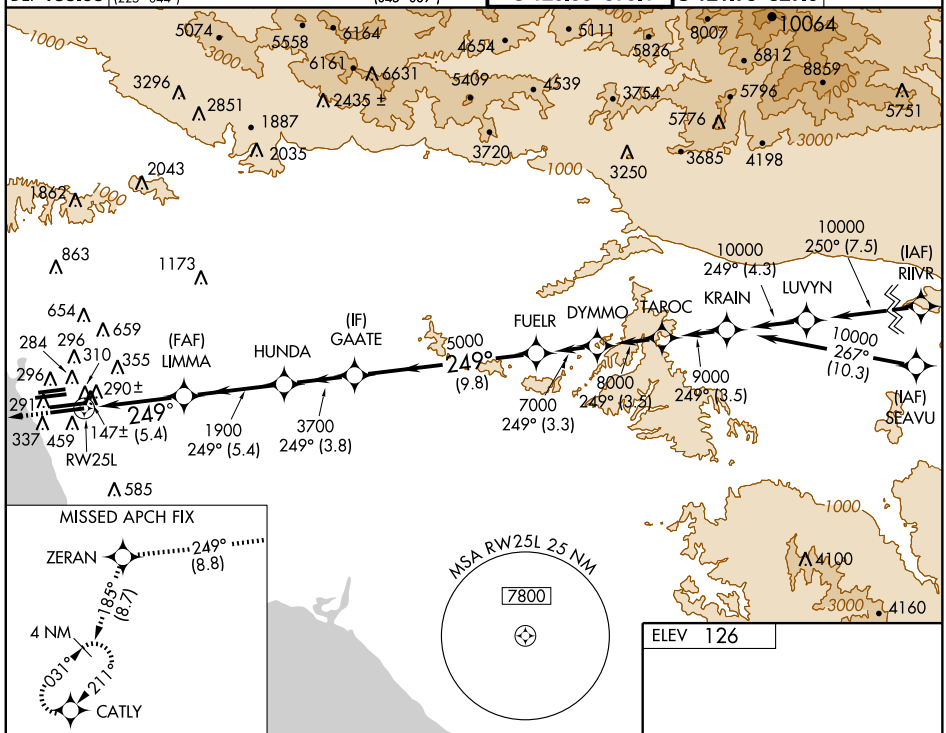
For uncompensated Baro-VNAV systems, procedure NA below 5°C (40°F), or above 48°C (118°F).
For inoperative ALSF-2 increase visibility RNP 0.12 all Cats. to RVR 5000, RNP 0.17 all Cats. to RVR 6000, and increase RNP 0.30 all Cats. to 1½ mile. GPS required.

NA

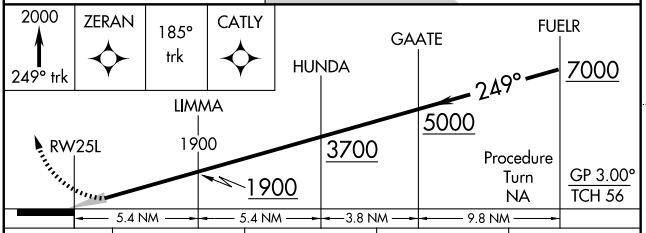
ALSF-2

MISSED APPROACH: Climb to 2000 via 249° track ZERAN and via 185° track to CATLY and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	

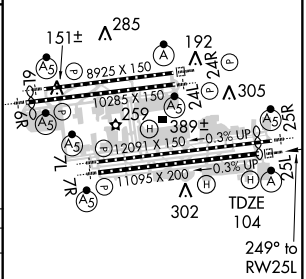


ELEV 126



CATEGORY	A	B	C	D
RNP 0.12 DA	408/24 304 (300-½)			
RNP 0.17 DA	458/40 354 (400-¾)			
RNP 0.30 DA	538/50 434 (500-1)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	11134
249°	TDZE	102
	Apt Elev	126

RNAV (RNP) Z RWY 25R

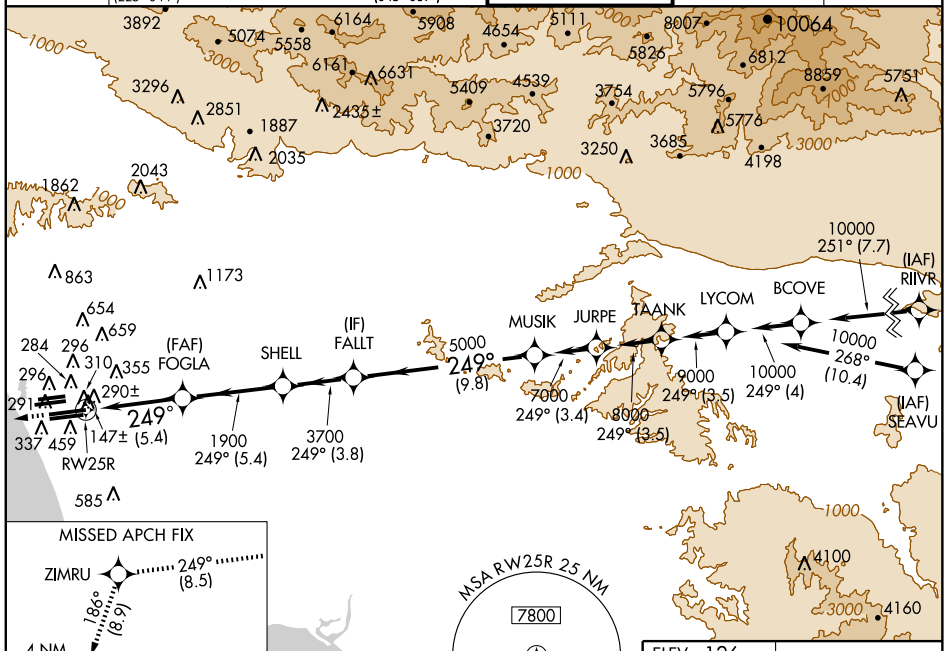
LOS ANGELES INTL (LAX)

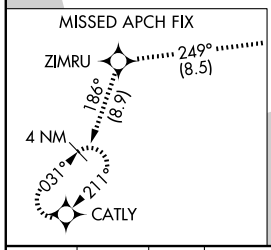
T NA — For inoperative MALSR, increase visibility RNP 0.11 to RVR 6000 and RNP 0.30 to 1½. For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 48°C (118°F). GPS required.

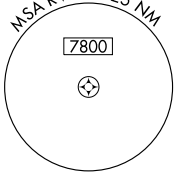
MALSR

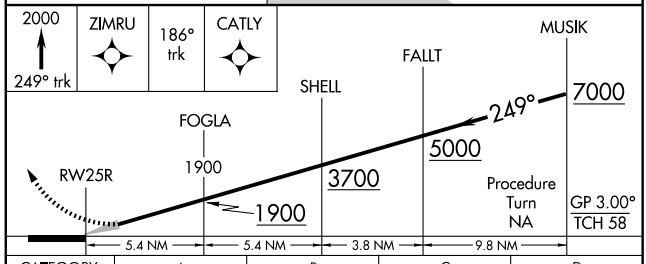
MISSED APPROACH: Climb to 2000 via 249° track to ZIMRU and via 186° track to CATLY and hold.

ATIS		SOCAL APP CON		LOS ANGELES TOWER	GND CON	CLNC DEL
ARR 133.8	124.3 363.2 (APCH FM WEST)		124.9 269.0 (090°-224°)	N 133.9 239.3	N 121.65 327.0	121.4 327.0
DEP 135.65	124.5 235.975 (225°-044°)		128.5 360.7 (045°-089°)	S 120.95 379.1	S 121.75 327.0	





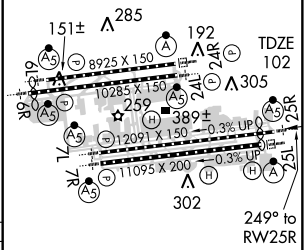




CATEGORY	A	B	C	D
RNP 0.11 DA	486/50 384 (400-1)			
RNP 0.30 DA	537/50 435 (500-1)			

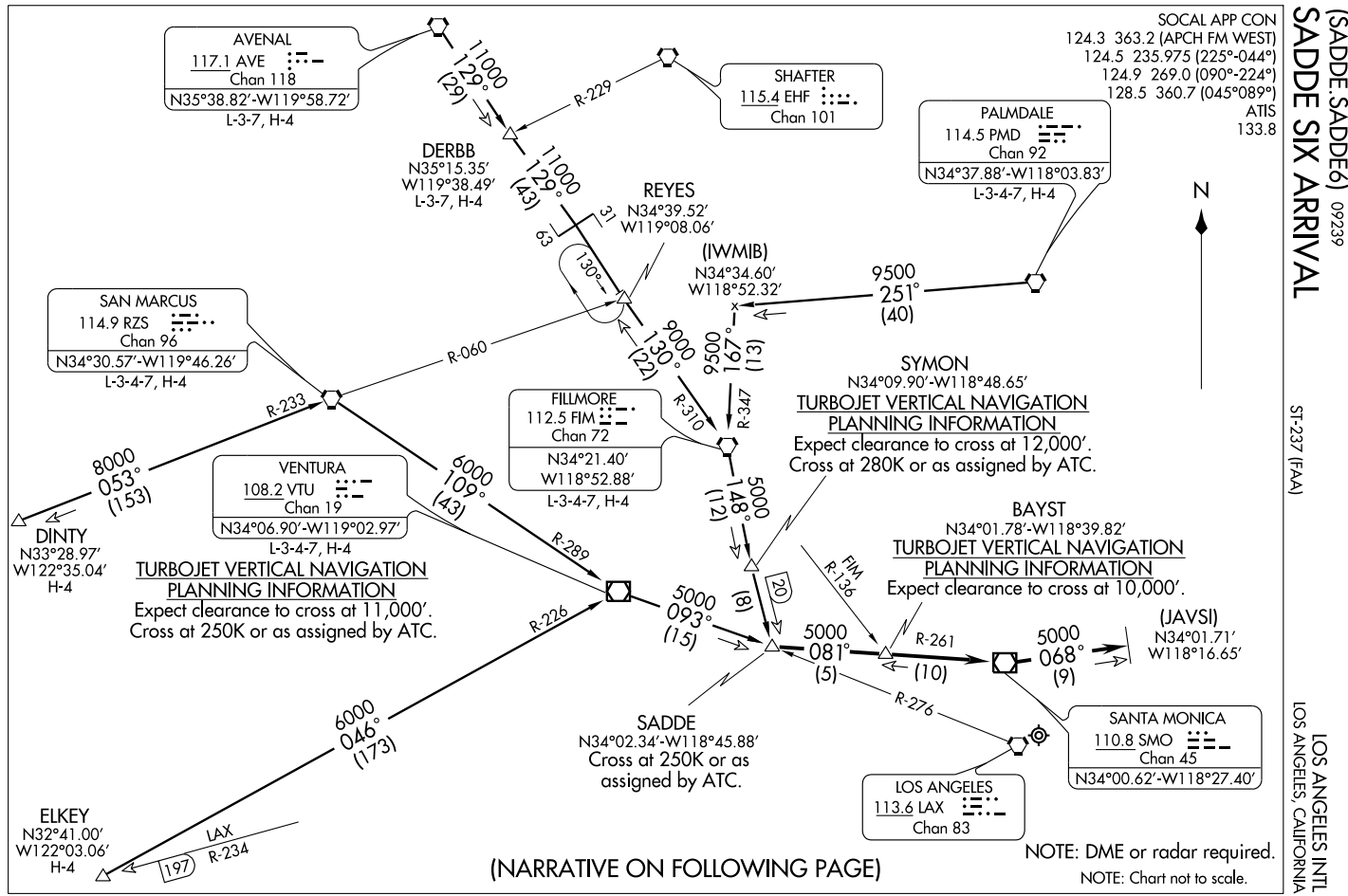
SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

ELEV 126



TDZ/CL Rwys 6R, 7L, 24R, and 25L
HIRL all Rwys

SW-3, 22 OCT 2009 to 19 NOV 2009


SOCAL APP CON
124.3 363.2 (APCH FM WEST)
124.5 235.975 (225°-044°)
124.9 269.0 (090°-224°)
128.5 360.7 (045°089°)
ATIS
133.8
(SADE.SADDE6) 09239
SADDE SIX ARRIVAL
ST-237 (FAA)
LOS ANGELES INTL
LOS ANGELES, CALIFORNIA
N
AVENAL
117.1 AVE
Chan 118
N35°38.82'-W119°58.72'
L-3-7, H-4
SHAFTER
115.4 EHF
Chan 101
PALMDALE
114.5 PMD
Chan 92
N34°37.88'-W118°03.83'
L-3-4-7, H-4
DERBB
N35°15.35'
W119°38.49'
L-3-7, H-4
REYES
N34°39.52'
W119°08.06'
(IWMIB)
N34°34.60'
W118°52.32'
SAN MARCUS
114.9 RZS
Chan 96
N34°30.57'-W119°46.26'
L-3-4-7, H-4
FILLMORE
112.5 FIM
Chan 72
N34°21.40'
W118°52.88'
L-3-4-7, H-4
SYMON
N34°09.90'-W118°48.65'
TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at 12,000'.
Cross at 280K or as assigned by ATC.
VENTURA
108.2 VTU
Chan 19
N34°06.90'-W119°02.97'
L-3-4-7, H-4
DINTY
N33°28.97'
W122°35.04'
H-4
TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at 11,000'.
Cross at 250K or as assigned by ATC.
BAYST
N34°01.78'-W118°39.82'
TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at 10,000'.
(JAVSI)
N34°01.71'
W118°16.65'
SADDE
N34°02.34'-W118°45.88'
Cross at 250K or as
assigned by ATC.
SANTA MONICA
110.8 SMO
Chan 45
N34°00.62'-W118°27.40'
LOS ANGELES
113.6 LAX
Chan 83
ELKEY
N32°41.00'
W122°03.06'
H-4
LAX
197
R-234
11000
129°
(29)
11000
129°
(43)
R-229
31
63
130°
9000
130°
(22)
9500
251°
(40)
9500
167°
(13)
R-060
R-233
R-310
R-347
8000
053°
(153)
6000
109°
(43)
5000
148°
(12)
R-289
FIM
R-136
20
5000
093°
(15)
(8)
5000
081°
(5)
R-261
(10)
5000
068°
(9)
R-226
6000
046°
(173)
R-276
(NARRATIVE ON FOLLOWING PAGE)
NOTE: DME or radar required.
NOTE: Chart not to scale.

ARRIVAL DESCRIPTION

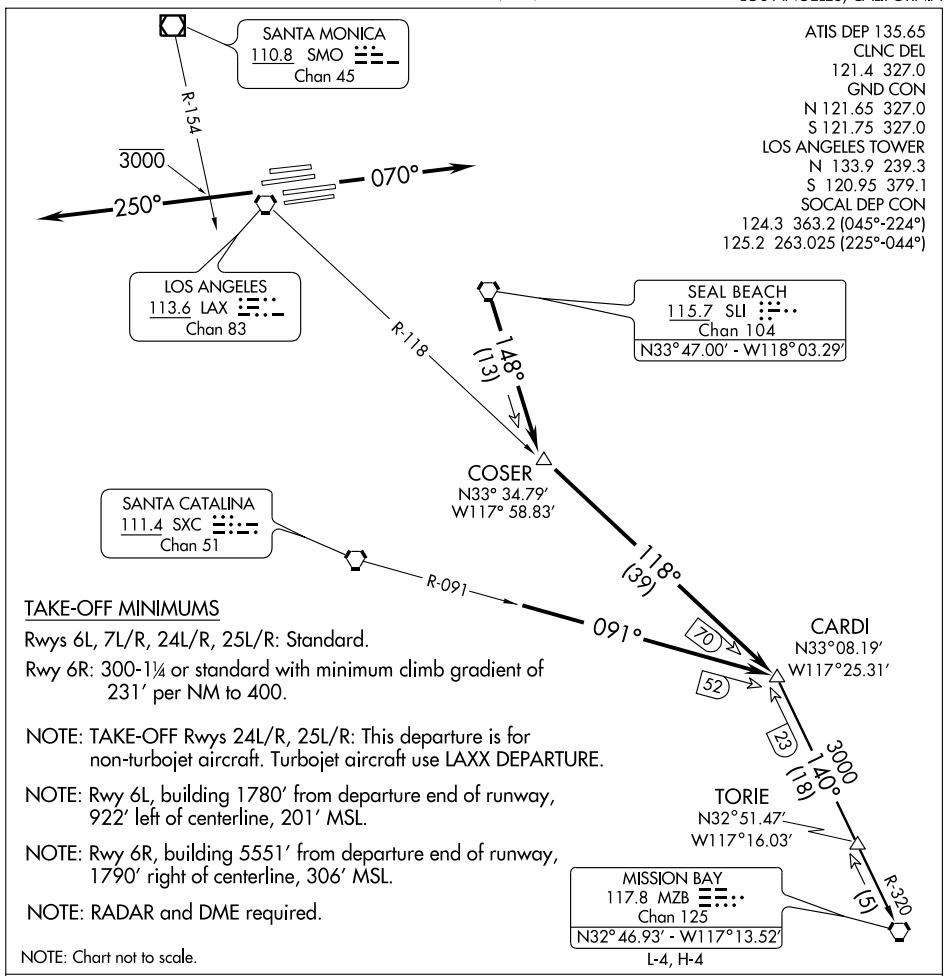
AVENAL TRANSITION (AVE.SADDE6): From over AVE VORTAC via AVE R-129 and FIM R-310 to FIM VORTAC, then via FIM R-148 to SADDE INT. Thence....
DERBB TRANSITION (DERBB.SADDE6): From over DERBB INT via AVE R-129 and FIM R-310 to FIM VORTAC, then via FIM R-148 to SADDE INT. Thence....
DINTY TRANSITION (DINTY.SADDE6): From over DINTY INT via RZS R-233 to RZS VORTAC; then via RZS R-109 and VTU R-289 to VTU VOR/DME, and then via VTU R-093 to SADDE INT. Thence....
ELKEY TRANSITION (ELKEY.SADDE6): From over ELKEY INT via VTU R-226 to VTU VOR/DME then via VTU R-093 to SADDE INT. Thence....
FILLMORE TRANSITION (FIM.SADDE6): From over FIM VORTAC via FIM R-148 to SADDE INT. Thence....
PALMDALE TRANSITION (PMD.SADDE6): From over PMD VORTAC via PMD R-251 and FIM R-347 to FIM VORTAC, then via FIM R-148 to SADDE INT. Thence....
SAN MARCUS TRANSITION (RZS.SADDE6): From over RZS VORTAC via RZS R-109 and VTU R-289 to VTU VOR/DME then via VTU R-093 to SADDE INT. Thence....
VENTURA TRANSITION (VTU.SADDE6): From over VTU VOR/DME via VTU R-093 to SADDE INT. Thence....
....From over SADDE INT via SMO R-261 to SMO VOR/DME, then via SMO R-068 to SMO 9 DME for Runways 24 and 25. From SMO 9 DME expect vector to final approach course for Los Angeles Intl Airport.

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN DIEGO FIVE DEPARTURE

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA



TAKE-OFF MINIMUMS

Rwys 6L, 7L/R, 24L/R, 25L/R: Standard.

Rwy 6R: 300-1¼ or standard with minimum climb gradient of 231′ per NM to 400.

NOTE: TAKE-OFF Rwys 24L/R, 25L/R: This departure is for non-turbojet aircraft. Turbojet aircraft use LAXX DEPARTURE.

NOTE: Rwy 6L, building 1780′ from departure end of runway, 922′ left of centerline, 201′ MSL.

NOTE: Rwy 6R, building 5551′ from departure end of runway, 1790′ right of centerline, 306′ MSL.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

L-4, H-4

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L/R, 7L/R: Climb via heading 070° for vector to SLI VORTAC, then via SLI R-148 to COSER DME fix then via LAX R-118 to CARDI INT. Thence....

TAKE-OFF RUNWAYS 24L/R, 25L/R: Climb via heading 250° to cross SMO R-154 at or below 3000, then via RADAR vector to join SXC R-091 to CARDI INT. Thence....

....via (assigned transition) or (assigned route). All aircraft expect further clearance to filed flight level three minutes after departure.

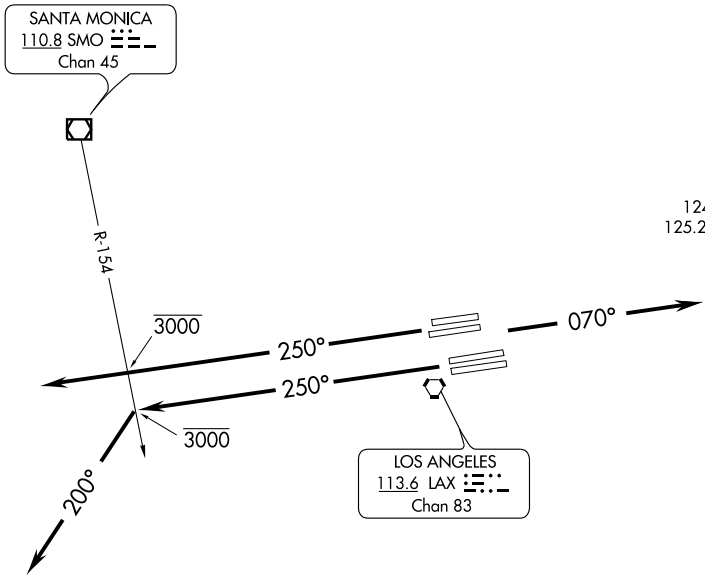
LOST COMMUNICATIONS: If not in contact with departure control within five minutes after departure, climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

MISSION BAY TRANSITION (SNGO5.MZB): From over CARDI INT via MZB R-320 to MZB VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

SEAL BEACH FIVE DEPARTURE SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA



ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

SEAL BEACH
115.7 SLI
Chan 104
N33°47.00'-W118°03.29'
L-3-4, H-4

TAKE-OFF MINIMUMS

Rwys 6L, 7L/R, 24L/R, 25L/R: Standard.

Rwy 6R: 300-1¼ or standard with minimum climb of 231' per NM to 400.

NOTE: TAKE-OFF Rwys 24L/R, 25L/R: This departure is for non-turbojet aircraft. Turbojet aircraft use LAXX DEPARTURE.

NOTE: Rwys 25L/R, ATC minimum climb gradient of 410' per NM to 600' MSL required.

NOTE: Rwy 6R, building 5551' from departure end of runway, 1790' right of centerline, 306' MSL.

NOTE: Rwy 6L, building 1780' from departure end of runway, 922' left of centerline, 201' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L/R, 7L/R: Climb via heading 070° for vector to SLI VORTAC. Thence ....

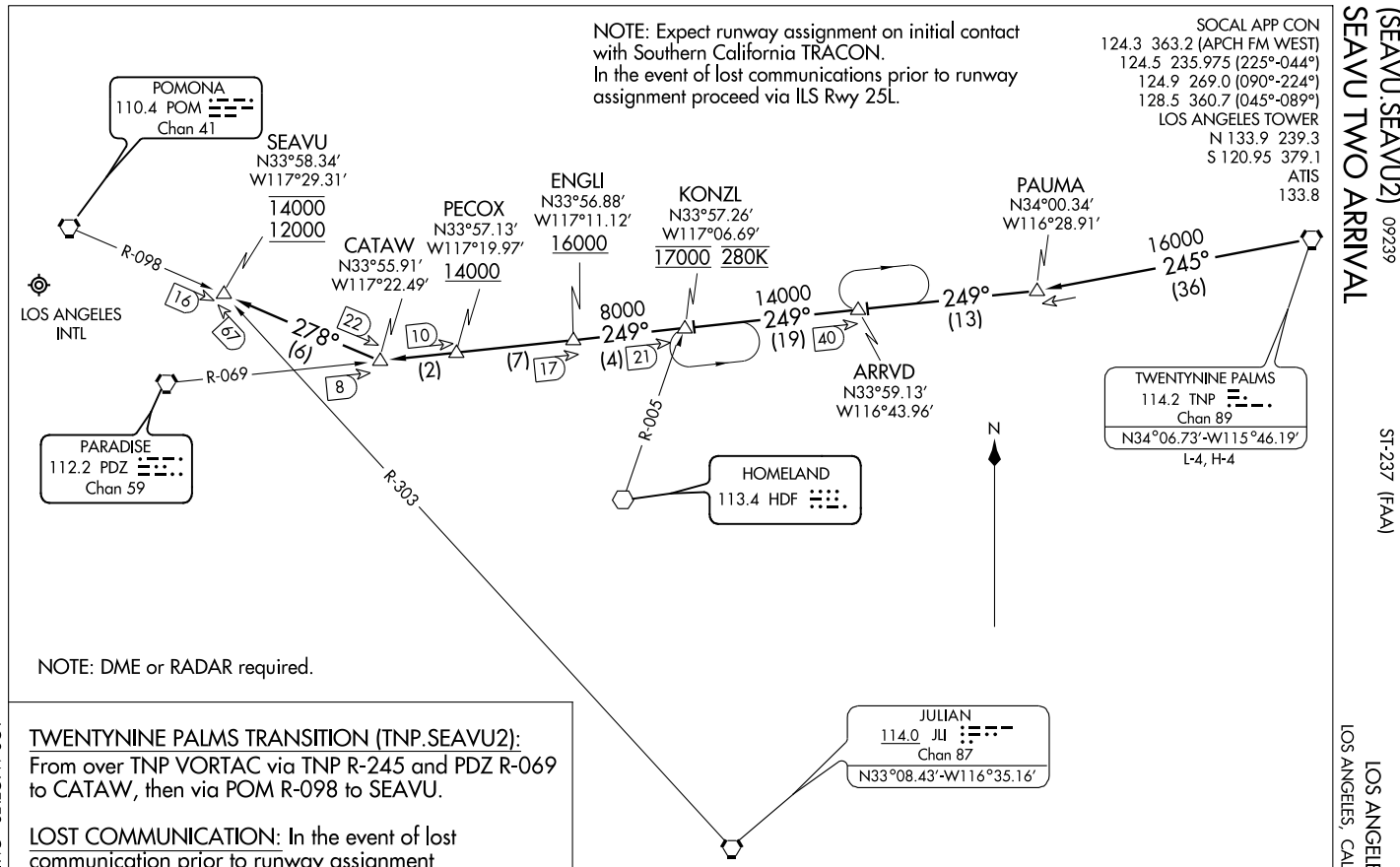
TAKE-OFF RUNWAYS 24L/R: Climb via heading 250° to cross SMO R-154 at or below 3000' then via radar vectors to SLI VORTAC. Thence ....

TAKE-OFF RUNWAYS 25L/R: Climb via heading 250° to cross SMO R-154 at or below 3000' then turn left heading 200° for vector to SLI VORTAC. Thence ....

.... via (assigned route). All aircraft expect further clearance to filed flight level three minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control within five minutes after departure, climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

SW-3, 22 OCT 2009 to 19 NOV 2009


NOTE: Expect runway assignment on initial contact with Southern California TRACON.
In the event of lost communications prior to runway assignment proceed via ILS Rwy 25L.
SOCAL APP CON
124.3 363.2 (APCH FM WEST)
124.5 235.975 (225°-044°)
124.9 269.0 (090°-224°)
128.5 360.7 (045°-089°)
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
ATIS
133.8
POMONA
110.4 POM
Chan 41
SEAVU
N33°58.34′
W117°29.31′
14000
12000
CATAW
N33°55.91′
W117°22.49′
PECOX
N33°57.13′
W117°19.97′
14000
ENGLI
N33°56.88′
W117°11.12′
16000
KONZL
N33°57.26′
W117°06.69′
17000 280K
PAUMA
N34°00.34′
W116°28.91′
16000
245°
(36)
LOS ANGELES INTL
R-098
16
67
278°
(6)
22
10
(2)
(7)
17
8000
249°
(4)
21
14000
249°
(19)
40
249°
(13)
ARRVD
N33°59.13′
W116°43.96′
R-069
PARADISE
112.2 PDZ
Chan 59
R-005
HOMELAND
113.4 HDF
R-303
TWENTYNINE PALMS
114.2 TNP
Chan 89
N34°06.73′-W115°46.19′
L-4, H-4
N
JULIAN
114.0 JLI
Chan 87
N33°08.43′-W116°35.16′
NOTE: DME or RADAR required.
TWENTYNINE PALMS TRANSITION (TNP.SEAVU2):
From over TNP VORTAC via TNP R-245 and PDZ R-069 to CATAW, then via POM R-098 to SEAVU.
LOST COMMUNICATION: In the event of lost communication prior to runway assignment proceed via ILS Rwy 25L.
NOTE: Chart not to scale.

SEBBY FOUR DEPARTURE

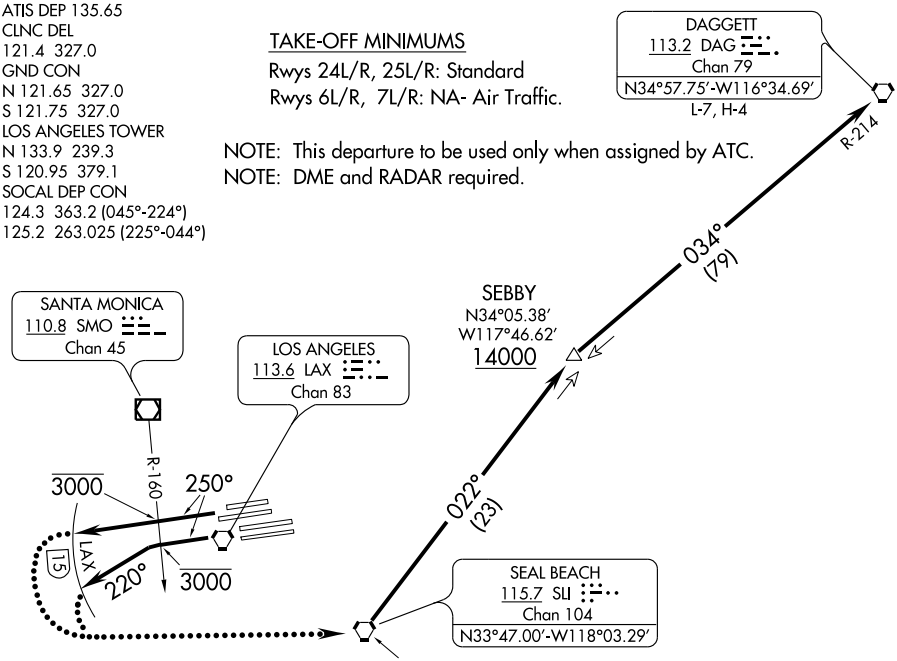
SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA

ATIS DEP 135.65
CLNC DEL
121.4 327.0
GND CON
N 121.65 327.0
S 121.75 327.0
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

TAKE-OFF MINIMUMS
Rwys 24L/R, 25L/R: Standard
Rwys 6L/R, 7L/R: NA- Air Traffic.

NOTE: This departure to be used only when assigned by ATC.
NOTE: DME and RADAR required.



TAKE-OFF OBSTACLE NOTES
Rwy 24L: Bush 962' from DER, 601' left of centerline, 29' AGL/148' MSL.
Antenna on pole 1357' from DER, 287' right of centerline, 25' AGL/144' MSL.
Rwy 24R: OL on glideslope 213' from DER, 400' left of centerline, 34' AGL/151' MSL.
Rwy 25L: Pole 2366' from DER, 820' left of centerline, 55' AGL/184' MSL.

NOTE: Chart not to scale.

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 24L/R: Climb via heading 250°, cross SMO R-160 at or below 3000, Thence....
TAKE-OFF RUNWAYS 25L/R: Climb via heading 250°, cross SMO R-160 at or below 3000, then turn left via heading 220°, Thence....

....via radar vectors to cross SLI VORTAC at or above 10000, then via SLI R-022 to cross SEBBY at or above 14000, then turn right via DAG R-214 to DAG VORTAC, expect further clearance to filed flight level three minutes after departure.

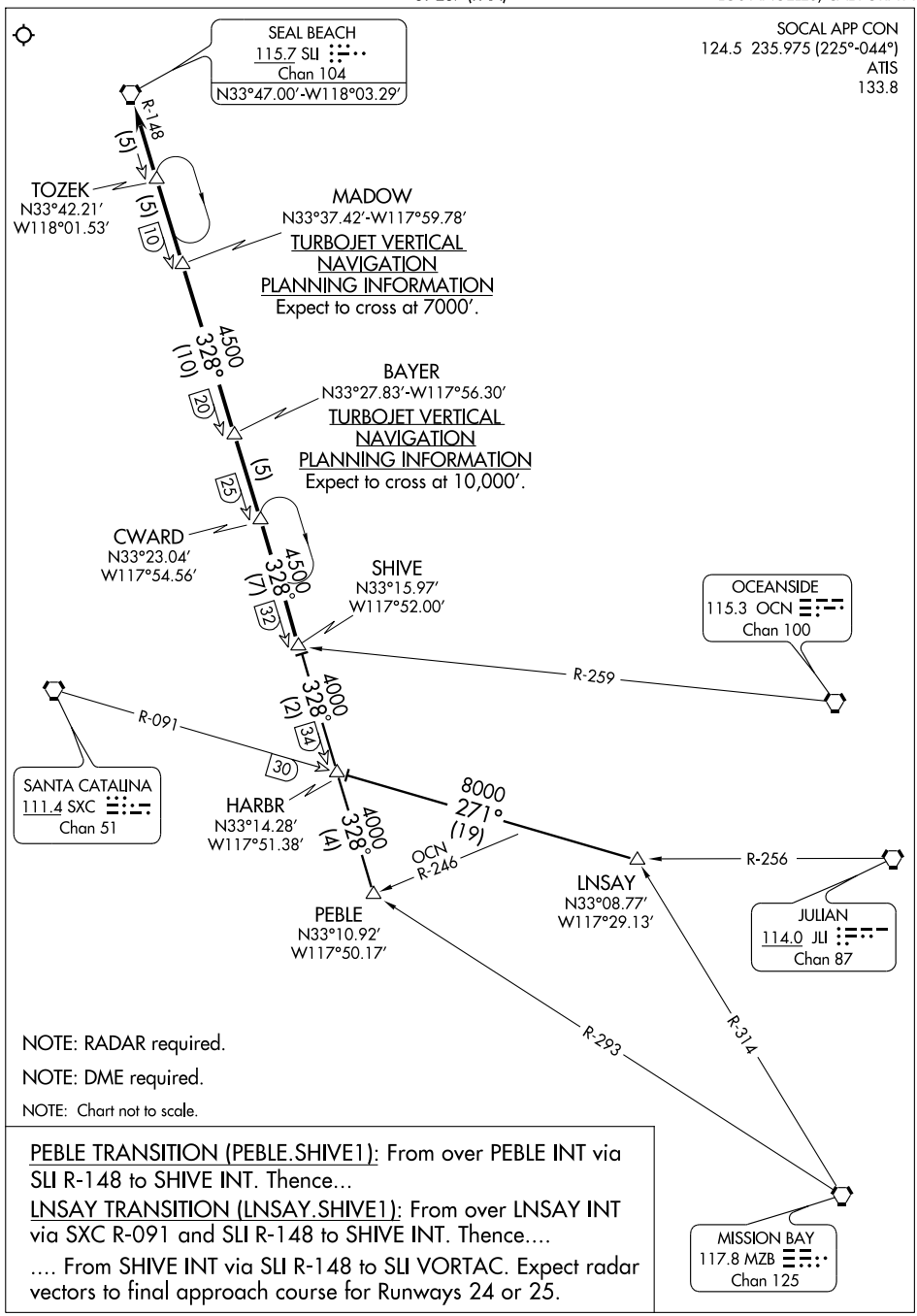
LOST COMMUNICATIONS: If not in contact with departure control by 15 DME west of LAX VORTAC, turn left direct SLI VORTAC and proceed on assigned route, climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

(SHIVE.SHIVE1) 09239

SHIVE ONE ARRIVAL

ST-237 (FAA)

LOS ANGELES INTL
LOS ANGELES, CALIFORNIA



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

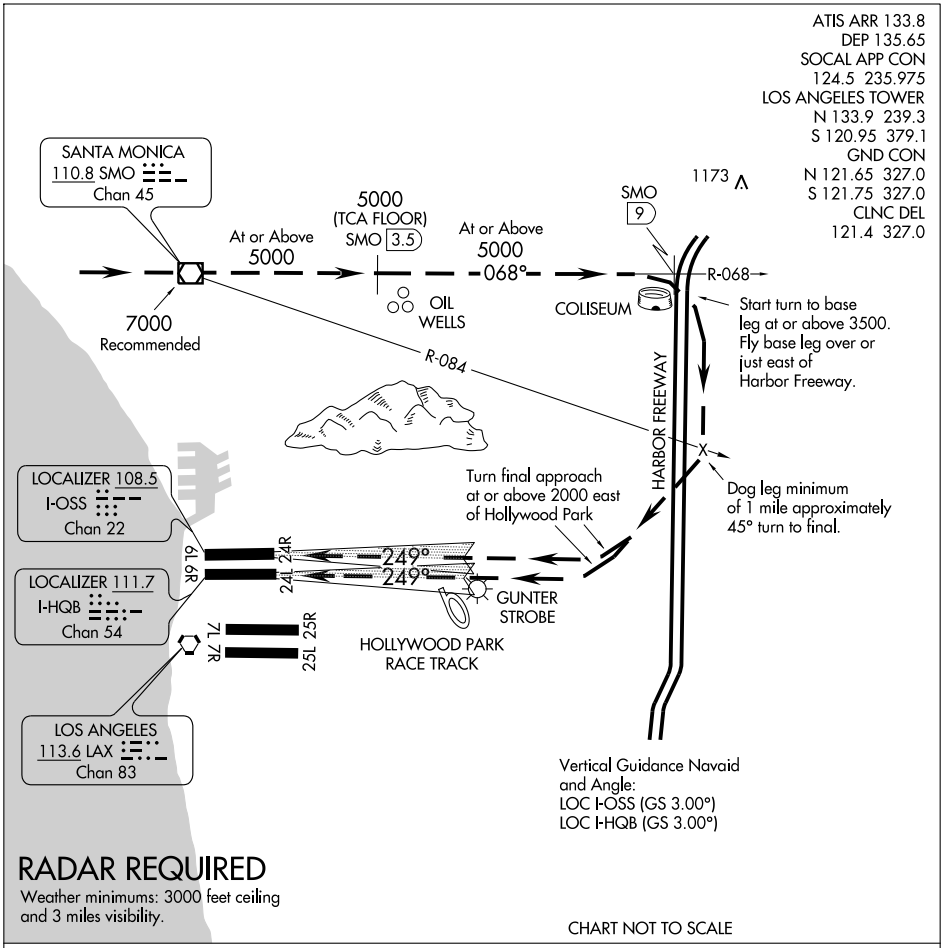
PEBLE TRANSITION (PEBLE.SHIVE1): From over PEBLE INT via SLI R-148 to SHIVE INT. Thence...

LNSAY TRANSITION (LNSAY.SHIVE1): From over LNSAY INT via SXC R-091 and SLI R-148 to SHIVE INT. Thence....

.... From SHIVE INT via SLI R-148 to SLI VORTAC. Expect radar vectors to final approach course for Runways 24 or 25.

SW-3, 22 OCT 2009 to 19 NOV 2009

STADIUM VISUAL RWY 24L/R



STADIUM VISUAL APPROACH

When visual approaches to Runways 24L/R are in progress, clearances to aircraft from the north and northwest will be given utilizing the following phraseology:

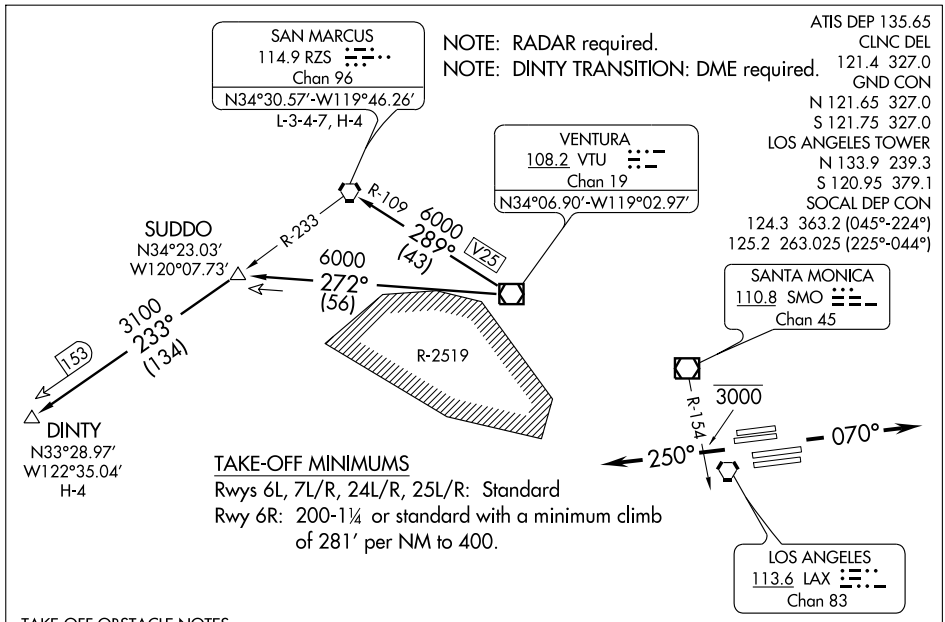
"(IDENT) CLEARED FOR STADIUM VISUAL RUNWAY 24 LEFT/RIGHT APPROACH."

A descent profile of approximately 3° starting at 7000 over SMO VOR/DME may be made with reference to the minimum altitudes above.

VENTURA FIVE DEPARTURE

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA



TAKE-OFF MINIMUMS

Rwys 6L, 7L/R, 24L/R, 25L/R: Standard

Rwy 6R: 200-1¼ or standard with a minimum climb of 281′ per NM to 400.

TAKE-OFF OBSTACLE NOTES

Rwy 6L: Multitple signs and building beginning 1693′ from DER, 340′ left of centerline, up to 91′ AGL/201′ MSL.

Rwy 6R: OL on sign 1867′ from DER, 941′ left of centerline, 52′ AGL/161′ MSL.
Multiple towers and windsock beginning 4930′ from DER, 1734′ right of centerline, up to 207′ AGL/306′ MSL.

Rwy 7L: Multiple blast fences, signs, and antennas beginning 168′ from DER, on centerline to 1858′ from DER, 576′ left of centerline, up to 58′ AGL/147′ MSL.
Railroad 275′ from DER, up to 23′ AGL/117′ MSL.

Rwy 24L: Bush 962′ from DER, 601′ left of centerline, 29′ AGL/148′ MSL.
Antenna on pole 1357′ from DER, 287′ right of centerline, 25′ AGL/144′ MSL.

Rwy 24R: OL on glideslope 213′ from DER, 400′ left of centerline, 34′ AGL/151′ MSL.

Rwy 25L: Pole 2366′ from DER, 820′ left of centerline, 55′ AGL/184′ MSL.

NOTE: Chart not scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L/R, 7L/R: Climb via heading 070° for vectors to VTU VOR/DME. Thence. . . .

TAKE-OFF RUNWAYS 24L/R, 25L/R: Climb via heading 250° for vectors to VTU VOR/DME, cross SMO R-154 at or below 3000. Thence. . . .

. . . .via (assigned transition) or (assigned route). Expect further clearance to filed flight level three minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control within five minutes after departure, climb to FL230 or filed altitude, whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

DINTY TRANSITION (VTU5.DINTY): From over VTU VOR/DME via VTU R-272 and RZS R-233 to DINTY INT.

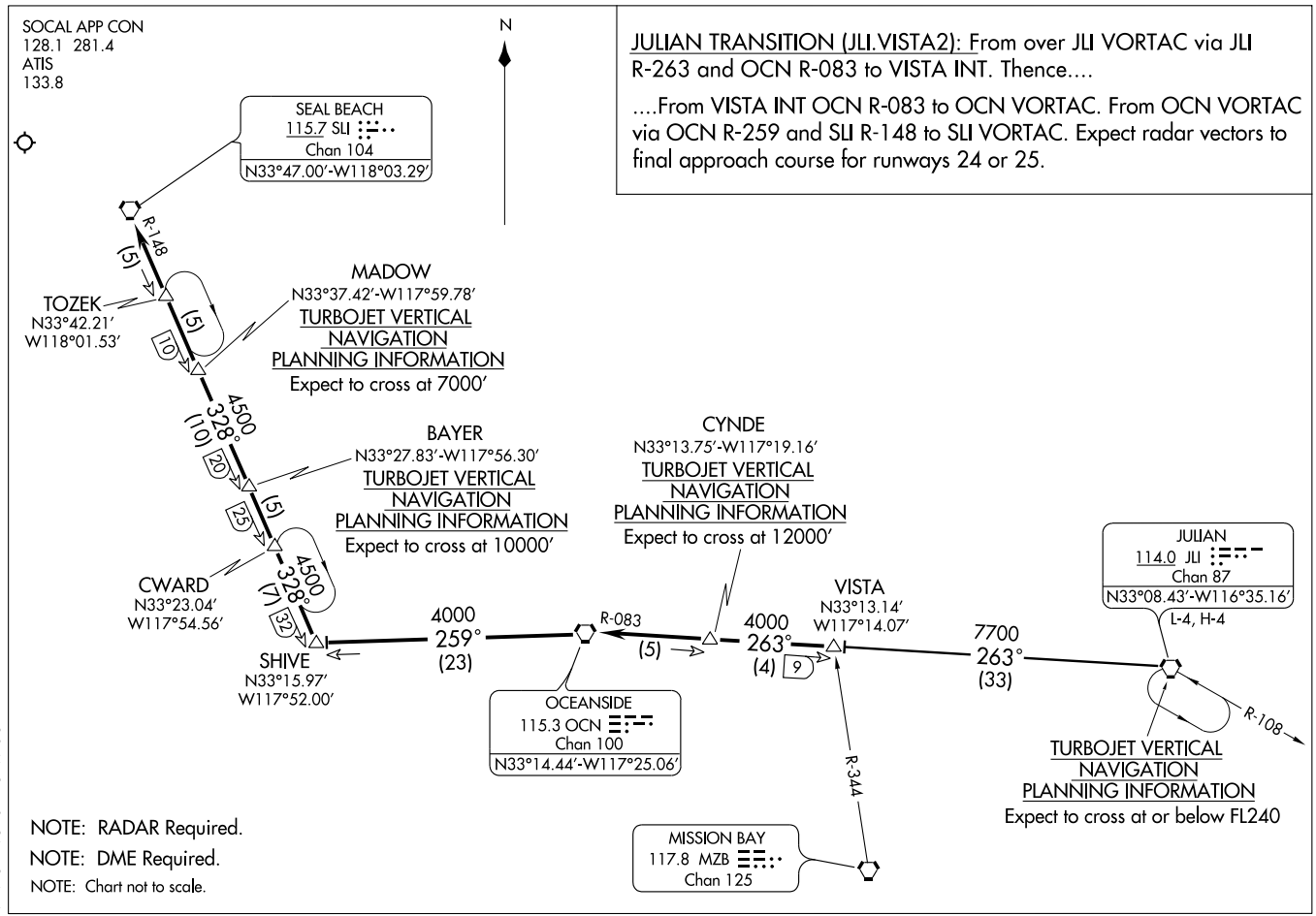
SAN MARCUS TRANSITION (VTU5.RZS): From over VTU VOR/DME via VTU R-289 and RZS R-109 to RZS VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

VISTA TWO ARRIVAL (VISTA.VISTA2) 07354

JULIAN TRANSITION (JLI.VISTA2): From over JLI VORTAC via JLI R-263 and OCN R-083 to VISTA INT. Thence....

....From VISTA INT OCN R-083 to OCN VORTAC. From OCN VORTAC via OCN R-259 and SLI R-148 to SLI VORTAC. Expect radar vectors to final approach course for runways 24 or 25.

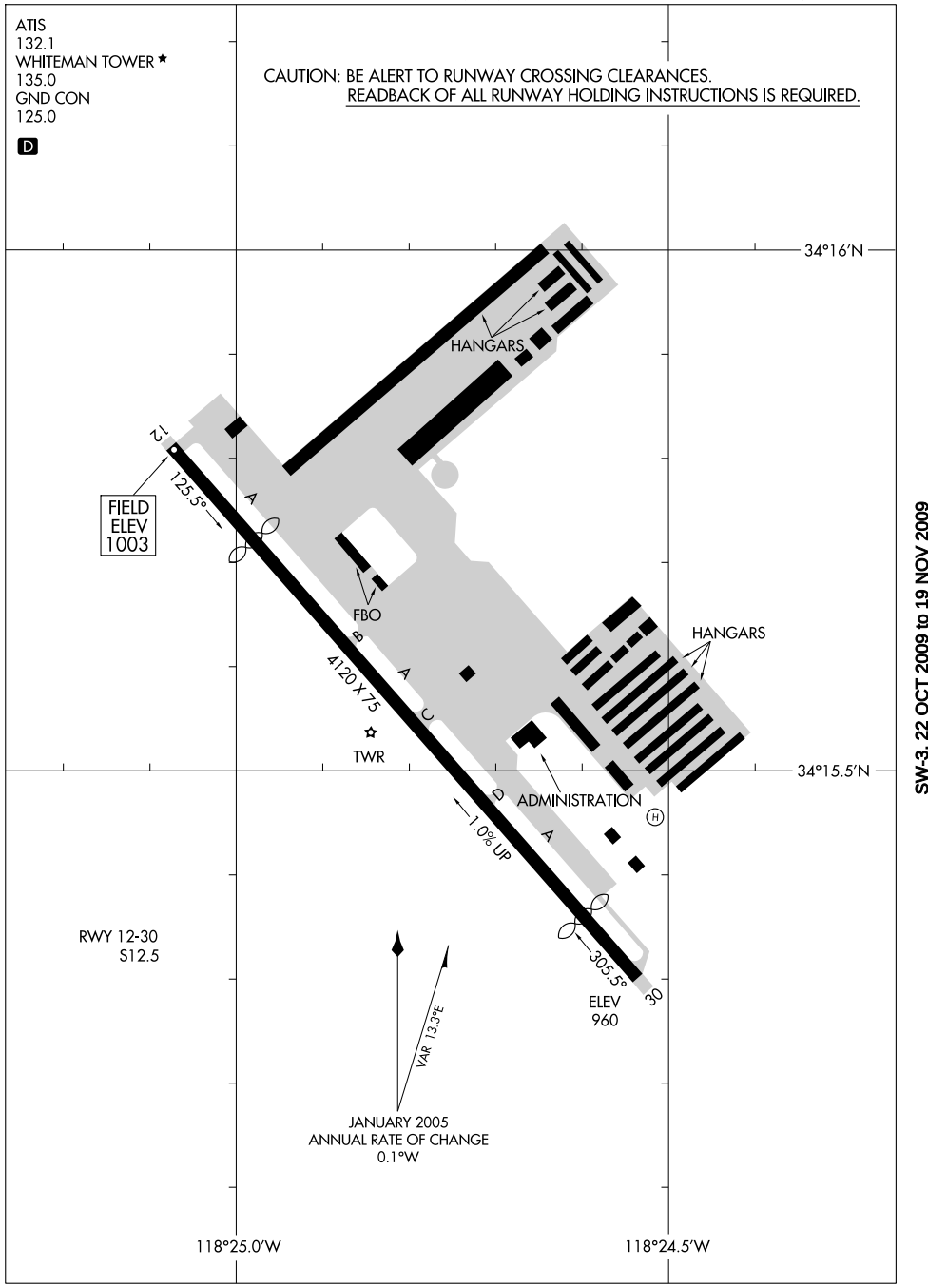


09295

AIRPORT DIAGRAM

AL-9132 (FAA)

LOS ANGELES/ WHITEMAN (WHP)
LOS ANGELES, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
110°	TDZE	N/A
	Apt Elev	1003

RNAV (GPS)-C

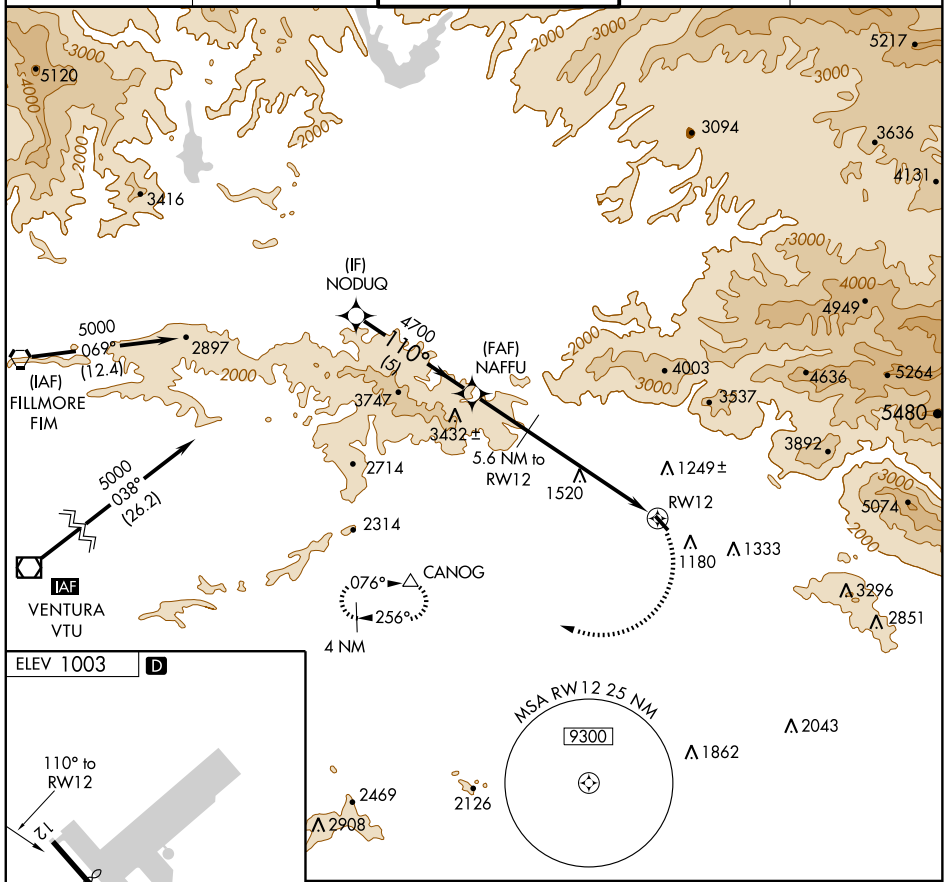
LOS ANGELES/WHITEMAN (WHP)

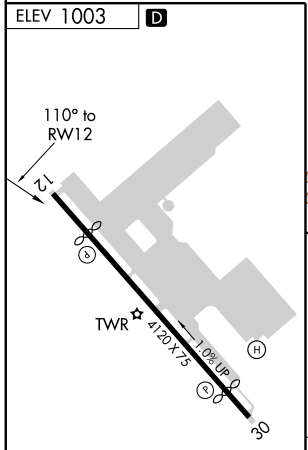
T ANA

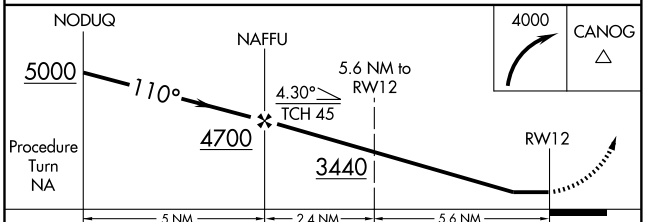
When control tower closed, use Burbank altimeter setting.
IAF ARM APPROACH MODE PRIOR TO IAF.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 4000 direct CANOG and hold.

ATIS	SOCAL APP CON	WHITEMAN TOWER ★	GND CON	UNICOM
132.1	134.2 338.2	135.0 (CTAF)	125.0	122.95







CATEGORY	A	B	C	D
CIRCLING	1900-1¼ 897 (900-1¼)		1900-2¾ 897 (900-2¾)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME VNY	APP CRS	Rwy Idg	N/A
113.1	046°	TDZE	N/A
Chan 78		Apt Elev	1003

VOR-A

LOS ANGELES/ WHITEMAN (WHP)

When control tower closed, use Burbank altimeter setting.

MISSED APPROACH: Climbing left turn to 3700 direct VNY VOR/DME then via VNY VOR/DME R-255 to CANOG INT/ VNY 5.1 DME and hold.

ATIS	SOCAL APP CON	WHITEMAN TOWER ★	GND CON	UNICOM
132.1	134.2 338.2	135.0 (CTAF)	125.0	122.95

Procedure NA for arrivals at FIM VORTAC via V518 westbound.

IAF FILLMORE 112.5 FIM Chan 72

4400 NoPT 120° (11.3)

4400 NoPT 075° (5.5) (IAF) GINNA VNY 16.9

3700 075° (6.3) SUANA VNY 11.4

4600 NoPT 053° (17.6)

IAF VENTURA 108.2 VTU Chan 19

(IF/IAF) CANOG VNY 5.1

R-120 R-255 R-317 R-320

075° 1 min 255°

3200 075° (5.1)

4600 255° (5.1)

Van Nuys

VAN NUYS 113.1 VNY Chan 78

4400 317° (14.5)

SANTA MONICA 110.8 SMO Chan 45

4400 320° (19.2)

LOS ANGELES 113.6 LAX Chan 83

10 NM

MSA VNY 25 NM

185° 7300 9300 095° 275° 6200 4400 005°

3416 2897 3747 4003 4636 4949 5264 3537 3892 5074 2714 2314 1520 1249± 1097 1180 1333 3296 2851 2043 1862 2469 2908 2126

ELEV 1003 D

TWR 4120 X 75 1.0% UP 046° 12 30

REIL Rwys 12 and 30
MIRL Rwy 12-30

One Minute Holding Pattern CANOG INT VNY 5.1

3700 VNY 113.1 VNY R-255 CANOG

VOR/DME VNY 4

3700 255° 075° 075° 3200 046°

5.1 NM 4 NM

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

CATEGORY	A	B	C	D
CIRCLING	1840-1 837 (900-1)	1840-1¼ 837 (900-1¼)	1840-2½ 837 (900-2½)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC PXN	APP CRS	Rwy Idg	3801
112.6	152°	TDZE	121
Chan 73		Apt Elev	121

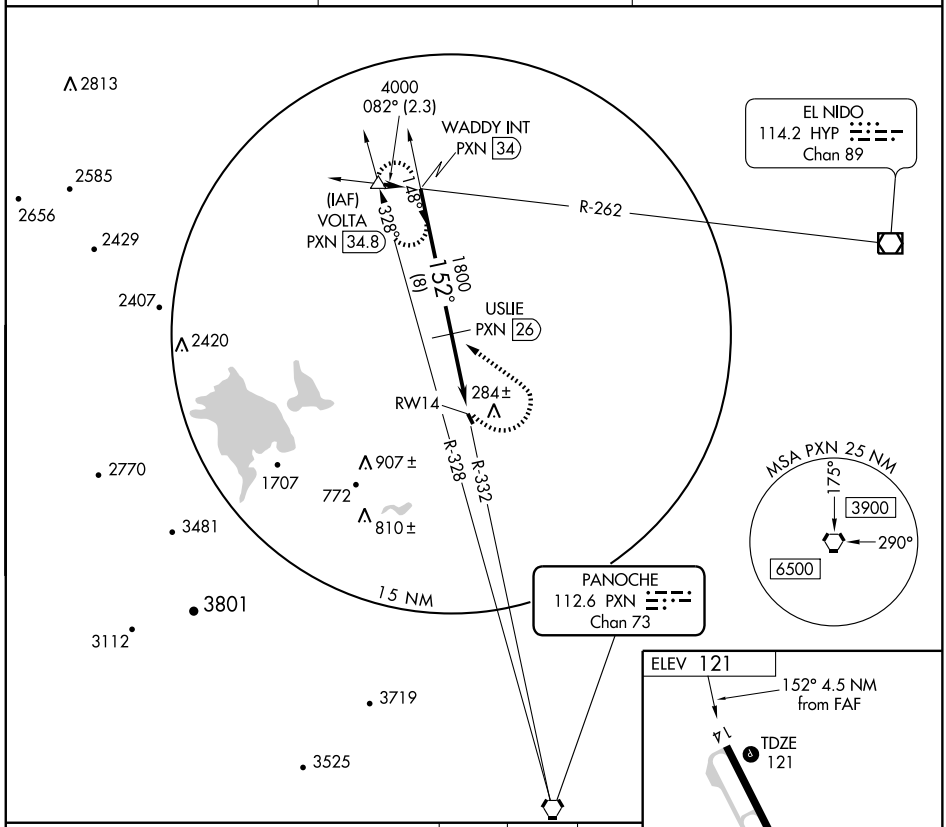
VOR/DME or GPS RWY 14

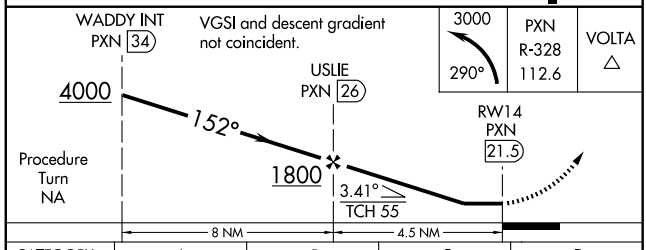
LOS BANOS MUNI (LSN)

T
NA When local altimeter setting not received, use Merced altimeter setting.

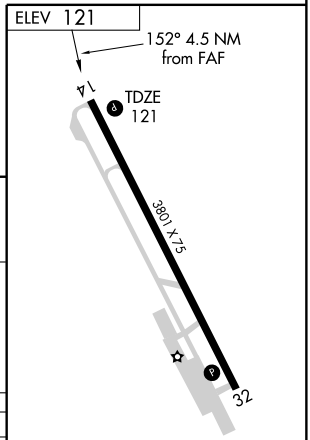
MISSED APPROACH: Climbing left turn to 3000 via heading 290° and PXN R-328 to VOLTA INT/34.8 DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.675	120.95 269.45	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-14	680-1 559 (600-1)	680-1¼ 559 (600-1¼)	NA	
CIRCLING	680-1 559 (600-1)	680-1¼ 559 (600-1¼)	NA	



MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC PXN	APP CRS	Rwy Idg	3801
112.6	333°	TDZE	121
Chan 73		Apt Elev	121

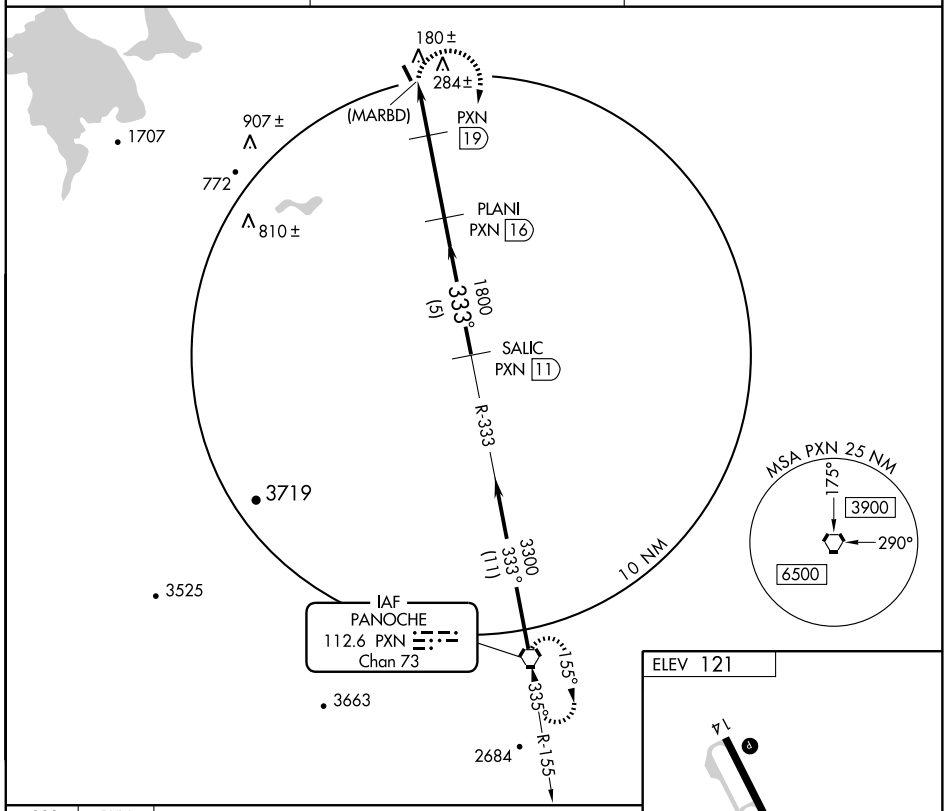
VOR/DME or GPS RWY 32

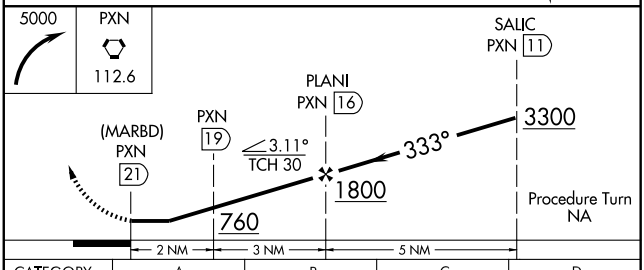
LOS BANOS MUNI (LSN)

T
NA When local altimeter setting not received, use Merced altimeter setting.

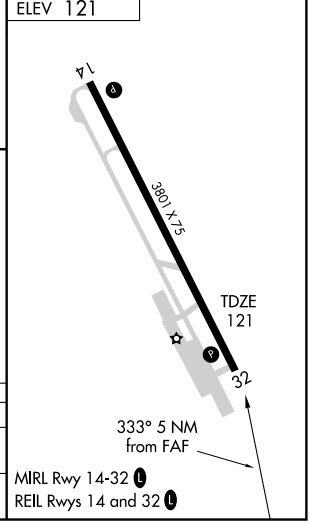
MISSED APPROACH: Climbing right turn to 5000 direct PXN VORTAC and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.675	120.95 269.45	122.8 (CTAF)





CATEGORY	A	B	C	D
S-32	620-1 499 (500-1)	620-1¼ 499 (500-1¼)	620-1½ 499 (500-1½)	NA
CIRCLING	680-1 559 (600-1)	680-1¼ 559 (600-1¼)	680-1½ 559 (600-1½)	NA



SW-2, 22 OCT 2009 to 19 NOV 2009

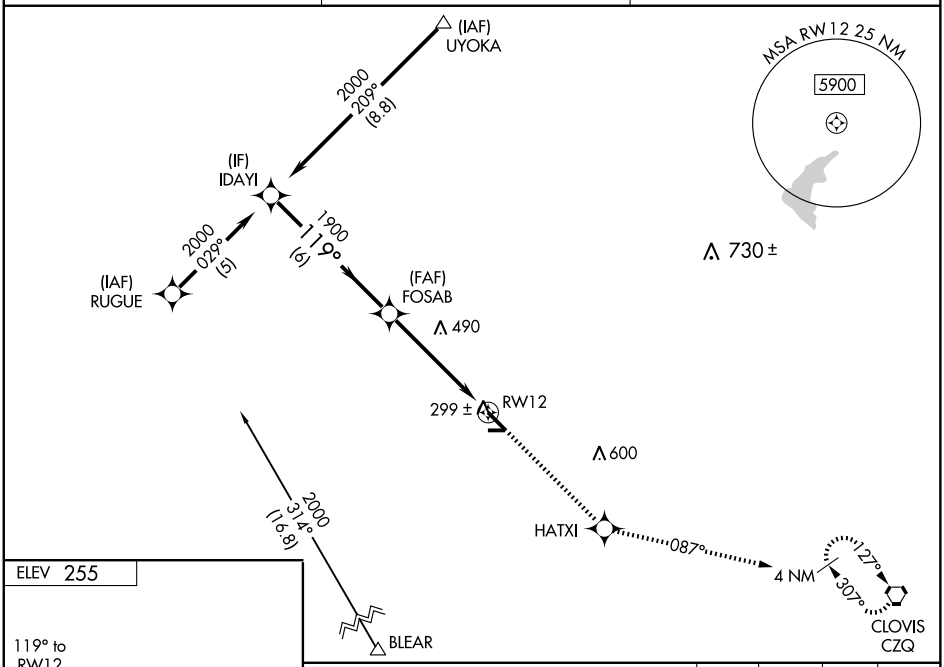
WAAS	APP CRS	Rwy Idg	5545
CH 62909	119°	TDZE	253
W12A		Apt Elev	255

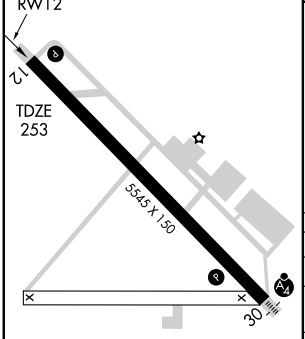
RNAV (GPS) RWY 12
MADERA MUNI (MAE)

DME/DME RNP- 0.3 NA. Circling NA to Rwy 7/25.
Baro-VNAV NA when using Fresno Yosemite Intl altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).
When local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase all DA 64 feet and all visibilities ¼ mile; increase all MDA 80 feet and all visibilities ¼ mile.
VDP NA when using Fresno Yosemite Intl altimeter setting.

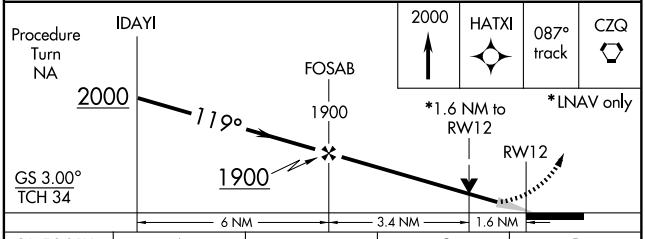
MISSED APPROACH: Climb to 2000 direct HATXI and via 087° track to CZQ VORTAC and hold.

ASOS	FRESNO APP CON	UNICOM
134.725	119.45	122.8 (CTAF) L





MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	503-1 250 (300-1)			NA
LNAV/VNAV DA	569-1¼ 316 (400-1¼)			NA
LNAV MDA	800-1 547 (600-1)		800-1½ 547 (600-1½)	NA
CIRCLING	800-1 545 (600-1)		800-1½ 545 (600-1½)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	5545
CH 90209	299°	TDZE	255
W30A		Apt Elev	255

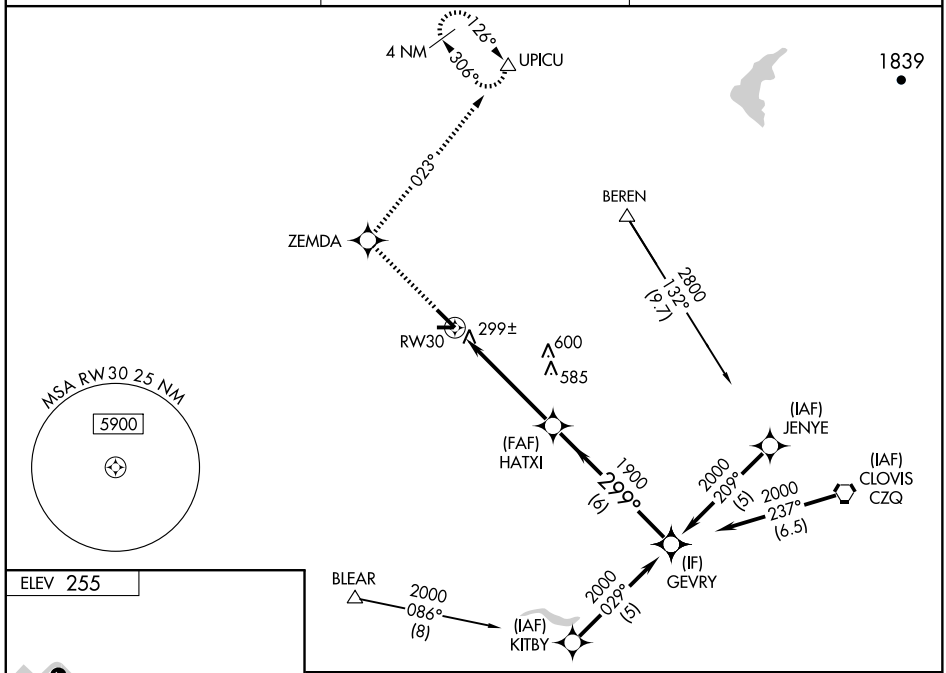
RNAV (GPS) RWY 30
MADERA MUNI (MAE)

DME/DME RNP- 0.3 NA. Circling NA to Rwy 7/25.
Baro-VNAV NA when using Fresno Yosemite Intl altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F).
When local altimeter setting not received, use Fresno Yosemite Intl altimeter setting and increase all DA 64 feet and all visibilities ¼ mile; increase all MDA 80 feet and all visibilities ¼ mile.
VDP NA when using Fresno Yosemite Intl altimeter setting.

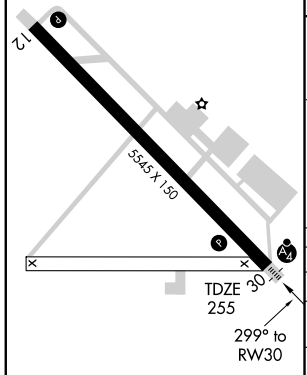
MALSF

MISSED APPROACH: Climb to 2100 direct ZEMDA and via 023° track to UPICU and hold.

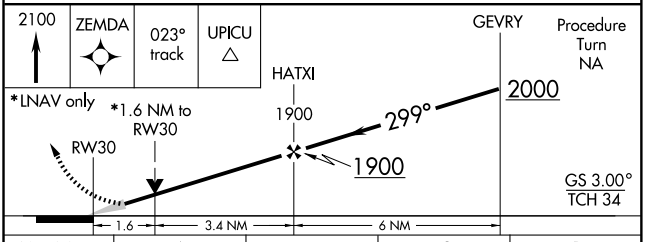
ASOS	FRESNO APP CON	UNICOM
134.725	119.45	122.8 (CTAF) L



ELEV 255



MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	505-1 250 (300-1)			NA
LNAV/VNAV DA	584-1¼ 329 (400-1¼)			NA
LNAV MDA	800-1 545 (600-1)		800-1½ 545 (600-1½)	NA
CIRCLING	800-1 545 (600-1)		800-1½ 545 (600-1½)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

MADERA, CALIFORNIA AL-6399 (FAA)

VORTAC CZQ	APP CRS	Rwy Idg	5545
112.9	277°	TDZE	253
Chan 76		Apt Elev	253

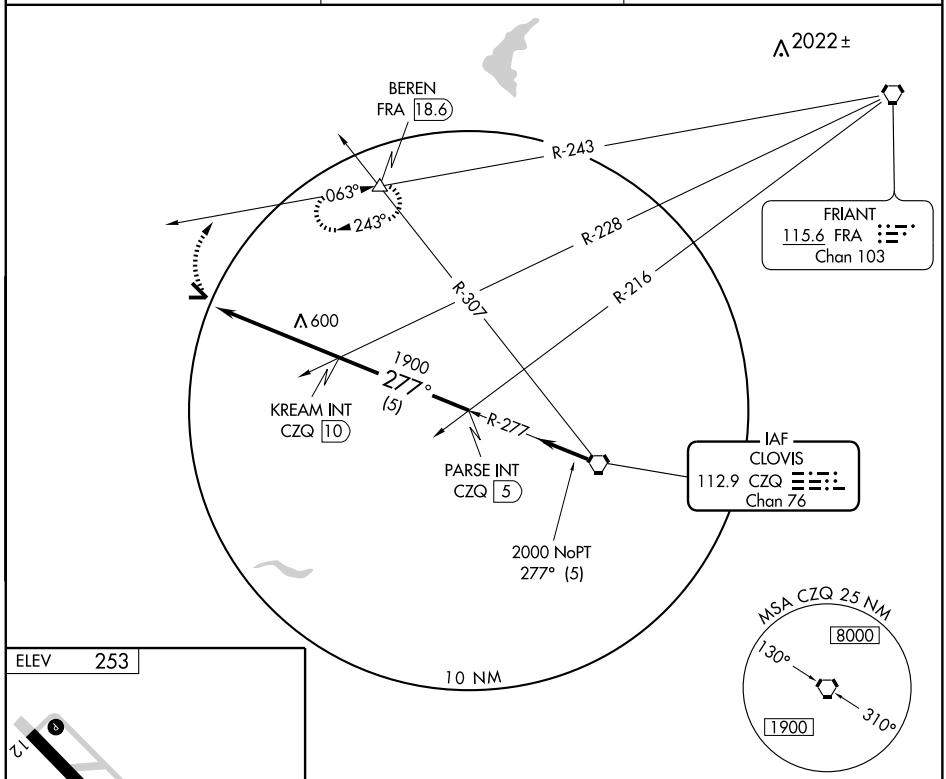
VOR RWY 30
MADERA MUNI (MAE)

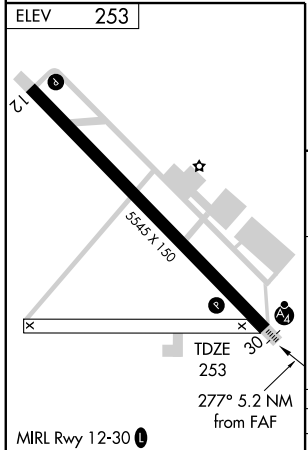
NA — Circling to Rwy 7-25 not authorized.

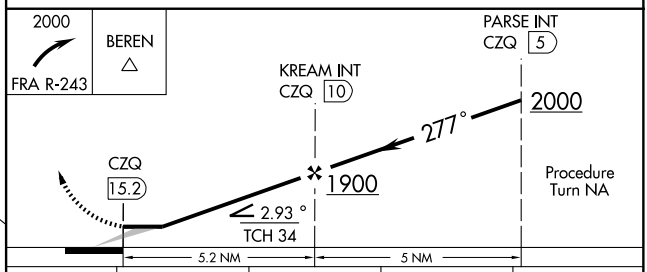
MALSF

MISSED APPROACH: Climbing right turn to 2000 via FRA R-243 to BEREN Int/FRA 18.6 DME and hold.

ASOS	FRESNO APP CON	UNICOM
134.725	119.45	122.8 (CTAF) L







FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

CATEGORY	A	B	C	D
S-30	960-1	707 (800-1)	960-2 707 (800-2)	NA
CIRCLING	960-1	707 (800-1)	960-2 707 (800-2)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

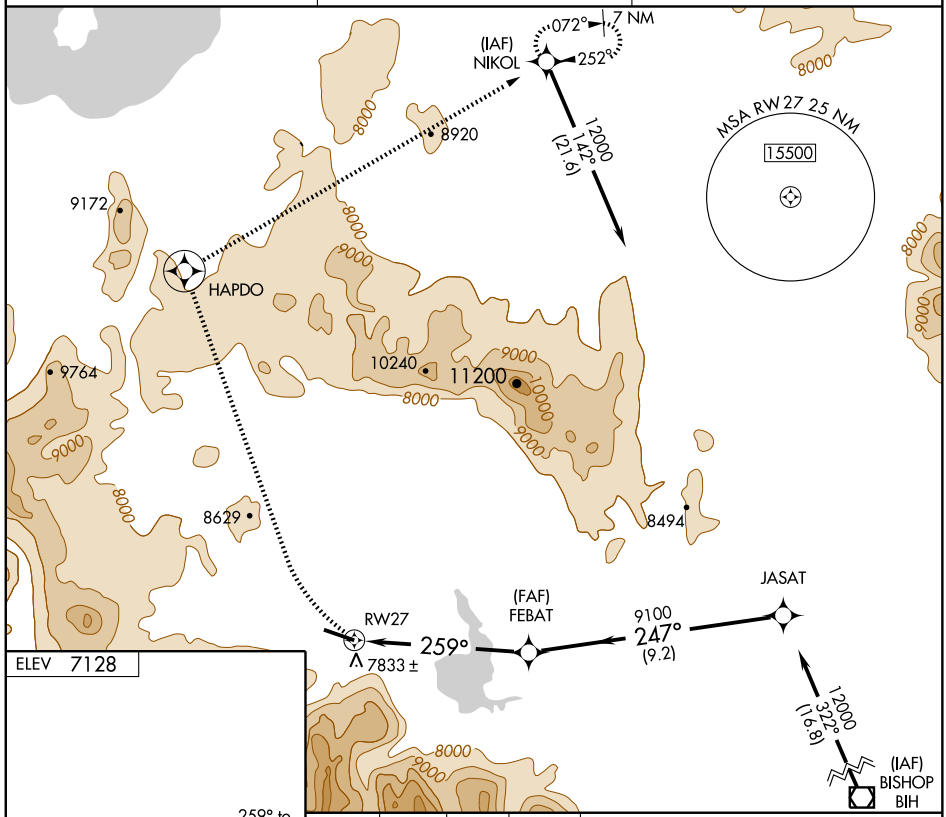
APP CRS	Rwy Idg	7000
259°	TDZE	7092
	Apt Elev	7128

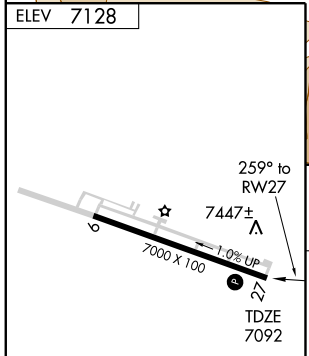
RNAV (GPS) RWY 27
MAMMOTH YOSEMITE (MMH)

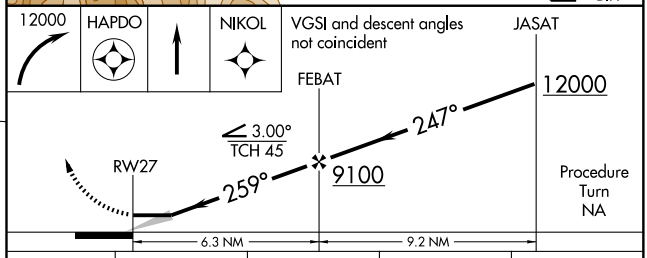
T NA — GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Circling NA south of Rwy 9-27. Circling NA at night.

MISSED APPROACH: Climbing right turn to 12000 direct HAPDO WP then direct NIKOL WP and hold.

AWOS-3	OAKLAND CENTER	UNICOM
118.05	125.75 284.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	8380-1¼ 1288 (1300-1¼)	8380-1½ 1288 (1300-1½)	8380-3 1288 (1300-3)	NA
CIRCLING	8380-1¼ 1252 (1300-1¼)	8380-1½ 1252 (1300-1½)	8380-3 1252 (1300-3)	NA

REIL Rwy 27 L
MIRL Rwy 9-27 L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3483
108°	TDZE	134
	Apt Elev	134

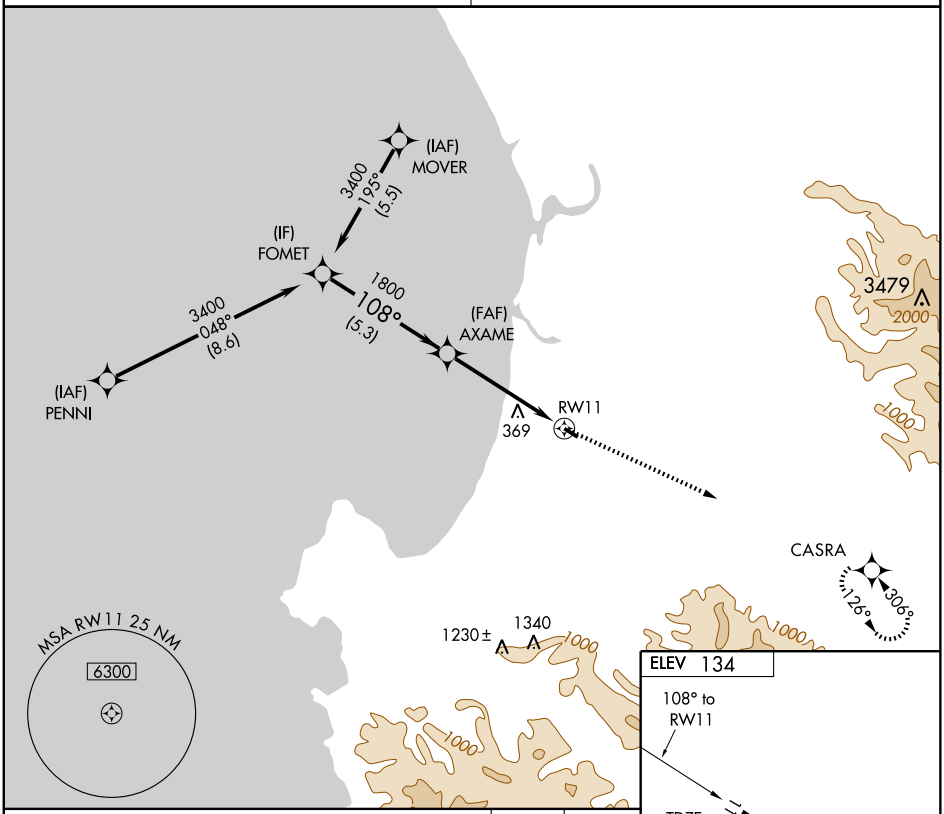
RNAV (GPS) RWY 11
MARINA MUNI (OAR)

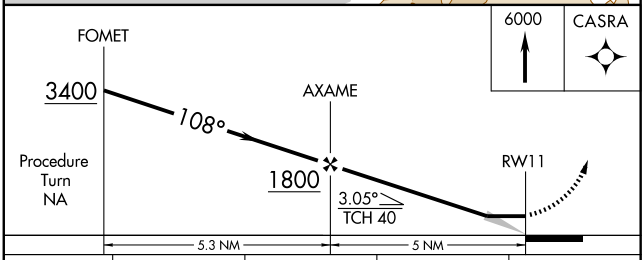
T
NA Use Monterey altimeter setting.
GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 6000 direct CASRA WP and hold.

NORCAL APP CON
133.0 251.15

UNICOM
122.7 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	720-1	586 (600-1)	NA	
CIRCLING	720-1	586 (600-1)	NA	

MIRL Rwy 11-29 L

SW-2, 22 OCT 2009 to 19 NOV 2009

MARINA, CALIFORNIA AL-5271 (FAA)

APP CRS	Rwy Idg	3483
288°	TDZE	134
	Apt Elev	134

RNAV (GPS) RWY 29

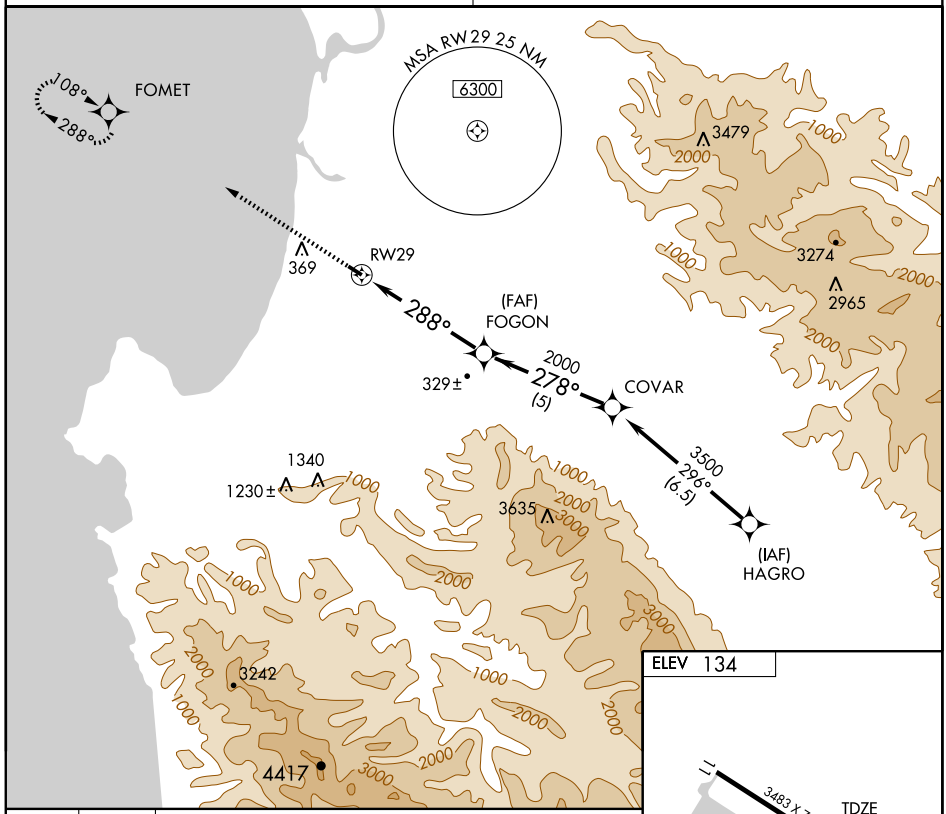
MARINA MUNI (OAR)

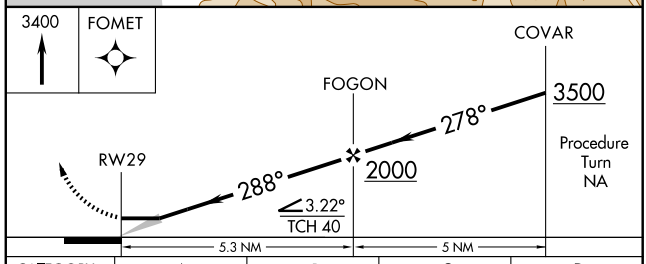
T Use Monterey altimeter setting.
NA GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA.

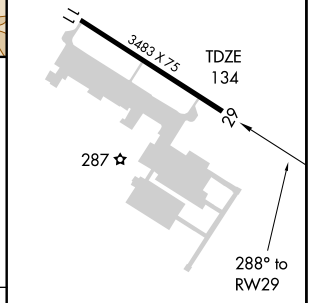
MISSED APPROACH: Climb to 3400 direct FOMET WP and hold.

NORCAL APP CON
133.0 251.15

UNICOM
122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	620-1	486 (500-1)	NA	
CIRCLING	700-1	566 (600-1)	NA	

MIRL Rwy 11-29 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC SNS 117.3 Chan 120	APP CRS 260°	Rwy Idg 3483 TDZE 134 Apt Elev 134

VOR/DME RWY 29

MARINA MUNI (OAR)

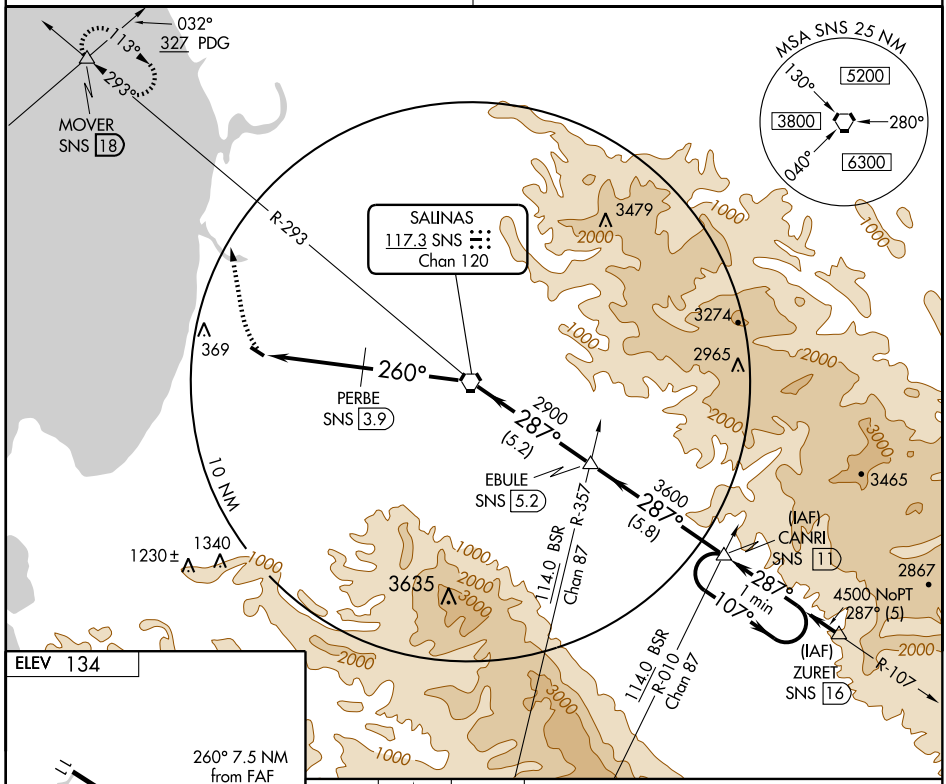
T
A NA

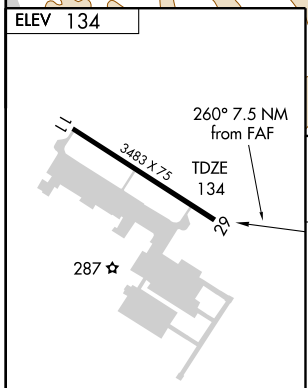
Use Monterey altimeter setting.

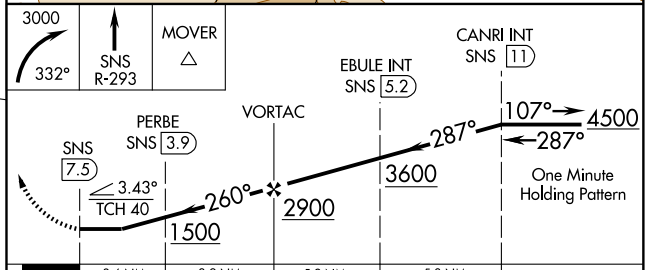
MISSED APPROACH: Climbing right turn to 3000 via heading 332° and SNS R-293 to MOVER INT/SNS 18 DME and hold.

NORCAL APP CON
133.0 251.15

UNICOM
122.7 (CTAF) L







MIRL Rwy 11-29 L

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-29	660-1 526 (600-1)		NA	
CIRCLING	680-1 546 (600-1)	720-1 586 (600-1)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC SNS	APP CRS	Rwy Idg	3483
117.3	082°	TDZE	134
Chan 120		Apt Elev	134

VOR RWY 11

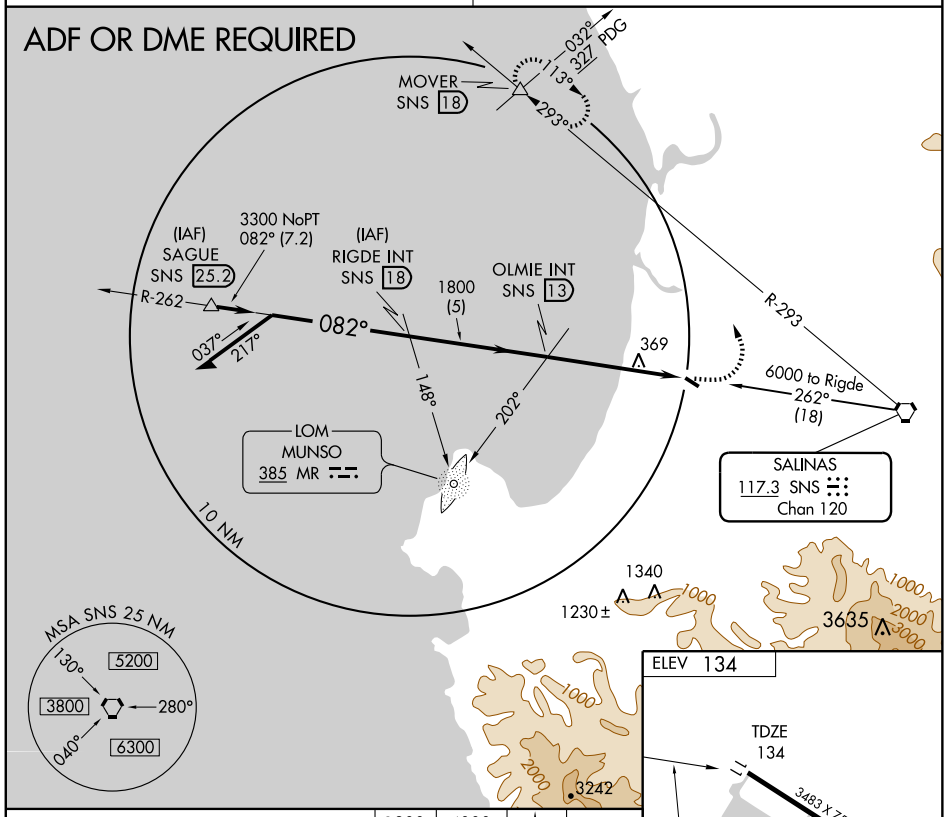
MARINA MUNI (OAR)

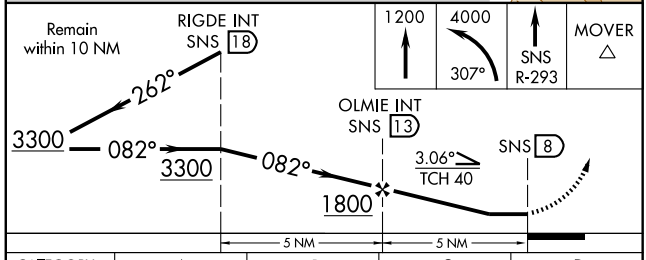
Use Monterey altimeter setting.

MISSED APPROACH: Climb to 1200, then climbing left turn to 4000 via heading 307° and SNS R-293 to MOVER Int/SNS 18 DME and hold.

NORCAL APP CON	UNICOM
133.0 251.15	122.7 (CTAF)

ADF OR DME REQUIRED





CATEGORY	A	B	C	D
S-11	720-1	586 (600-1)	NA	
CIRCLING	720-1	586 (600-1)	NA	

MIRL Rwy 11-29 (L)

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
290°	TDZE	N/A
	Apt Elev	2254

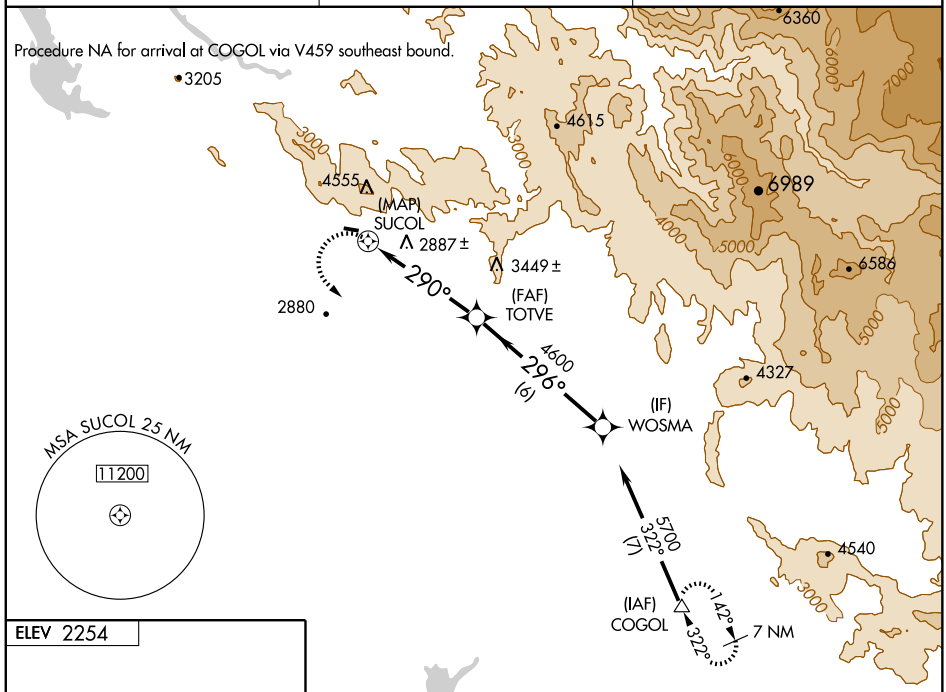
RNAV (GPS)-A
MARIPOSA-YOSEMITE (MPI)

DME/DME RNP-0.3 NA.
Circling not authorized north of Rwy 8-26.
Procedure not authorized at night.
If local altimeter setting not received, use Atwater altimeter setting and increase all MDAs 350 feet.

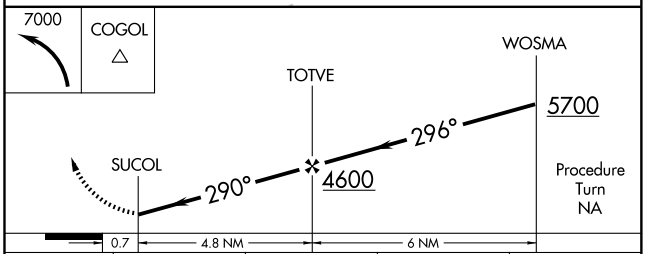
MISSED APPROACH: Climbing left turn to 7000 direct COGOL and hold.

AWOS-3	OAKLAND CENTER	UNICOM
135.6	121.25 327.0	122.7 (CTAF) L

Procedure NA for arrival at COGOL via V459 southeast bound.



ELEV 2254



CATEGORY	A	B	C	D
CIRCLING	3900-1¼ 1646 (1700-1¼)	3900-1½ 1646 (1700-1½)	NA	

MIRL Rwy 8-26 L

SW-2, 22 OCT 2009 to 19 NOV 2009

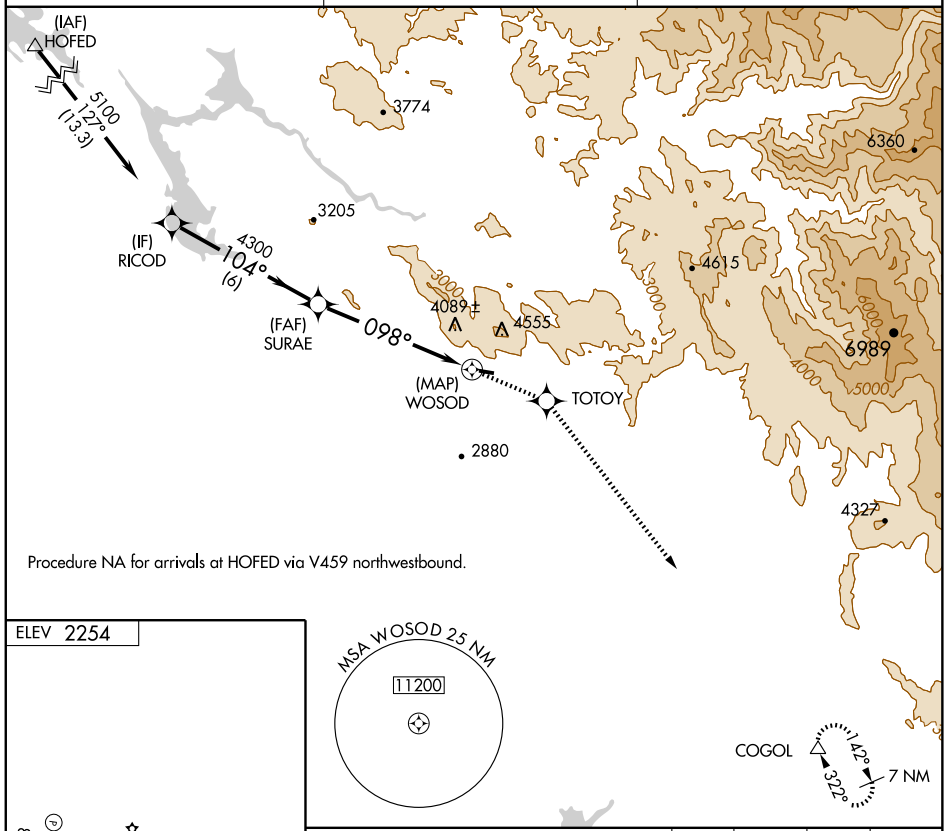
APP CRS	Rwy Idg	N/A
098°	TDZE	N/A
	Apt Elev	2254

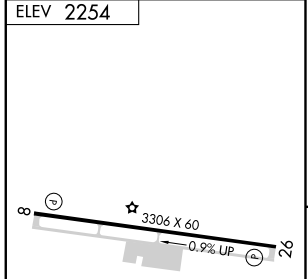
RNAV (GPS)-B
MARIPOSA-YOSEMITE (MPI)

DME/DME RNP- 0.3 NA.
Circling not authorized north of Rwy 8-26.
Procedure not authorized at night.
If local altimeter setting not received, use Atwater altimeter setting and increase all MDAs 350 feet.

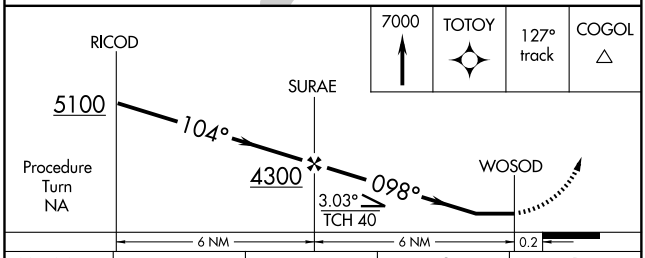
MISSED APPROACH: Climb to 7000 direct TOTOY and via 127° track to COGOL and hold.

AWOS-3	OAKLAND CENTER	UNICOM
135.6	121.25 327.0	122.7 (CTAF)



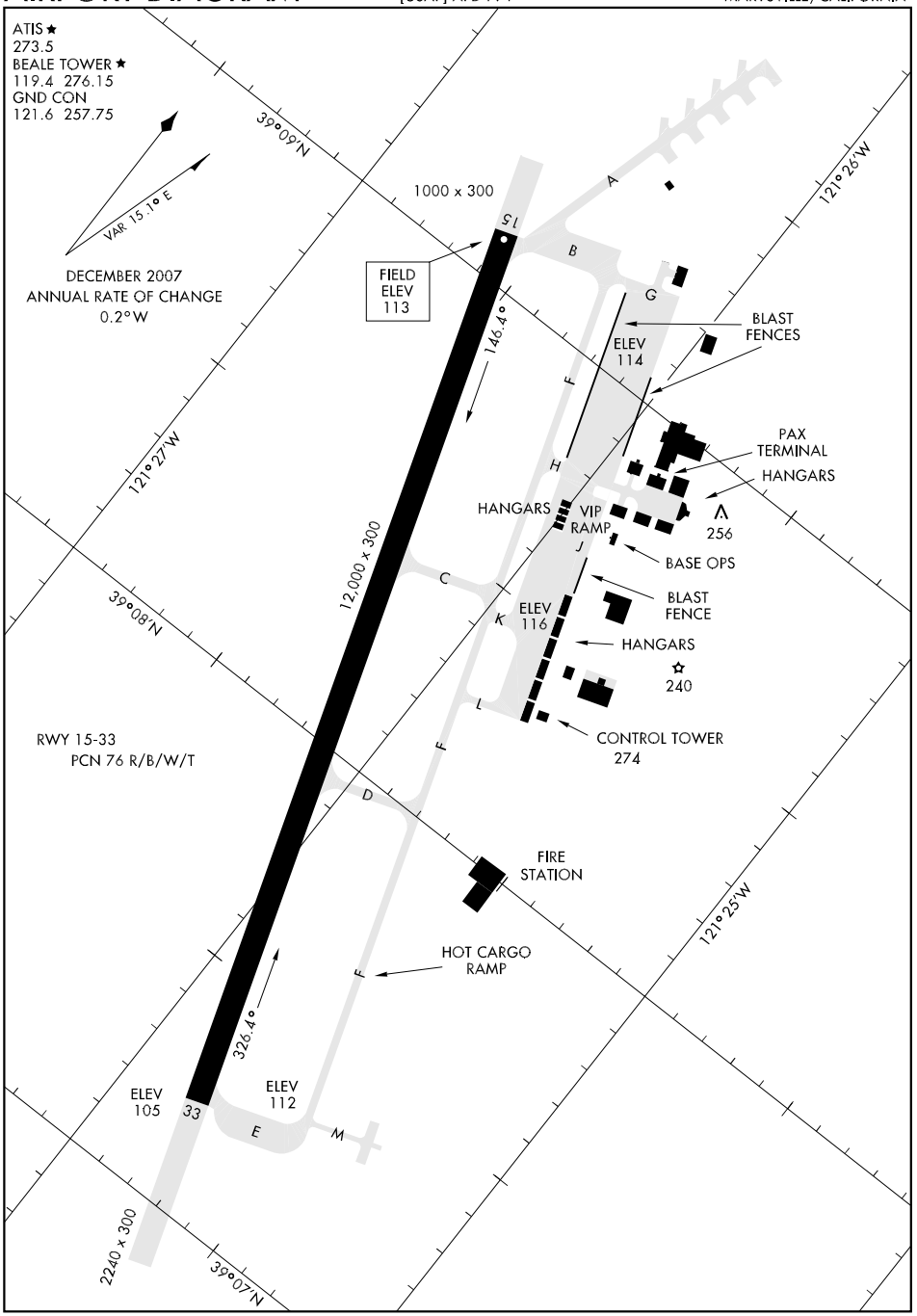


MIRL Rwy 8-26



CATEGORY	A	B	C	D
CIRCLING	4180-1¼ 1926 (2000-1¼)	4180-1½ 1926 (2000-1½)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009



SW-2, 22 OCT 2009 to 19 NOV 2009

HI-ILS or LOC/DME RWY 15

BEALE AFB (KBAB)

LOC I-BAB	APCH CRS	Rwy ldg 12,000 / TDZE 113 / Arpt Elev 113
109.5	145°	JAL-771 [USAF]

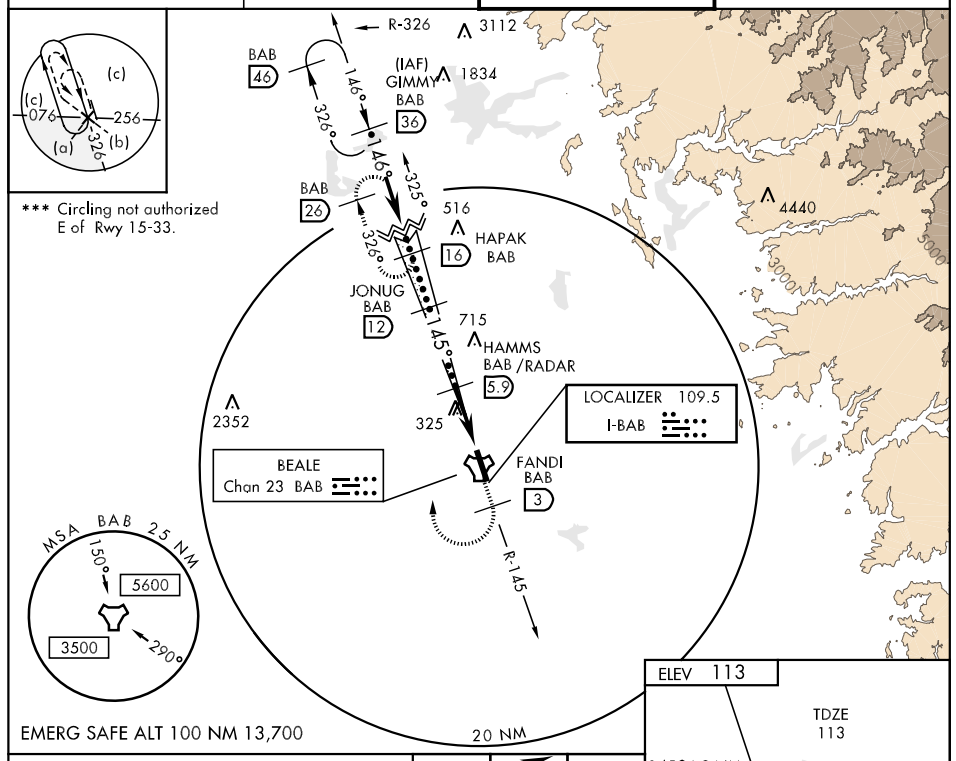
▼ * When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT CD vis 1½ miles, CAT E vis to 1¾ miles.

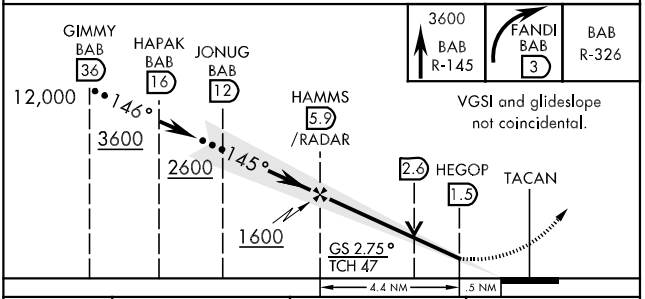
ALSF-1

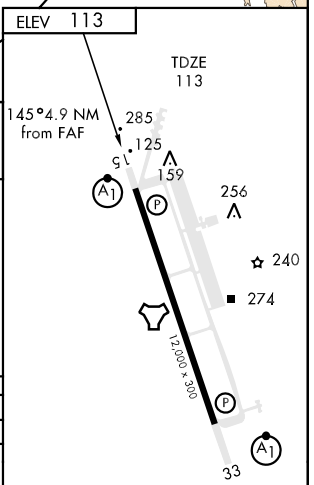
MISSED APPROACH: Climb to 3600 via BAB TACAN R-145, at FANDI, turn right, intercept BAB R-326 to HAPAK and hold.

ATIS ★	NORCAL APP CON	BEALE TOWER ★	GND CON
273.5	125.4 259.1	119.4 276.15	121.6 257.75

*** Circling not authorized E of Rwy 15-33.







CATEGORY	C	D	E
S-ILS 15 *	313/24 200 (200-½)		
S-LOC 15 **	620/50 507 (600-1)		620/60 507 (600-1¼)
CIRCLING ***	620-1½ 507 (600-1½)	680-2 567 (600-2)	

HI-ILS or LOC/DME RWY 15

SW-2, 22 OCT 2009 to 19 NOV 2009

MARYSVILLE, CALIFORNIA

HI-ILS or LOC/DME RWY 33

BEALE AFB (KBAB)

LOC I-MIZ	APCH CRS	Rwy ldg 12,000 TDZE 105 Arpt Elev 113
109.5	325°	

JAL-771 [USAF]

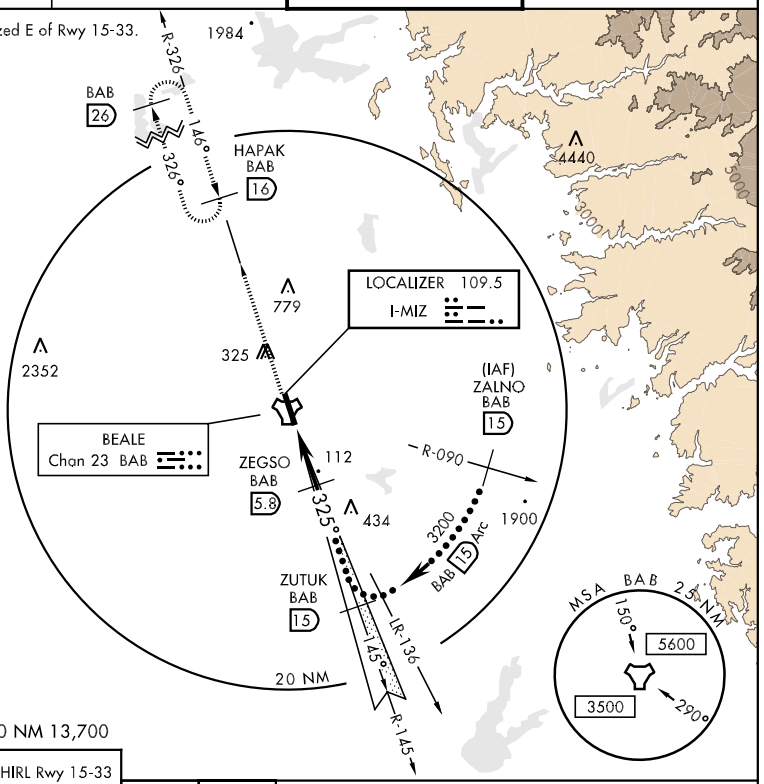
▼ * When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT CD RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.

ALSF-1 (A1)

MISSED APPROACH: Climb to 3600 via BAB TACAN R-326 to HAPAK and hold.

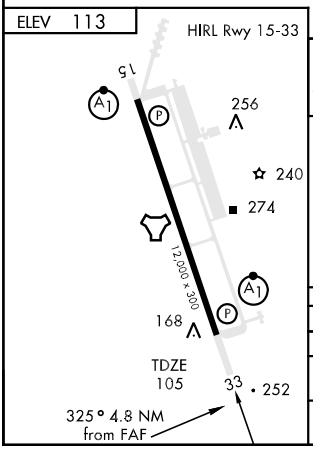
ATIS ★	NORCAL APP CON	BEALE TOWER ★	GND CON
273.5	125.4 259.1	119.4 276.15	121.6 257.75

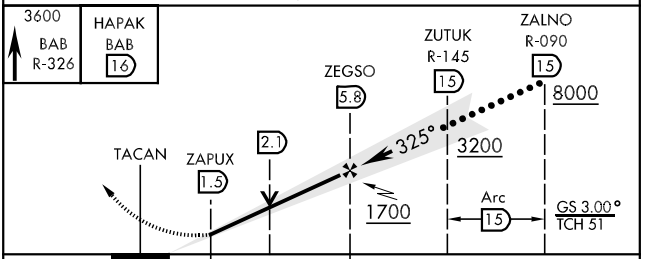
*** Circling not authorized E of Rwy 15-33.



EMERG SAFE ALT 100 NM 13,700

ELEV 113





CATEGORY	C	D	E
S-ILS 33 *	305/24 200 (200-½)		
S-LOC 33 **	520/40 415 (500-¾)		520/50 415 (500-1)
CIRCLING ***	600-1½ 487 (500-1½)	680-2 567 (600-2)	

SW-2, 22 OCT 2009 to 19 NOV 2009

MARYSVILLE, CALIFORNIA
Orig 09155

39°08'N-121°26'W

BEALE AFB (KBAB)

HI-ILS or LOC/DME RWY 33

HI-TACAN RWY 15

TACAN	APCH CRS	Rwy ldg	12,000
BAB Chan 23	153°	TDZE	113
		Arpt Elev	113

JAL-771 [USAF]

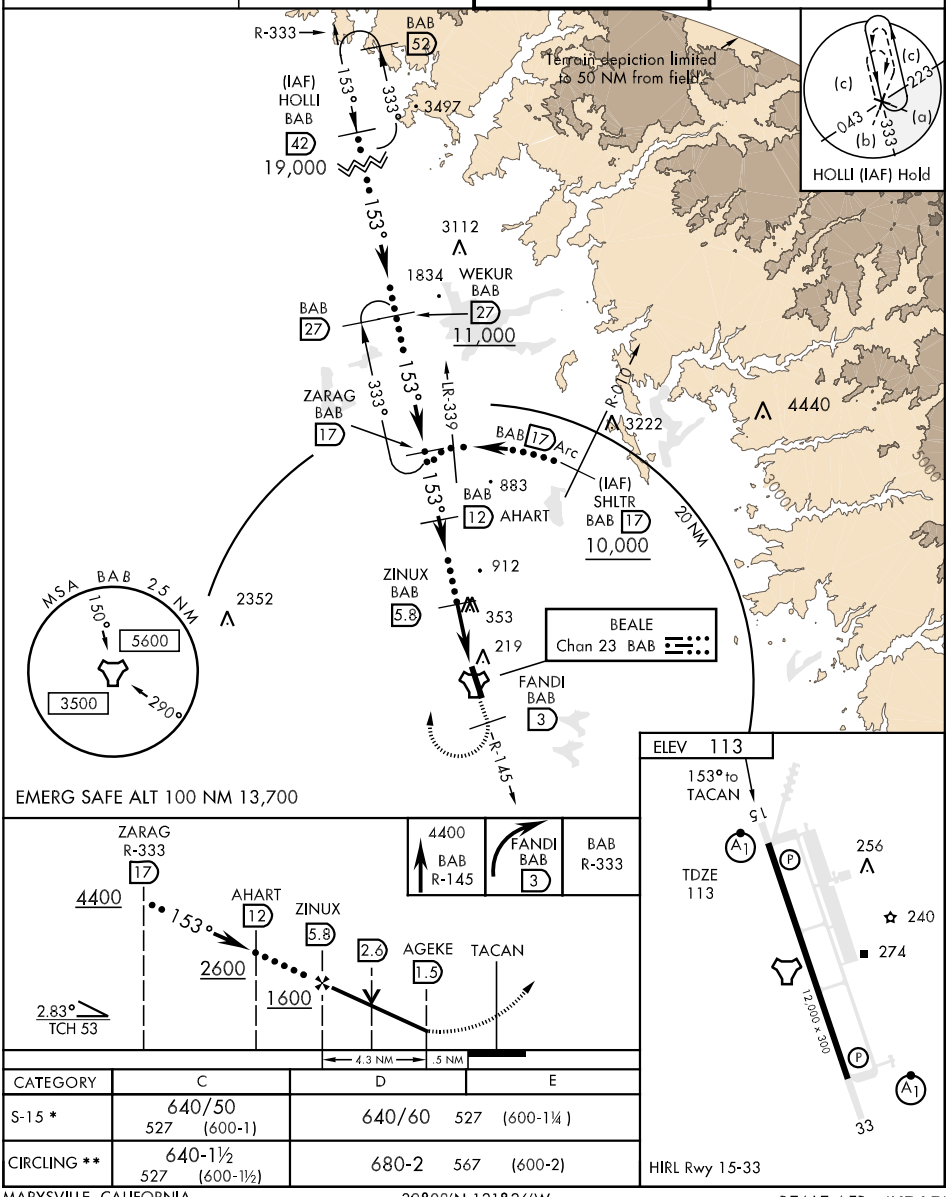
BEALE AFB (KBAB)

▼ * When ALS inop, increase CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.
** Circling not authorized E of Rwy 15-33.

ALSF-1

MISSED APPROACH: Climb to 4400 via BAB TACAN R-145, at FANDI, turn right, intercept BAB R-333 to ZARAG and hold, continue climb in hold to 4400.

ATIS ★	NORCAL APP CON	BEALE TOWER ★	GND CON
273.5	125.4 259.1	119.4 276.15	121.6 257.75



CATEGORY	C	D	E
S-15 *	640/50 527 (600-1)	640/60 527 (600-1¼)	
CIRCLING **	640-1½ 527 (600-1½)	680-2 567 (600-2)	

MARYSVILLE, CALIFORNIA

HI-TACAN RWY 33

BEALE AFB (KBAB)

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
BAB Chan 23	317°	12,000	105	113

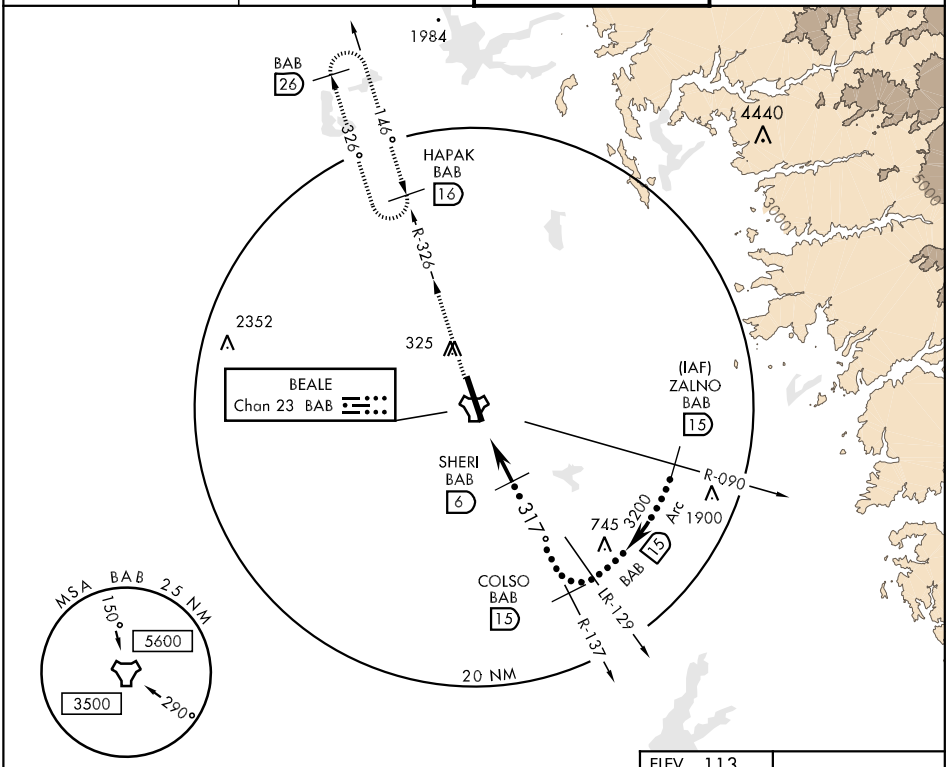
JAL-771 [USAF]

▼ * When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling not authorized E of Rwy 15-33.

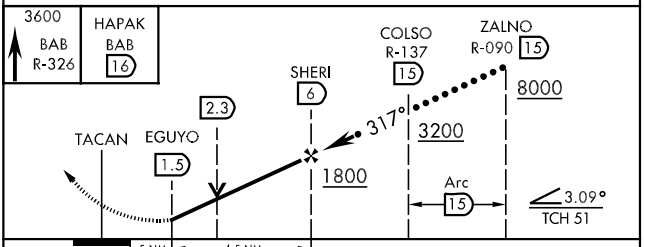
ALSF-1

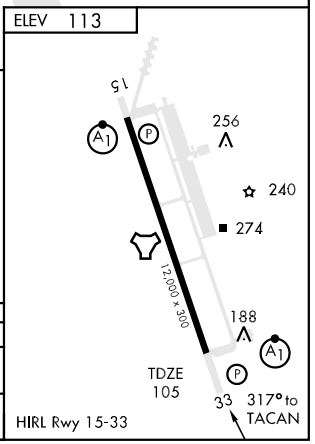
MISSED APPROACH: Climb to 3600 via BAB TACAN R-326 to HAPAK and hold.

ATIS ★	NORCAL APP CON		BEALE TOWER ★		GND CON	
273.5	125.4	259.1	119.4	276.15	121.6	257.75



EMERG SAFE ALT 100 NM 13,700





CATEGORY	C	D	E
S-33 *	580/40 475 (500-¾)	580/50 475 (500-1)	580/60 475 (500-1¼)
CIRCLING **	600-1½ 487 (500-1½)	680-2 567 (600-2)	

SW-2, 22 OCT 2009 to 19 NOV 2009

ILS or LOC/DME RWY 15

LOC I-BAB	APCH CRS	Rwy ldg 12,000 TDZE 113 Arpt Elev 113
109.5	145°	

AL-771 [USAF]

BEALE AFB (KBAB)

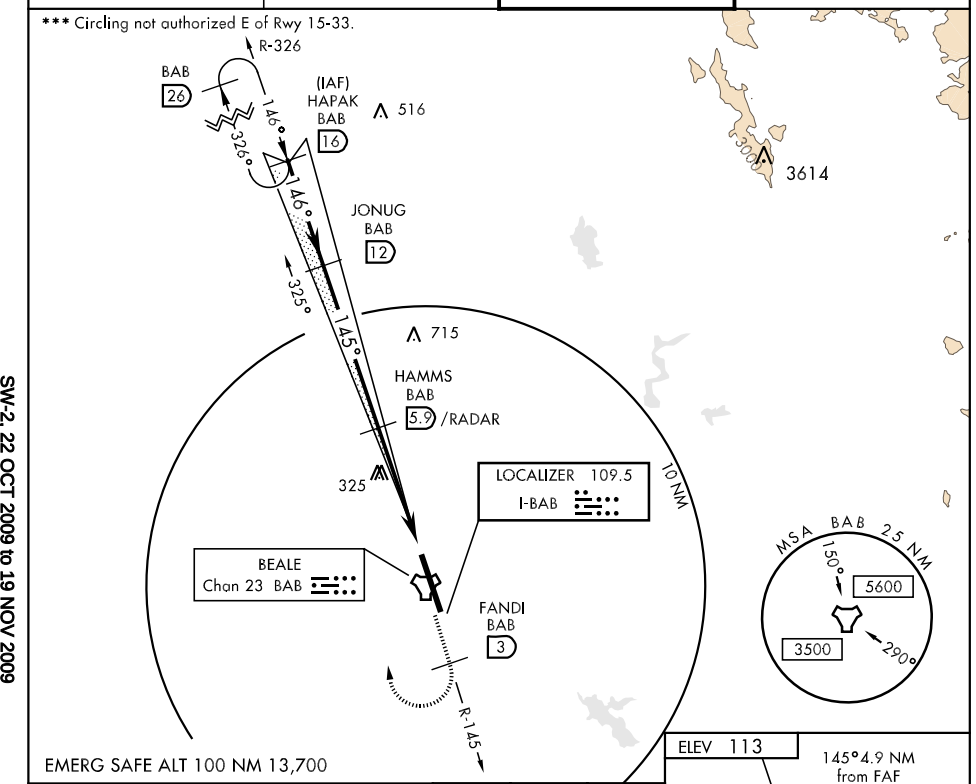
▼ * When ALS inop, increase all CAT RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD vis to 1½ miles, CAT E vis to 1¾ miles.

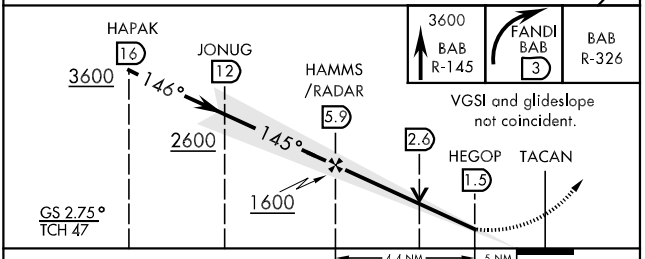
ALSF-1

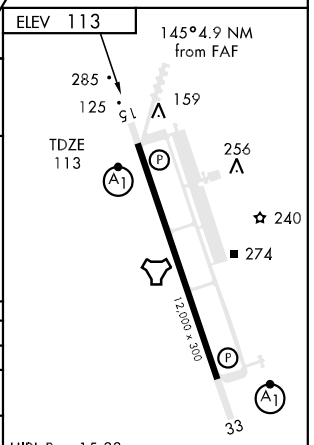
MISSED APPROACH: Climb to 3600 via BAB TACAN R-145, at FANDI turn right, intercept BAB R-326 to HAPAK and hold.

ATIS ★	NORCAL APP CON	BEALE TOWER ★	GND CON
273.5	125.4 259.1	119.4 276.15	121.6 257.75

*** Circling not authorized E of Rwy 15-33.







CATEGORY	A	B	C	D	E
S-ILS 15 *	313/24		200 (200-½)		
S-LOC 15 **	620/24 507 (600-½)		620/50 507 (600-1)		620/60 507 (600-1¼)
CIRCLING ***	620-1 507 (600-1)		620-1½ 507(600-1½)	680-2 567 (600-2)	

SW-2, 22 OCT 2009 to 19 NOV 2009

MARYSVILLE, CALIFORNIA

ILS or LOC/DME RWY 33

LOC I-MIZ	APCH CRS	Rwy ldg 12,000 TDZE 105 Arpt Elev 113
109.5	325°	

AL-771 [USAF]

BEALE AFB (KBAB)

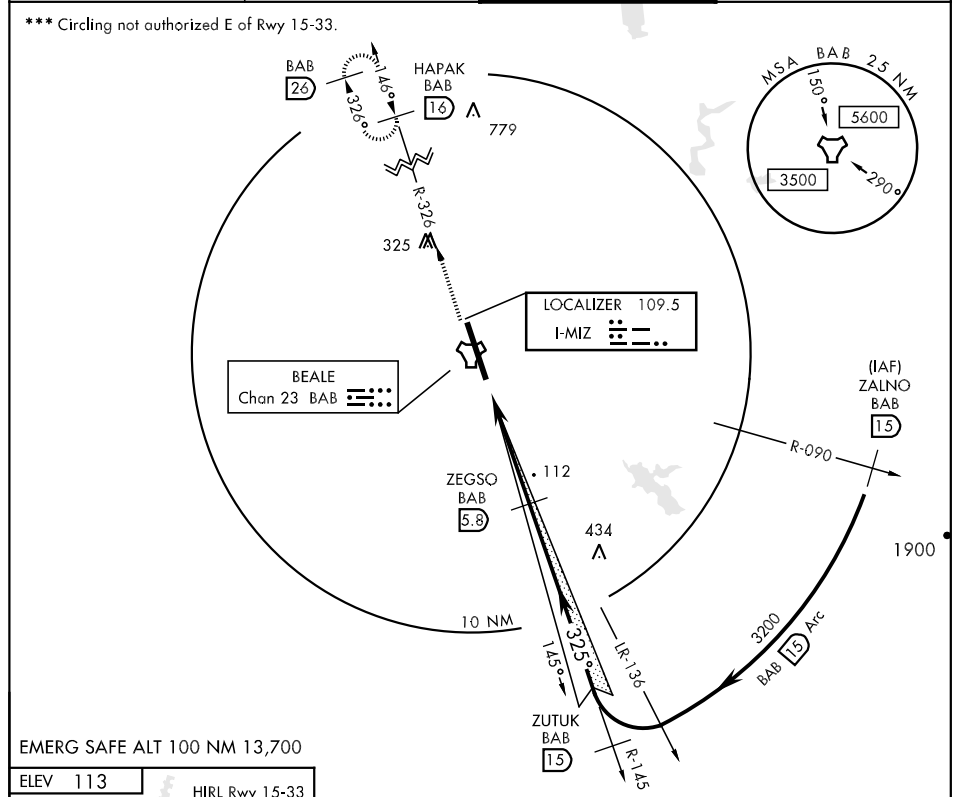
▼ * When ALS inop, increase CAT ABCDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.

ALSF-1 (A1)

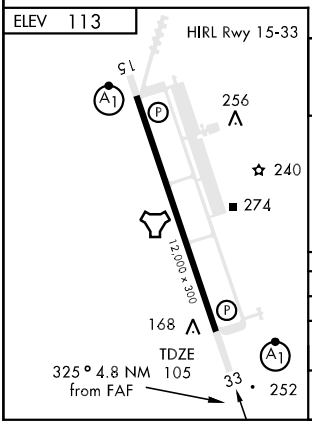
MISSED APPROACH: Climb to 3600 via BAB TACAN R-326 to HAPAK and hold.

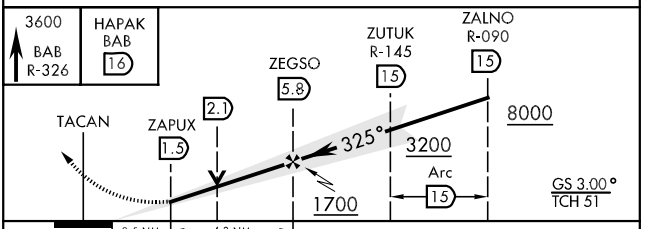
ATIS ★	NORCAL APP CON	BEALE TOWER ★	GND CON
273.5	125.4 259.1	119.4 276.15	121.6 257.75

*** Circling not authorized E of Rwy 15-33.



EMERG SAFE ALT 100 NM 13,700





CATEGORY	A	B	C	D	E
S-ILS 33 *	305/24		200 (200-½)		
S-LOC 33 **	520/24 415 (500-½)		520/40 415 (500-¾)		520/50 415 (500-1)
CIRCLING ***	600-1 487 (500-1)		600-1½ 487(500-1½)	680-2 567 (600-2)	

SW-2, 22 OCT 2009 to 19 NOV 2009

MARYSVILLE, CALIFORNIA

39°08'N-121°26'W

BEALE AFB (KBAB)

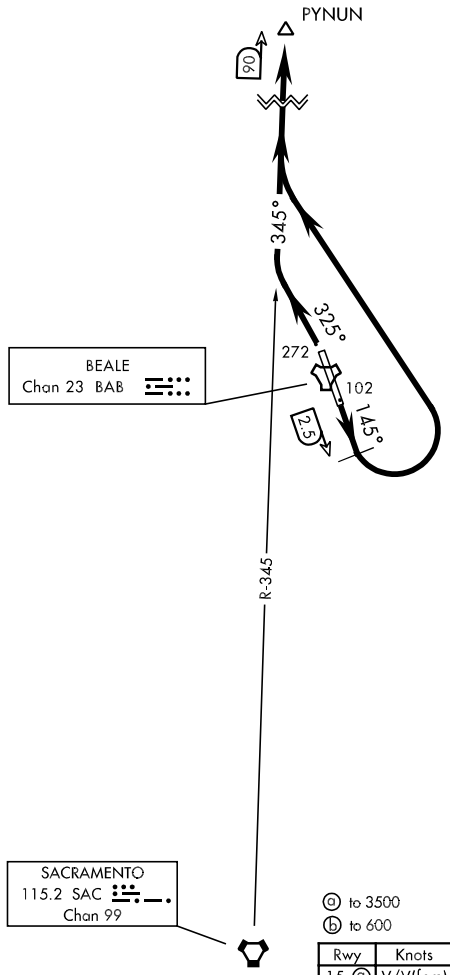
Orig 09155

ILS or LOC/DME RWY 33

PYNUN-FOUR DEPARTURE (PYNUN4 • PYNUN)

ATIS★ 273.5
GND CON
121.6 257.75
BEALE TOWER ★
119.4 276.15
NORCAL DEP CON
125.4 259.1

SHL-771 [USAF]



ⓐ to 3500
ⓑ to 600

Minimum Climb Rate

Rwy	Knots	60	120	180	240	300	360
15 ⓐ	V/V(fpm)	260	520	780	1040	1300	1560
33 ⓑ	V/V(fpm)	260	520	780	1040	1300	1560

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 15: Fly heading 145° until BAB TACAN 2.5 DME, turn left intercept SAC VORTAC R-345 to PYNUN. Then via assigned route.

TAKE-OFF RWY 33: Fly heading 325° intercept SAC VORTAC R-345 to PYNUN. Then via assigned route.

PYNUN-FOUR DEPARTURE (PYNUN4 • PYNUN)
MARYSVILLE, CALIFORNIA

TACAN RWY 15

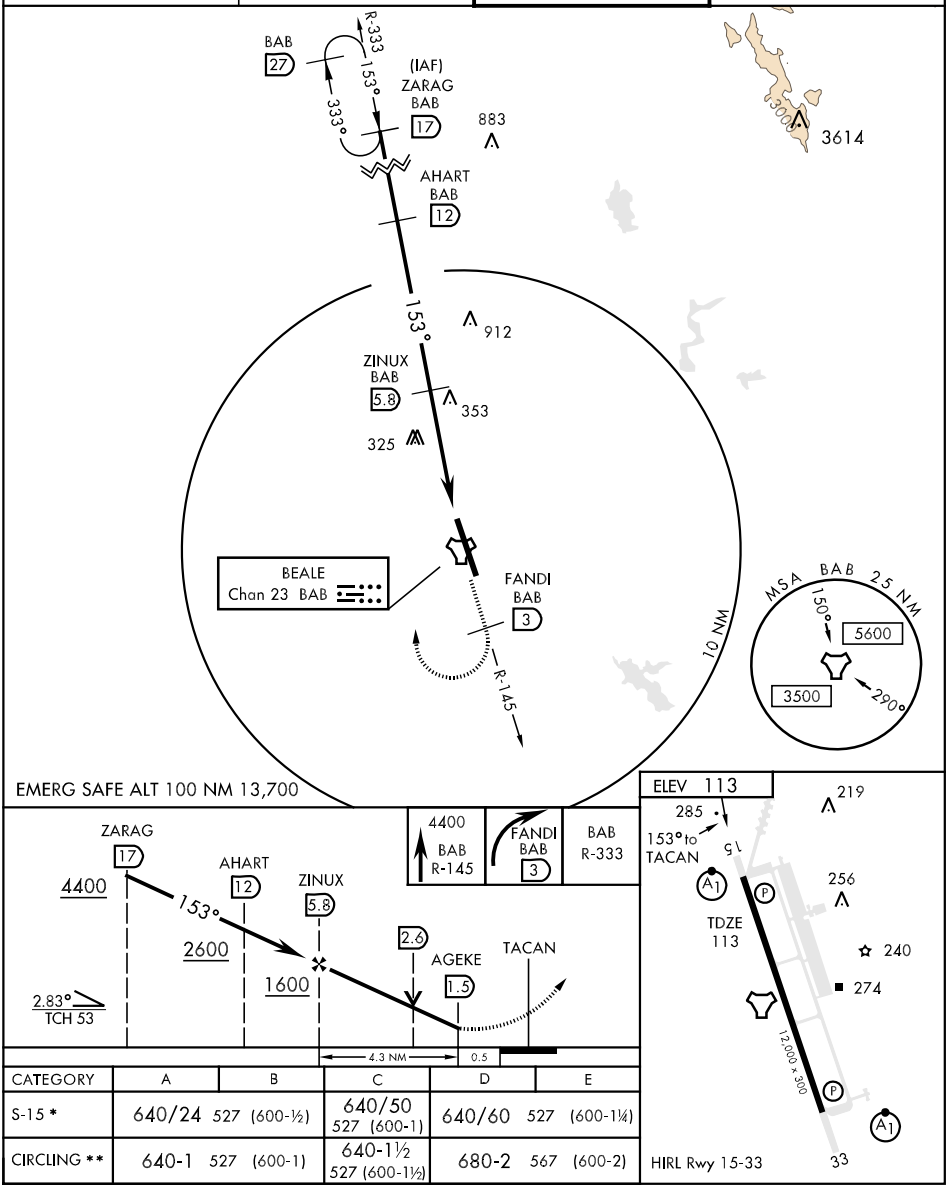
TACAN BAB Chan 23	APCH CRS 153°	Rwy ldg 12,000 TDZE 113 Arpt Elev 113	AL-771 [USAF]	BEALE AFB (KBAB)

▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.
** Circling not authorized E of Rwy 15-33.

ALSF-1

MISSED APPROACH: Climb to 4400 via BAB TACAN R-145, at FANDI, turn right, intercept BAB R-333 to ZARAG and hold, continue climb in hold to 4400.

ATIS ★	NORCAL APP CON	BEALE TOWER ★	GND CON
273.5	125.4 259.1	119.4 276.15	121.6 257.75



CATEGORY	A	B	C	D	E
S-15 *	640/24 527 (600-½)		640/50 527 (600-1)	640/60 527 (600-1¼)	
CIRCLING **	640-1 527 (600-1)		640-1½ 527 (600-1½)	680-2 567 (600-2)	

SW-2, 22 OCT 2009 to 19 NOV 2009

MARYSVILLE, CALIFORNIA

TACAN RWY 33

TACAN	APCH CRS	Rwy ldg	12,000
BAB		TDZE	105
Chan 23	317°	Arpt Elev	113

AL-771 [USAF]

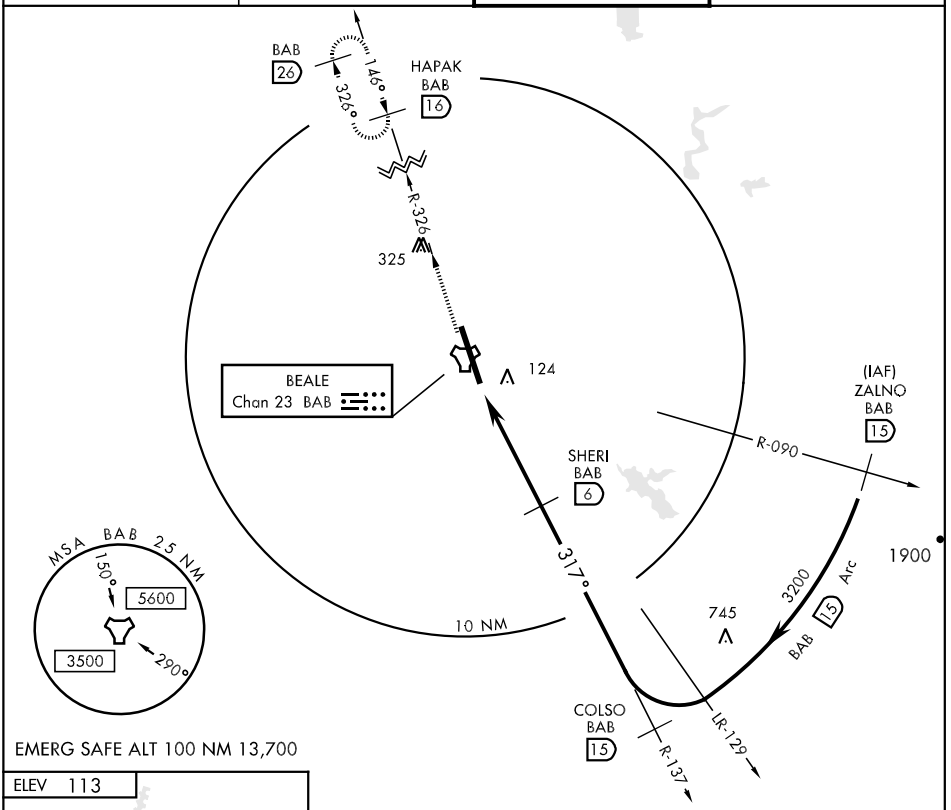
BEALE AFB (KBAB)

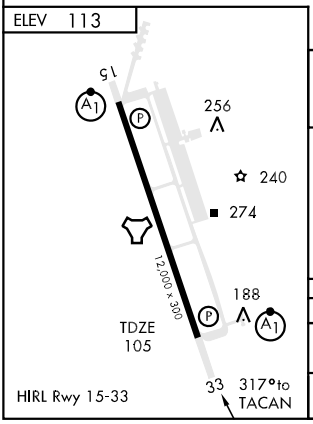
* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling not authorized E of Rwy 15-33.

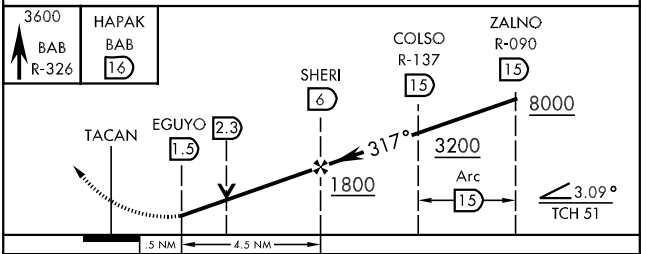
ALSF-1

MISSED APROACH: Climb to 3600 via BAB TACAN R-326 to HAPAK and hold.

ATIS ★	NORCAL APP CON		BEALE TOWER ★		GND CON	
273.5	125.4	259.1	119.4	276.15	121.6	257.75







CATEGORY	A	B	C	D	E
S-33 *	580/24 475 (500-½)		580/40 475 (500-¾)	580/50 475 (500-1)	580/60 475 (500-1¼)
CIRCLING **	600-1 487 (500-1)		600-1½ 487 (500-1½)	680-2 567 (600-2)	

MARYSVILLE, CALIFORNIA — 39°08'N-121°26'W — BEALE AFB (KBAB)

Orig 09155

TACAN RWY 33

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-MYV	APP CRS	Rwy Idg 6006
110.5	141°	TDZE 61
		Apt Elev 62

ILS or LOC RWY 14

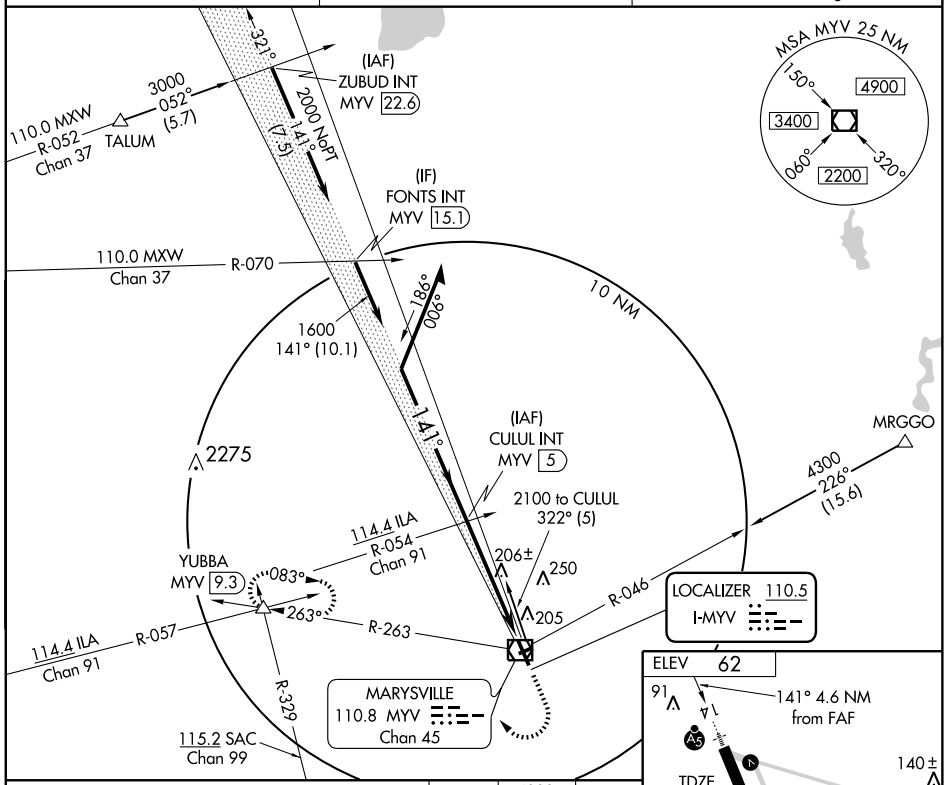
MARYSVILLE/ YUBA COUNTY (MYV)

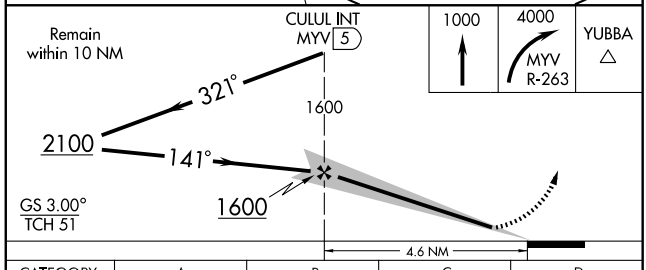
T NA — If local altimeter setting not received, use Oroville Muni altimeter setting and increase all DAs/MDAs 80 feet. Autopilot coupled approach NA below 576.

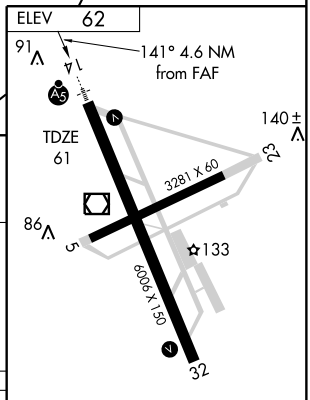
MALSR

MISSED APPROACH: Climb to 1000, then climbing right turn to 4000 via MYV R-263 to YUBBA INT/MYV VOR/DME 9.3 DME and hold. Continue climb in hold to 4000.

ASOS	NORCAL APP CON	UNICOM
118.475	125.4 259.1	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 14	261-½ 200 (200-½)			
S-LOC 14	460-½ 399 (400-½)			460-¾ 399 (400-¾)
CIRCLING	540-1 478 (500-1)		540-1½ 478 (500-1½)	620-2 558 (600-2)

REIL Rwy 14
HIRL Rwy 14-32 L

△100

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 42814 W14A	APP CRS 141°	Rwy Idg 6006 TDZE 64 Apt Elev 64

RNAV (GPS) RWY 14

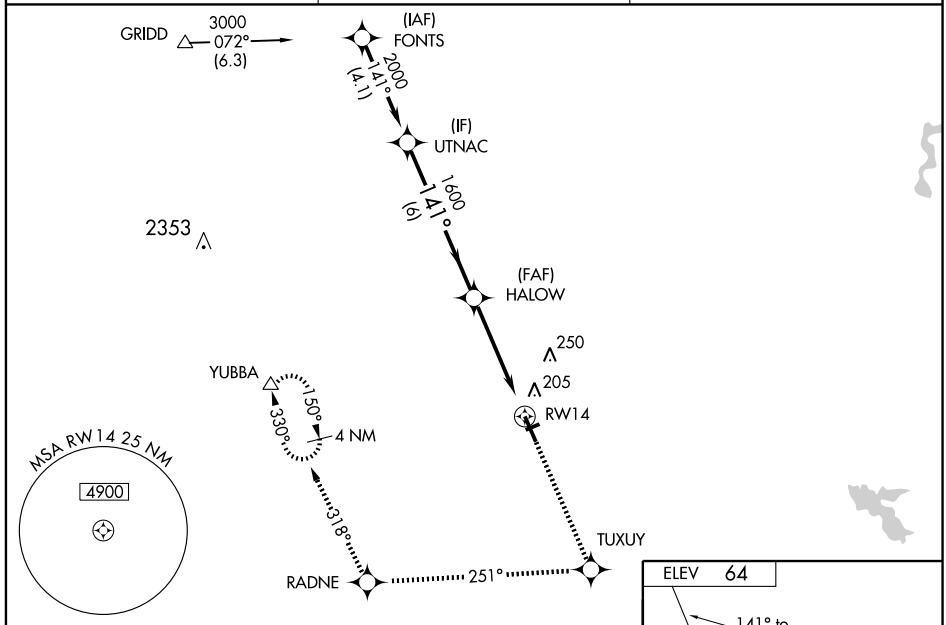
MARYSVILLE/YUBA COUNTY (MYV)

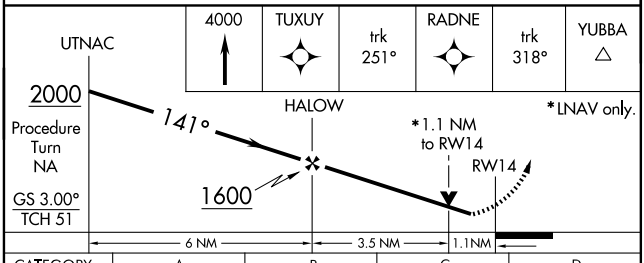
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV and VDP NA when using Lincoln altimeter setting. When local altimeter setting not received, use Lincoln altimeter setting and increase all DA 44 feet and all MDA 60 feet. Inoperative table does not apply to LPV all Cats. For inoperative MALSR increase LNAV all Cats visibility ¼ mile. For inoperative MALSR when using Lincoln altimeter setting, increase LNAV Cats A and B visibility ¼ mile.

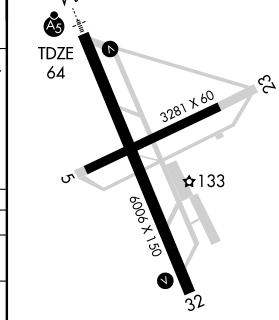
MALSR

MISSED APPROACH: Climb to 4000 direct TUXUY and via track 251° to RADNE and via track 318° to YUBBA and hold.

ASOS	NORCAL APP CON	UNICOM
118.475	125.4 259.1	123.05 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	264-¾ 200 (200-¾)			
LNAV/VNAV DA	470-1 406 (500-1)			
LNAV MDA	460-¾ 396 (400-¾)			460-1 396 (400-1)
CIRCLING	540-1 476 (500-1)		540-1½ 476 (500-1½)	620-2 556 (600-2)

REIL Rwy 14
HIRL Rwy 14-32 L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	6006
CH 87014	321°	TDZE	63
W32A		Apt Elev	64

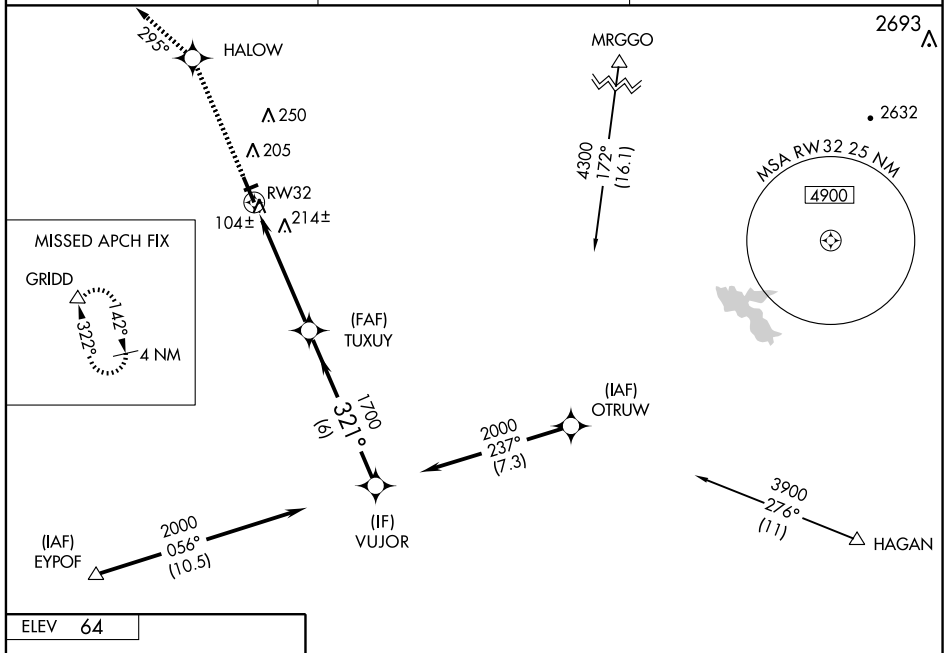
RNAV (GPS) RWY 32

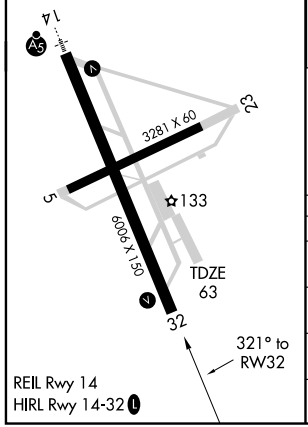
MARYSVILLE/ YUBA COUNTY (MYV)

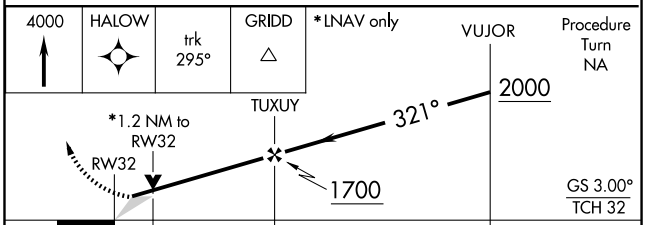
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Lincoln altimeter setting and increase all DA 44 feet and all MDA 60 feet and increase LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Lincoln altimeter setting.

MISSED APPROACH: Climb to 4000 direct HALOW and via track 295° to GRIDD and hold.

ASOS	NORCAL APP CON	UNICOM
118.475	125.4 259.1	123.05 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	313-1 250 (300-1)			
LNAV/ VNAV DA	374-1¼ 311 (400-1¼)			
LNAV MDA	480-1 417 (500-1)		480-1¼ 417 (500-1¼)	
CIRCLING	540-1 476 (500-1)		540-1½ 476 (500-1½)	620-2 556 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

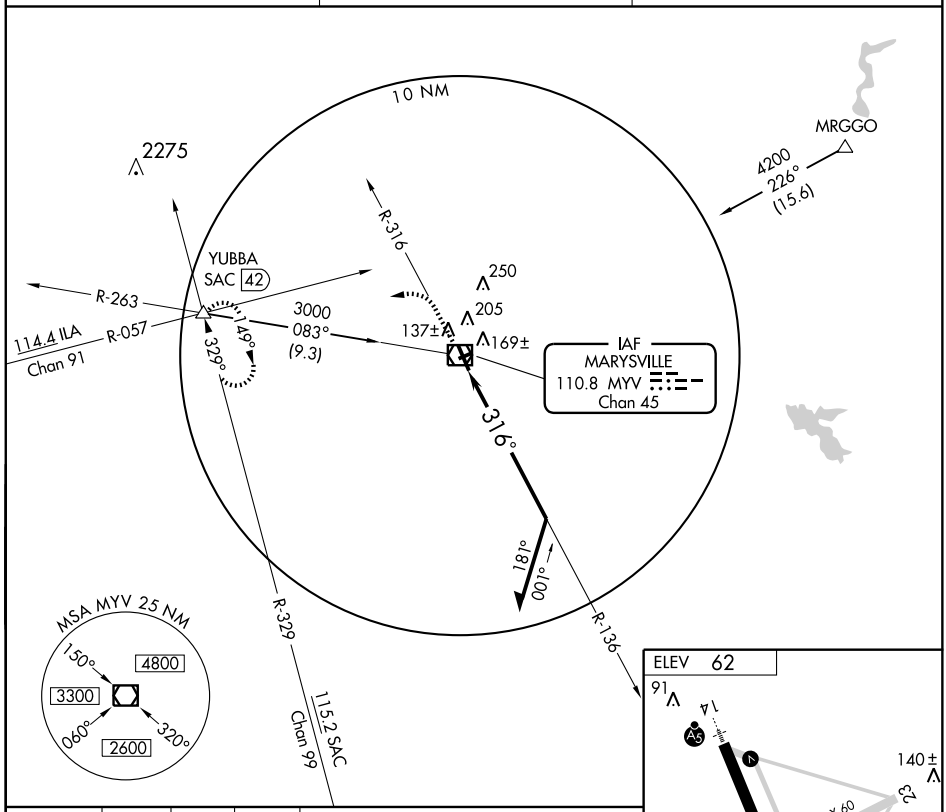
VOR/DME MYV	APP CRS	Rwy Idg	6006
110.8	316°	TDZE	61
Chan 45		Apt Elev	62

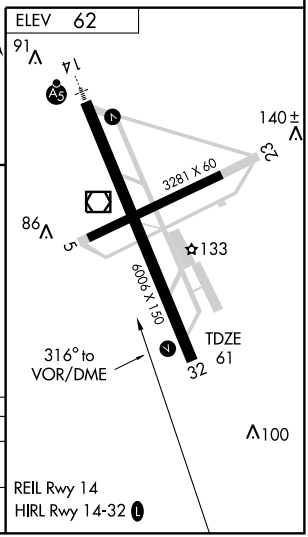
VOR RWY 32

MARYSVILLE/ YUBA COUNTY (MYV)

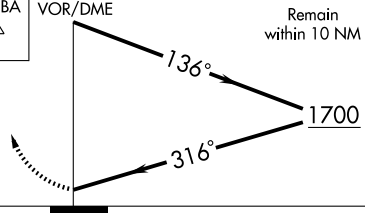
MISSED APPROACH: Climb to 2300 via MYV R-316, then climbing left turn to 4000 via heading 230° and SAC R-329 to YUBBA Int/SAC 42 DME and hold.

ASOS	NORCAL APP CON	UNICOM
118.475	125.4 259.1	123.05 (CTAF) L





2300	4000	SAC	YUBBA
MYV R-316	230°	R-329	△
		115.2	



CATEGORY	A	B	C	D
S-32	540-1	479 (500-1)	540-1¼ 479 (500-1¼)	540-1½ 479 (500-1½)
CIRCLING	540-1	478 (500-1)	540-1½ 478 (500-1½)	620-2 558 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5914
123°	TDZE	155
	Apt Elev	155

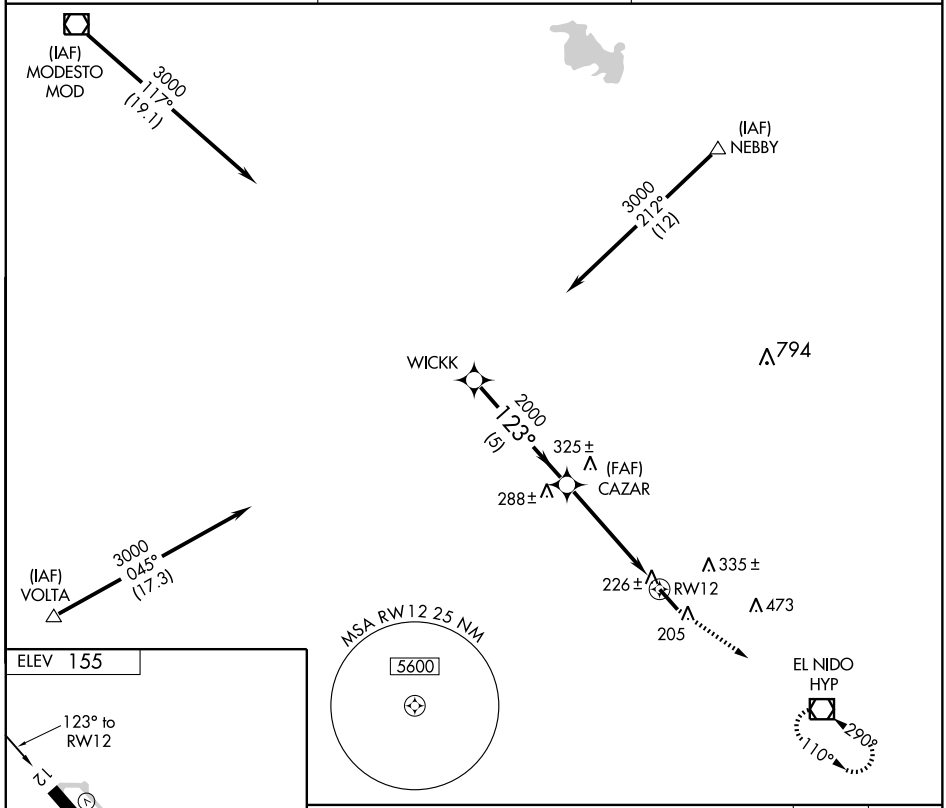
GPS RWY 12

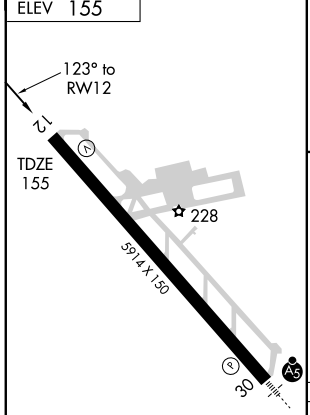
MERCED RGNL/MACREADY FIELD (MCE)

When local altimeter setting not received, use Castle altimeter setting and increase all MDAs 20 feet. Circling NA NE of Rwy 12-30.

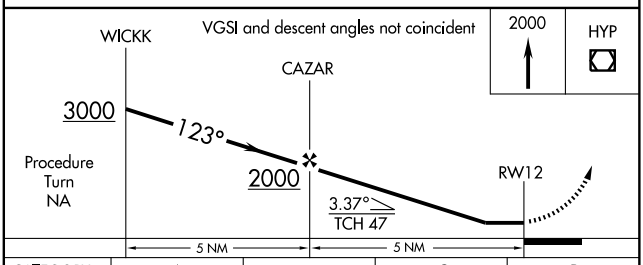
MISSED APPROACH: Climb to 2000 direct HYP VOR/DME and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.4	122.7 (CTAF) L





REIL Rwy 12
HIRL Rwy 12-30 L



CATEGORY	A	B	C	D
S-12	520-1 365 (400-1)			520-1¼ 365 (400-1¼)
CIRCLING	560-1 405 (500-1)	620-1 465 (500-1)	620-1½ 465 (500-1½)	720-2 565 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-MCE	APP CRS	Rwy Idg	5914
109.3	303°	TDZE	155
Chan 30		Apt Elev	155

ILS or LOC RWY 30

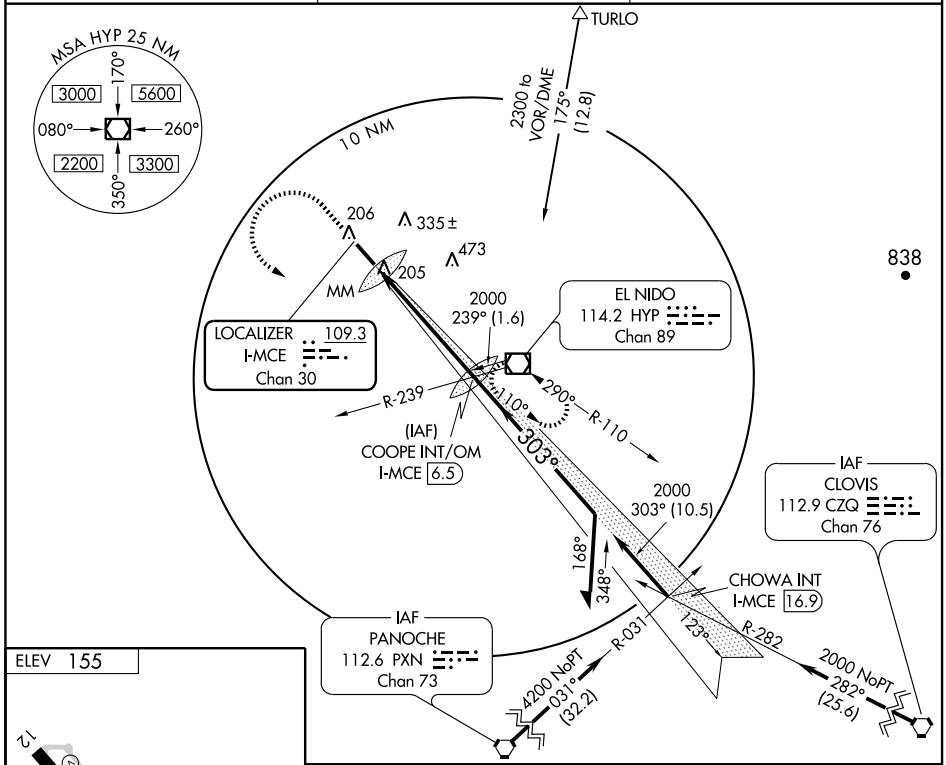
MERCED RGNL/MACREADY FIELD (MCE)

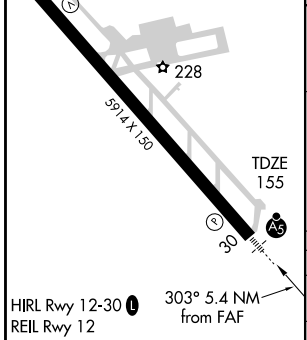
When local altimeter setting not received, use Castle altimeter setting and increase all DA/MDA 20 feet. Autopilot coupled approach NA below 585. For inoperative MALSR increase S-LOC 30 Cat D visibility to 1. Circling NA NE of Rwy 12-30.

MALSR

MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct HYP VOR/DME and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.45	122.7 (CTAF) L



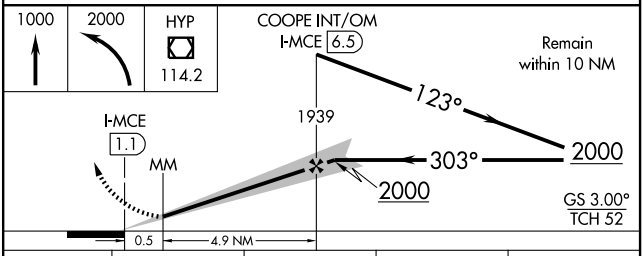


HIRL Rwy 12-30 L
REIL Rwy 12

303° 5.4 NM from FAF

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-ILS 30	355-½ 200 (200-½)			
S-LOC 30	480-½ 325 (400-½)			480-¾ 325 (400-¾)
CIRCLING	560-1 405 (500-1)	620-1 465 (500-1)	620-1½ 465 (500-1½)	720-2 565 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-MCE	APP CRS	Rwy Idg	5914
109.3	123°	TDZE	155
Chan 30		Apt Elev	155

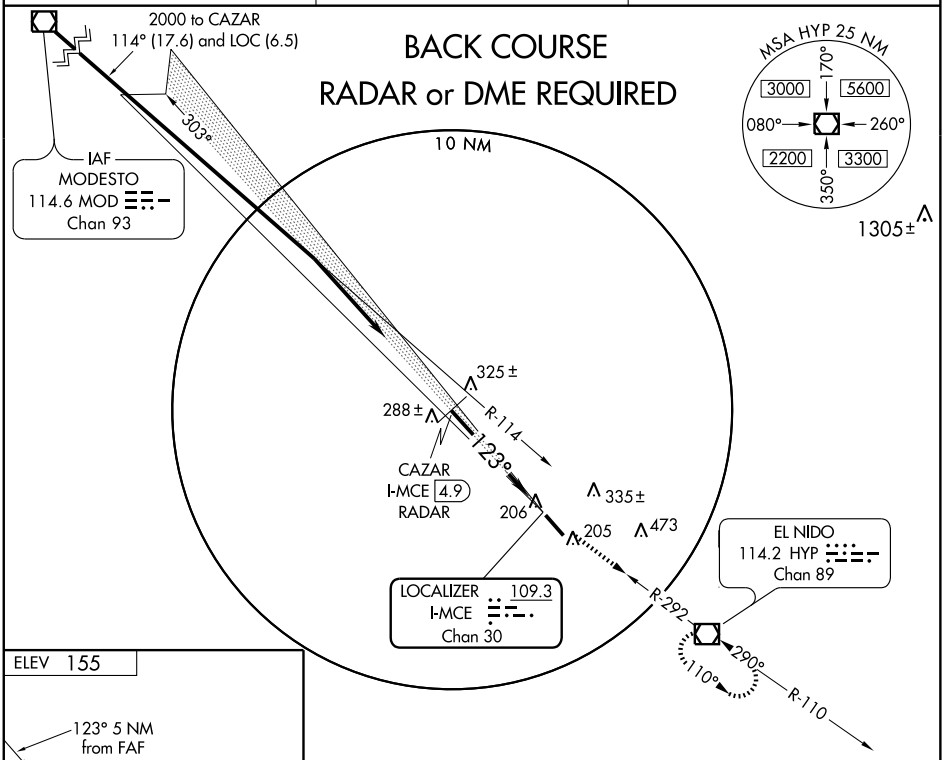
LOC BC RWY 12

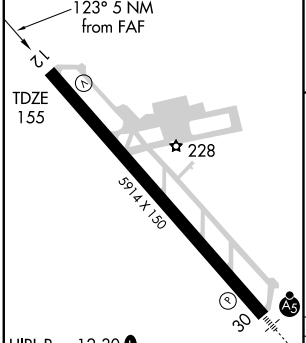
MERCED RGNL/MACREADY FIELD (MCE)

When local altimeter setting not received, use Castle altimeter setting and increase all MDAs 20 feet. Circling NA NE of Rwy 12-30.

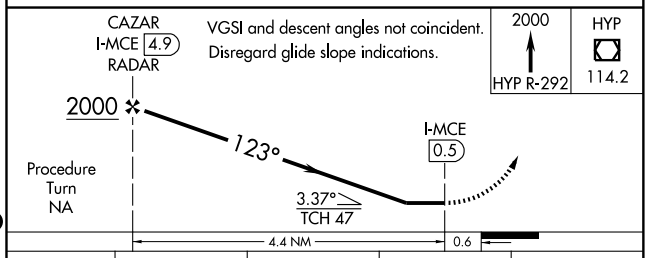
MISSED APPROACH: Climb to 2000 via HYP R-292 to HYP VOR/DME and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.45	122.7 (CTAF) L





FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28



CATEGORY	A	B	C	D
S-12	520-1 365 (400-1)			520-1¼ 365 (400-1¼)
CIRCLING	560-1 405 (500-1)	620-1 465 (500-1)	620-1½ 465 (500-1½)	720-2 565 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	5914
CH 93709	304°	TDZE	155
W30A		Apt Elev	155

RNAV (GPS) RWY 30

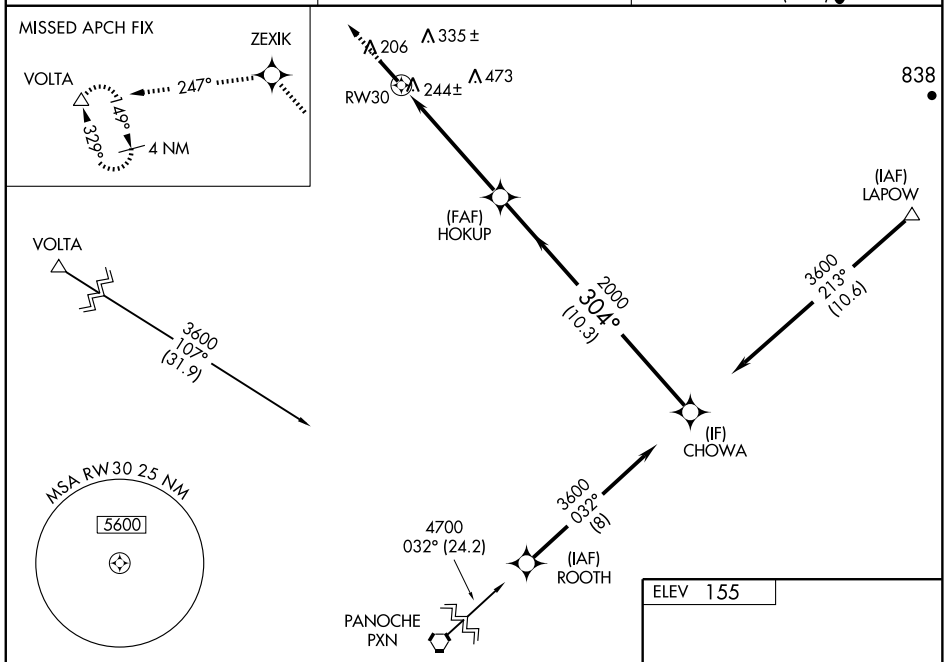
MERCED RGNL/MACREADY FIELD (MCE)

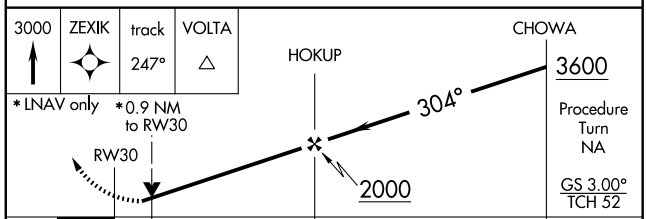
Circling NA NE of Rwy 12-30. Baro-VNAV NA when using Merced/Castle altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA when using Castle altimeter setting. For inoperative MALSR, increase LNAV visibilities Cat A, B, C to 1 mile and Cat D to 1¼ mile. When local altimeter setting not received, use Castle altimeter setting and increase all DA/MDA 20 feet. Inoperative table does not apply.

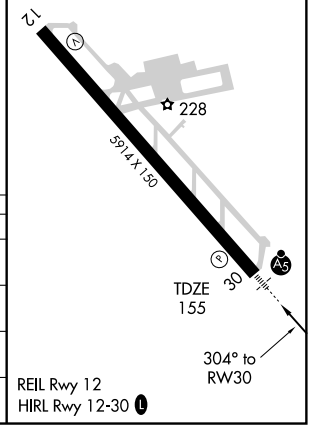
MALSR

MISSED APPROACH: Climb to 3000 direct ZEXIK and via track 247° to VOLTA and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.4	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	449-¾ 294 (300-¾)			
LNAV/VNAV DA	514-¾ 359 (400-¾)			
LNAV MDA	500-¾ 345 (400-¾)			500-1 345 (400-1)
CIRCLING	560-1 405 (500-1)	620-1 465 (500-1)	620-1½ 465 (500-1½)	720-2 565 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME HYP	APP CRS	Rwy Idg	5914
114.2	289°	TDZE	155
Chan 89		Apt Elev	155

VOR RWY 30

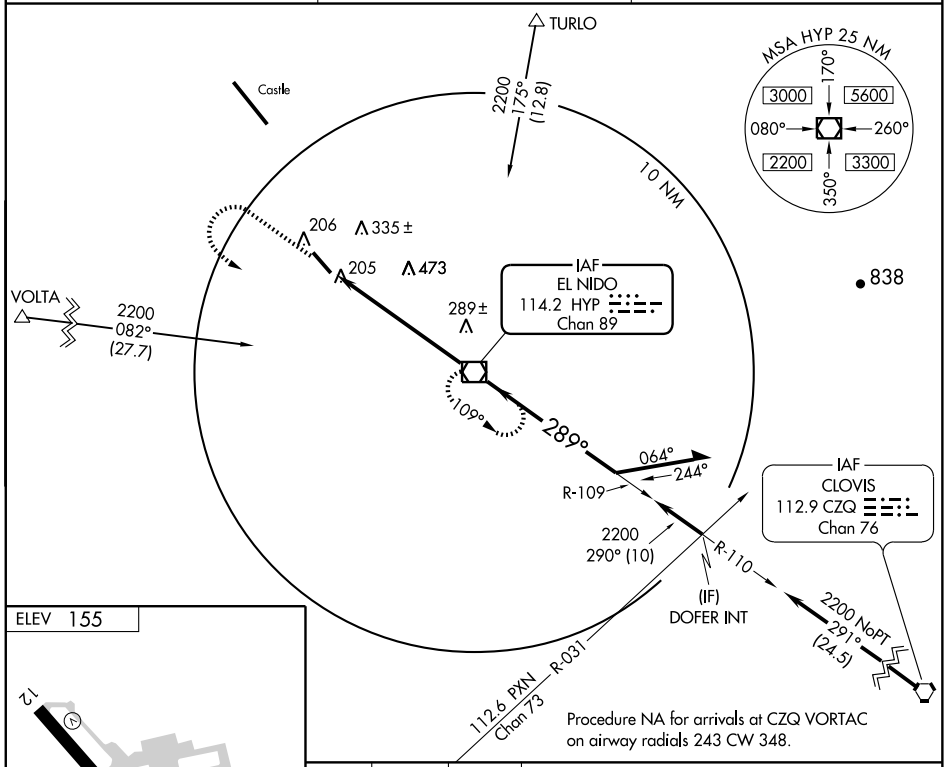
MERCED RGNL/MACREADY FIELD (MCE)

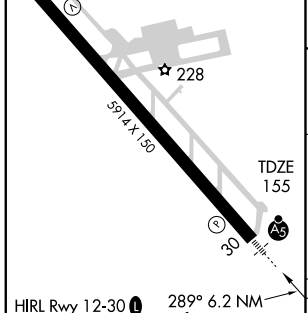
For inoperative MALSR, increase S-30 Cat A and B visibility to 1 mile, and Cat D to 1¼ mile. Circling NA NE of Rwy 12-30. Visibility reduction by helicopters NA. VDP NA when using Castle altimeter setting. When local altimeter setting not received, use Castle altimeter setting and increase all MDAs 20 feet.

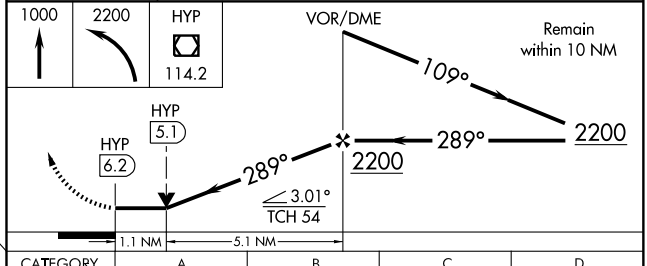
MALSR

MISSED APPROACH: Climb to 1000 then climbing left turn to 2200 direct HYP VOR/DME and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.45	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-30	560-¾ 405 (500-¾)			560-1 405 (500-1)
CIRCLING	560-1 405 (500-1)	620-1 465 (500-1)	620-1½ 465 (500-1½)	720-2 565 (600-2)

FAF to MAP 6.2 NM

Knots	60	90	120	150	180
Min:Sec	6:12	4:08	3:06	2:29	2:04

SW-2, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-568 (FAA)

MERCED/CASTLE (MER)
MERCED, CALIFORNIA

ATIS
124.475
CASTLE TOWER ★
118.175 235.775
GND CON
133.575

37°24'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

FIELD ELEV 191

13
126.5°

VAR 14.5° E

JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W

NORTH RAMP

37°23'N

11802 X 150

RWY 13-31
S155, D200, ST175, DT415, DDT720

OPERATIONAL RAMP

HOT 2

306.5°

CONTROL TOWER

368±

ELEV 178

31

37°22'N

HOT 1

GENERAL AVIATION RAMP

120°35'W

120°34'W

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-MER	APP CRS	Rwy Idg	11802
109.5	306°	TDZE	181
		Apt Elev	191

ILS or LOC/DME RWY 31

MERCED/ CASTLE (MER)

Circling NA SW of Rwy 13-31.
When local altimeter setting not received, use Merced Rgnl/Macready Field altimeter setting and increase DA/MDA 20 feet.
DME from HYP VOR/DME. Simultaneous reception of I-MER and HYP DME required.

ALSF-1

MISSED APPROACH: Climb to 800, then climbing right turn to 3000 direct HYP VOR/DME and hold.

ATIS	NORCAL APP CON	CASTLE TOWER ★	GND CON	UNICOM	
124.475	120.95 269.45	118.175 (CTAF) 235.775	133.575	122.95	123.00 L

ALT MISSED APCH FIX
MODESTO
MOD
114.6
Chan 93
285°
105°
R-105°

2289

794

10 NM

LOCALIZER 109.5
I-MER

274 ±

SARNE
HYP 6.7

335 ±

Merced Rgnl/Macready Field

1800
306°
6.7

MSA HYP 25 NM
5600

IF/IAF
EL NIDO
114.2 HYP
Chan 89

125°
1 min
305°
R-125
128°

IAF
CLOVIS
112.9 CZQ
Chan 76

3000 NoPT
291°
(34.5)

Procedure NA for arrivals on CZQ VORTAC airway radials 243 CW 348.

ELEV 191

11802 X 150

TDZE
181

31

368 ±

306° 4.9 NM
from FAF

HIRL Rwy 13-31 L

800	3000	HYP 114.2

One Minute Holding Pattern

VOR/DME

SARNE
HYP 6.7

HYP
11.6

1800

306°

125°
305°

3000

1800

GS 3.00°
TCH 55

4.9 NM 6.7 NM

CATEGORY	A	B	C	D
S-ILS 31	381-½ 200 (200-½)			
S-LOC 31	540-½ 359 (400-½)			540-¾ 359 (400-¾)
CIRCLING	640-1 449 (500-1)	660-1 469 (500-1)	660-1½ 469 (500-1½)	760-2 569 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	11802
CH 50211	126°	TDZE	191
W13A		Apt Elev	191

RNAV (GPS) RWY 13

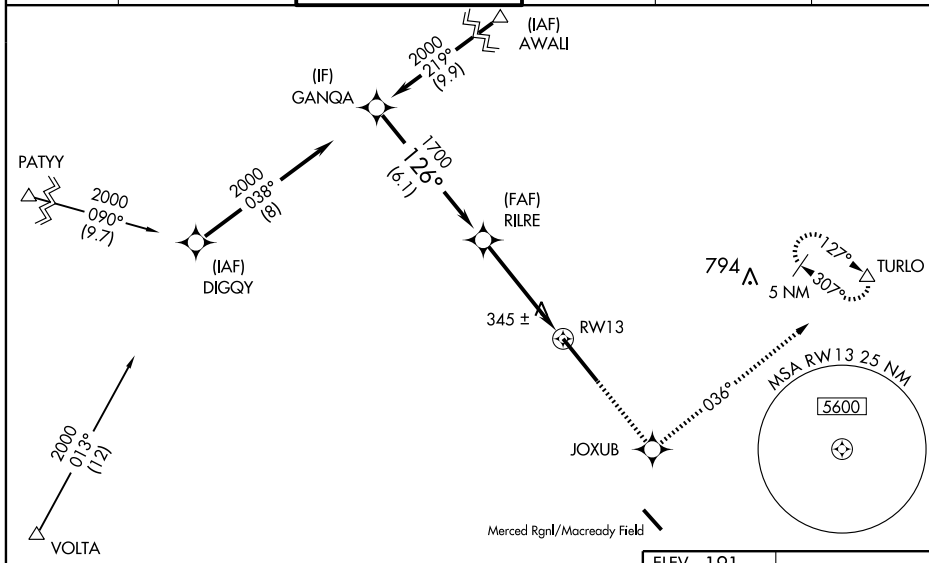
MERCED/ CASTLE (MER)

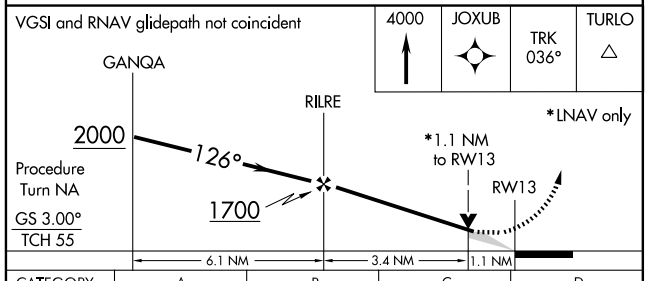
Circling NA SW of Rwy 13-31. Baro-VNAV NA when using Merced Rgnl/Macready Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. VDP NA when using Merced Rgnl/Macready Field altimeter setting. When local altimeter setting not received, use Merced Rgnl/Macready Field altimeter setting and increase all DA/MDA 20 feet and LNAV/VNAV visibility ¼ mile. For inoperative ALSF-1 increase visibility LPV all Cats and LNAV Cat D to 1¼, and LNAV Cats A and B to 1. For inoperative ALSF-1 when using Merced Rgnl/Macready Field altimeter setting, increase visibility LPV all Cats to 1½, and LNAV Cats A and B to 1.

ALSF-1

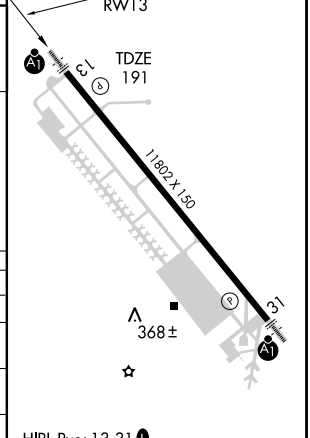
MISSED APPROACH: Climb to 4000 direct JOXUB and via track 036° to TURLO and hold, continue climb-in-hold to 4000.

ATIS	NORCAL APP CON	CASTLE TOWER *	GND CON	UNICOM	
124.475	120.95 269.45	118.175 (CTAF) 235.775	133.575	122.95	123.00 L





CATEGORY	A	B	C	D
LPV DA	555-¾ 364 (400-¾)			
LNAV/ VNAV DA	655-1 464 (500-1)			
LNAV MDA	600-¾ 409 (500-¾)			600-1 409 (500-1)
CIRCLING	640-1 449 (500-1)	660-1 469 (500-1)	660-1½ 469 (500-1½)	760-2 569 (600-2)



SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 87110 W31A	APP CRS 306°	Rwy Idg 11802 TDZE 181 Apt Elev 191

RNAV (GPS) RWY 31

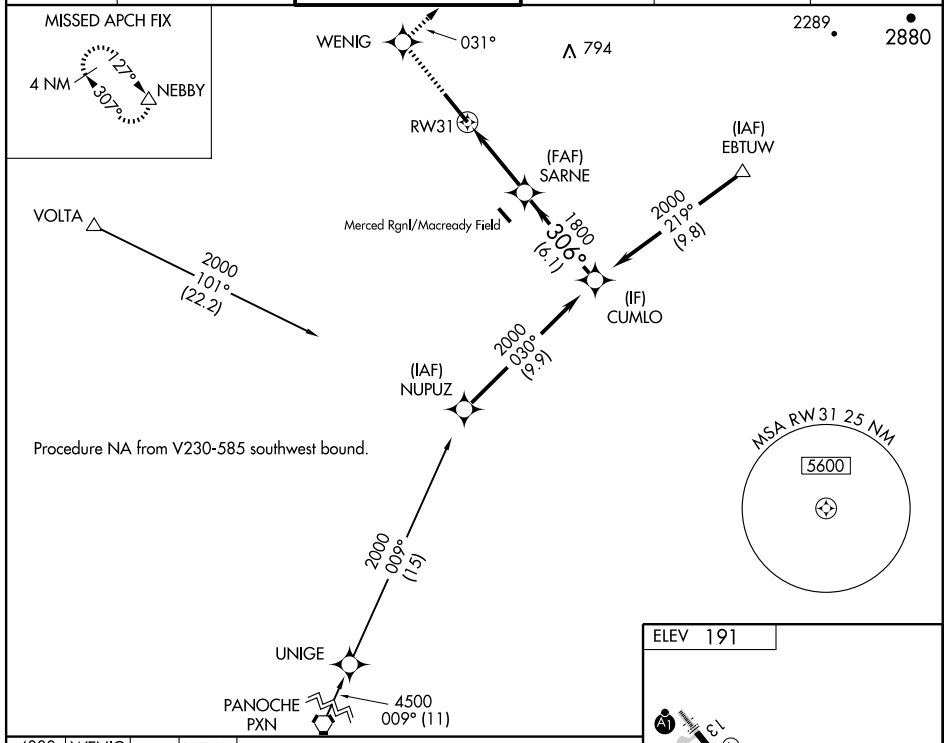
MERCED/ CASTLE (MER)

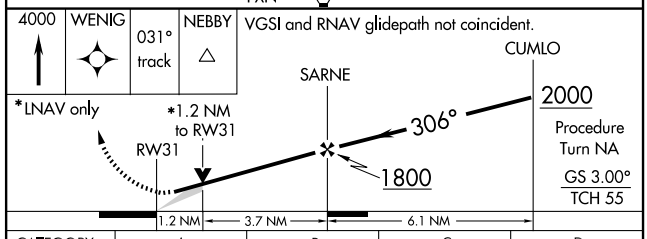
Circling NA SW of Rwy 13-31. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Merced Rgnl/Macready Field altimeter setting. When local altimeter setting not received, use Merced Rgnl/Macready Field altimeter setting and increase all DA/MDA 20 feet.

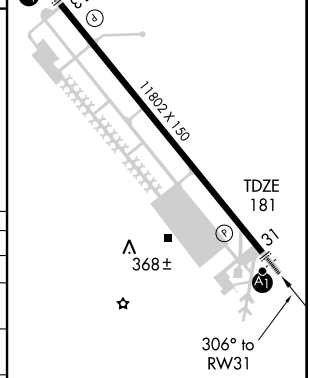
ALSF-1

MISSED APPROACH: Climb to 4000 direct WENIG and via 031° track to NEBBY and hold, continue climb-in-hold to 4000.

ATIS	NORCAL APP CON	CASTLE TOWER ★	GND CON	UNICOM	
124.475	120.95 269.45	118.175 (CTAF) 235.775	133.575	122.95	123.00 L







CATEGORY	A	B	C	D
LPV DA	381-½ 200 (200-½)			
LNAV/ VNAV DA	540-¾ 359 (400-¾)			
LNAV MDA	640-½ 459 (500-½)		640-¾ 459 (500-¾)	640-1 459 (500-1)
CIRCLING	640-1 449 (500-1)	660-1 469 (500-1)	660-1½ 469 (500-1½)	760-2 569 (600-2)

HIRL Rwy 13-31 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME HYP	APP CRS	Rwy Idg	11802
114.2	305°	TDZE	181
Chan 89		Apt Elev	191

VOR/DME RWY 31

MERCED / CASTLE (MER)

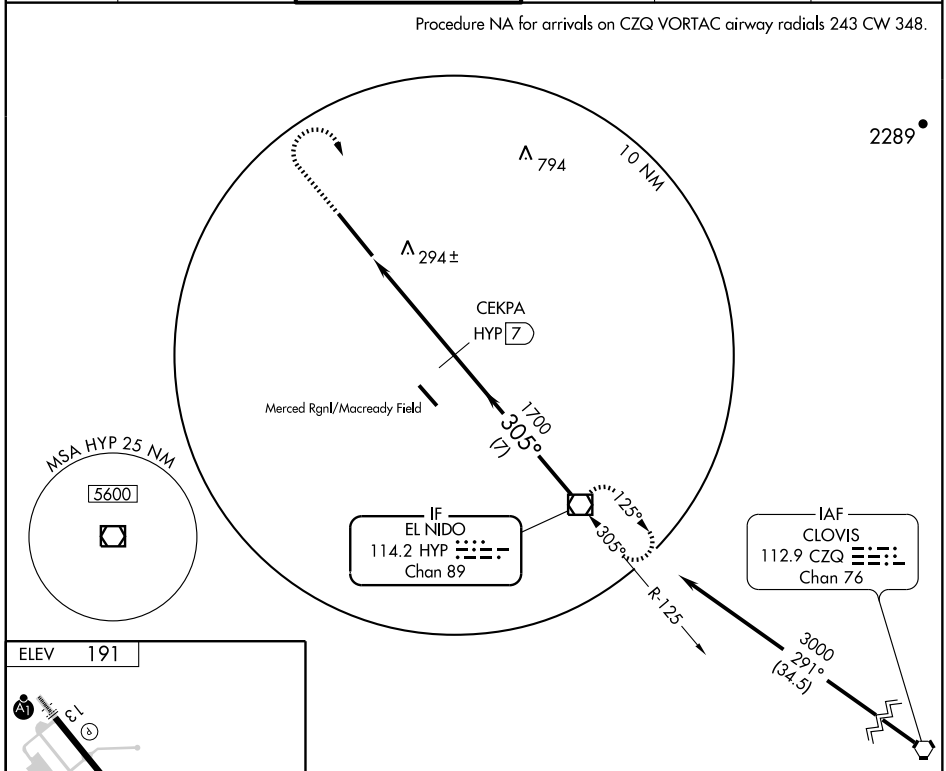
For inoperative ALSF-1, increase Cat D visibility to 1¼ mile. Circling not authorized SW of Rwy 13 and 31. When local altimeter setting not received, use Merced Rgnl/Macready Field altimeter setting and increase all MDA 20 feet. VDP NA when using Merced Rgnl/Macready Field altimeter setting.

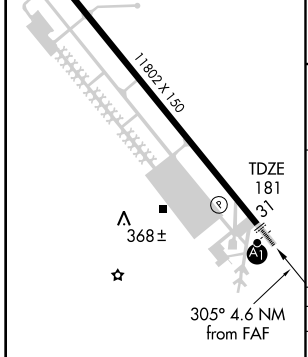
ALSF-1

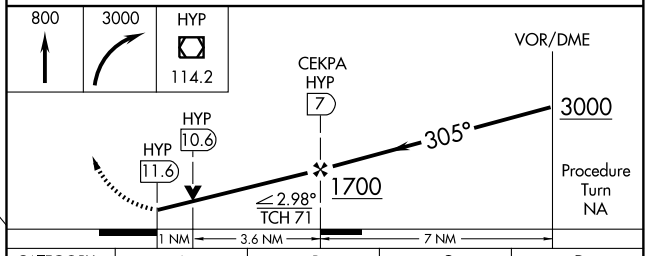
MISSED APPROACH: Climb to 800, then climbing right turn to 3000 direct HYP VOR/DME and hold.

ATIS	NORCAL APP CON	CASTLE TOWER ★	GND CON	UNICOM	
124.475	120.95 269.45	118.175 (CTAF) 235.775	133.575	122.95	123.00 L

Procedure NA for arrivals on CZQ VORTAC airway radials 243 CW 348.







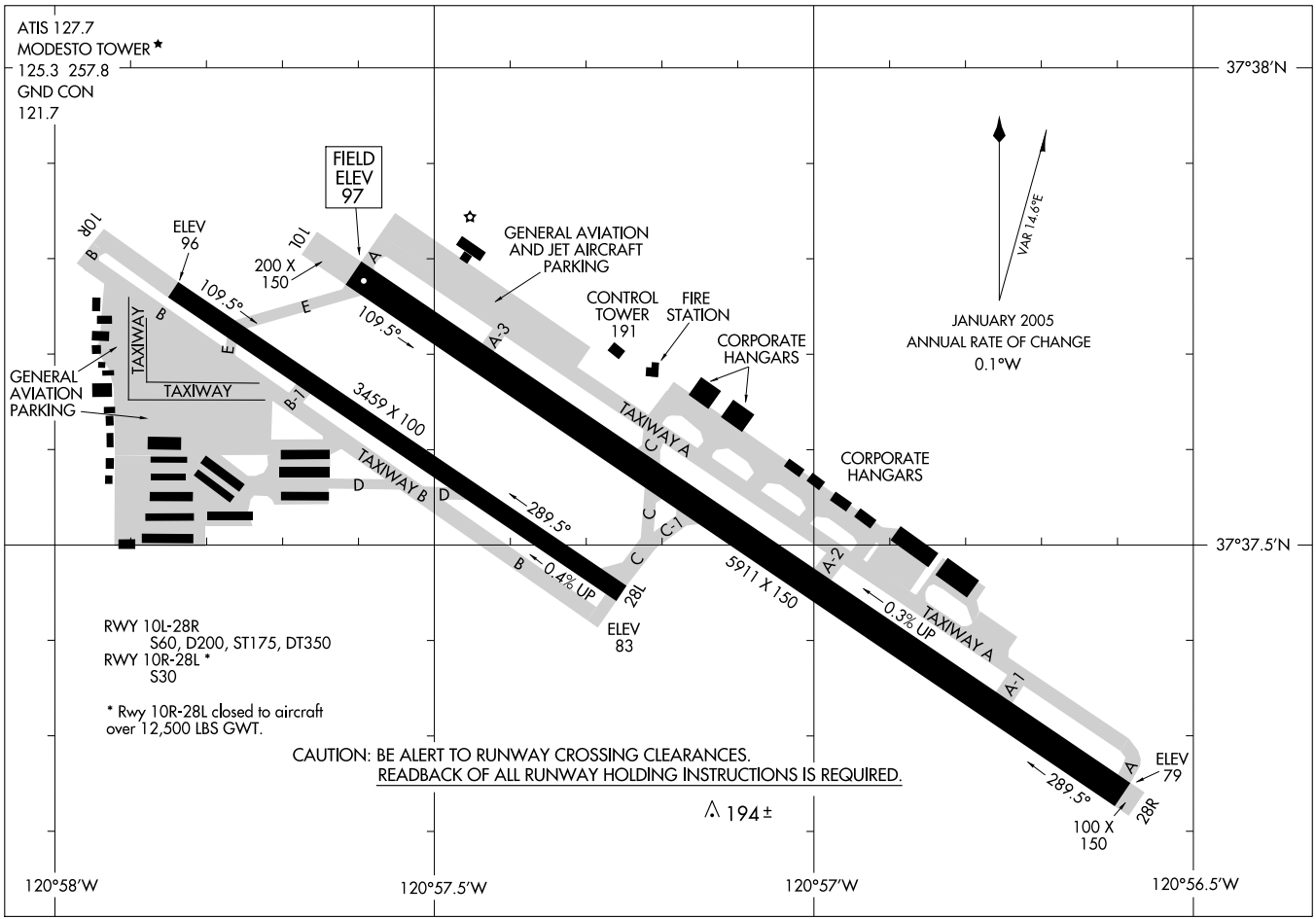
CATEGORY	A	B	C	D
S-31	560-½ 379 (400-½)			560-1 379 (400-1)
CIRCLING	640-1 449 (500-1)	660-1 469 (500-1)	660-1½ 469 (500-1½)	760-2 569 (600-2)

HIRL Rwy 13-31 L

SW-2, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

MODESTO CITY-COUNTY-HARRY SHAM FIELD (MOD)
AL-643 (FAA)
MODESTO, CALIFORNIA



MODESTO, CALIFORNIA

AL-643 (FAA)

LOC I-MOD	APP CRS	Rwy Idg	5911
111.9	288°	TDZE	88
		Apt Elev	97

ILS or LOC/DME RWY 28R

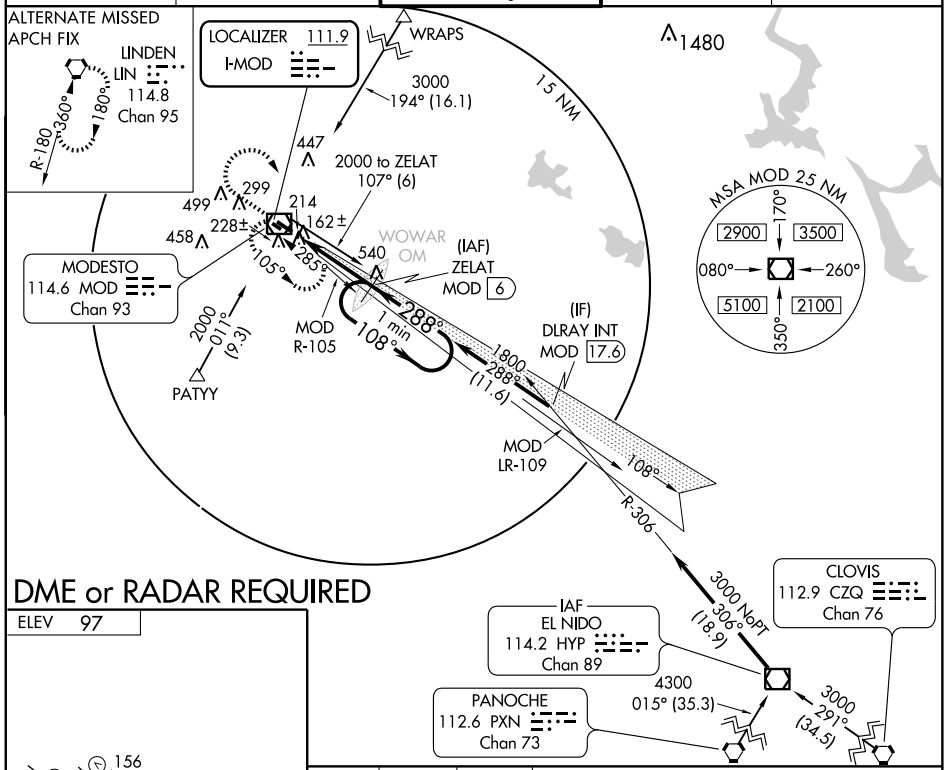
MODESTO CITY-COUNTY-HARRY SHAM FIELD (MOD)

Autopilot coupled approach NA below 660. For inoperative MALSR, increase S-LOC Cat D visibility to 1 mile. When local altimeter setting not received, use Atwater altimeter setting and increase DA 68 feet and all MDAs 80 feet. Increase S-LOC Cat C visibility to ¾. For inoperative MALSR, when using Atwater altimeter setting; increase S-ILS 28R all visibilities ½ mile. DME from MOD VOR/DME. Simultaneous reception of I-MOD and MOD DME required.

MALSR

MISSED APPROACH: Climb to 1500 then climbing right turn to 2000 direct MOD VOR/DME and hold.

ATIS	NORCAL APP CON	MODESTO TOWER★	GND CON	UNICOM
127.7	120.95 269.45	125.3 (CTAF) L 257.8	121.7	122.95



CATEGORY	A	B	C	D
S-ILS 28R	288-½ 200 (200-½)			
S-LOC 28R	420-½ 332 (400-½)			420-¾ 332 (400-¾)
CIRCLING	540-1 443 (500-1)	560-1 463 (500-1)	560-1½ 463 (500-1½)	660-2 563 (600-2)

REIL Rwy 10L L
MIRL Rwy 10R-28L
HIRL Rwy 10L-28R L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 70609 W28A	APP CRS 288°	Rwy Idg 5911 TDZE 88 Apt Elev 97

RNAV (GPS) RWY 28R

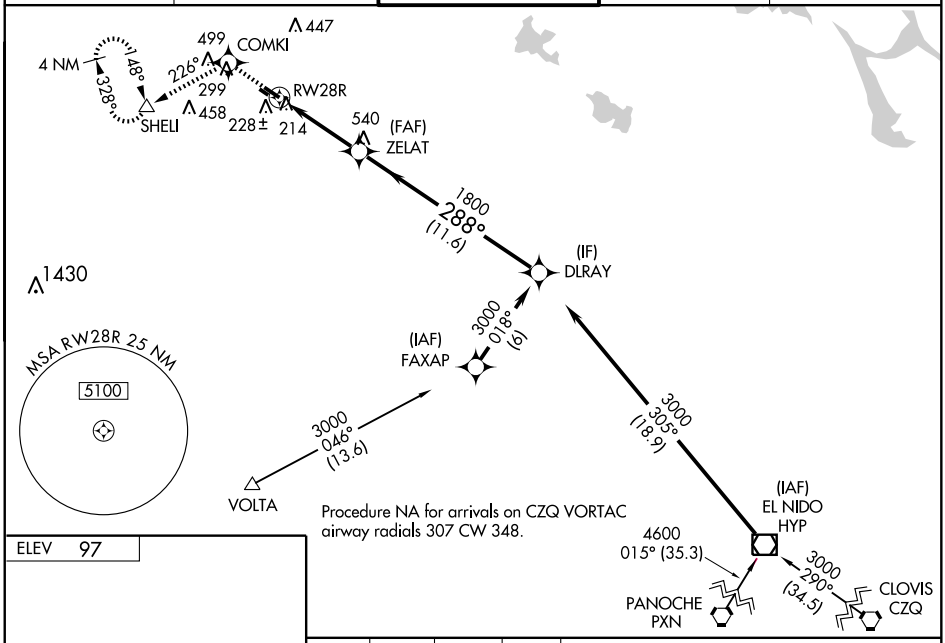
MODESTO CITY-COUNTY-HARRY SHAM FIELD (MOD)

For inoperative MALSR, increase LPV visibility to 1 mile all Cats and LNAV Cat D to 1¼ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Atwater/Castle altimeter setting and increase all DA/MDA 80 feet; increase LPV, LNAV/VNAV visibilities ¼ mile all Cats and LNAV Cat C visibility ¼ mile.
Baro-VNAV and VDP NA when using Atwater/Castle altimeter setting.
For inoperative MALSR, when using Atwater/Castle altimeter setting, increase LPV visibility to 1¼ mile all Cats.

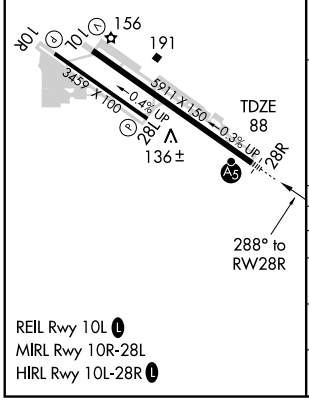
MALSR

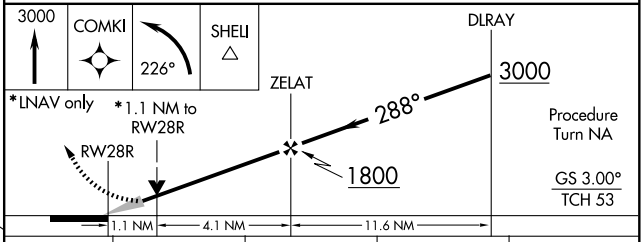
MISSED APPROACH: Climb to 3000 direct COMKI and left turn via 226° track to SHELI and hold, continue climb-in-hold to 3000.

ATIS	NORCAL APP CON	MODESTO TOWER★	GND CON	UNICOM
127.7	120.95 269.45	125.3 (CTAF) L 257.8	121.7	122.95



ELEV 97





CATEGORY	A	B	C	D
LPV DA	385-½ 297 (300-½)			
LNAV/VNAV DA	495-1 407 (400-1)			
LNAV MDA	480-½ 392 (400-½)			480-1 392 (400-1)
CIRCLING	540-1 443 (500-1)	560-1 463 (500-1)	560-1½ 463 (500-1½)	660-2 563 (600-2)

REIL Rwy 10L L
MIRL Rwy 10R-28L
HIRL Rwy 10L-28R L

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME MOD	APP CRS	Rwy Idg	5911
114.6	287°	TDZE	88
Chan 93		Apt Elev	97

VOR/DME RWY 28R

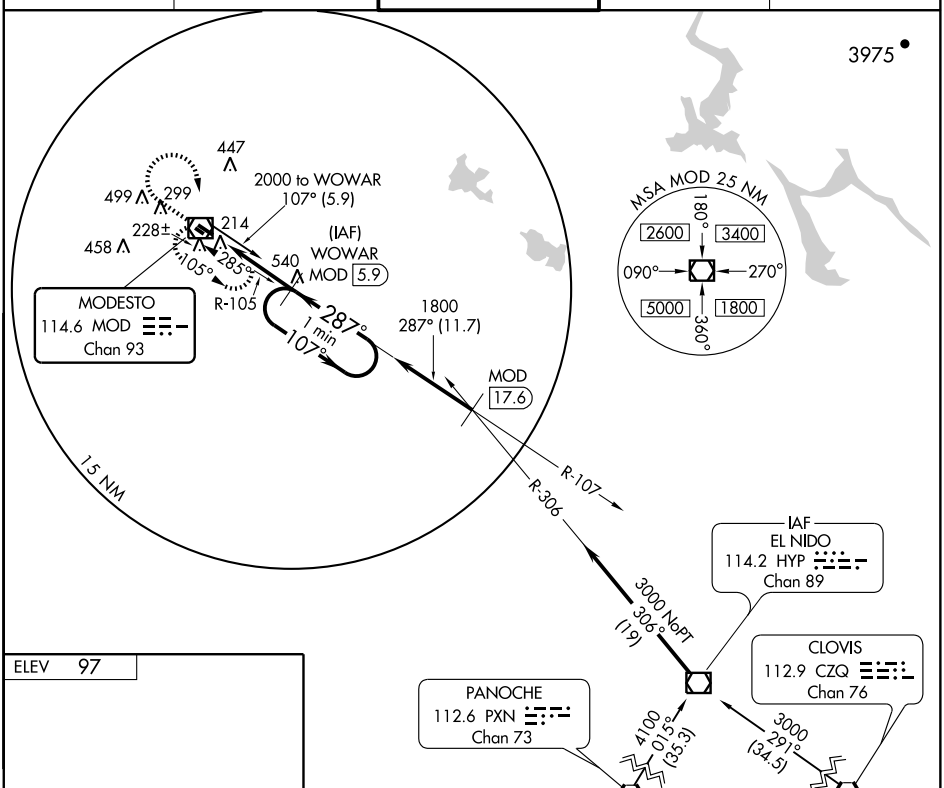
MODESTO CITY-COUNTY-HARRY SHAM FIELD (MOD)

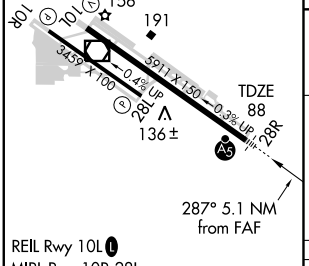
For inoperative MALSR increase S-28R Cat. D visibility to 1¼.

MALSR

MISSED APPROACH: Climb to 900 then climbing right turn to 2000 direct MOD VOR/DME and hold.

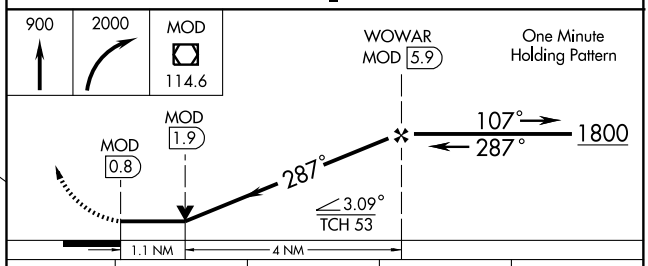
ATIS	NORCAL APP CON	MODESTO TOWER ★	GND CON	UNICOM
127.7	120.95 269.45	125.3 (CTAF) L 257.8	121.7	122.95





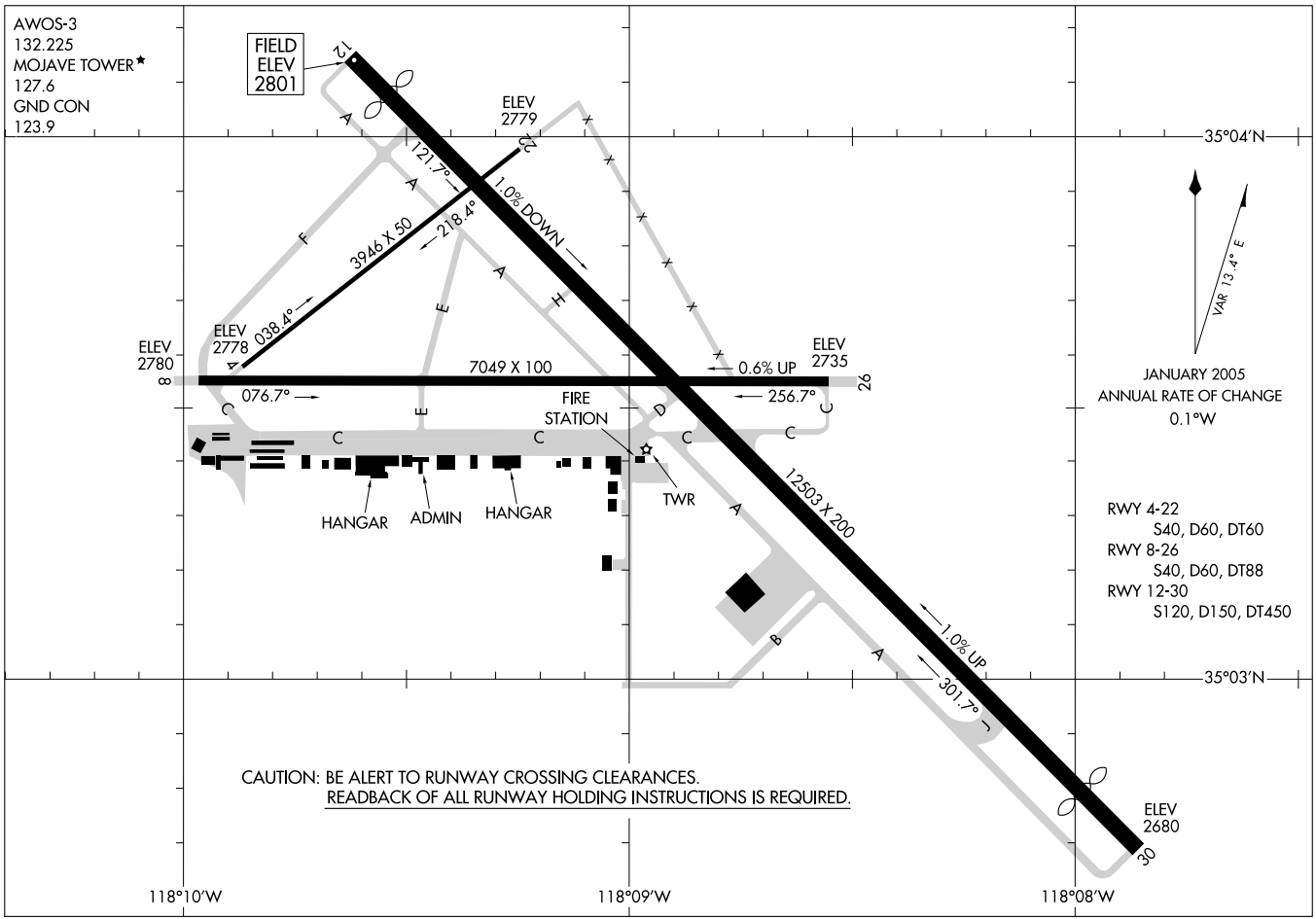
REIL Rwy 10L L
MIRL Rwy 10R-28L
HIRL Rwy 10L-28R L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-28R	480-½ 392 (400-½)			480-1 392 (400-1)
CIRCLING	540-1 443 (500-1)	560-1 463 (500-1)	560-1½ 463 (500-1½)	660-2 563 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-9353 (FAA)

MOJAVE (MHV)
MOJAVE, CALIFORNIA

MOJAVE, CALIFORNIA AL-9353 (FAA)

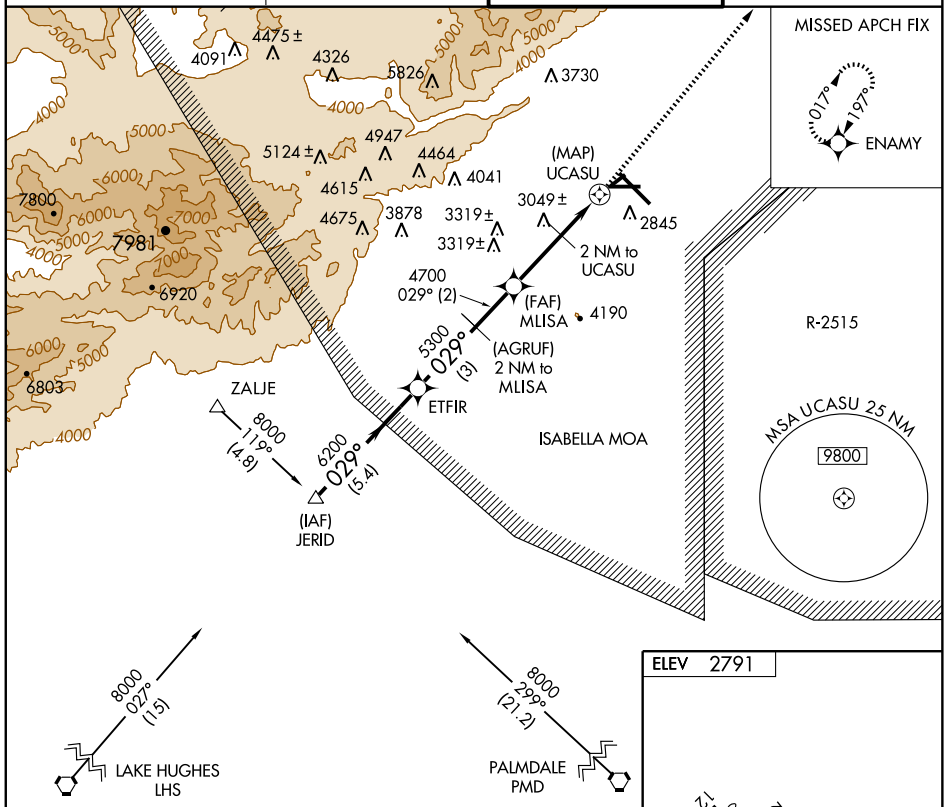
APP CRS	Rwy Idg	3946
029°	TDZE	2778
	Apt Elev	2791

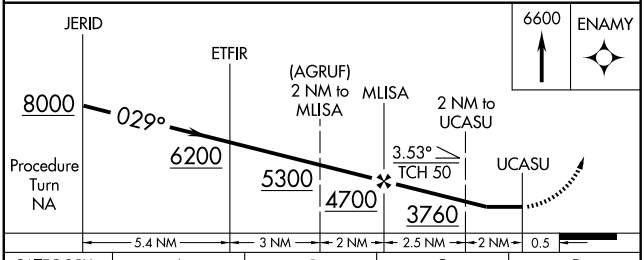
GPS RWY 4
MOJAVE (MHV)

Use Edwards AFB altimeter setting.
Circling SE of runway 4-22 not authorized.
Procedure NA at night.

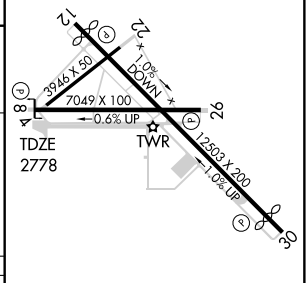
MISSED APPROACH: Climb to 6600 direct ENAMY WP and hold.

AWOS-3	JOSHUA APP CON	MOJAVE TOWER ★	GND CON
132.225	133.65 348.7	127.6 (CTAF) L	123.9





CATEGORY	A	B	C	D
S-4	3420-1	642 (700-1)	3420-1¾ 642 (700-1¾)	NA
CIRCLING	3520-1	729 (800-1)	3520-2 729 (800-2)	NA



REIL Rwys 12 and 30 L
MIRL Rwy 8-26 L
HIRL Rwy 12-30 L

SW-3, 22 OCT 2009 to 19 NOV 2009

MOJAVE, CALIFORNIA AL-9353 (FAA)

APP CRS	Rwy Idg	3946
218°	TDZE	2779
	Apt Elev	2791

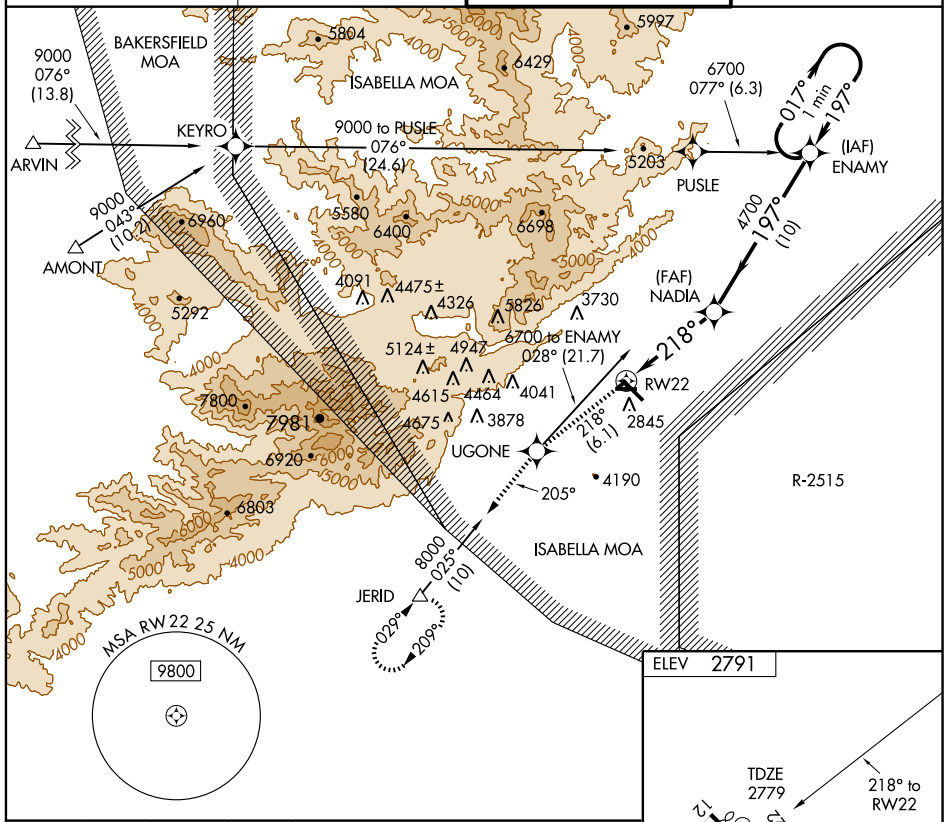
GPS RWY 22
MOJAVE (MHV)

T
ANA

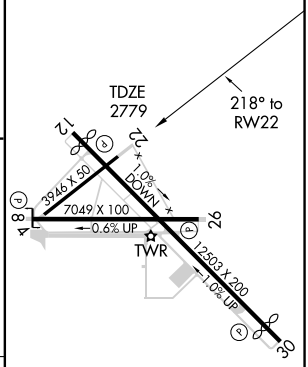
Use Edwards AFB altimeter setting.
Circling SE of runway 4-22 not authorized.
Procedure NA at night.

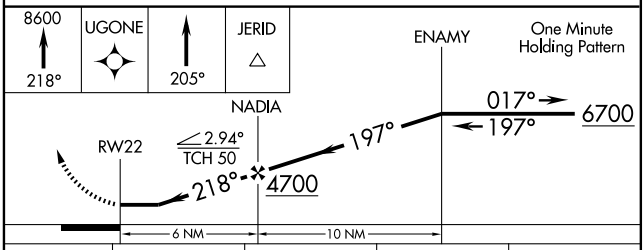
MISSED APPROACH: Climb to 8600 via course 218° to UGONE WP then via course 205° to JERID WP and hold.

AWOS-3	JOSHUA APP CON	MOJAVE TOWER ★	GND CON
132.225	133.65 348.7	127.6 (CTAF) L	123.9



ELEV 2791





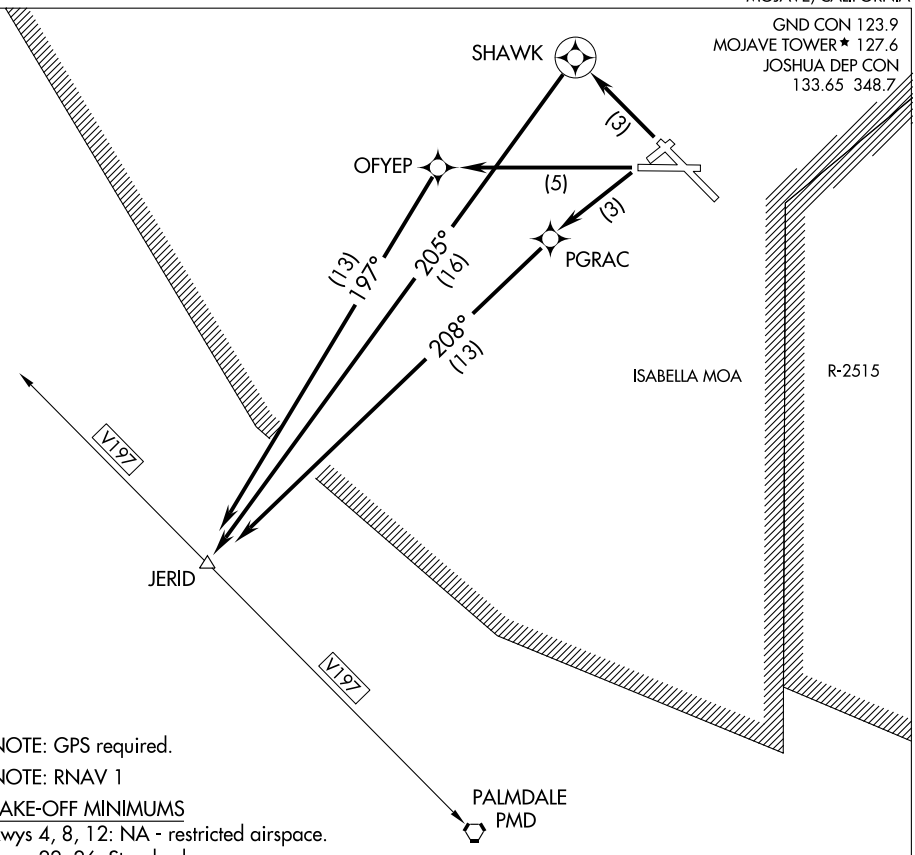
CATEGORY	A	B	C	D
S-22	3820-1¼ 1041 (1100-1¼)	3820-1½ 1041 (1100-1½)	3820-3 1041 (1100-3)	NA
CIRCLING	3820-1¼ 1029 (1100-1¼)	3820-1½ 1029 (1100-1½)	3820-3 1029 (1100-3)	NA

REIL Rwys 12 and 30 L
MIRL Rwy 8-26 L
HIRL Rwy 12-30 L

SW-3, 22 OCT 2009 to 19 NOV 2009

JERID THREE DEPARTURE (RNAV)

MOJAVE (MHV)
MOJAVE, CALIFORNIA



NOTE: GPS required.

NOTE: RNAV 1

TAKE-OFF MINIMUMS

Rwys 4, 8, 12: NA - restricted airspace.
Rwys 22, 26: Standard.
Rwy 30: Standard with a minimum climb of 480′ per NM to 5300.

NOTE: Aircraft departing Rwys 22, 26, 30 northwest bound on V197:
Standard with a minimum climb of 480′ per NM to 7600.

TAKE-OFF OBSTACLE NOTES

Rwy 30: Vehicle on road 3181′ from DER, 22′ right of centerline 17′ AGL/2896′ MSL.
Train 1441′ from DER, 351′ right of centerline, 23′ AGL/2882′ MSL.
Rwy 22: Tower 1519′ from DER, 150′ left of centerline, 80′ AGL/2849′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 22: Climb direct PGRAC, then via 208° track to JERID, thence....

TAKE-OFF RUNWAY 26: Climb direct OFYEP, then via 197° track to JERID, thence....

TAKE-OFF RUNWAY 30: Climb direct SHAWK, then climbing left turn via 205° track to JERID, thence....

....maintain 10000, expect filed altitude 10 minutes after departure.

NDB MOG 404	APP CRS 352°	Rwy Idg N/A TDZE N/A Apt Elev 2648

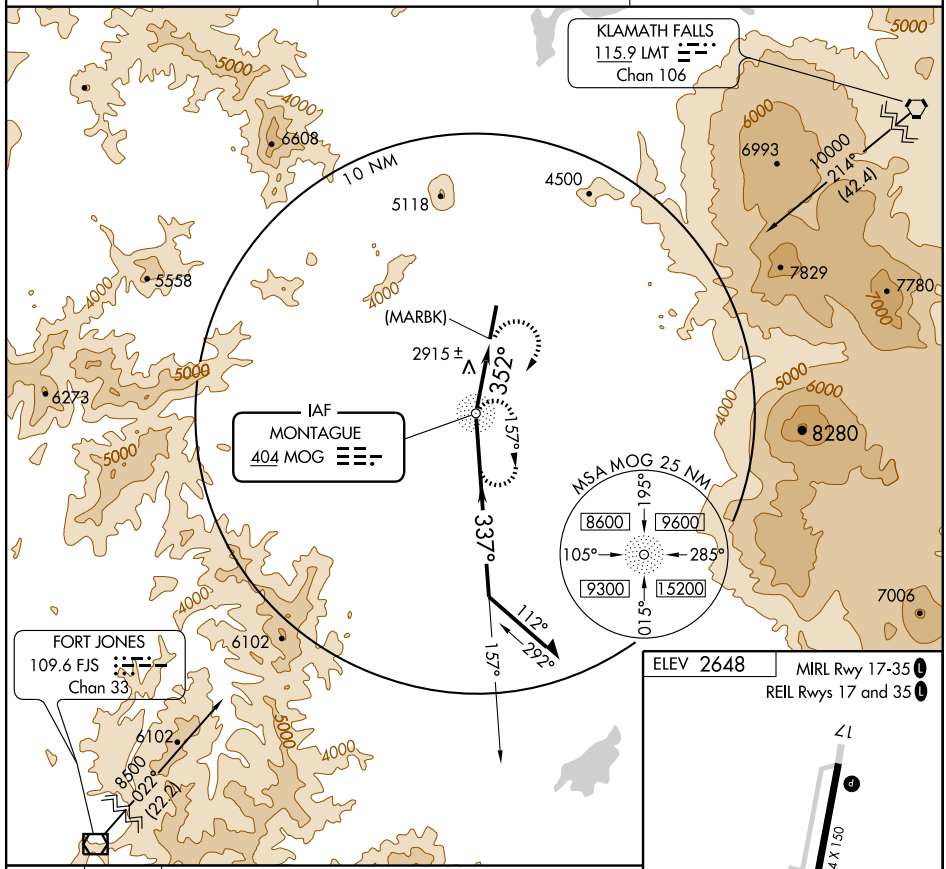
NDB or GPS-A

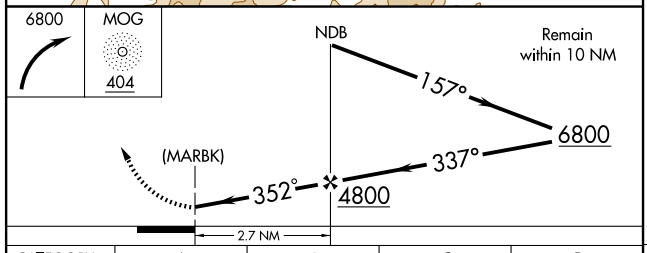
MONTAGUE/ SISKIYOU COUNTY (SIY)

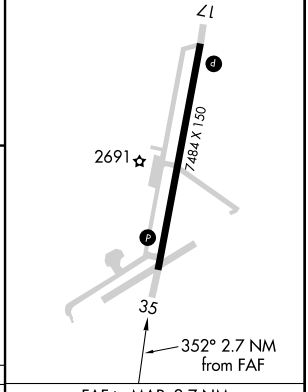
T NA Use Siskiyou County altimeter setting; when not available, use Montague-Yreka Rohrer Field altimeter setting; when neither received, procedure not authorized.

MISSED APPROACH: Climbing right turn to 6800 direct MOG NDB and hold.

ASOS	SEATTLE CENTER	UNICOM
121.125	124.85 306.3	123.0 (CTAF) L



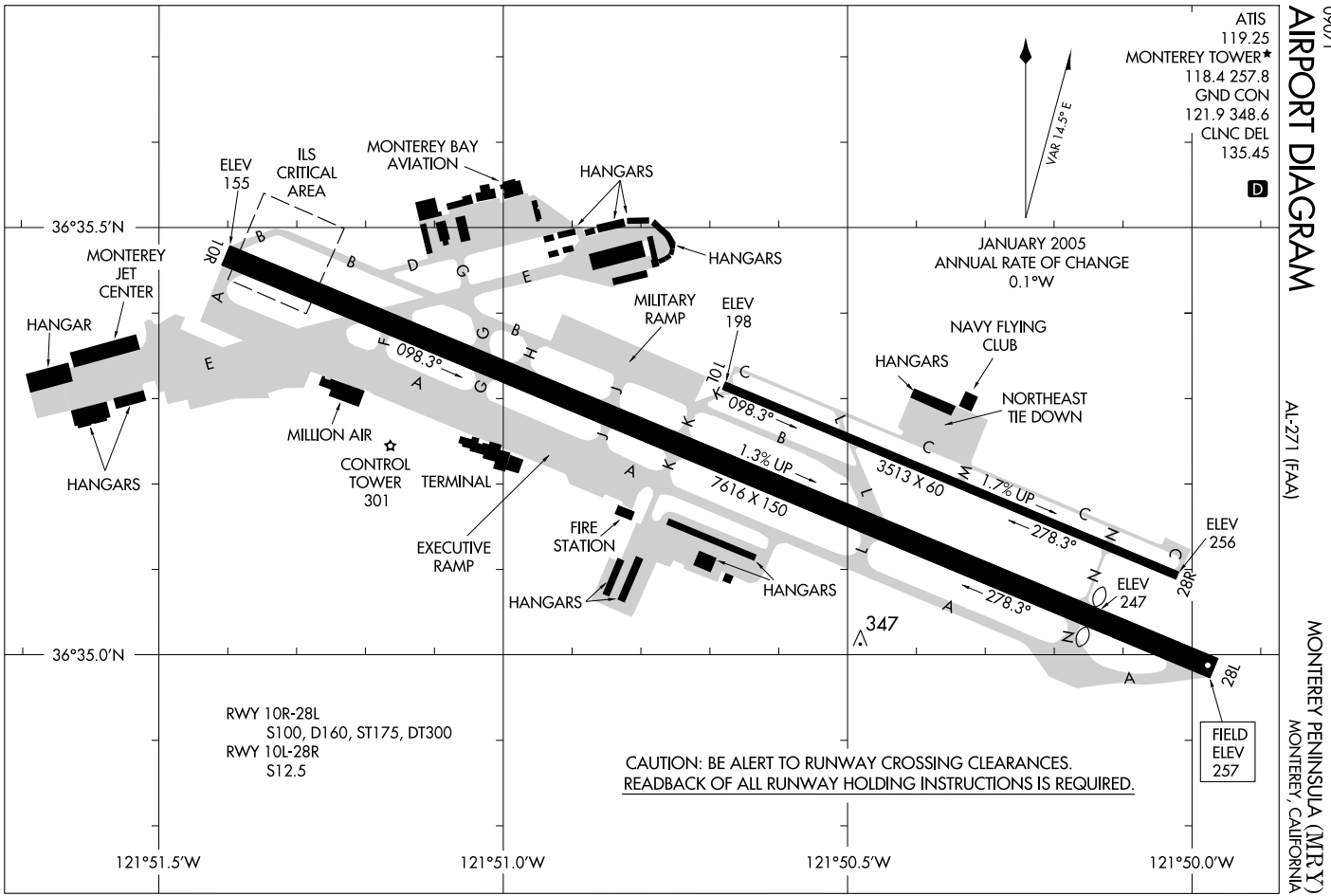




CATEGORY	A	B	C	D
CIRCLING	3760-1¼ 1112 (1200-1¼)	3760-1½ 1112 (1200-1½)	3760-3 1112 (1200-3)	

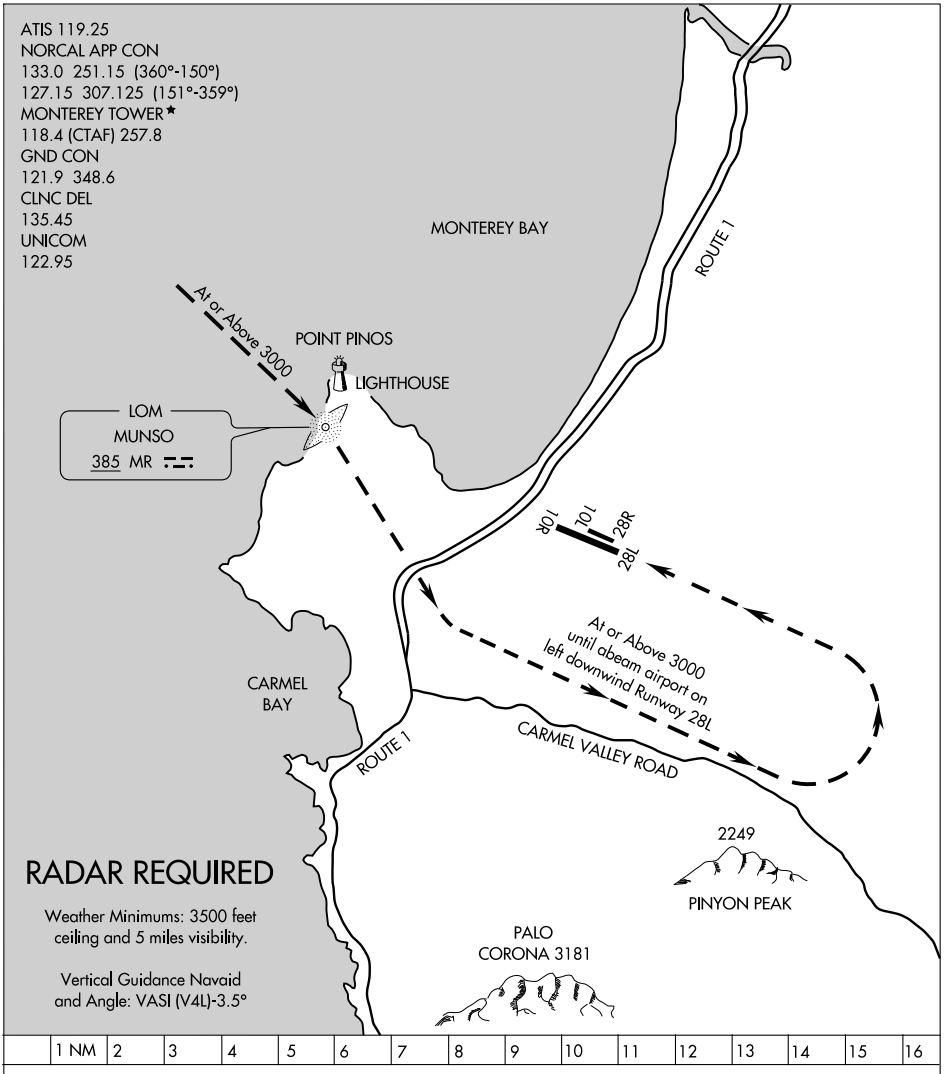
FAF to MAP 2.7 NM					
Knots	60	90	120	150	180
Min:Sec	2:42	1:48	1:21	1:05	0:54

SW-2, 22 OCT 2009 to 19 NOV 2009


AIRPORT DIAGRAM
MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA
AL-271 (FAA)
ATIS
119.25
MONTEREY TOWER★
118.4 257.8
GND CON
121.9 348.6
CLNC DEL
135.45
D
VAR 14.5° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
ELEV
155
ILS
CRITICAL
AREA
MONTEREY BAY
AVIATION
HANGARS
HANGARS
MONTEREY
JET
CENTER
HANGAR
HANGARS
MILLION AIR
CONTROL
TOWER
301
TERMINAL
EXECUTIVE
RAMP
MILITARY
RAMP
ELEV
198
NAVY FLYING
CLUB
HANGARS
NORTHEAST
TIE DOWN
098.3°
1.3% UP
7616 X 150
3513 X 60
1.7% UP
278.3°
278.3°
ELEV
256
ELEV
247
347
FIRE
STATION
HANGARS
HANGARS
10R
28L
10L
28R
36°35.5'N
36°35.0'N
121°51.5'W
121°51.0'W
121°50.5'W
121°50.0'W
RWY 10R-28L
S100, D160, ST175, DT300
RWY 10L-28R
S12.5
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
FIELD
ELEV
257

CARMEL VISUAL RWY 28L

MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA



CARMEL VISUAL APPROACH RWY 28L
PROCEDURE NOT AUTHORIZED AT NIGHT

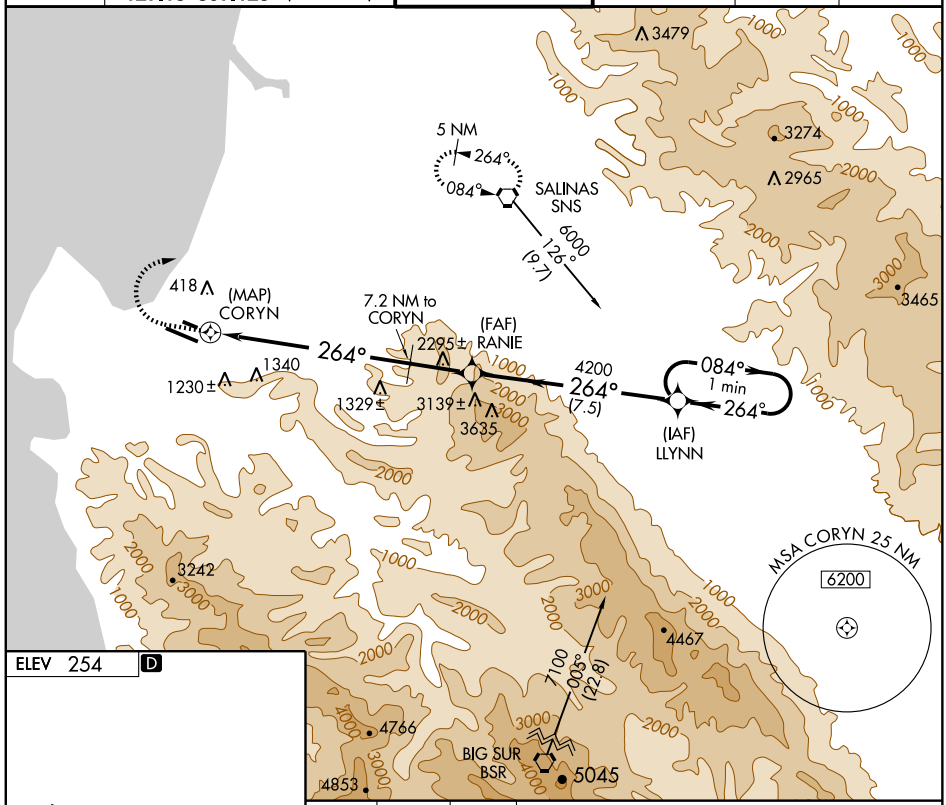
APP CRS	Rwy Idg	3513
264°	TDZE	253
	Apt Elev	254

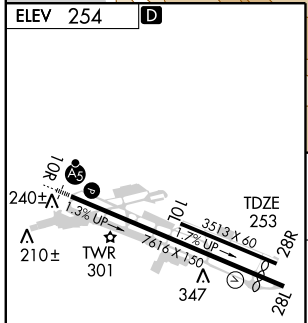
GPS RWY 28R
MONTEREY PENINSULA (MRY)

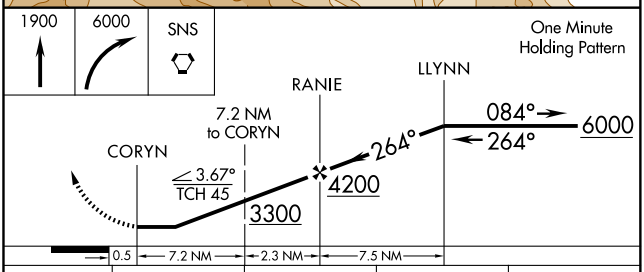
T NA — Circling not authorized south of Rwy 10R-28L. When tower closed, straight-in minimums not authorized.

MISSED APPROACH: Climb to 1900, then climbing right turn to 6000 direct SNS VORTAC and hold.

ATIS	NORCAL APP CON	MONTEREY TOWER ★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) L 257.8	121.9 348.6	135.45	122.95







CATEGORY	A	B	C	D
S-28R	1560-1¼ 1307 (1400-1¼)	1560-1½ 1307 (1400-1½)	NA	
CIRCLING	1560-1¼ 1306 (1400-1¼)	1560-1½ 1306 (1400-1½)	NA	

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-MRY	APP CRS	Rwy Idg	7616
110.7	098°	TDZE	193
Chan 44		Apt Elev	257

ILS or LOC RWY 10R

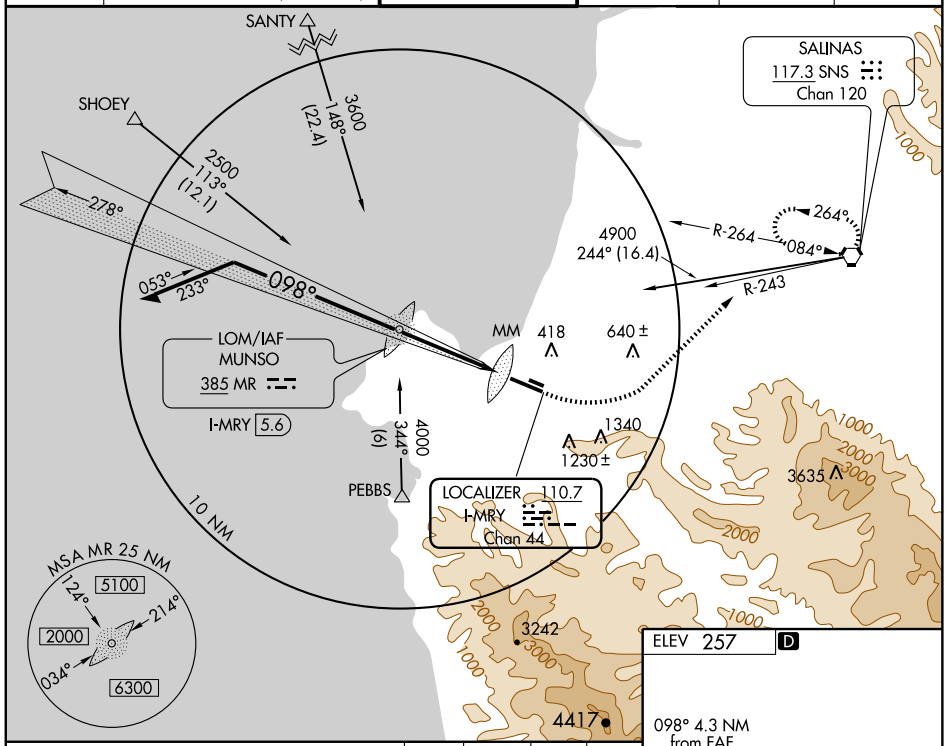
MONTEREY PENINSULA (MRY)

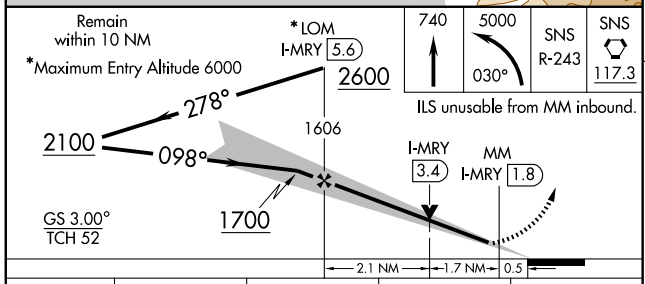
Circling not authorized south of Runway 10R-28L.
ILS unusable from MM inbound.
Auto pilot coupled approach not authorized.
For inoperative MALSR, increase S-ILS 10R to RVR 5000.

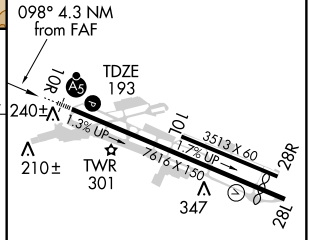
MALSR

MISSED APPROACH: Climb to 740, then climbing left turn to 5000 via heading 030° and SNS R-243 to SNS VORTAC and hold.

ATIS	NORCAL APP CON	MONTEREY TOWER ★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) L 257.8	121.9 348.6	135.45	122.95







CATEGORY	A	B	C	D
S-ILS 10R	480/24	287 (300-½)		
S-LOC 10R	900/24	707 (700-½)	900-1½ 707 (700-1½)	900-1¾ 707 (700-1¾)
CIRCLING	900-1	643 (700-1)	900-2 643 (700-2)	1080-2¾ 823 (900-2¾)

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L

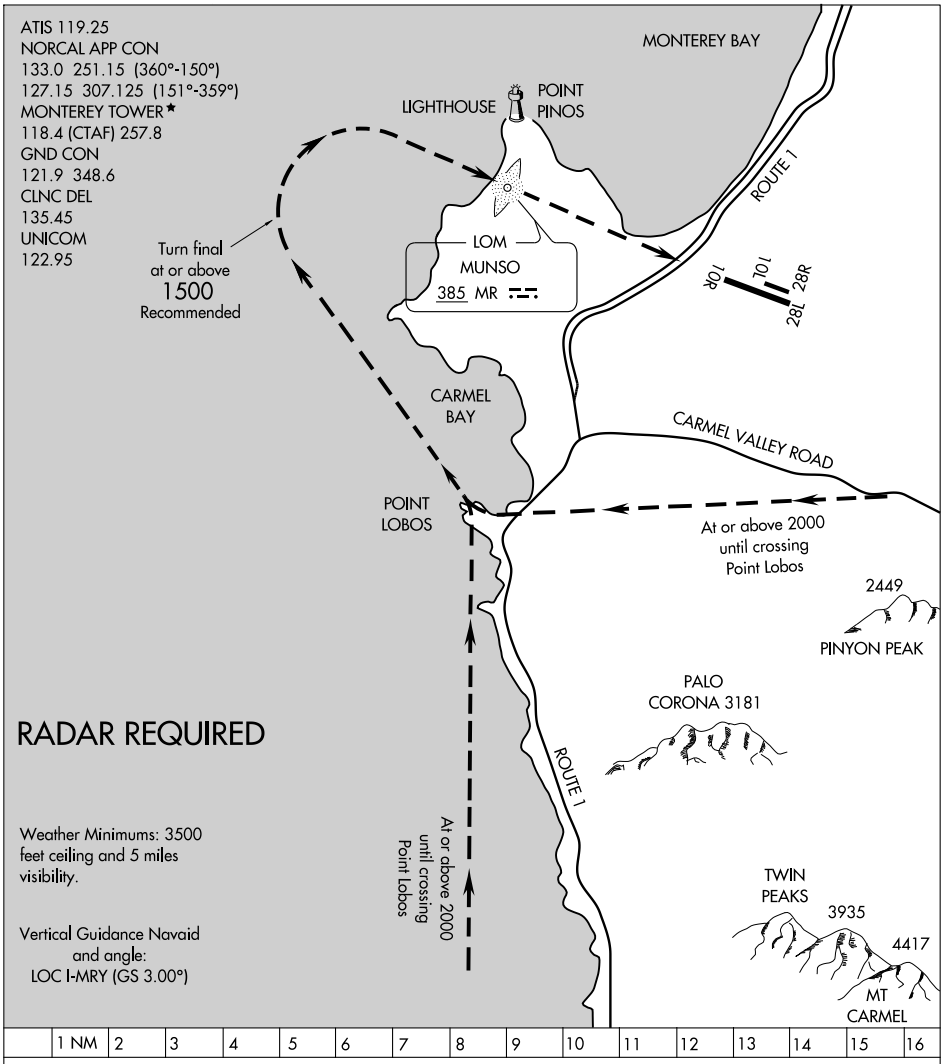
FAF to MAP 3.8 NM

Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

SW-2, 22 OCT 2009 to 19 NOV 2009

LOBOS VISUAL RWY 10R

MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA



LOBOS VISUAL APPROACH RWY 10R
PROCEDURE NOT AUTHORIZED AT NIGHT

MONTEREY, CALIFORNIA

AL-271 (FAA)

LOC/DME I-MTB	APP CRS	Rwy Idg	6616
110.7	278°	TDZE	245
Chan 44		Apt Elev	254

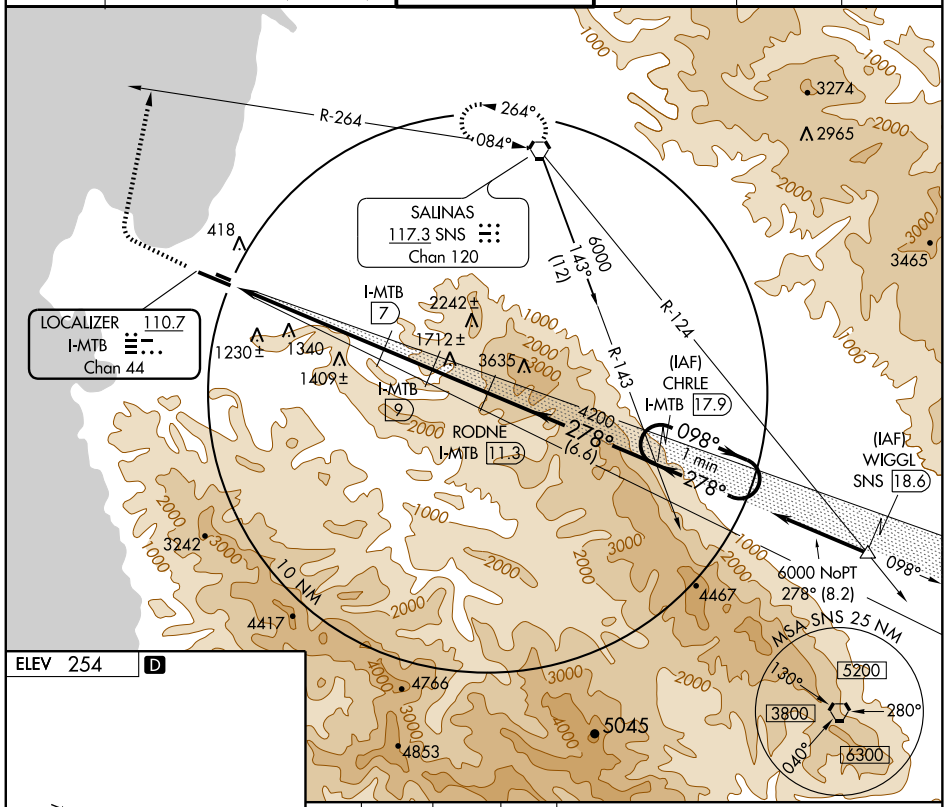
LOC/DME RWY 28L

MONTEREY PENINSULA (MRY)

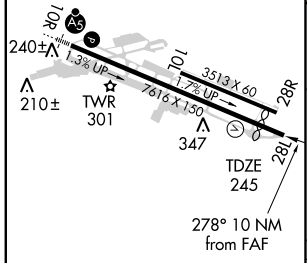
Circling not authorized south of Rwy 28L.
Procedure NA when control tower closed.

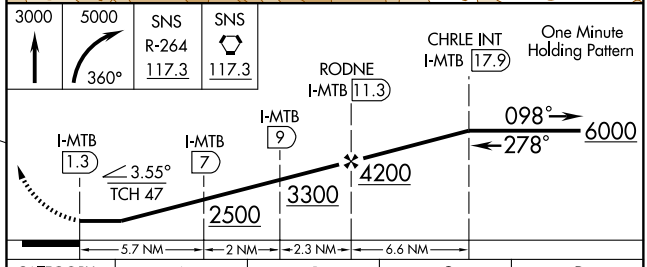
MISSED APPROACH: Climb straight ahead to 3000 then climbing right turn to 5000 via heading 360° and SNS R-264 to SNS VORTAC and hold.

ATIS	NORCAL APP CON	MONTEREY TOWER ★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) Ⓛ 257.8	121.9 348.6	135.45	122.95



ELEV 254 D





CATEGORY	A	B	C	D
S-28L	1660-1¼ 1415 (1500-1¼)	1660-1½ 1415 (1500-1½)	1660-3	1415 (1500-3)
CIRCLING	1660-1¼ 1406 (1500-1¼)	1660-1½ 1406 (1500-1½)	1660-3	1406 (1500-3)

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L Ⓛ
REIL Rwy 28L Ⓛ

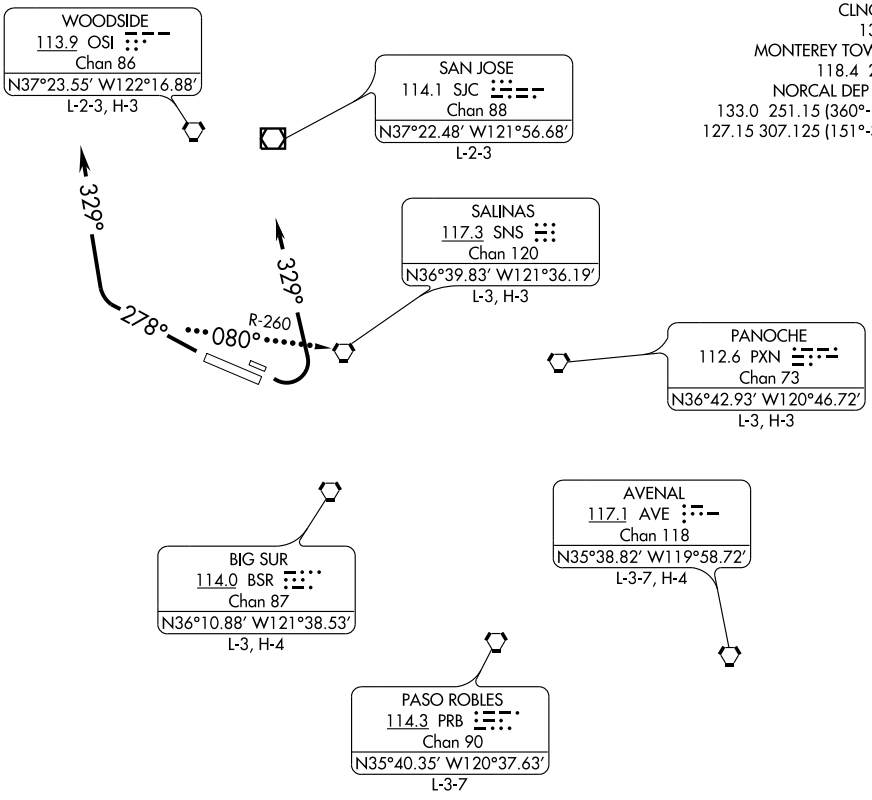
SW-2, 22 OCT 2009 to 19 NOV 2009

MONTEREY NINE DEPARTURE

SL-271 (FAA)

MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA

ATIS
119.25
GND CON
121.9 348.6
CLNC DEL
135.45
MONTEREY TOWER★
118.4 257.8
NORCAL DEP CON
133.0 251.15 (360°-150°)
127.15 307.125 (151°-359°)



TAKE-OFF MINIMUMS

Rwy 10R: Standard with a minimum climb of 451′ per NM to 1900.
Rwy 10L: Standard with a minimum climb of 428′ per NM to 1900.
Rwy 28L: Standard with a minimum climb of 310′ per NM to 1100.
Rwy 28R: Standard with a minimum climb of 240′ per NM to 1100.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

MONTEREY NINE DEPARTURE

SL-271 (FAA)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 10L/R: Climbing left turn heading 329°. Thence. . . .

TAKE-OFF RUNWAY 28L/R: Climb heading 278° until leaving 1100′ or as directed by Monterey Tower. Then climbing right turn heading 329°. Thence. . . .

. . . .all aircraft expect vectors to assigned route/fix. Altitude will be assigned by ATC. Expect clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If no transmissions received for one minute after departure, proceed via SNS R-260 to SNS VORTAC, then via assigned fix/route. Climb to 6000′ or assigned altitude, whichever is higher.

TAKE-OFF OBSTACLE NOTES

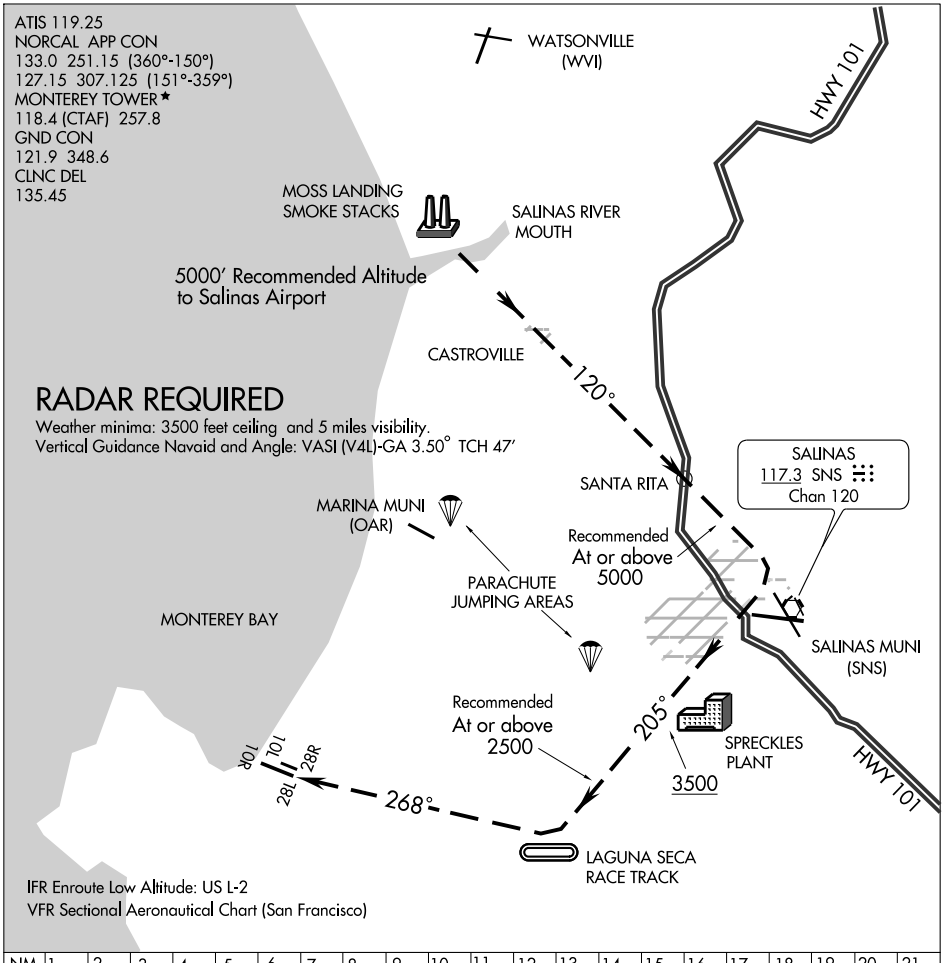
Rwy 10R: OL on DME 64′ from DER, 284′ left of centerline, 12′ AGL/272′ MSL.
Tree 1.7 NM from DER, 2318′ right of centerline, up to 100′ AGL/859′ MSL.
Rwy 10L: OL on DME 555′ from DER, 217′ right of centerline, 12′ AGL/272′ MSL.
Tree 1.8 NM from DER, 2817′ right of centerline, up to 100′ AGL/859′ MSL.
Rwy 28R: Airplane 6′ from DER, 179′ left of centerline, 64′ AGL/263′ MSL.
Rwy 28L: Tree 743′ from DER, 619′ left of centerline, up to 100′ AGL/240′ MSL.
Tree 2.9 NM from DER, 2298′ left of centerline, up to 100′ AGL/640′ MSL.
Tree 2.9 NM from DER, 4578′ left of centerline, 114′ AGL/853′ MSL.

SW-2, 22 OCT 2009 to 19 NOV 2009

MOSS LANDING VISUAL RWY 28L

AL-271 (FAA)

MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA



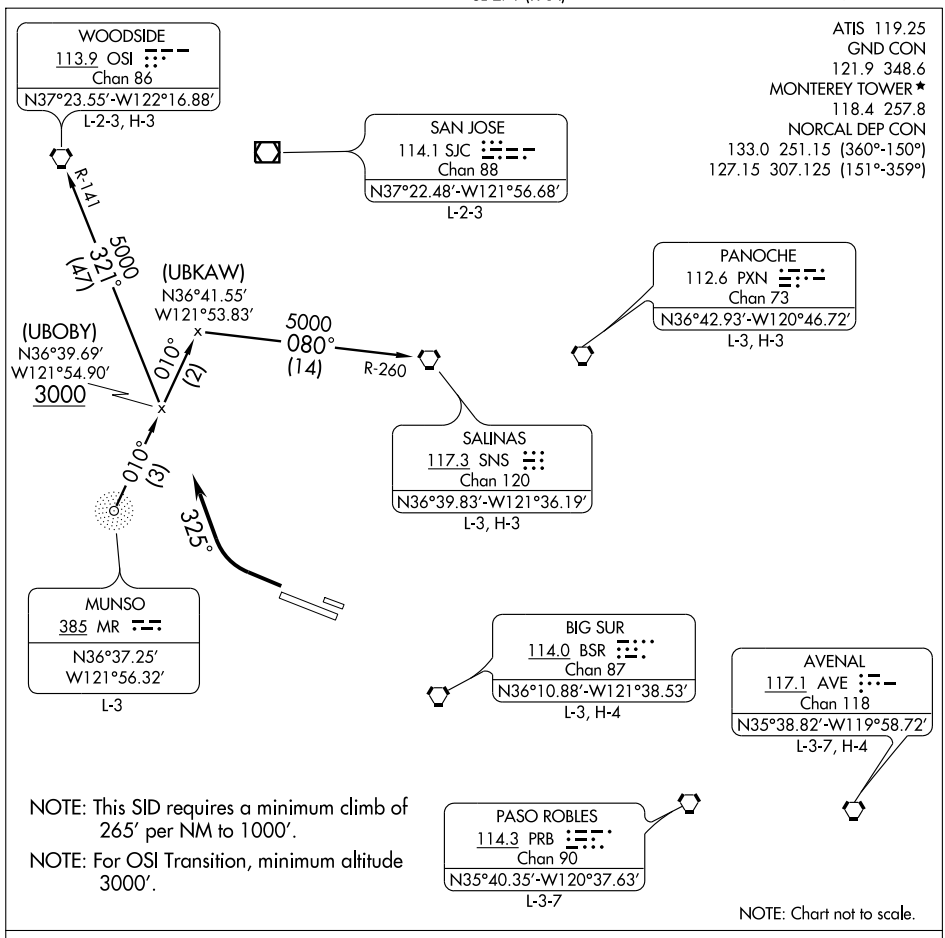
MOSS VISUAL APPROACH RWY 28L
PROCEDURE NOT AUTHORIZED AT NIGHT
PROCEDURE NOT AUTHORIZED
WHEN CONTROL TOWER CLOSED

NOTES: Due to practice approaches to RWY 10R, RWY 28L LOC not always activated during VFR conditions.

MUNSO TWO DEPARTURE

SL-271 (FAA)

MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA



NOTE: This SID requires a minimum climb of 265' per NM to 1000'.

NOTE: For OSI Transition, minimum altitude 3000'.

NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 28L/R: After leaving 1000', or as directed by tower, turn right heading 325° and join the 010° bearing from MUNSO NDB, thence via assigned route or transition. Maintain 6000'. Expect clearance to filed altitude five minutes after departure.

LOST COMMUNICATIONS: If no transmissions received for one minute after departure, proceed direct SNS VORTAC,then via assigned fix/route. Climb to 6000' or assigned altitude, whichever is higher.

SALINAS TRANSITION (MR2.SNS): From over MUNSO NDB via MR 010° bearing and SNS R-260 to SNS VORTAC.

WOODSIDE TRANSITION (MR2.OSI): From over MUNSO NDB via MR 010° bearing and OSI R-141 to OSI VORTAC.

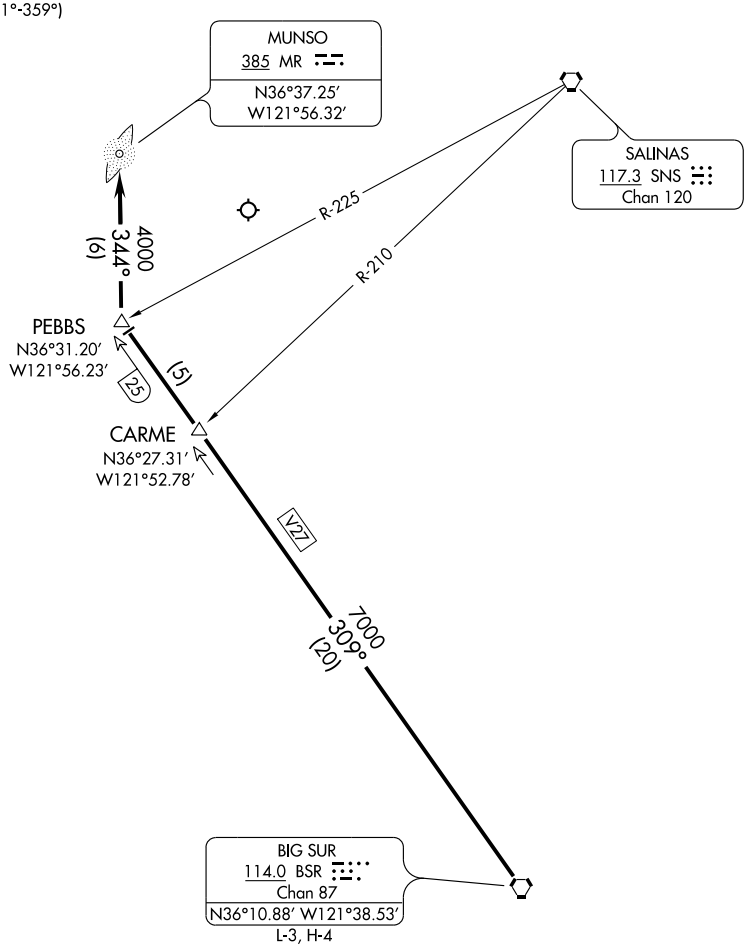
(BSR.PEBB1) 09239

PEBBS ONE ARRIVAL

ST-271 (FAA)

MONTEREY PENINSULA
MONTEREY, CALIFORNIA

ATIS
119.25
NORCAL APP CON
133.0 251.15 (360°-150°)
127.15 307.125 (151°-359°)
OAKLAND CENTER
128.7 307.0



NOTE: ADF required

From over BSR VORTAC via BSR R-309 to PEBBS Int/DME Fix, thence via 344° course to MUNSO LOM. Expect ILS Runway 10R Approach.

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3513
098°	TDZE	250
	Apt Elev	257

RNAV (GPS) RWY 10L
MONTEREY PENINSULA (MRY)

Circling NA south of Rwy 10R-28L.
DME/DME RNP- 0.3 NA.
When control tower closed, straight-in minimums NA.

MISSED APPROACH: Climb to 5000 direct YOGUY and via 042° track to SNS VORTAC and hold, continue climb-in-hold to 5000.

ATIS	NORCAL APP CON	MONTEREY TOWER★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) L 257.8	121.9 348.6	135.45	122.95

Procedure NA for arrivals at SHOEY via V27 northwest bound.

EUGEN
4000
129°
(25.6)
(IAF)
SANTY
3600 NoPT
167°
(18.6)
(IAF)
SHOEY
3600 NoPT
136°
(5.2)
098°
(IF/IAF)
KEDVE
5 NM
278°
2200
098°
(6.5)
(FAF)
CURMI
853± 418
RW10L
042°
(10.4)
YOGUY
1230± 1340
4000
256°
(23.2)
5 NM
264°
084°
SALINAS
SNS
3635
MSA RW10L 25 NM
6300
ELEV 257 D
098° to
RW10L
TDZE
250
240±
1.3% UP
1.7% UP
3513 X 60
7616 X 150
210±
TWR
301
347
10R
10L
28R
28L

5 NM
Holding Pattern
KEDVE
5000
YOGUY
042°
track
SNS
CURMI
3.1 NM to
RW10L
3600
278°
098°
098°
3.05°
TCH 45
2200
RW10L
6.5 NM
2.9 NM
3.1 NM

CATEGORY	A	B	C	D
LNAV MDA	1260-1¼ 1010 (1100-1¼)	1260-1½ 1010 (1100-1½)	NA	
CIRCLING	1260-1¼ 1003 (1100-1¼)	1260-1½ 1003 (1100-1½)	NA	

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7616
098°	TDZE	193
	Apt Elev	257

RNAV (GPS) Y RWY 10R

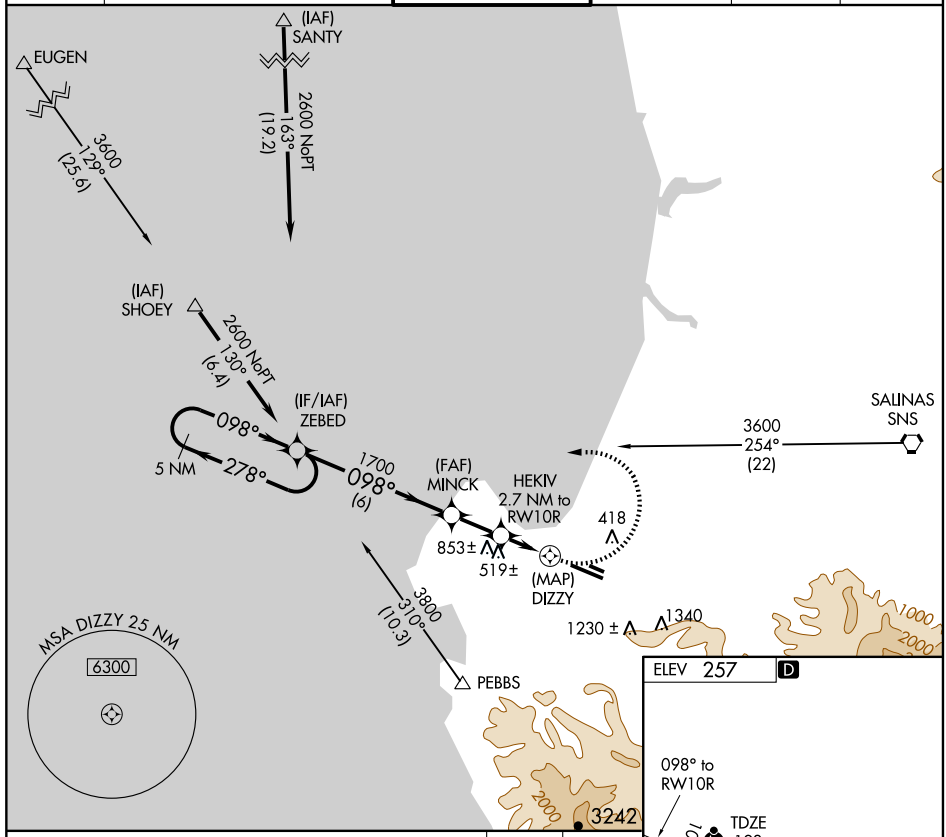
MONTEREY PENINSULA (MRY)

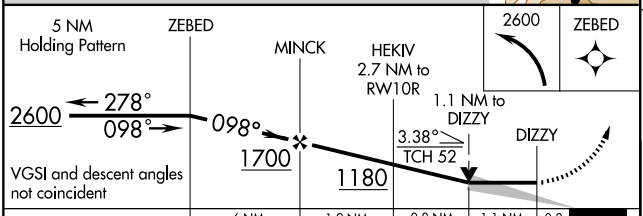
Circling NA south of Rwy 10R-28L.
DME/DME RNP -0.3 NA.

MALSR

MISSED APPROACH: Climbing left turn to 2600 direct ZEBED and hold.

ATIS	NORCAL APP CON	MONTEREY TOWER★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) L 257.8	121.9 348.6	135.45	122.95





CATEGORY	A	B	C	D
LNAV MDA	800/24 607 (600-½)		800/60 607 (600-1¼)	800-1½ 607 (600-1½)
CIRCLING	800-1 543 (600-1)		840-1¾ 583 (600-1¾)	1080-2¾ 823 (900-2¾)

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6616
264°	TDZE	247
	Apt Elev	257

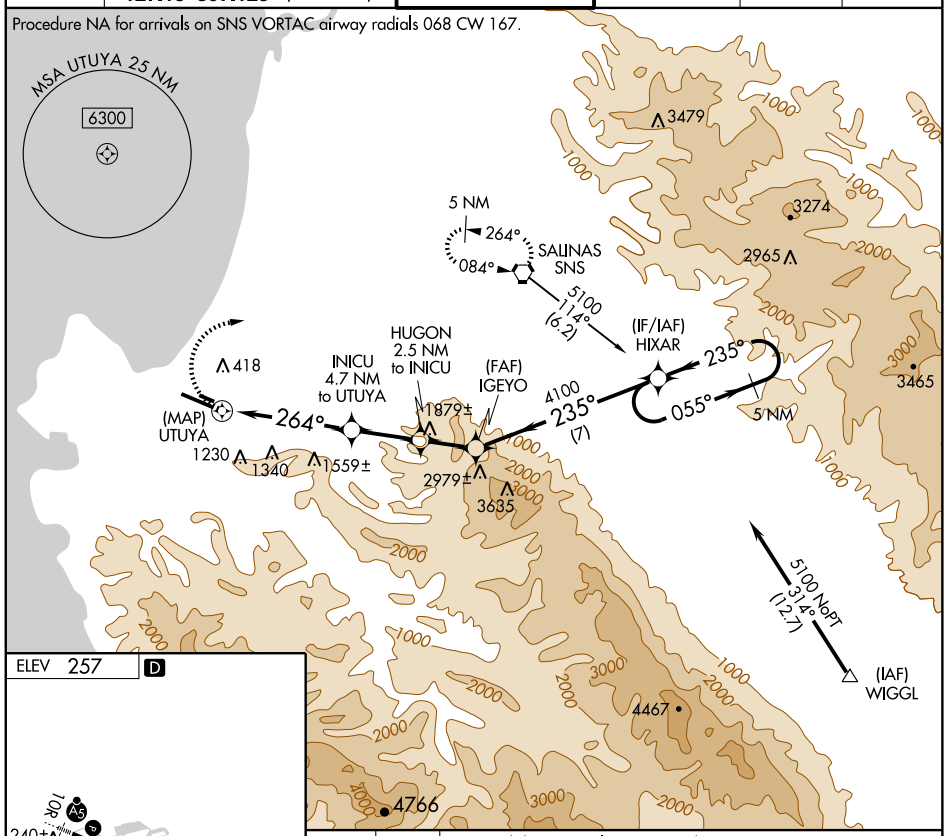
RNAV (GPS) Y RWY 28L
MONTEREY PENINSULA (MRY)

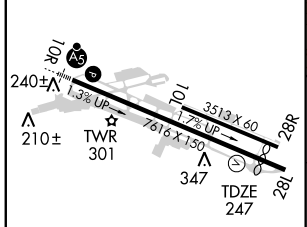
Circling NA south of Rwy 10R-28L.
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.

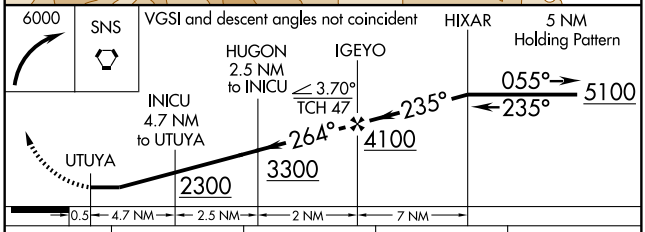
MISSED APPROACH: Climbing right turn to 6000 direct to SNS VORTAC and hold, continue climb-in-hold to 6000.

ATIS	NORCAL APP CON	MONTEREY TOWER ★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) L 257.8	121.9 348.6	135.45	122.95

Procedure NA for arrivals on SNS VORTAC airway radials 068 CW 167.







CATEGORY	A	B	C	D
LNAV MDA	1600/60 1353 (1400-1¼)	1600-1½ 1353 (1400-1½)	1600-3 1353 (1400-3)	NA
CIRCLING	1600-1¼ 1343 (1400-1¼)	1600-1½ 1343 (1400-1½)	1600-3 1343 (1400-3)	NA

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	7616
CH 70699	098°	TDZE	193
W10A		Apt Elev	257

RNAV (GPS) Z RWY 10R

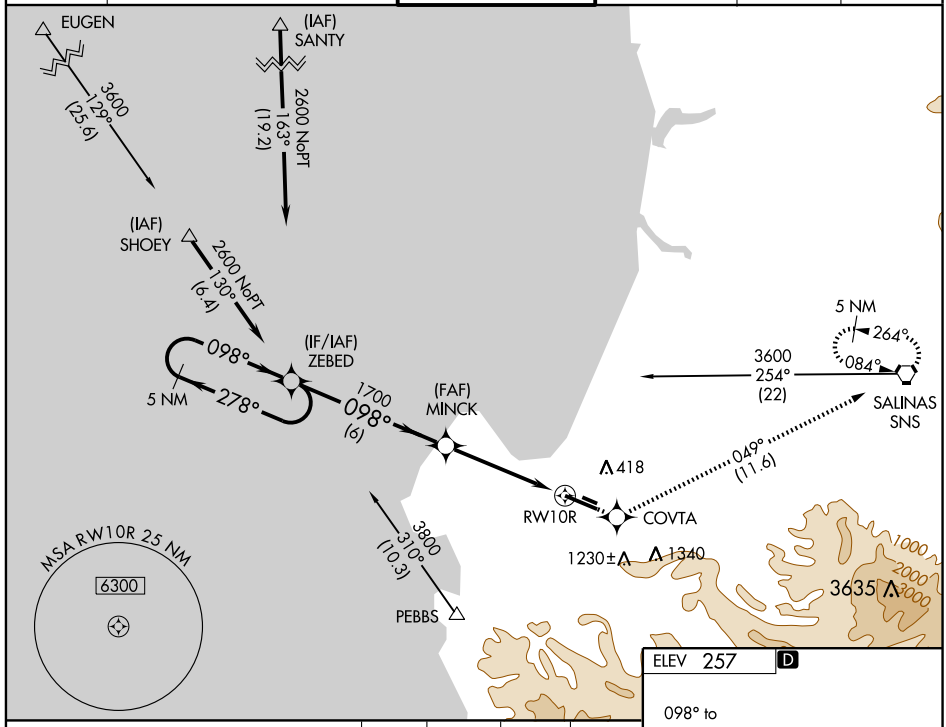
MONTEREY PENINSULA (MRY)

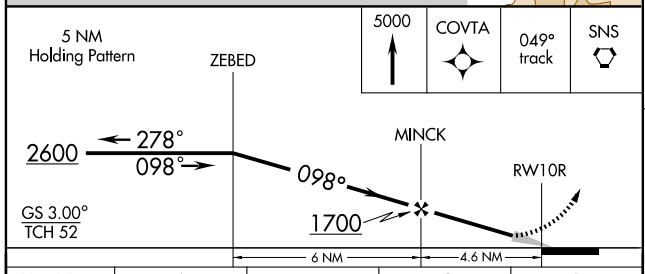
DME/DME RNP- 0.3 NA.
For inoperaive MALSR, increase LPV all Cats visibility to 1¾ mile.

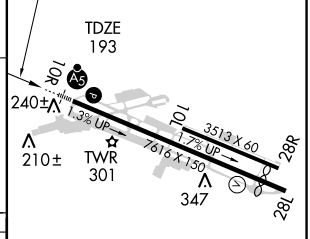
MALSR

MISSED APPROACH: Climb to 5000 direct COVTA and via 049° track to SNS VORTAC and hold, continue climb-in-hold to 5000.

ATIS	NORCAL APP CON	MONTEREY TOWER ★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) L 257.8	121.9 348.6	135.45	122.95







CATEGORY	A	B	C	D
LPV DA	679/60	486 (500-1¼)		
LNAV/VNAV DA	NA			
LNAV MDA	NA			
CIRCLING	NA			

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6616
279°	TDZE	247
	Apt Elev	257

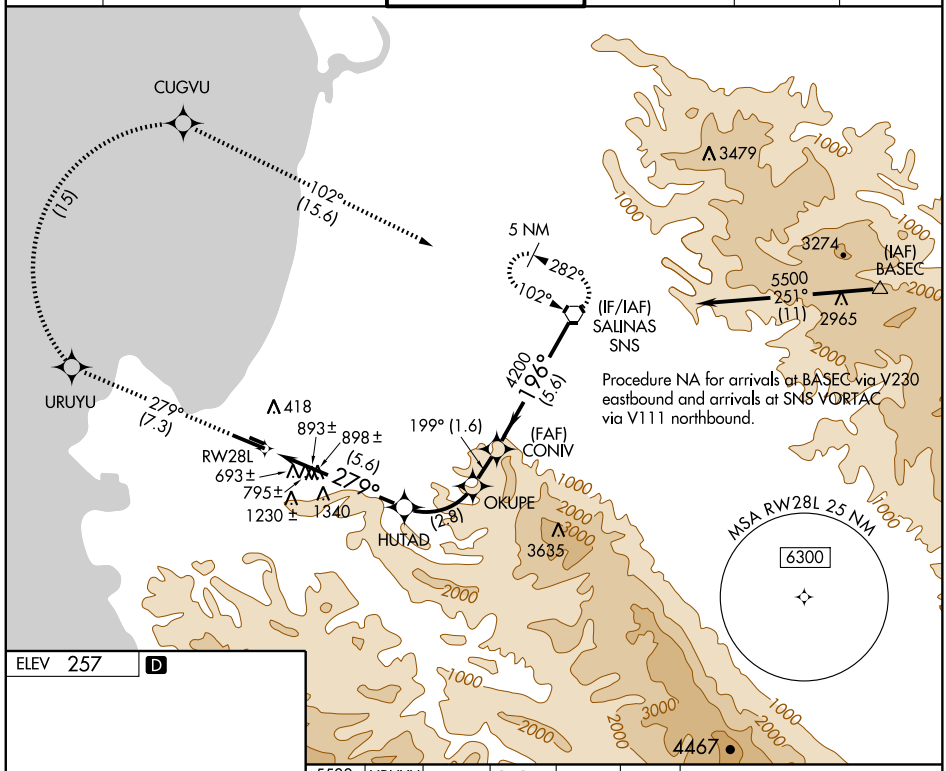
RNAV (RNP) Z RWY 28L

MONTEREY PENINSULA (MRY)

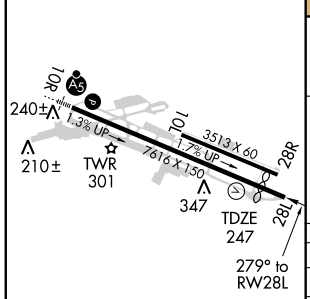
RF and GPS required. When VGSI inoperative, RNP 0.30 DA NA at night. For uncompensated Baro-VNAV systems, procedure NA below 0°C (32°F) or above 39°C (102°F). Visibility reduction by helicopters NA.

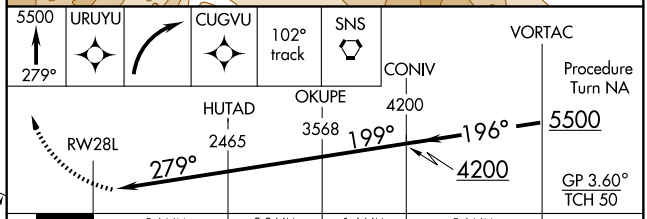
MISSED APPROACH: Climb to 5500 via 279° track to URUYU and via right turn to CUGVU and via 102° track to SNS VORTAC and hold.

ATIS	NORCAL APP CON	MONTEREY TOWER★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (360°-150°) 127.15 307.125 (151°-359°)	118.4 (CTAF) L 257.8	121.9 348.6	135.45	122.95



SW-2, 22 OCT 2009 to 19 NOV 2009





CATEGORY	A	B	C	D
RNP 0.10 DA	497/40	250 (300-¾)		NA
RNP 0.20 DA	1196-2¾	949 (1000-2¾)		NA
RNP 0.30 DA	1257-3	1010 (1000-3)		NA

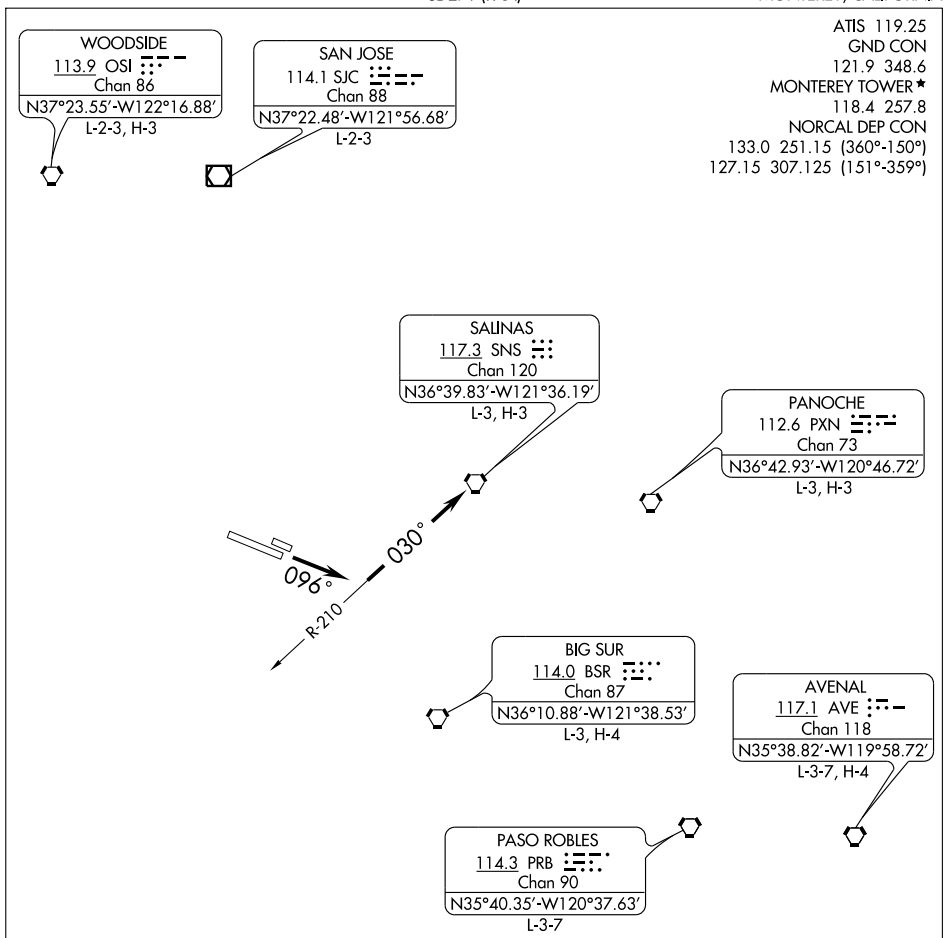
MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SECA TWO DEPARTURE

SL-271 (FAA)

MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA



NOTE: This SID requires a minimum climb of 405' per NM to 4000'.

NOTE: Minimum assignable altitude 6000'.

NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

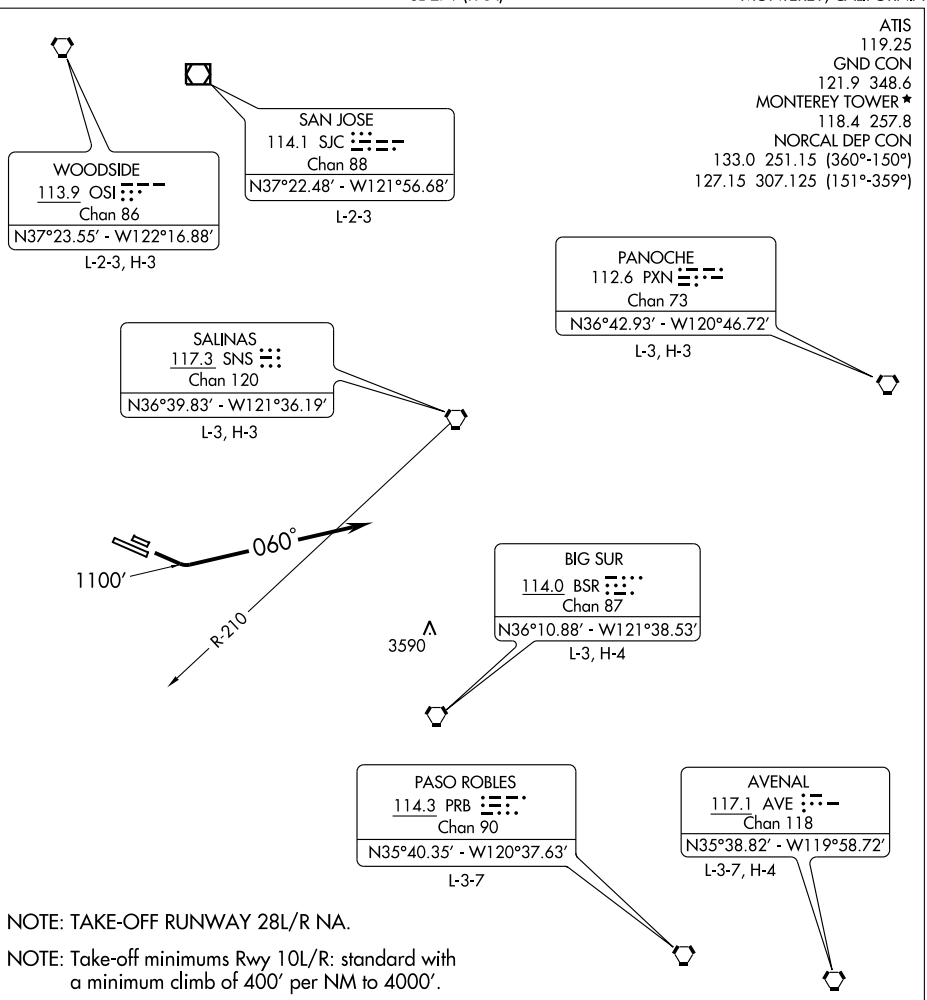
TAKE-OFF RUNWAY 10L/R: Climb via heading 096° and intercept the SNS R-210 to SNS VORTAC, thence via assigned route, maintain 6000'. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If no transmissions received for one minute after departure, proceed to the SNS VORTAC, then via assigned fix/route. Climb to 6000' or assigned altitude, whichever is higher.

TORO FIVE DEPARTURE

SL-271 (FAA)

MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA



NOTE: TAKE-OFF RUNWAY 28L/R NA.

NOTE: Take-off minimums Rwy 10L/R: standard with a minimum climb of 400′ per NM to 4000′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

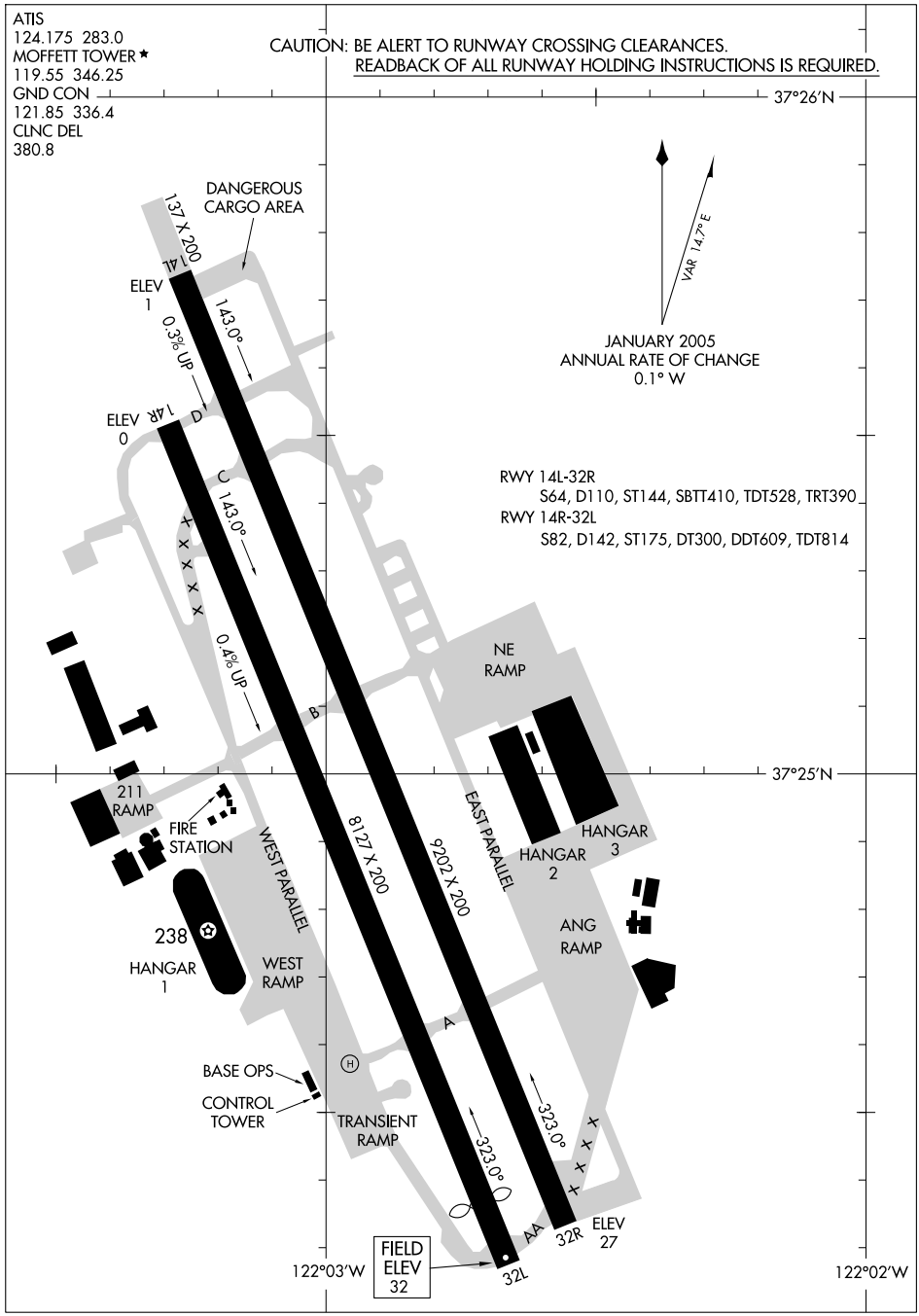
TAKE-OFF RUNWAY 10L/R: Climb runway heading to 1100′, then climbing left turn heading 060°.Expect vectors to filed route after passing SNS R-210. Maintain 6000′ or assigned higher altitude. Expect clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure climb direct SNS VORTAC, then via assigned fix/route. Maintain 6,000′ or assigned higher altitude.

SW-2, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

MOUNTAIN VIEW/MOFFETT FEDERAL AIRFIELD (NUQ)
MOUNTAIN VIEW, CALIFORNIA
AL-410 (FAA)

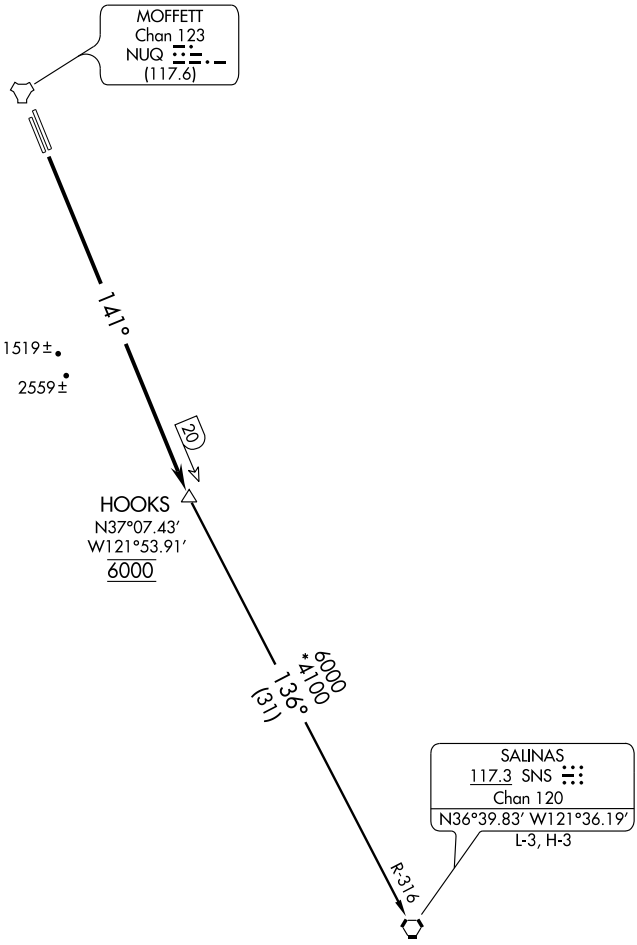


SW-2, 22 OCT 2009 to 19 NOV 2009

HOOKS ONE DEPARTURE

MOUNTAIN VIEW/ MOFFETT FEDERAL AFLD (NUQ)
MOUNTAIN VIEW, CALIFORNIA
SL-410 (FAA)

ATIS
124.175 283.0
CLNC DEL
380.8
GND CON
121.85 336.4
MOFFETT TOWER*
119.55 (CTAF) 346.25
NORCAL DEP CON
120.1 290.25



NOTE: TACAN required.

TAKE-OFF MINIMUMS
Rwy 14R/14L: Standard with the following minimum climb gradients:
Rwy 14R: Obstacle climb of 314' per NM to 4900, ATC climb of 332' per NM to 6000.
Rwy 14L: Obstacle climb of 314' per NM to 4900, ATC climb of 328' per NM to 6000.
Rwy 32R/32L: NA, ATC.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 14L/14R: Climb via NUQ R-141 to cross HOOKS/NUQ 20 DME at 6000, thence . . . .

. . . . via (transition).

VALLEY TRANSITION (HOOKS1.SNS): From over HOOKS DME via SNS R-316 to SNS VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

MOUNTAIN VIEW, CALIFORNIA

AL-410 (FAA)

LOC I-NUQ	APP CRS	Rwy Idg	9202
110.35	322°	TDZE	27
		Apt Elev	32

ILS OR LOC/DME RWY 32R

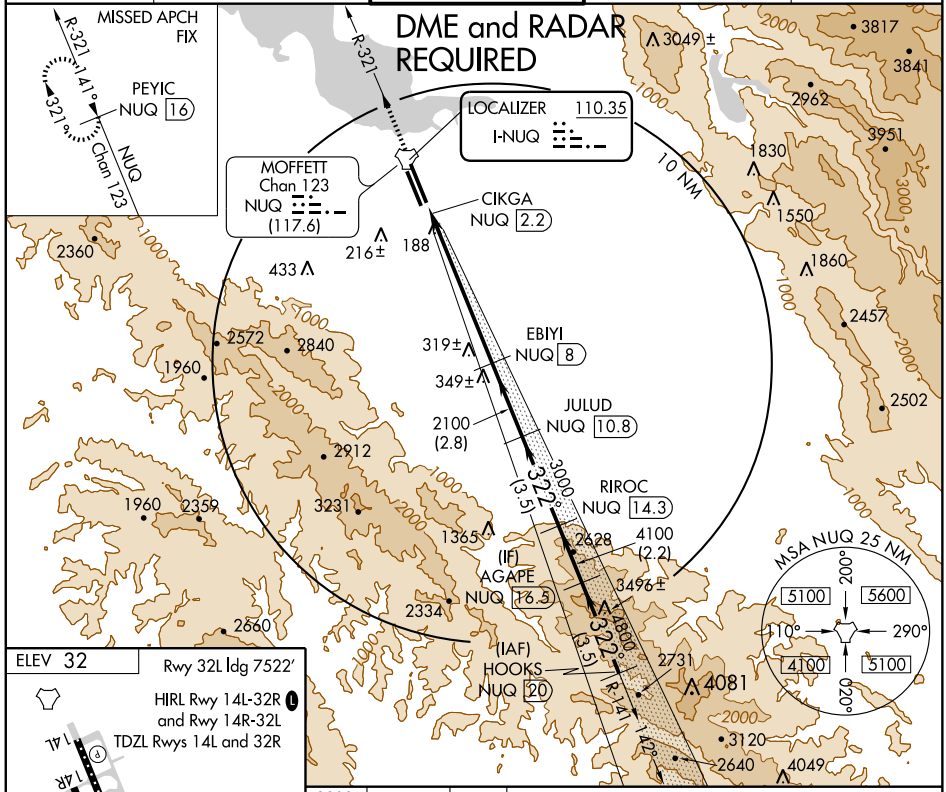
MOUNTAIN VIEW/ MOFFETT FEDERAL AFLD (NUQ)

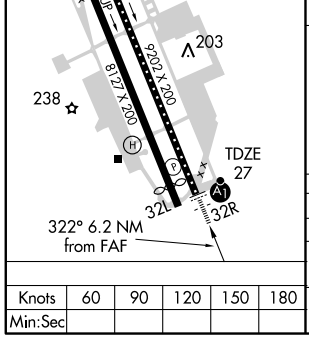
T NA — DME from NUQ TACAN. Simultaneous reception of I-NUQ and NUQ DME required. For inoperative ALSF, increase S-LOC 32R Cats A/B visibility to RVR 5000 and Cat E to 2. Inoperative table does not apply to S-ILS 32R. TACAN required.

ALSF-1

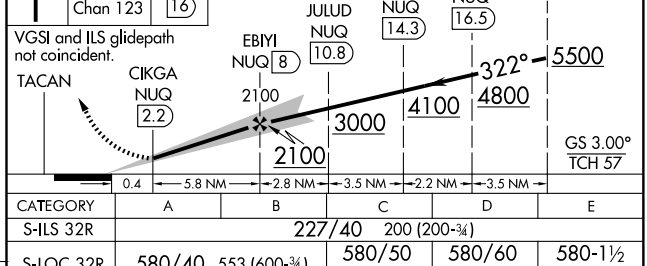
MISSED APPROACH: Climb to 3200 via NUQ TACAN and NUQ R-321 to PEYIC/NUQ 16 DME and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 (L) (CTAF) 346.25	121.85 336.4	380.8





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D	E
S-ILS 32R	227/40 200 (200-¾)				
S-LOC 32R	580/40 553 (600-¾)		580/50 553 (600-1)	580/60 553 (600-1¼)	580-1½ 553 (600-1½)
CIRCLING	580-1 548 (600-1)		580-1½ 548 (600-1½)	600-2 568 (600-2)	840-2¾ 808 (900-2¾)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-MNQ	APP CRS	Rwy ldg	9202
110.35	142°	TDZE	2
		Apt Elev	32

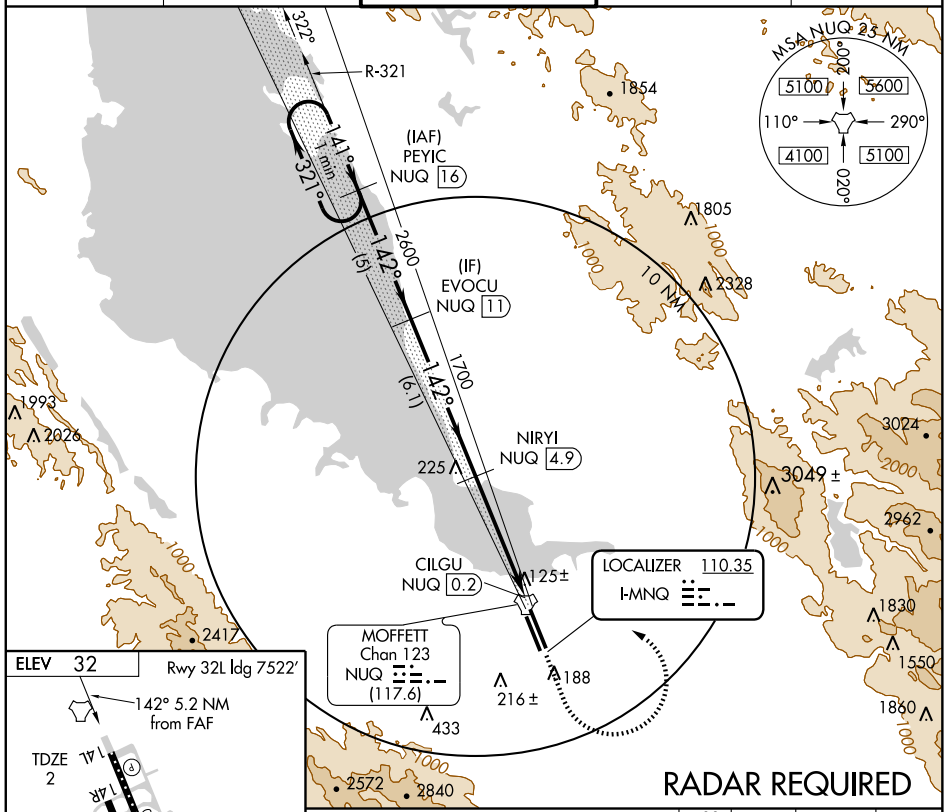
LOC/DME RWY 14L

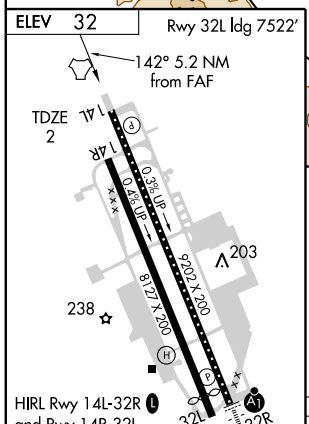
MOUNTAIN VIEW/MOFFETT FEDERAL AFLD (NUQ)

T NA — DME from NUQ TACAN. Simultaneous reception of I-MNQ and NUQ DME required. TACAN required.

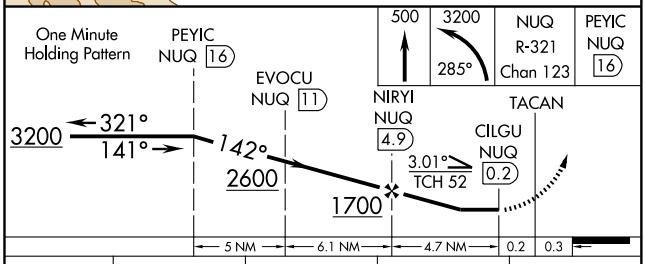
MISSED APPROACH: Climb to 500 then climbing left turn to 3200 via heading 285° and NUQ R-321 to PEYIC NUQ 16 DME and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 346.25	121.85 336.4	380.8





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-LOC 14L	380-1 378 (400-1)			380-1¼ 378 (400-1¼)
CIRCLING	540-1 508 (600-1)		540-1½ 508 (600-1½)	600-2 568 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

POINT REYES ONE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA

NORCAL APP CON
133.95 317.6
SAN FRANCISCO TOWER
120.5 269.1
SAN FRANCISCO INTL ATIS
113.7 118.85
SAN CARLOS TOWER★
119.0 326.2
SAN CARLOS ATIS
125.9
PALO ALTO TOWER★
118.6
PALO ALTO ATIS
135.275
MOFFETT FEDERAL AFLD TOWER★
119.55 346.25
MOFFETT FEDERAL AFLD ATIS
124.175 283.0
SAN JOSE TOWER★
124.0 257.6
NORMAN Y. MINETA
SAN JOSE INTL ATIS
126.95
REID-HILLVIEW TOWER★
119.8 RWY 13L/31R
126.1 RWY 13R/31L
REID-HILLVIEW ATIS
125.2

MAXWELL
110.0 MXW
Chan 37
N39°19.06′-W122°13.29′
L-2

MENDOCINO
112.3 ENI
Chan 70
N39°03.19′-W123°16.45′
L-2, H-3

SANTA ROSA
113.0 STS
Chan 77

SACRAMENTO
115.2 SAC
Chan 99
N38°26.62′-W121°33.10′
L-2-3, H-3

POPES
N38°29.16′
W122°20.75′

SCAGGS ISLAND
112.1 SGD
Chan 58

POINT REYES
113.7 PYE
Chan 84
N38°04.79′-W122°52.07′

SAUSALITO
116.2 SAU
Chan 109

SAN FRANCISCO
115.8 SFO
Chan 105

OAKLAND
116.8 OAK
Chan 115

STINS
N37°49.42′
W122°45.40′

SAN FRANCISCO INTL

PALO ALTO AIRPORT OF SANTA CLARA COUNTY

SAN CARLOS

MOFFETT FEDERAL AFLD

NORMAN Y. MINETA SAN JOSE INTL

REID-HILLVIEW OF SANTA CLARA COUNTY

HADLY
N37°24.14′
W122°34.54′

WOODSIDE
113.9 OSI
Chan 86
N37°23.55′-W122°16.88′

6500 184° (80)
6000 146° (61)
5000 208° (35)
5000 257° (38)
V494
R-077
22
R-347
R-005
R-028
R-325
144° (16)
R-243
V27
R-287
144° (27)
43
R-204
076° (14)
R-256

NOTE: SACRAMENTO Transition to be used only when assigned by ATC.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

MAXWELL TRANSITION (MXW.PYE1): From over MXW VORTAC via MXW R-184 and PYE R-005 to PYE VORTAC. Thence....

MENDOCINO TRANSITION (ENI.PYE1): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

SACRAMENTO TRANSITION (SAC. PYE1): From over SAC VORTAC via SAC R-257 and PYE R-028 to PYE VORTAC. Thence....

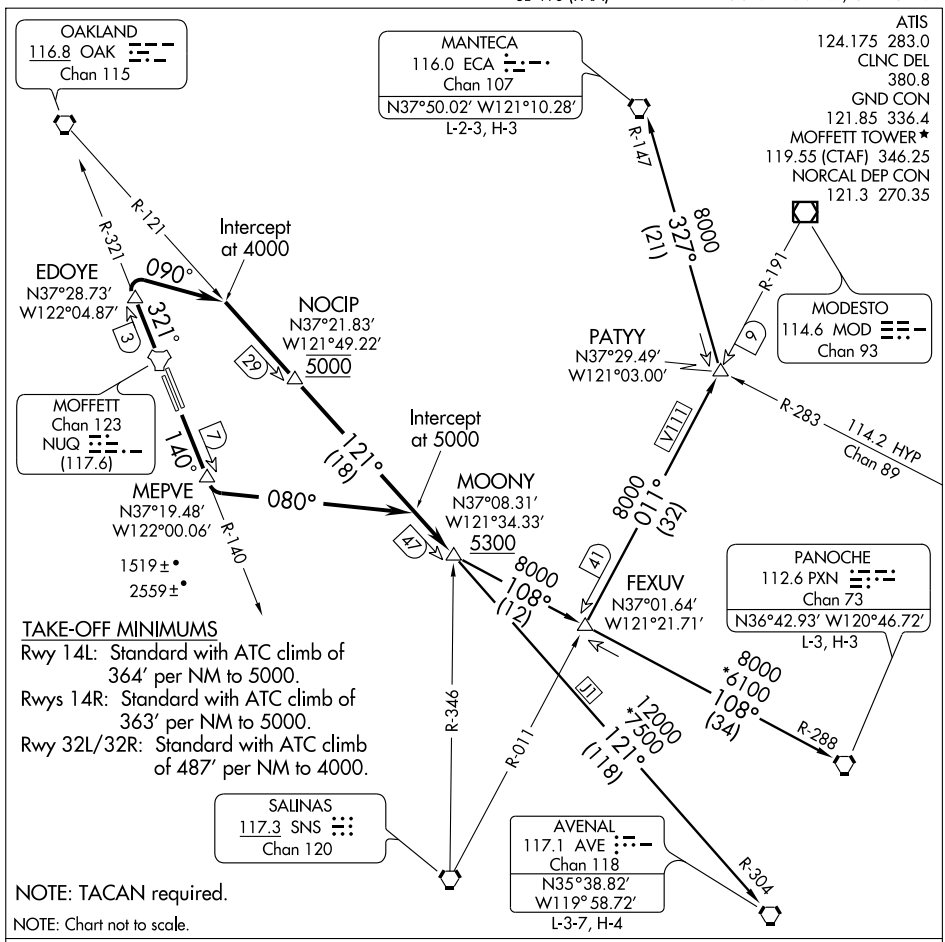
....From over PYE VORTAC via PYE R-144 to HADLY INT, then via OSI R-256 to OSI VORTAC. Expect radar vectors to final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

(SOLN1.MOONY) 07298

SOUTHLAND ONE DEPARTURE

MOUNTAIN VIEW/ MOFFETT FEDERAL AFLD (NUQ)
SL-410 (FAA)
MOUNTAIN VIEW, CALIFORNIA



TAKE-OFF MINIMUMS

Rwy 14L: Standard with ATC climb of 364′ per NM to 5000.
Rwys 14R: Standard with ATC climb of 363′ per NM to 5000.
Rwy 32L/32R: Standard with ATC climb of 487′ per NM to 4000.

NOTE: TACAN required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 14L/14R: Climb via NUQ R-140 to MEPVE/NUQ 7 DME, then climbing left turn via heading 080° to intercept OAK R-121 at 5000, then via OAK R-121 to MOONY INT, thence . . . .

TAKE-OFF RUNWAYS 32L/32R: Climb via NUQ R-321 to EDOYE/NUQ 3 DME, then climbing right turn via heading 090° to intercept OAK R-121 at 4000, then via OAK R-121 to cross NOCIP/OAK 29 DME at 5000, then via OAK R-121 to MOONY INT, thence . . . .

. . . . cross MOONY INT at or above 5300, then via (Transition).

AVENAL TRANSITION (SOLN1.AVE): From over MOONY INT via OAK R-121 and AVE R-304 to AVE VORTAC.

MANTECA TRANSITION (SOLN1.ECA): From over MOONY INT via PXN R-288, MOD R-191, and ECA R-147 to ECA VORTAC.

PANOCHE TRANSITION (SOLN1.PXN): From over MOONY INT via PXN R-288 to PXN VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

TACAN	APP CRS		
NUQ Chan 123	321°	Rwy Idg 7522 TDZE 31 Apt Elev 32	

TACAN RWY 32L

MOUNTAIN VIEW/ MOFFETT FEDERAL AFLD (NUQ)

NA

MISSED APPROACH: Climb to 3200 via NUQ TACAN and NUQ R-321 to PEYIC/16 DME and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 (L) (CTAF) 346.25	121.85 336.4	380.8

MISSED APCH FIX

R-321 141° 321° PEYIC NUQ 16 Chan 123 NUQ

RADAR REQUIRED

MOFFETT Chan 123 NUQ (117.6)

R-321

10 NM

DIYEB NUQ 2.2

216 ± 188

433

EKECE NUQ 8

349 ± 379 ±

2100 (2.8)

JOVDA NUQ 10.8

RURSE NUQ 14.3

321° (3.5)

3000

4100 (2.2)

(IF) CEVGI NUQ 16.5

3496 ±

4800

321° (3.5)

(IAF) HOSNU NUQ 20

2731 4081

R-141

2834 2640 3120

MSA NUQ 25 NM

200° 020° 110° 290°

5100 5600 4100 5100

3024 3817 3841 3049 ± 2962 3951 1830 1550 1860 2457 2502 2417 2360 2572 2840 1960 2912 1960 2359 3231 1365

ELEV 32

Rwy 32L Idg 7522'

HIRL Rwy 14L-32R (L) and Rwy 14R-32L

TDZL Rwys 14L and 32R

14L 14R 0.3% UP 0.4% UP 9202 X 200 8127 X 200 203 238 TDZE 31 32L 32R Touchdown

321° 6.2 NM from FAF

Knots	60	90	120	150	180
Min:Sec					

3200	NUQ R-321 Chan 123	PEYIC NUQ 16

TACAN NUQ 3.4 DIYEB NUQ 2.2 3.01° TCH 55 EKECE NUQ 8 JOVDA NUQ 10.8 RURSE NUQ 14.3 CEVGI NUQ 16.5 HOSNU NUQ 20 2100 3000 4100 4800 321° 5500

0.4 1.3 NM 4.5 NM 2.8 NM 3.5 NM 2.2 NM 3.5 NM

CATEGORY	A	B	C	D	E
S-32L	620-1 589 (600-1)		620-1½ 589 (600-1½)	620-1¾ 589 (600-1¾)	620-2 589 (600-2)
CIRCLING	620-1 588 (600-1)		620-1½ 588 (600-1½)	620-2 588 (600-2)	840-2¾ 808 (900-2¾)

SW-2, 22 OCT 2009 to 19 NOV 2009

TACAN	APP CRS		
NUQ Chan 123	321°	Rwy ldg 9202 TDZE 27 Apt Elev 32	

TACAN RWY 32R

MOUNTAIN VIEW/MOFFETT FEDERAL AFLD (NUQ)

T ANA For inoperative ALSF, increase S-32R Cats A/B visibility to RVR 5000 and Cat E to 2.

ALSF-1

MISSED APPROACH: Climb to 3200 via NUQ TACAN and NUQ R-321 to PEYIC/16 DME and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 346.25	121.85 336.4	380.8

MISSED APCH FIX

R-321 141° 321° PEYIC NUQ 16 Chan 123 NUQ

RADAR REQUIRED

R-321

MOFFETT Chan 123 NUQ (117.6)

10 NM

DIYEB NUQ 2.2

216 ± 188

433

EKECE NUQ 8

349 ± 379 ±

2100 (2.8)

JOVDA NUQ 10.8

3000 321° (3.5)

RURSE NUQ 14.3

2628 4100 (2.2)

(IF) CEVGI NUQ 16.5

3496 ±

2834

(IAF) HOSNU NUQ 20

2731 4081

R-141

3120

2640

MSA NUQ 25 NM

200° 020° 290° 110°

5100 5600 4100 5100

3024 3817 3841 2962 3049 ± 3951 1830 1550 1860 2457 2502 2417 2360 2572 2840 1960 2912 1960 2359 3231 1365

ELEV 32

Rwy 32L ldg 7522'

HIRL Rwy 14L-32R L and Rwy 14R-32L

TDZL Rwys 14L and 32R

14L 14R 0.3% UP 0.4% UP 9202 X 200 8127 X 200 203 238 TDZE 27 32L 32R

321° 6.2 NM from FAF

Knots	60	90	120	150	180
Min:Sec					

3200

NUQ R-321 Chan 123

PEYIC NUQ 16

TACAN NUQ 3.5 DIYEB NUQ 2.2 3.05° TCH 52 EKECE NUQ 8 JOVDA NUQ 10.8 RURSE NUQ 14.3 CEVGI NUQ 16.5 HOSNU NUQ 20

2100 3000 4100 4800 321° 5500

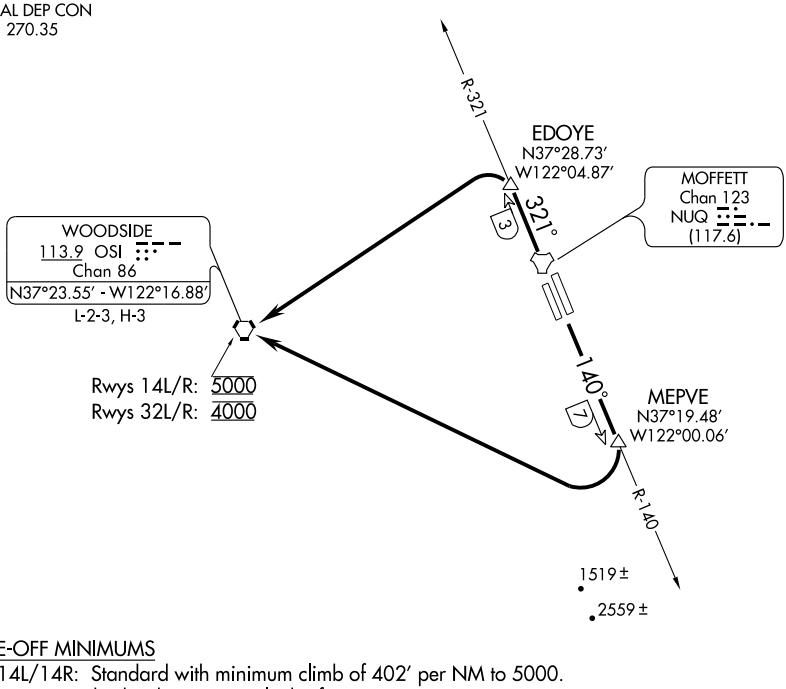
0.4 1.3 NM 4.5 NM 2.8 NM 3.5 NM 2.2 NM 3.5 NM

CATEGORY	A	B	C	D	E
S-32R	620/40 593 (600-¾)		620/50 593 (600-1)	620/60 593 (600-1¼)	620-1½ 593 (600-1½)
CIRCLING	620-1 588 (600-1)		620-1½ 588 (600-1½)	620-2 588 (600-2)	840-2¾ 808 (900-2¾)

SW-2, 22 OCT 2009 to 19 NOV 2009

WOODSIDE ONE DEPARTURE

ATIS
124.175 283.0
CLNC DEL
380.8
GND CON
121.85 336.4
MOFFETT TOWER ★
119.55 (CTAF) 346.25
NORCAL DEP CON
121.3 270.35



TAKE-OFF MINIMUMS
Rwy 14L/14R: Standard with minimum climb of 402′ per NM to 5000.
Rwy 32R: Standard with minimum climb of 250′ per NM to 4000.
Rwy 32L: Standard with minimum climb of 246′ per NM to 4000.

NOTE: TACAN required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 14L/14R: Climb via NUQ R-140 to MEPVE/NUQ 7 DME, then right turn direct to cross OSI VORTAC at 5000, thence . . . .

TAKE-OFF RUNWAYS 32L/32R: Climb via NUQ R-321 to EDOYE/NUQ 3 DME, then turn left direct to cross OSI VORTAC at 4000, thence . . . .

. . . . via RADAR vectors or assigned route.

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6000
179°	TDZE	1350
	Apt Elev	1350

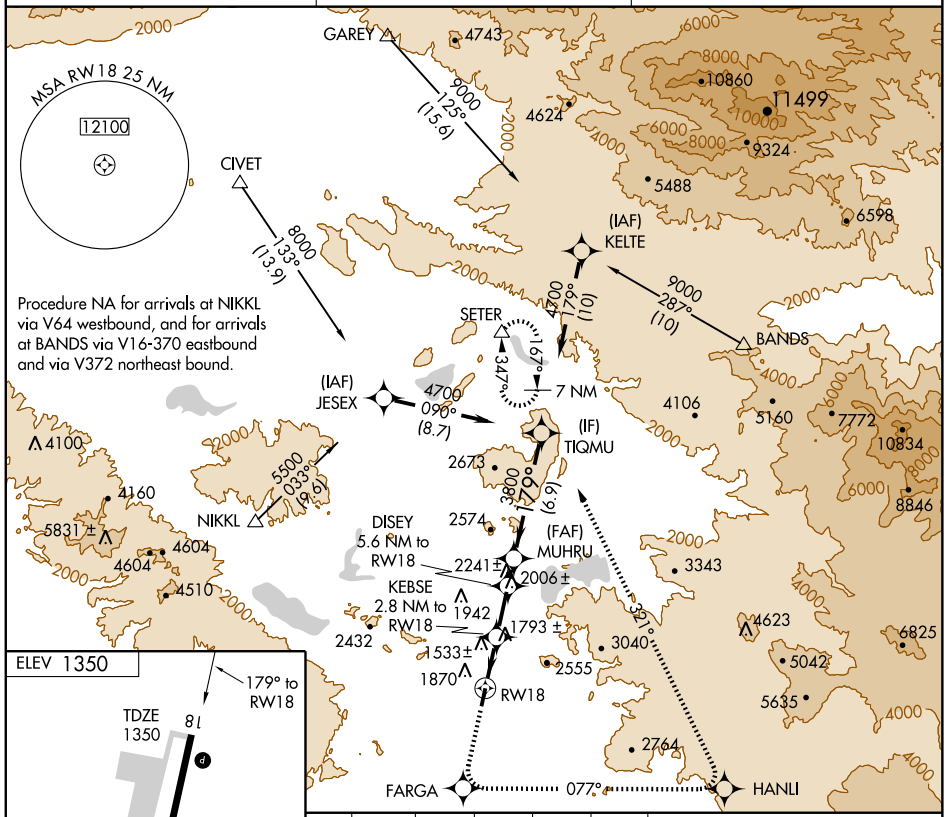
RNAV (GPS) RWY 18

MURRIETA/TEMECULA/FRENCH VALLEY (F70)

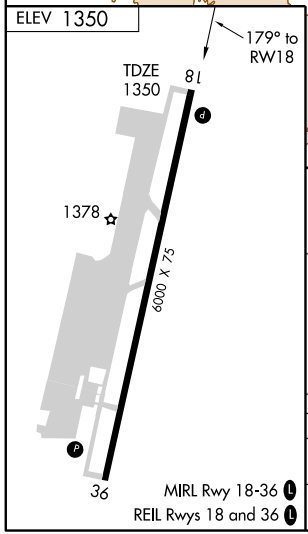
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling not authorized west of Rwy 18-36. When local altimeter setting not received, use Ramona altimeter setting and increase all MDAs 100 feet and all visibilities ¼ mile.

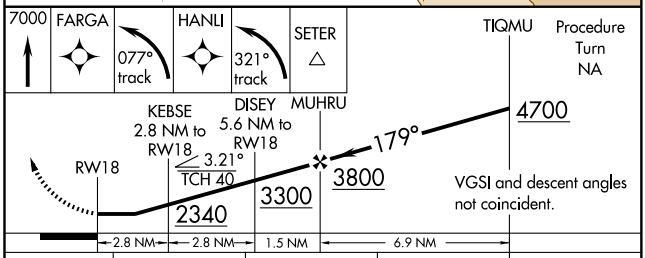
MISSED APPROACH: Climb to 7000 direct FARGA and left turn via 077° track to HANLI and left turn via 321° track to SETER and hold.

AWOS-3	MARCH APP CON ★	UNICOM
119.025	133.5 324.1	122.8 (CTAF) L



Procedure NA for arrivals at NIKKL via V64 westbound, and for arrivals at BANDS via V16-370 eastbound and via V372 northeast bound.





CATEGORY	A	B	C	D
LNAV MDA	1880-1	530 (600-1)	1880-1½ 530 (600-1½)	NA
CIRCLING	2040-1	690 (700-1)	2040-2 690 (700-2)	NA

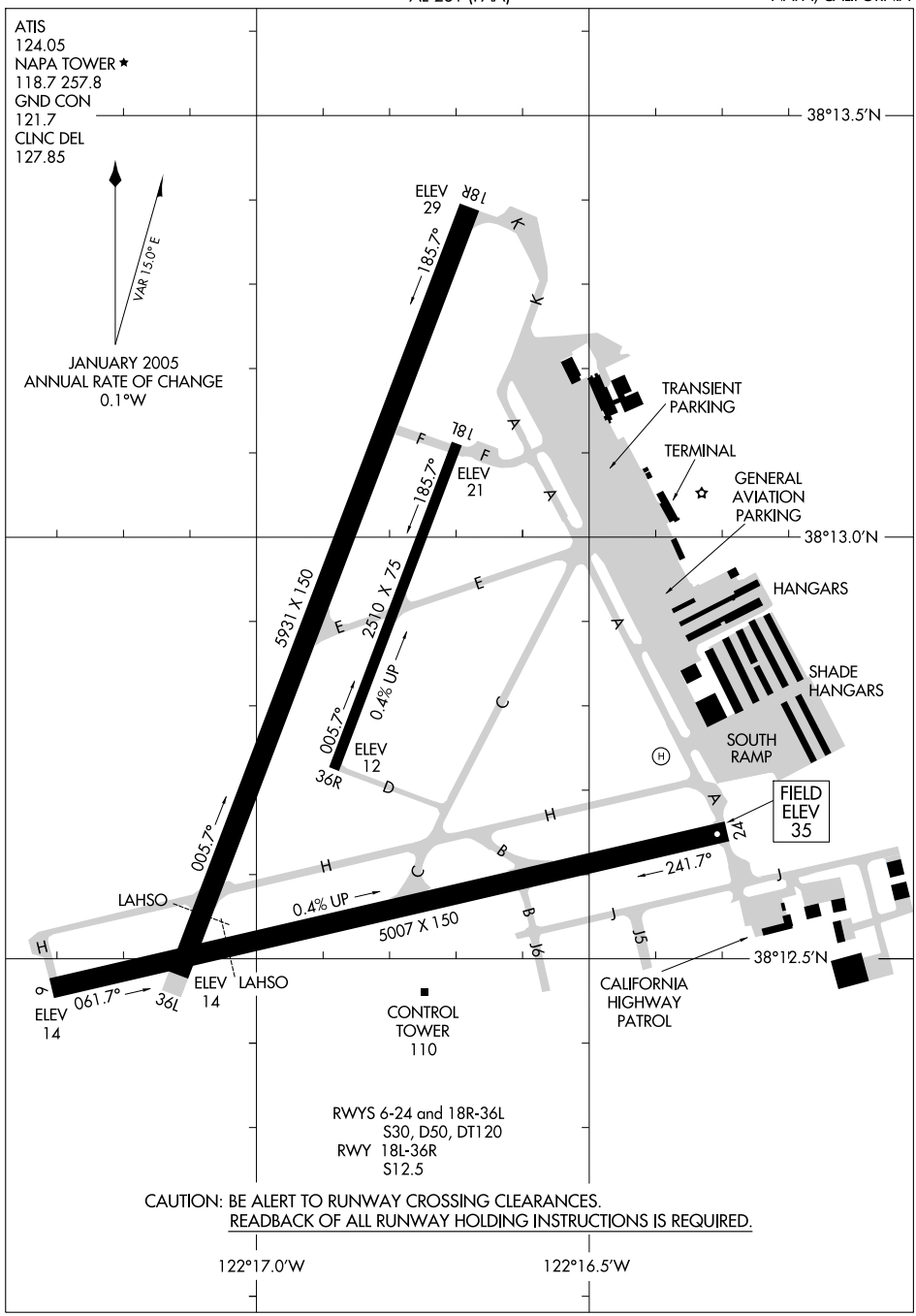
SW-3, 22 OCT 2009 to 19 NOV 2009

09183

AIRPORT DIAGRAM

AL-281 (FAA)

NAPA COUNTY (APC)
NAPA, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

LIZRD THREE DEPARTURE

ATIS 124.05
GND CON
121.7
OAKLAND CENTER
127.8 353.5

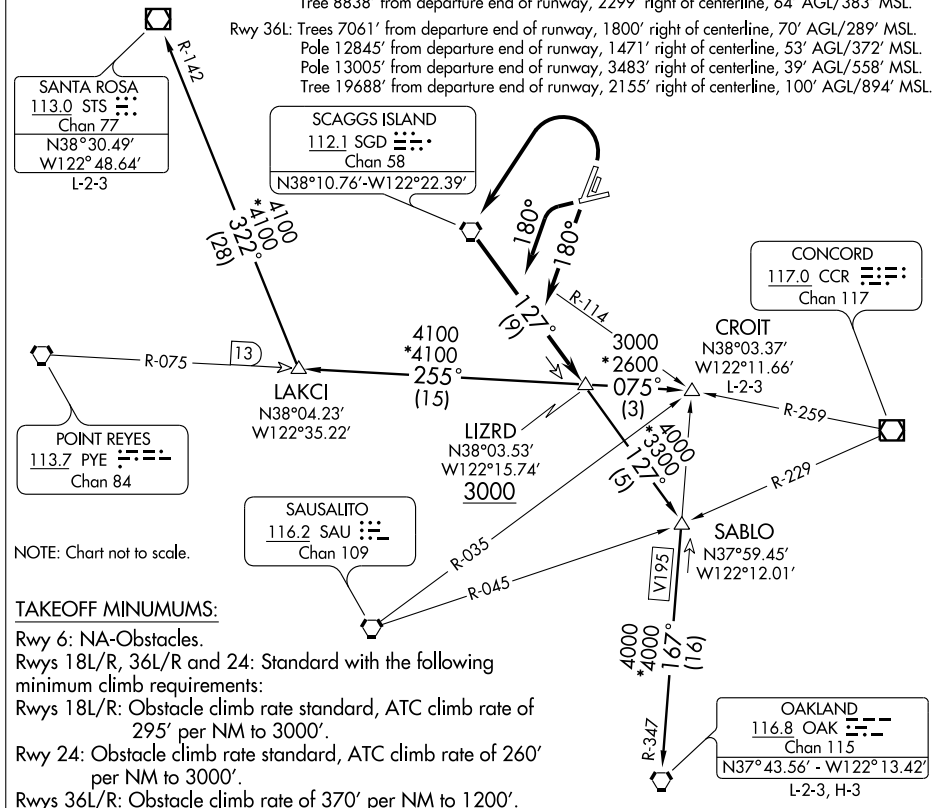
TAKEOFF OBSTACLES:

Rwy 18L: Tree 4982′ from departure end of runway, 237′ left of centerline, 58′ AGL/92′MSL.

Rwy 24: Bridge 4964′ from departure end of runway, 1716′ right of centerline, 167′ AGL/167′MSL.

Rwy 36R: Floodlight 462′ from departure end of runway, 339′ right of centerline, 29′ AGL/53′ MSL.
Tree 8701′ from departure end of runway,1286 right of centerline, 70′ AGL/289′ MSL.
Tree 8838′ from departure end of runway, 2299′ right of centerline, 64′ AGL/383′ MSL.

Rwy 36L: Trees 7061′ from departure end of runway, 1800′ right of centerline, 70′ AGL/289′ MSL.
Pole 12845′ from departure end of runway, 1471′ right of centerline, 53′ AGL/372′ MSL.
Pole 13005′ from departure end of runway, 3483′ right of centerline, 39′ AGL/558′ MSL.
Tree 19688′ from departure end of runway, 2155′ right of centerline, 100′ AGL/894′ MSL.



NOTE: Chart not to scale.

TAKEOFF MINUMUMS:

Rwy 6: NA-Obstacles.
Rwys 18L/R, 36L/R and 24: Standard with the following minimum climb requirements:
Rwys 18L/R: Obstacle climb rate standard, ATC climb rate of 295′ per NM to 3000′.
Rwy 24: Obstacle climb rate standard, ATC climb rate of 260′ per NM to 3000′.
Rwys 36L/R: Obstacle climb rate of 370′ per NM to 1200′.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 18L/R: Climb via 180° heading to intercept and proceed outbound via the SGD R-127 to LIZRD INT. Cross LIZRD INT at or above 3000′. Thence. . . .

TAKE-OFF RUNWAY 24: Turn left, climb via 180° heading to intercept and proceed outbound via the SGD R-127 to LIZRD INT. Cross LIZRD INT at or above 3000′. Thence. . . .

TAKE-OFF RUNWAYS 36L/R: Turn left direct SGD VORTAC, proceed outbound via the SGD R-127 to LIZRD INT. Cross LIZRD INT at or above 3000′. Thence. . . .

. . . . via (transition) or (assigned route).

CROIT TRANSITION (LIZRD3.CROIT): From over LIZRD INT via PYE R-075 to CROIT INT.

OAKLAND TRANSITION (LIZRD3.OAK): From over LIZRD INT via SGD R-127 and OAK R-347 to OAK VORTAC.

SANTA ROSA TRANSITION (LIZRD3.STS): From over LIZRD INT via PYE R-075 and STS R-142 to STS VOR/DME.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-APC	APP CRS	Rwy Idg	5931
111.3	005°	TDZE	14
		Apt Elev	33

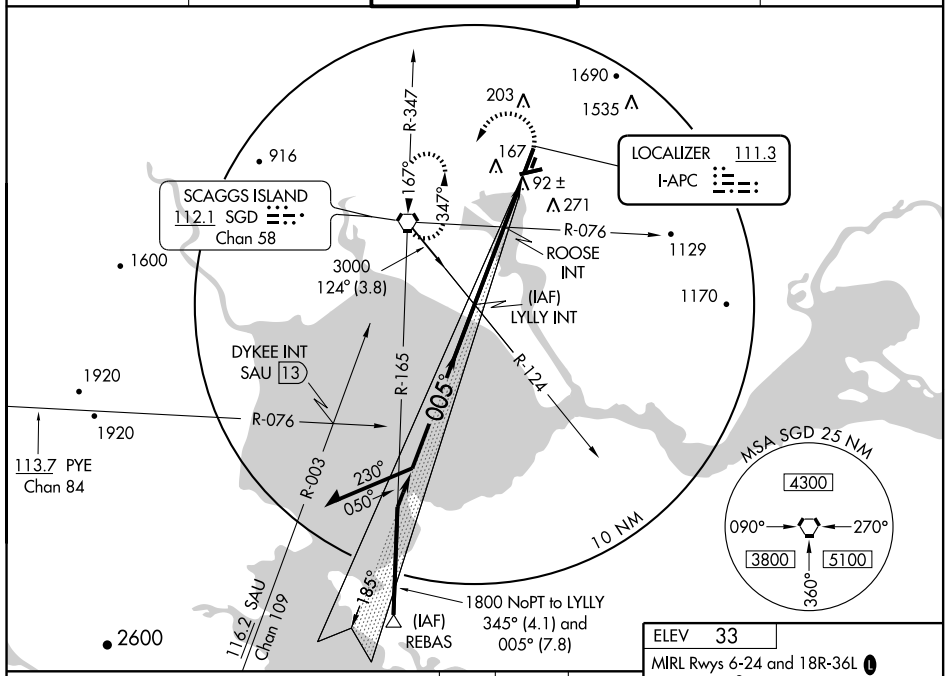
LOC RWY 36L
NAPA COUNTY (APC)

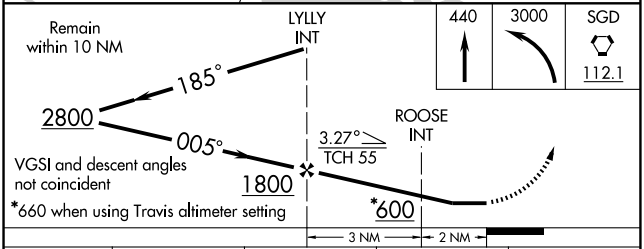
When control tower closed, use Travis AFB altimeter setting and increase all MDAs 60 feet.
Circling not authorized northeast of Rwys 18R and 24.
†† Inoperative table does not apply to MALS for Cat.D.
† Inoperative table does not apply to MALS for Cat. C & D.

MALS

MISSED APPROACH: Climb to 440, then climbing left turn to 3000 direct SGD VORTAC and hold.

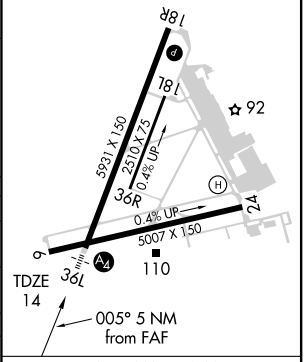
ATIS	OAKLAND CENTER	NAPA TOWER★	GND CON	CLNC DEL
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85





CATEGORY	A	B	C	D
S-LOC 36L†	600-¾ 586 (600-¾)		600-1½ 586 (600-1½)	600-1¾ 586 (600-1¾)
CIRCLING	600-1 567 (600-1)	620-1 587 (600-1)	620-1½ 587 (600-1½)	1140-3 1107 (1200-3)
ROOSE MINIMUMS				
S-LOC 36L††	360-¾ 346 (400-¾)			360-1¼ 346 (400-1¼)
CIRCLING	600-1 567 (600-1)	620-1 587 (600-1)	620-1½ 587 (600-1½)	1140-3 1107 (1200-3)

ELEV 33
MIRL Rwys 6-24 and 18R-36L L
REIL Rwy 6 L



FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-2, 22 OCT 2009 to 19 NOV 2009

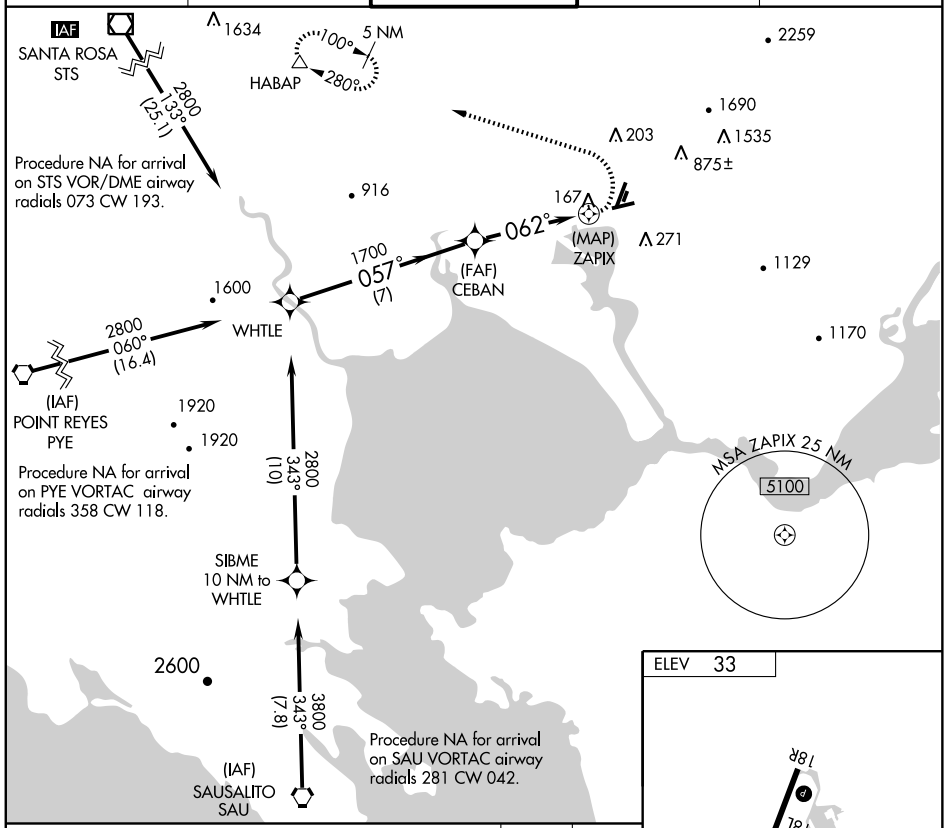
APP CRS	Rwy Idg	5007
062°	TDZE	19
	Apt Elev	33

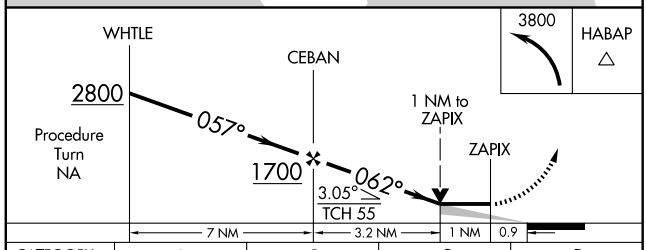
RNAV (GPS) RWY 6
NAPA COUNTY (APC)

Circling NA northeast of Rwys 18R and 24.
IAF ARM APPROACH MODE PRIOR TO IAF.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

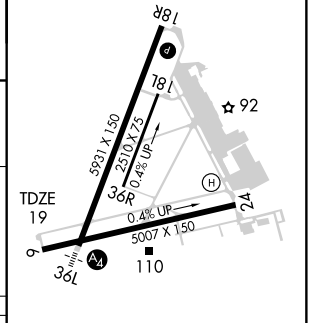
MISSED APPROACH: Climbing left turn to 3800 direct HABAP and hold.

ATIS	OAKLAND CENTER	NAPA TOWER★	GND CON	CLNC DEL
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85





CATEGORY	A	B	C	D
LNAV MDA	660-1 641 (700-1)		660-1¾ 641 (700-1¾)	660-2 641 (700-2)
CIRCLING	660-1 627 (700-1)		720-2 687 (700-2)	1240-3 1207 (1300-3)



REIL Rwy 6 L
MIRL Rwys 6-24 and 18R-36L L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 56613 W36A	APP CRS 006°	Rwy Idg 5931 TDZE 17 Apt Elev 35

RNAV (GPS) Y RWY 36L

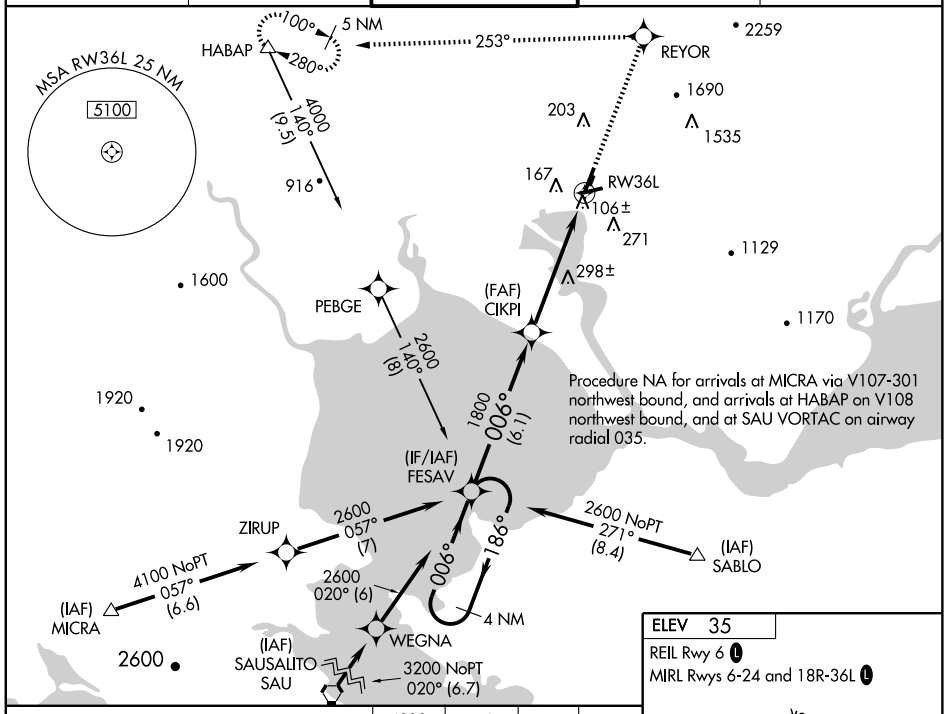
NAPA COUNTY (APC)

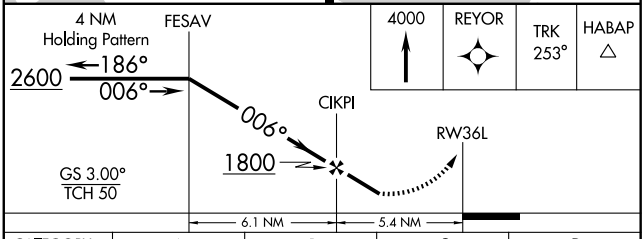
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Buchanan Field altimeter setting and increase all DA 41 feet, all MDA 60 feet. Baro-VNAV NA when using Buchanan Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -30°C (-22°F) or above 49°C (120°F).

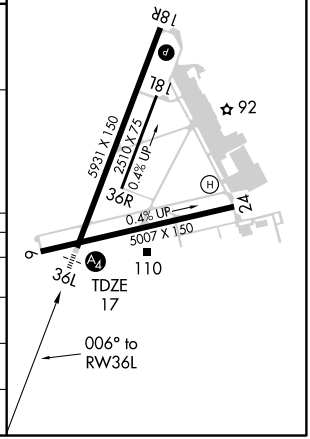
MALS

MISSED APPROACH: Climb to 4000 direct REYOR and via track 253° to HABAP and hold.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85







CATEGORY	A	B	C	D
LPV DA	1202-5 1185 (1200-5)			
LNAV/VNAV DA	1419-5 1402 (1400-5)			
LNAV MDA	1620-1¼ 1603 (1600-1¼)	1620-1½ 1603 (1600-1½)	1620-3 1603 (1600-3)	
CIRCLING	1620-1¼ 1585 (1600-1¼)	1620-1½ 1585 (1600-1½)	1620-3 1585 (1600-3)	

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 40313 W36B	APP CRS 006°	Rwy Idg 5931 TDZE 17 Apt Elev 35

RNAV (GPS) Z RWY 36L

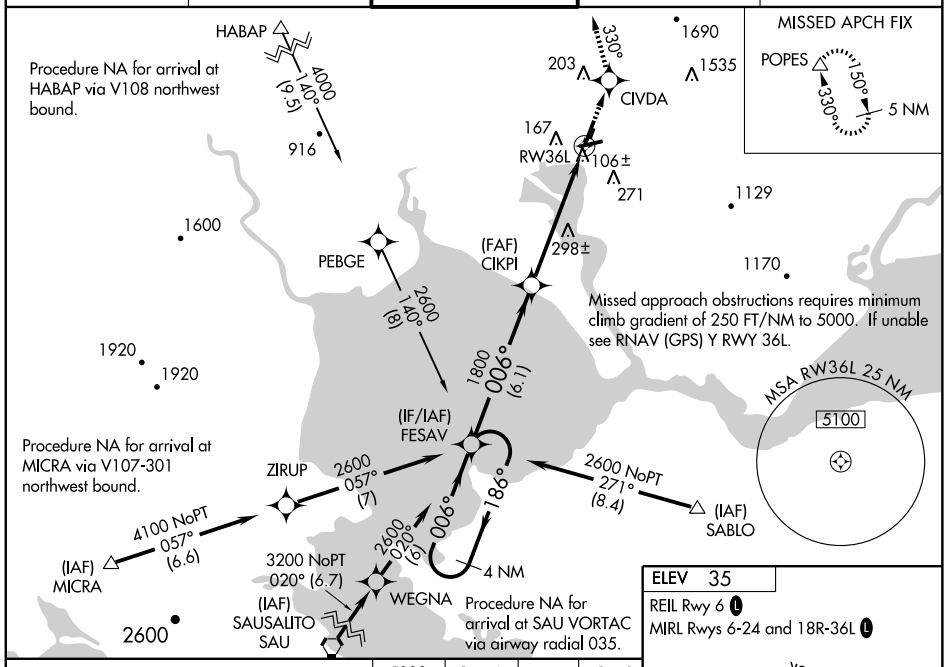
NAPA COUNTY (APC)

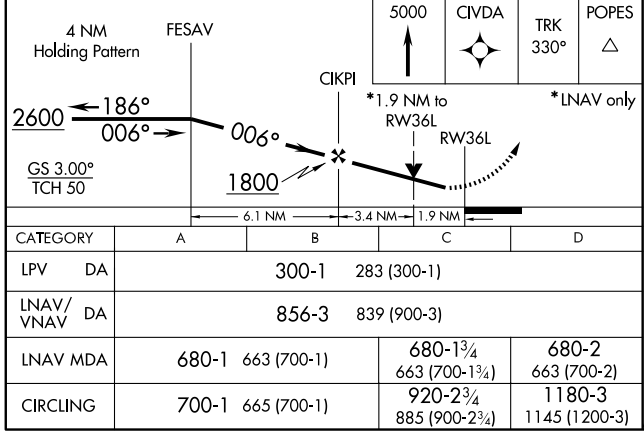
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Buchanan Field altimeter setting and increase all DA 41 feet, all MDA 60 feet, and increase visibility LPV all Cats. ¼ mile, LNAV/VNAV all Cats. 1 mile, and LNAV Cats. C/D ¼ mile. VDP NA when using Buchanan Field altimeter setting. Baro-VNAV NA when using Buchanan Field altimeter setting.

MALS

MISSED APPROACH: Climb to 5000 direct CIVDA and via track 330° to POPES and hold.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85



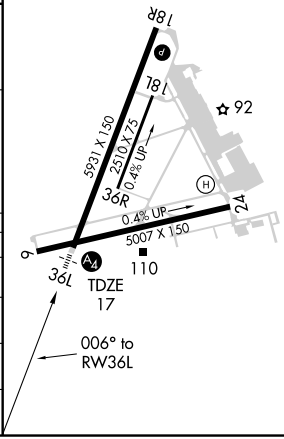


CATEGORY	A	B	C	D
LPV DA		300-1 283 (300-1)		
LNAV/VNAV DA		856-3 839 (900-3)		
LNAV MDA	680-1 663 (700-1)		680-1¾ 663 (700-1¾)	680-2 663 (700-2)
CIRCLING	700-1 665 (700-1)		920-2¾ 885 (900-2¾)	1180-3 1145 (1200-3)

ELEV 35

REIL Rwy 6 L

MIRL Rwys 6-24 and 18R-36L L



SW-2, 22 OCT 2009 to 19 NOV 2009

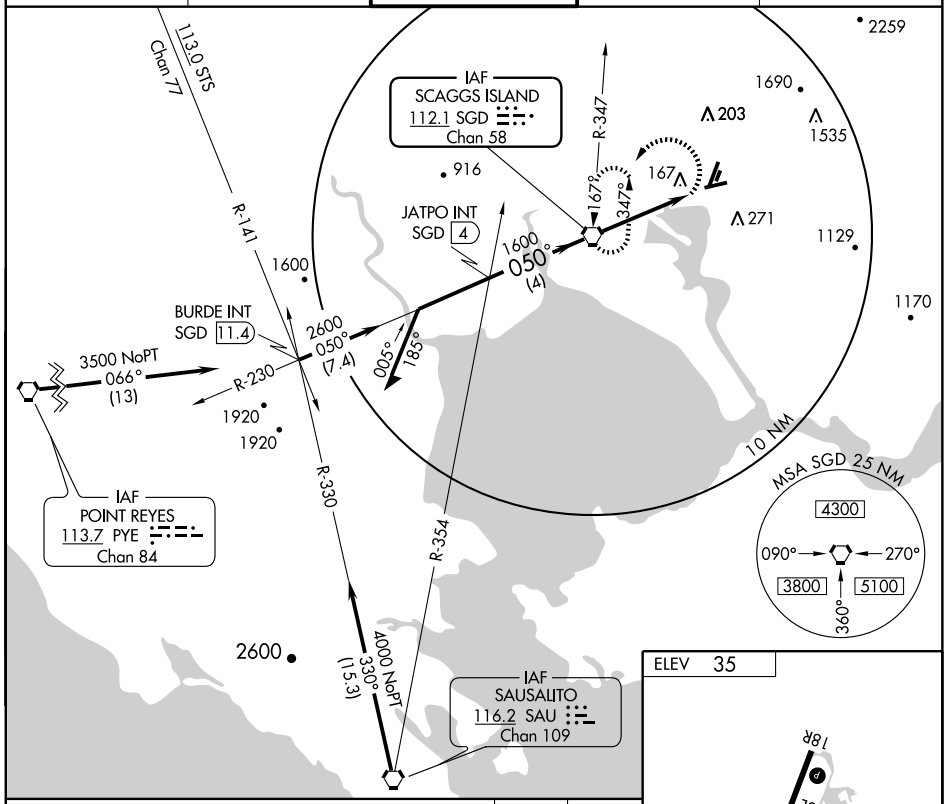
VORTAC SGD 112.1 Chan 58	APP CRS 050°	Rwy Idg 5007 TDZE 21 Apt Elev 35

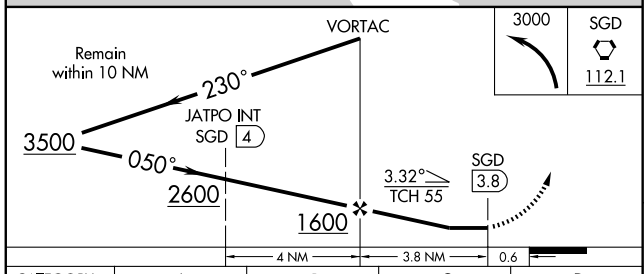
VOR RWY 6
NAPA COUNTY (APC)

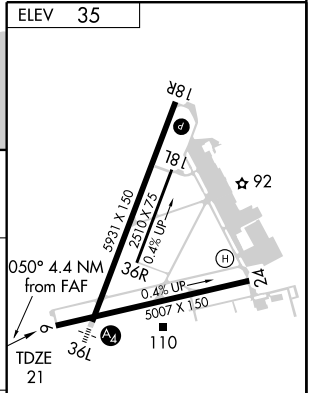
Circling NA northeast of Rwys 18R and 24.

MISSED APPROACH: Climbing left turn to 3000 direct SGD VORTAC and hold.

ATIS	OAKLAND CENTER	NAPA TOWER★	GND CON	CLNC DEL
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85







REIL Rwy 6 L
MIRL Rwys 6-24 and 18R-36L L

CATEGORY	A	B	C	D
S-6	440-1 419 (500-1)		440-1¼ 419 (500-1¼)	
CIRCLING	600-1 565 (600-1)	620-1 585 (600-1)	720-2 685 (700-2)	1240-3 1205 (1300-3)

FAF to MAP 3.8 NM

Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

SW-2, 22 OCT 2009 to 19 NOV 2009

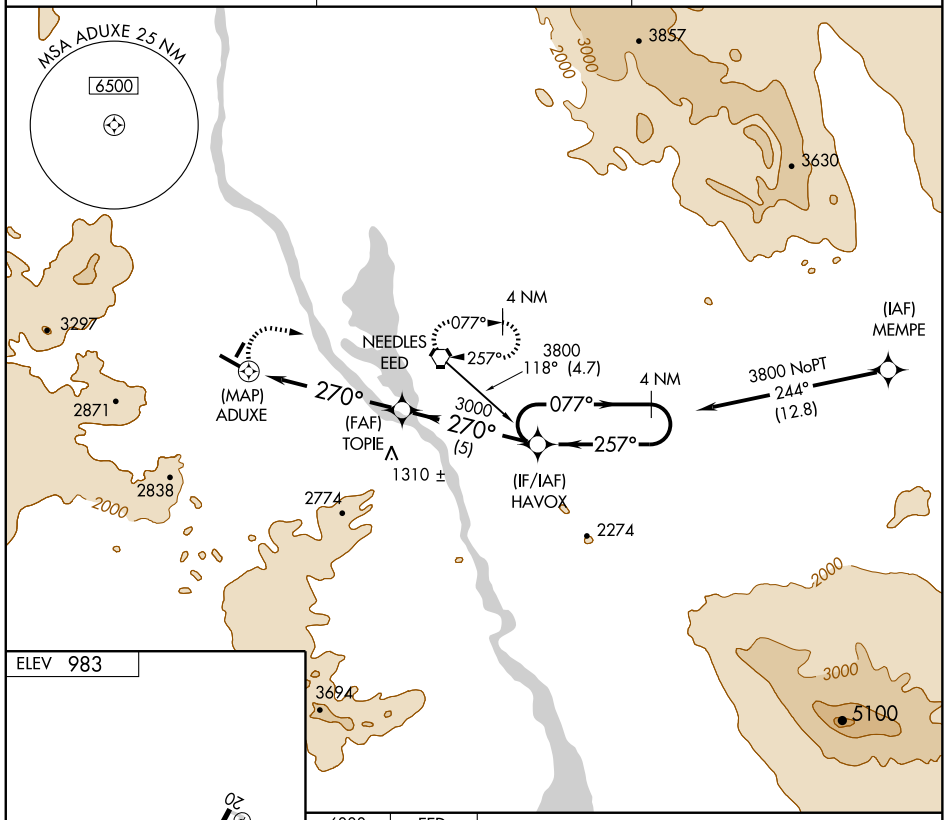
APP CRS	Rwy Idg	5005
270°	TDZE	956
	Apt Elev	983

RNAV (GPS) RWY 29
NEEDLES (EED)

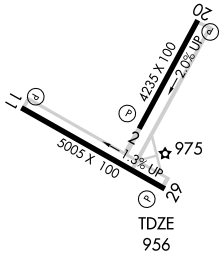
Straight-in minimums not authorized at night.
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 6000 direct to EED VORTAC and hold.

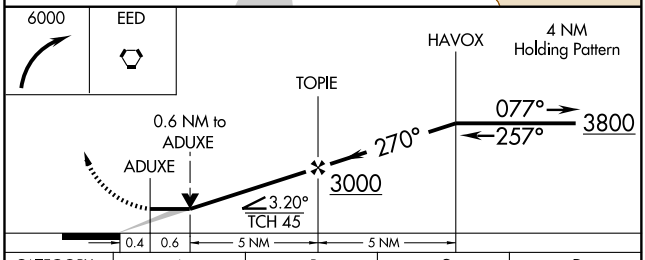
ASOS	LOS ANGELES CENTER	UNICOM
128.325	134.65 360.65	123.0 (CTAF) L



ELEV 983



MIRL Rwys 2-20 and 11-29 L
REIL Rwys 11and 29 L



CATEGORY	A	B	C	D
LNAV MDA	1300-1 344 (400-1)			1300-1¼ 344 (400-1¼)
CIRCLING	1560-1 577 (600-1)	1600-1 617 (700-1)	1620-1¾ 637 (700-1¾)	1780-2½ 797 (800-2½)

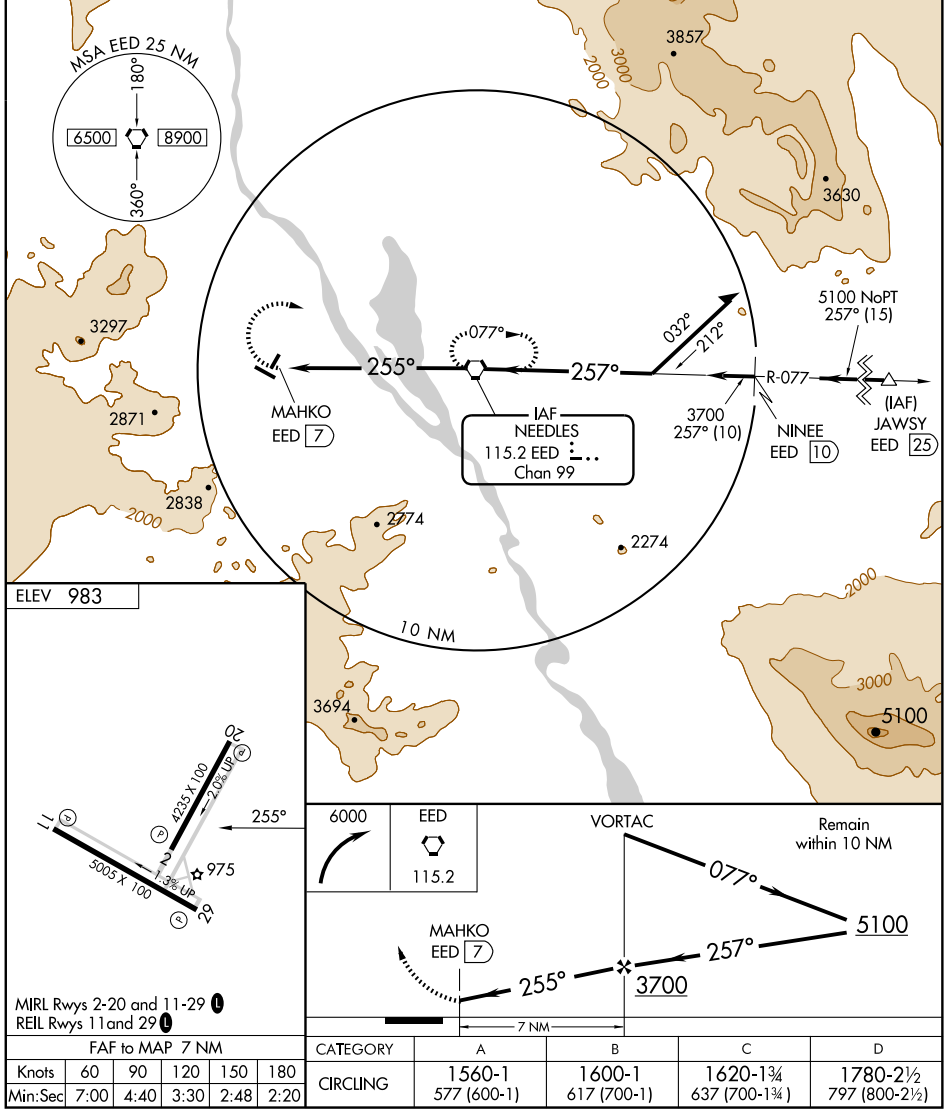
SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC EED	APP CRS	Rwy Idg	N/A
115.2	255°	TDZE	N/A
Chan 99		Apt Elev	983

VOR-A
NEEDLES (EED)

MISSED APPROACH: Climbing right turn to 6000 direct EED VORTAC and hold.

ASOS	LOS ANGELES CENTER	UNICOM
128.325	134.65 360.65	123.0 (CTAF) L



FAF to MAP 7 NM

Knots	60	90	120	150	180
Min:Sec	7:00	4:40	3:30	2:48	2:20

CATEGORY	A	B	C	D
CIRCLING	1560-1 577 (600-1)	1600-1 617 (700-1)	1620-1¾ 637 (700-1¾)	1780-2½ 797 (800-2½)

SW-3, 22 OCT 2009 to 19 NOV 2009

NOVATO, CALIFORNIA AL-9238 (FAA)

APP CRS	Rwy Idg	3300
147°	TDZE	2
	Apt Elev	2

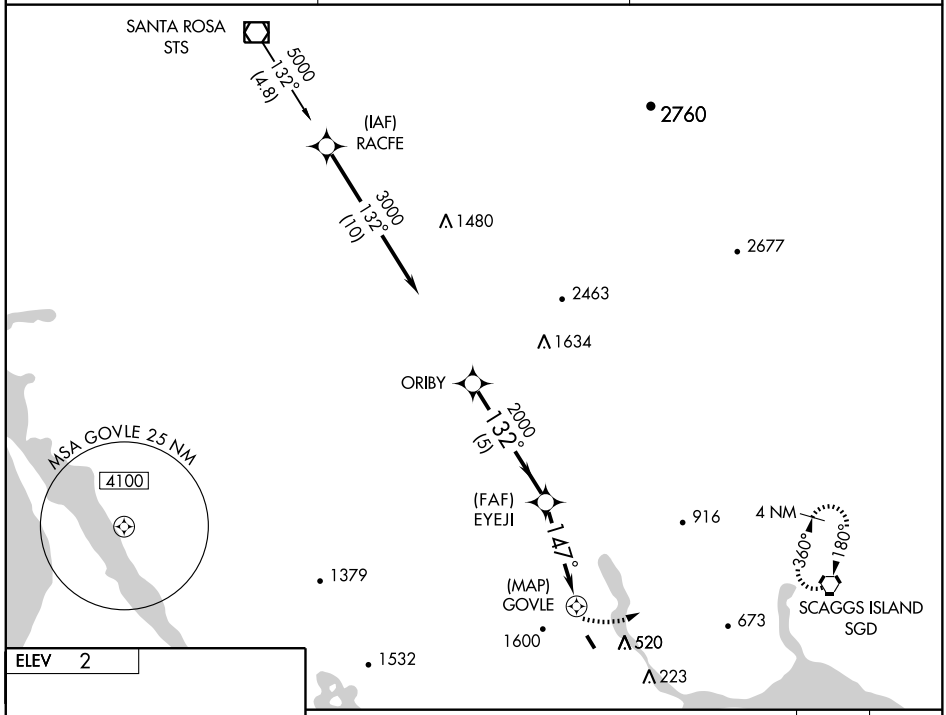
GPS RWY 13

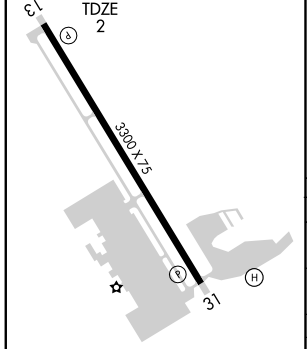
NOVATO/GNOSS FIELD (DVO)

Circling NA west of Rwy 13-31. When local altimeter not received, use Napa altimeter setting and increase all MDAs 40 feet. If neither is received procedure is NA.

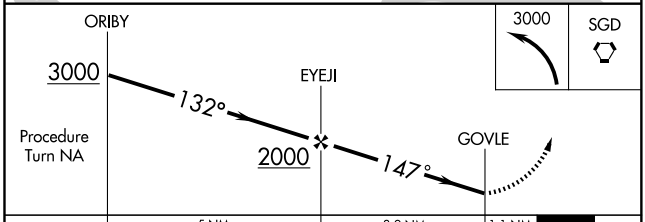
MISSED APPROACH: Climbing left turn to 3000 direct SGD VORTAC and hold.

AWOS	OAKLAND CENTER	UNICOM
120.675	127.8 353.5	123.075 (CTAF)





MIRL Rwy 13-31



CATEGORY	A	B	C	D
S-13	1000-1¼ 998 (1000-1¼)	1000-1½ 998 (1000-1½)	NA	
CIRCLING	1000-1¼ 998 (1000-1¼)	1000-1½ 998 (1000-1½)	NA	
NAPA ALTIMETER SETTING MINIMUMS				
S-13	1040-1¼ 1038 (1100-1¼)	1040-1½ 1038 (1100-1½)	NA	
CIRCLING	1040-1¼ 1038 (1100-1¼)	1040-1½ 1038 (1100-1½)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

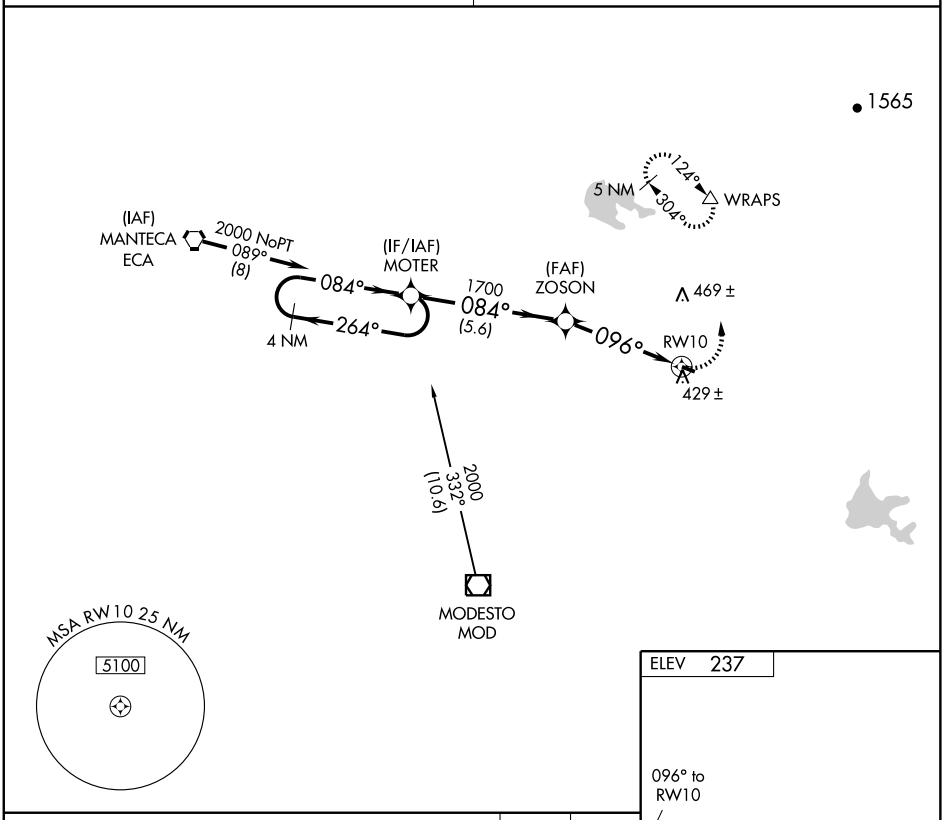
APP CRS	Rwy Idg	3013
096°	TDZE	237
	Apt Elev	237

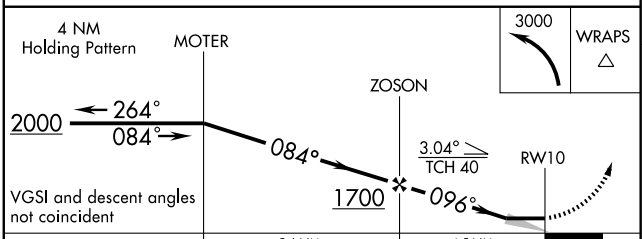
RNAV (GPS) RWY 10
OAKDALE (O27)

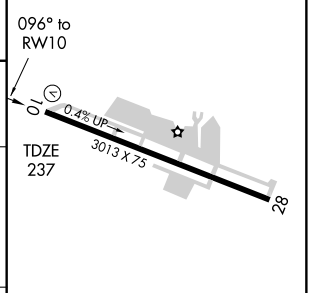
DME/DME RNP-0.3 NA.
Use Stockton altimeter setting, when not received, procedure NA.
Circling to Rwy 28 NA at night.

MISSED APPROACH: Climbing left turn to 3000 direct WRAPS and hold.

NORCAL APP CON	UNICOM
125.1 363.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	760-1	523 (600-1)	NA	
CIRCLING	860-1	623 (700-1)	NA	

MIRL Rwy 10-28 L

SW-2, 22 OCT 2009 to 19 NOV 2009

OAKDALE, CALIFORNIA AL-6135 (FAA)

APP CRS	Rwy Idg	3013
276°	TDZE	237
	Apt Elev	237

RNAV (GPS) RWY 28

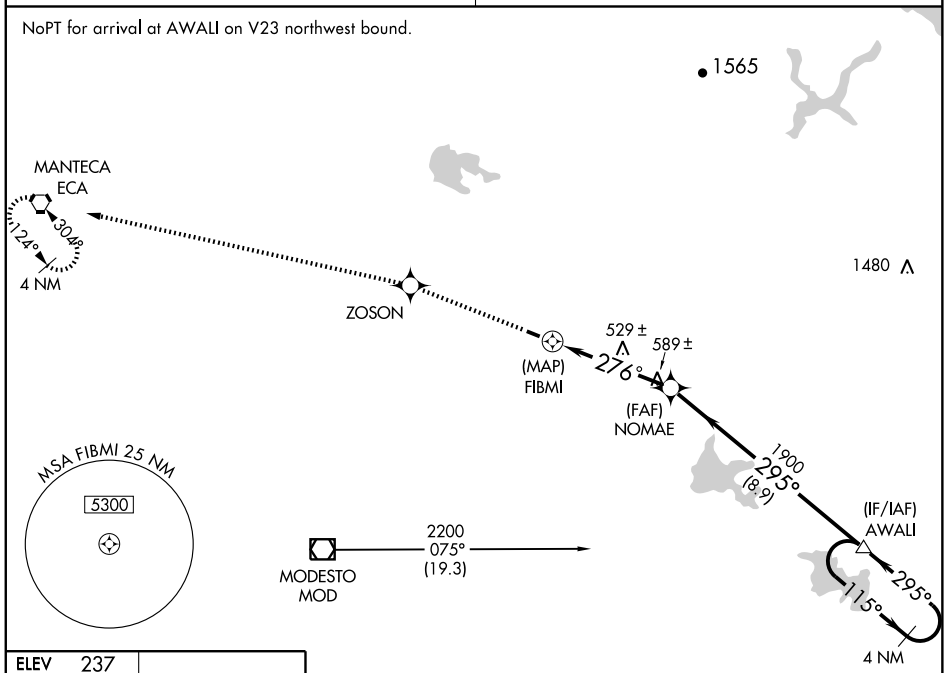
OAKDALE (O27)

DME/DME RNP-0.3 NA.
NA Use Stockton altimeter setting, when not received, procedure NA.
Straight-In/Circling to Rwy 28 NA at night.

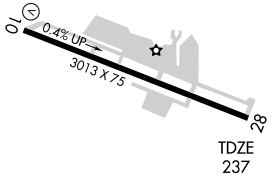
MISSED APPROACH: Climb to 3000 direct ZOSON and via 267° track to ECA VORTAC and hold.

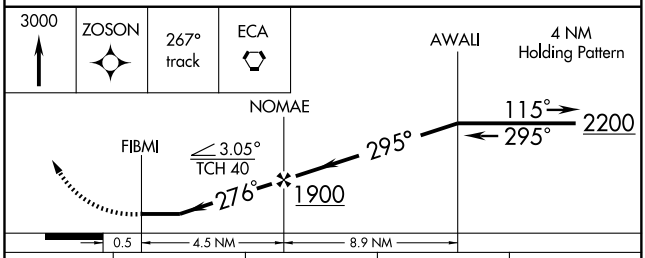
NORCAL APP CON	UNICOM
125.1 363.2	122.8 (CTAF) L

NoPT for arrival at AWALI on V23 northwest bound.



ELEV 237





CATEGORY	A	B	C	D
LNAV MDA	860-1 623 (700-1)		NA	
CIRCLING	860-1 623 (700-1)		NA	

MIRL Rwy 10-28 L

SW-2, 22 OCT 2009 to 19 NOV 2009

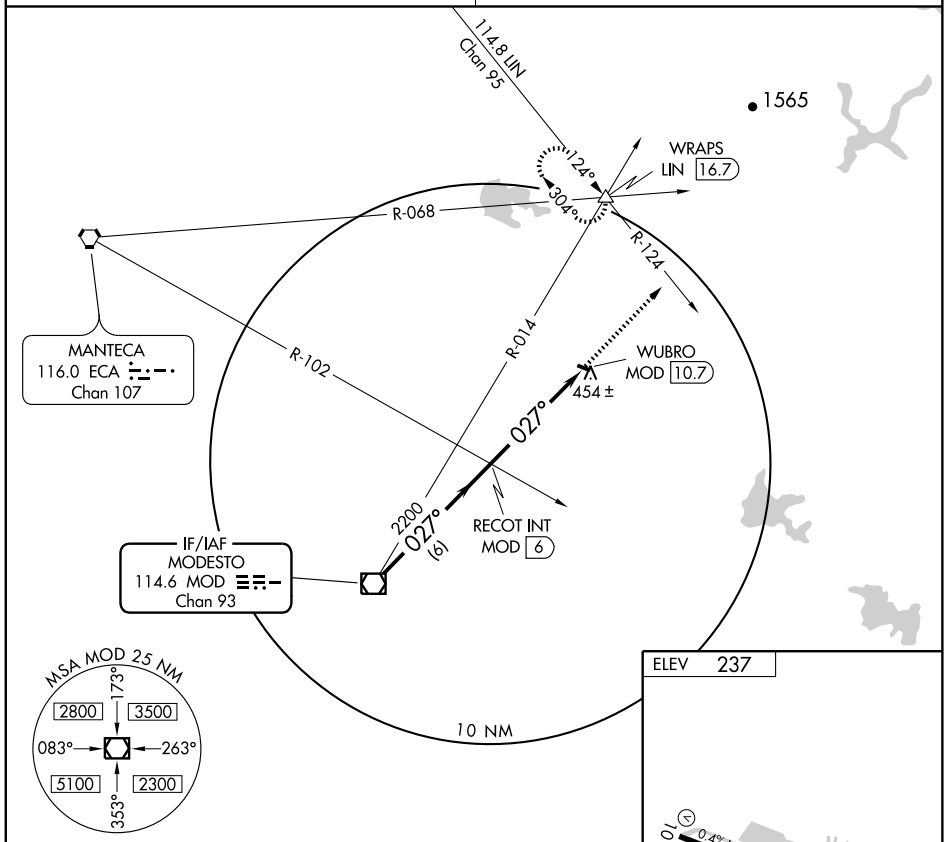
VOR/DME MOD	APP CRS	Rwy Idg	N/A
114.6	027°	TDZE	N/A
Chan 93		Apt Elev	237

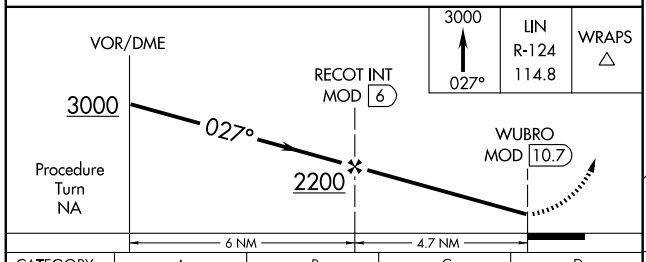
VOR-A
OAKDALE (O27)

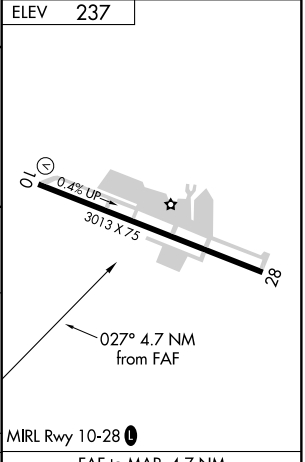
▼ NA — Use Stockton altimeter setting, when not received, procedure NA. Circling to Rwy 28 NA at night.

MISSED APPROCAH: Climb to 3000 via heading 027° and LIN R-124 to WRAPS Int/LIN 16.7 DME and hold, continue climb-in-hold to 3000.

NORCAL APP CON	UNICOM
125.1 363.2	122.8 (CTAF) L







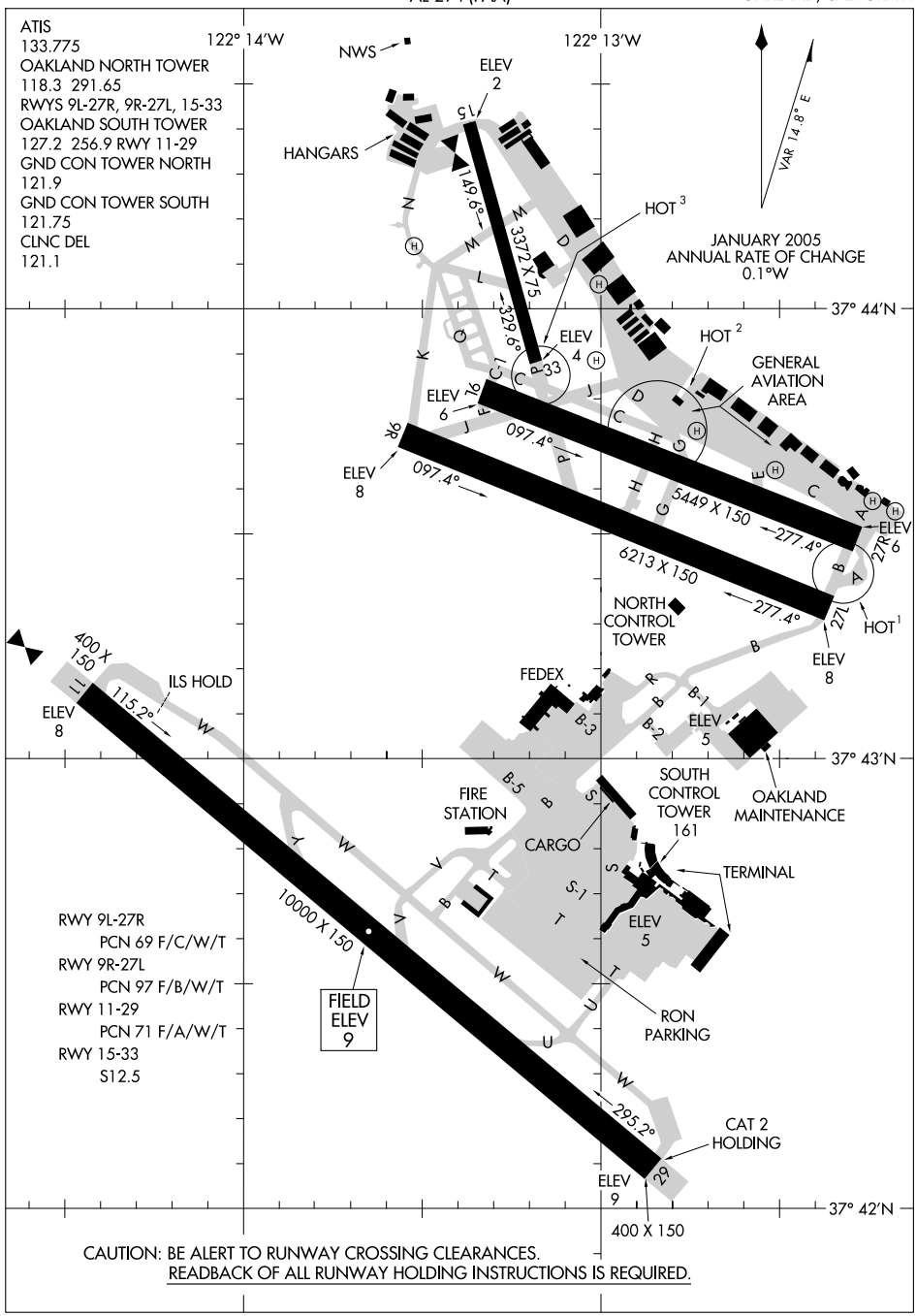
CATEGORY	A	B	C	D
CIRCLING	860-1 623 (700-1)		NA	

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

SW-2, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

OAKLAND/METROPOLITAN OAKLAND INTL (OAK)
AL-294 (FAA)
OAKLAND, CALIFORNIA



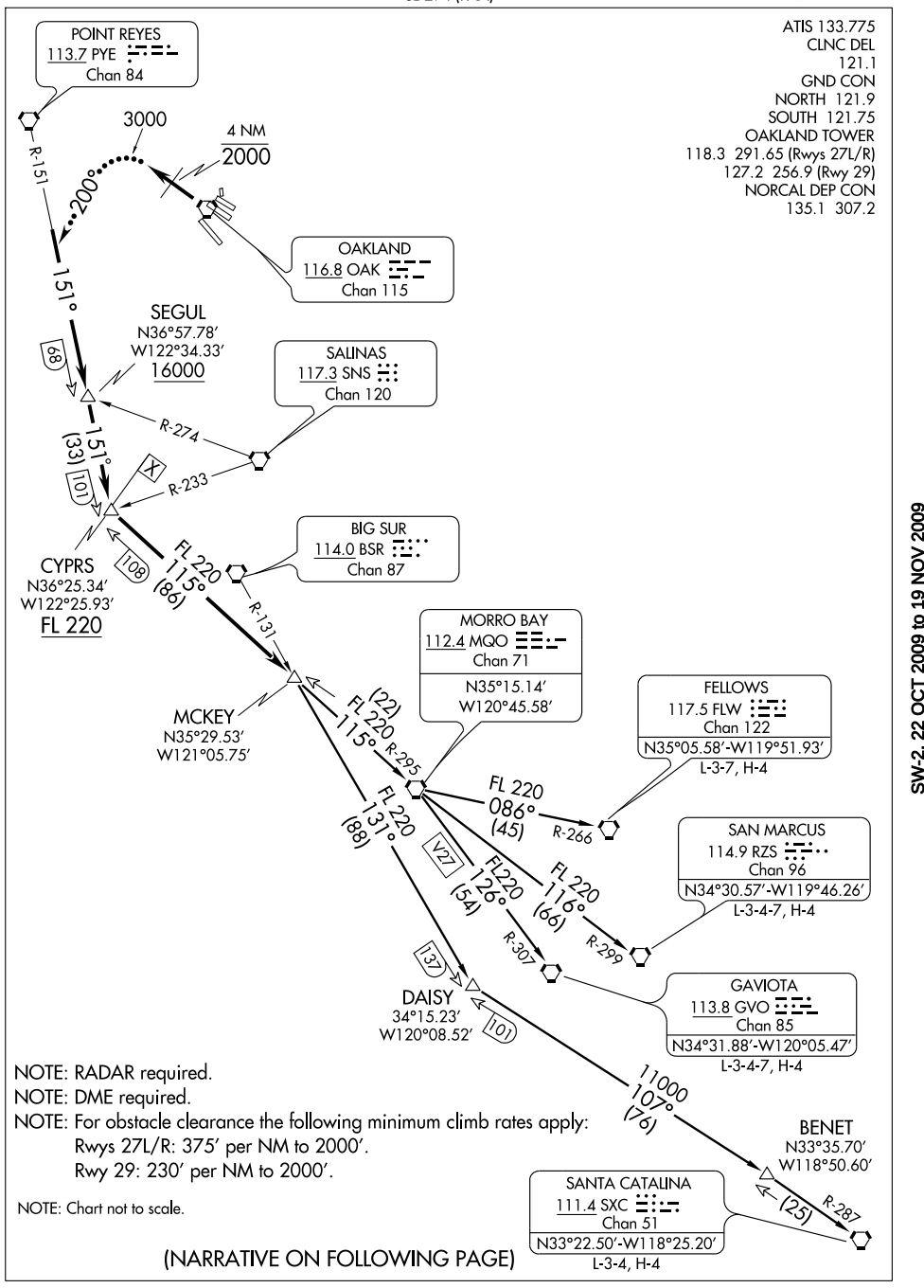
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-2, 22 OCT 2009 to 19 NOV 2009

(COAST5.MCKEY) 09239

COAST FIVE DEPARTURE

OAKLAND/METROPOLITAN OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA
SL-294 (FAA)



NOTE: RADAR required.

NOTE: DME required.

NOTE: For obstacle clearance the following minimum climb rates apply:
Rwys 27L/R: 375' per NM to 2000'.
Rwy 29: 230' per NM to 2000'.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

COAST FIVE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 27L/R and 29: Maintain runway heading for vectors to PYE R-151. Cross 4 miles northwest of OAK VORTAC at or below 2000′. Intercept and proceed via the PYE R-151 to SEGUL INT. Cross SEGUL INT at or above 16000′. Proceed via the PYE R-151 to CYPRS INT; cross CYPRS INT at or above FL 220. Then via the MQO R-295 to MCKEY INT, then via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: TAKE-OFF RUNWAYS 27L/R AND 29: After reaching 3000′, turn left heading 200° , intercept and proceed via PYE R-151, then resume own navigation.

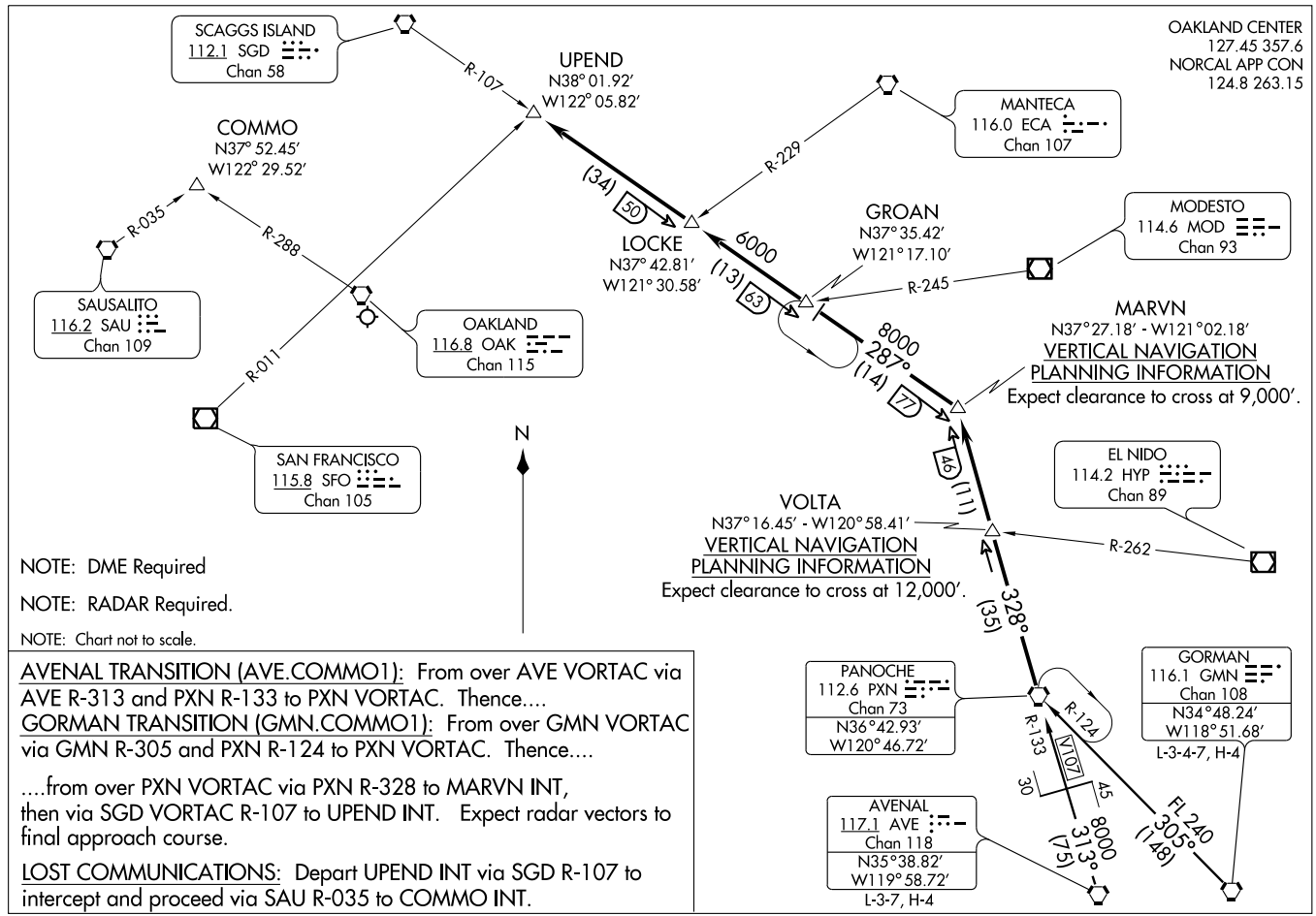
FELLOWS TRANSITION (COAST5.FLW): From over MCKEY INT via MQO R-295 to MQO VORTAC; then via MQO R-086 and FLW R-266 to FLW VORTAC.

GAVIOTA TRANSITION (COAST5.GVO): from over MCKEY INT via MQO R-295 to MQO VORTAC; then via MQO R-126 and GVO R-307 to GVO VORTAC.

SAN MARCUS TRANSITION (COAST5.RZS): From over MCKEY INT via MQO R-295 to MQO VORTAC; then via MQO R-116 and RZS R-299 to RZS VORTAC.

SANTA CATALINA TRANSITION (COAST5.SXC): From over MCKEY INT via BSR R-131 and SXC R-287 to SXC VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009



AVENAL TRANSITION (AVE.COMMO1): From over AVE VORTAC via AVE R-313 and PXN R-133 to PXN VORTAC. Thence....

GORMAN TRANSITION (GMN.COMMO1): From over GMN VORTAC via GMN R-305 and PXN R-124 to PXN VORTAC. Thence....

....from over PXN VORTAC via PXN R-328 to MARVN INT, then via SGD VORTAC R-107 to UPEND INT. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: Depart UPEND INT via SGD R-107 to intercept and proceed via SAU R-035 to COMMO INT.

(PXN.COMMO1) 09295

COMMO ONE ARRIVAL

ST-294 (FAA)

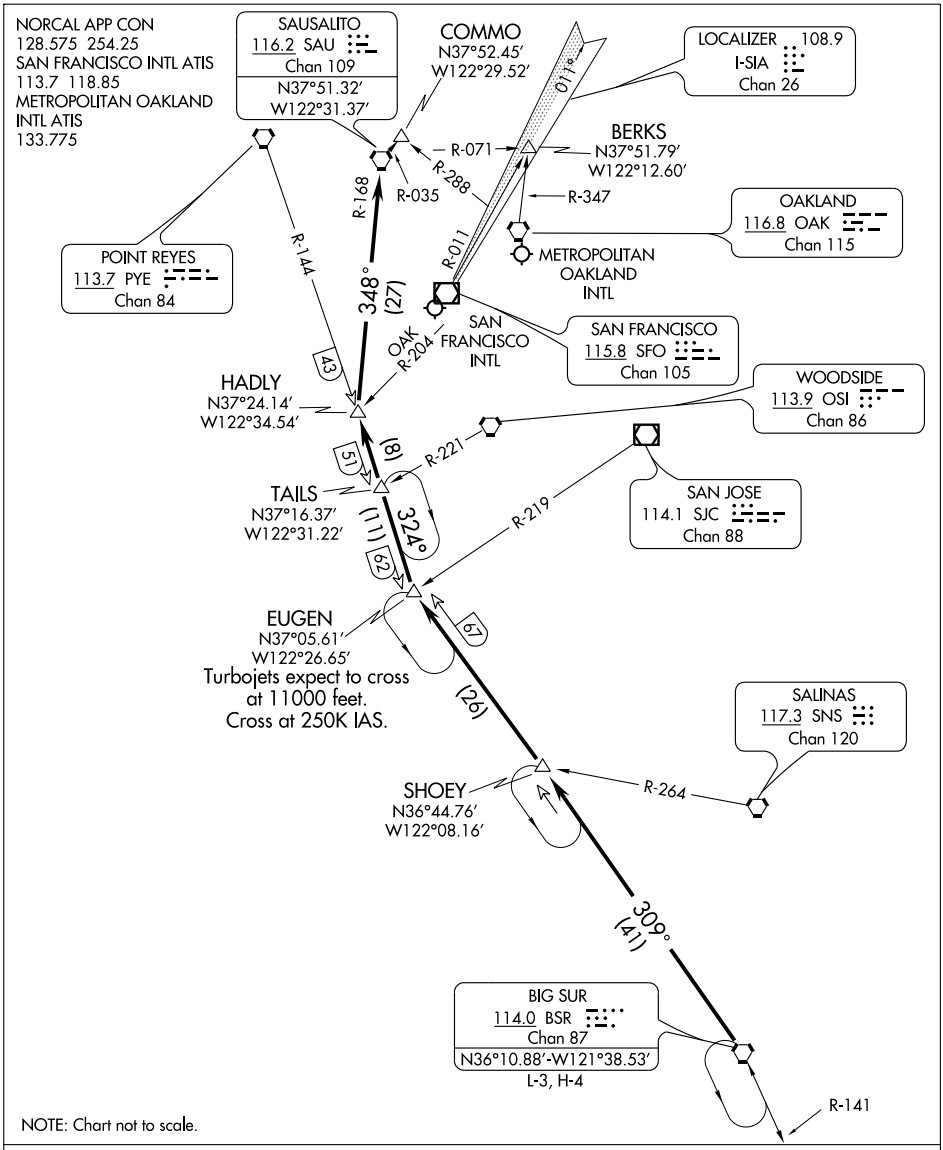
METROPOLITAN OAKLAND INTL
OAKLAND, CALIFORNIA

(BSR.HADLY2) 07298

HADLY TWO ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA



From over BSR VORTAC via BSR R-309 to EUGEN INT, then via PYE R-144 to HADLY INT, then via direct SAU VORTAC. Expect vectors to final approach course. Expect clearance to cross EUGEN INT at 11000′ and at 250K IAS.

LOST COMMUNICATIONS

San Francisco Intl: Depart SAU VORTAC via SAU R-071 to BERKS INT.

Metropolitan Oakland Intl: Depart SAU VORTAC via SAU R-035 to COMMO INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

OAKLAND, CALIFORNIA

AL-294 (FAA)

ILS or LOC/DME RWY 27R

OAKLAND/
METROPOLITAN OAKLAND INTL (OAK)

LOC I-OAK	APP CRS		27R	27L
109.9	276°	Rwy Idg	5449	6213
		TDZE	7	9
		Apt Elev	9	9

*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR Rwy 27R

MISSED APPROACH: Climb to 3000 via OAK R-285 to intercept SGD R-165 to REBAS INT/SGD 14.3 and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2	121.9	121.75	121.1

112.1 SGD Chan 58

REBAS SGD 14.3

165° 345° R-035 R-165

116.2 SAU Chan 109

ALTERNATE MISSED APCH FIX

035° 215° R-035

SAUSALITO SAU 116.2 Chan 109

MSA OAK 25 NM

170° 350° 3800 5100

2050 1795 1974 3901

10 NM

1630 2222 2600

878 443 R-285

LOCALIZER 109.9 I-OAK

1811 208 226 940± 1854

950 810 OAKLAND 116.8 OAK Chan 115

144± 539± UPACI INT OAK 9 GROVE INT OAK 11.7

1567± 1128 CUVSA OAK 5.5 1500 276° (3.5) 2600 276° (2.7) 3400 276° (3.3) 1834 (IF) NAGVY INT OAK 15

703± 096°

1275 (IAF) SUNOL OAK 21

R-329 R-336 R-346 2349 (CUSUK)

114.1 SJC Chan 88

4200 to NAGVY 229° (0.7) and LOC (5.5)

ELEV 9

276° 4.6 NM from FAF

5449 X 150 6213 X 150 10000 X 150

TDZE 9 TDZE 7

3000 OAK R-285 | SGD R-165 112.1 | REBAS

Procedure Turn NA

CUVSA OAK 5.5 | UPACI INT OAK 9 | GROVE INT OAK 11.7 | NAGVY INT OAK 15

OAK 0.9 1500 2600 276° 3400 4200

GS 2.90° TCH 57

4.6 NM 3.5 NM 2.7 NM 3.3 NM

CATEGORY	A	B	C	D
S-ILS 27R	*207/24 200 (200-½)			
S-LOC 27R	400/24 393 (400-½)			400/40 393 (400-¾)
SIDESTEP RWY 27L	420/50 411 (500-1)		420-1½ 411 (500-1½)	420-2 411 (500-2)
CIRCLING	520-1 511 (600-1)	540-1 531 (600-1)	540-1½ 531 (600-1½)	560-2 551 (600-2)

TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-AAZ	APP CRS	Rwy Idg	10000
111.9	114°	TDZE	9
		Apt Elev	9

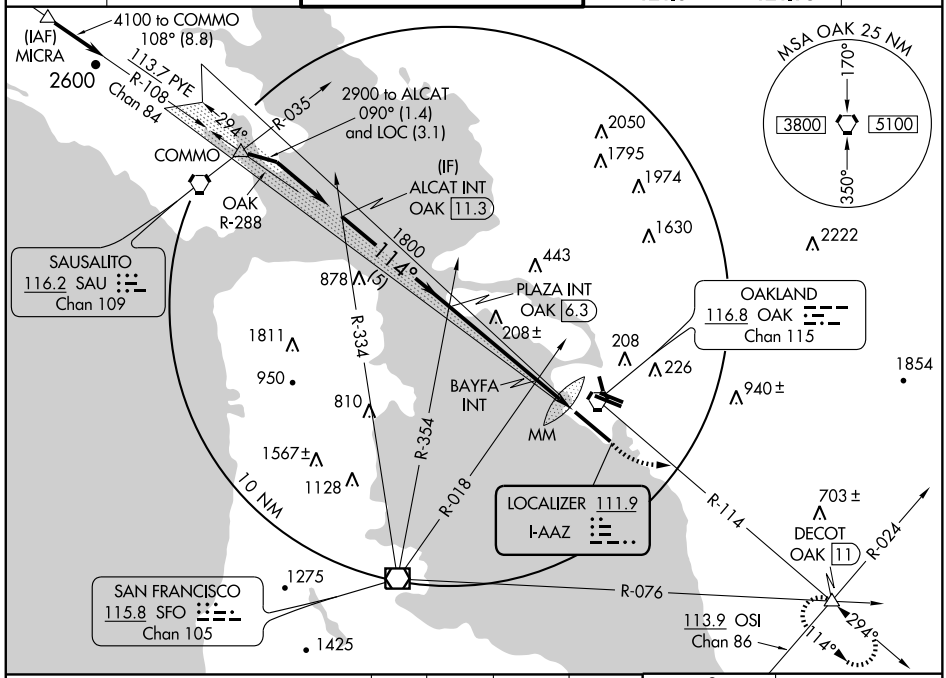
ILS or LOC RWY 11

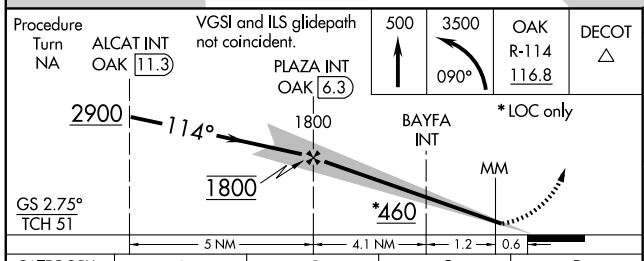
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

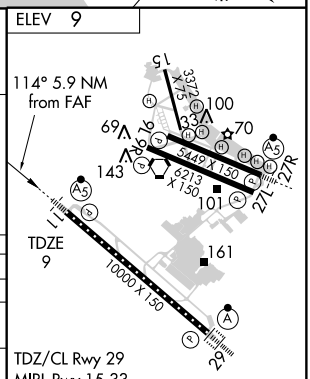
MALSR

MISSED APPROACH: Climb to 500 then climbing left turn to 3500 via heading 090° and OAK VORTAC R-114 to DECOT INT/OAK 11 DME and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1







CATEGORY	A	B	C	D
S-ILS 11	209/24 200 (200-½)			
S-LOC 11	460/24 451 (500-½)		460/40 451 (500-¾)	460/50 451 (500-1)
CIRCLING	520-1 511 (600-1)	540-1 531 (600-1)	540-1½ 531 (600-1½)	560-2 551 (600-2)
BAYFA FIX MINIMUMS				
S-LOC 11	360/24 351 (400-½)			360/40 351 (400-¾)
CIRCLING	520-1 511 (600-1)	540-1 531 (600-1)	540-1½ 531 (600-1½)	560-2 551 (600-2)

TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R and 9R-27L

FAF to MAP 5.9 NM

Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-INB	APP CRS	Rwy Idg	10000
108.7	294°	TDZE	9
		Apt Elev	9

ILS or LOC RWY 29

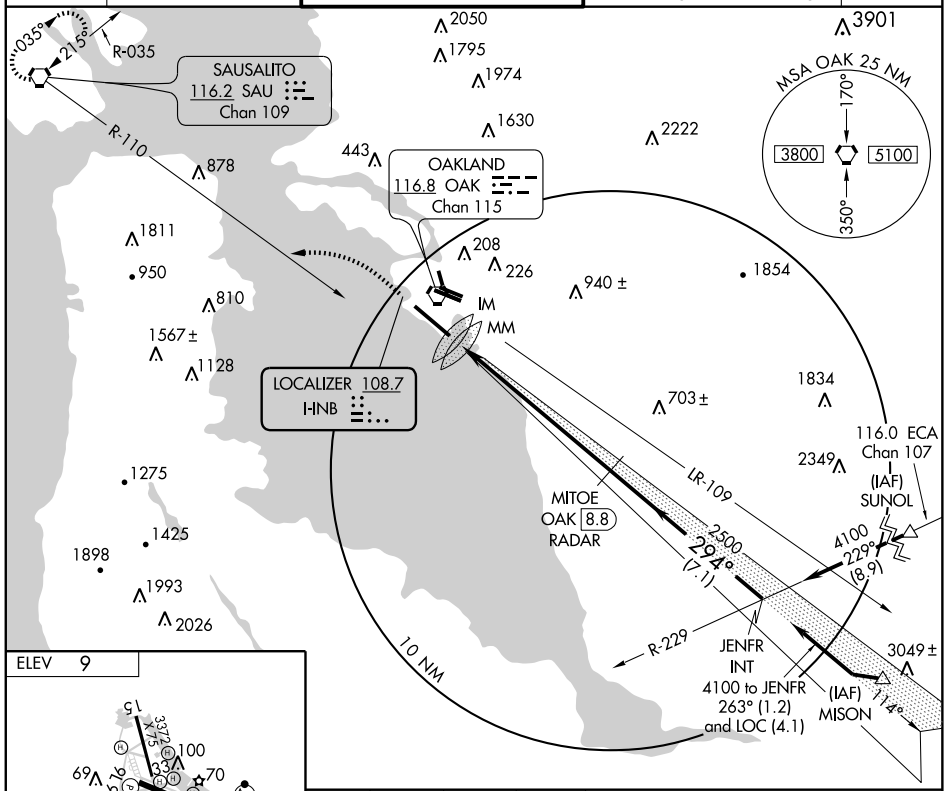
OAKLAND/ METROPOLITAN OAKLAND INTL (OAK)

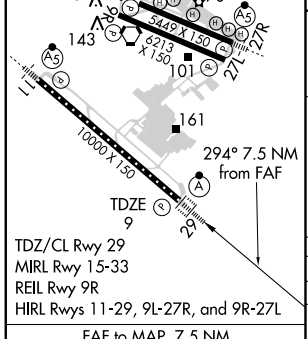
*DME or RADAR required for S-LOC 29.

ALSF-2

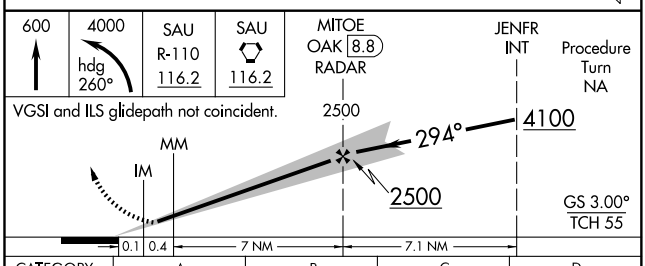
MISSED APPROACH: Climb to 600 then climbing left turn to 4000 via heading 260° and SAU R-110 to SAU VORTAC and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1





FAF to MAP 7.5 NM					
Knots	60	90	120	150	180
Min:Sec	7:30	5:00	3:45	3:00	2:30



CATEGORY	A	B	C	D
S-ILS 29	209/18 200 (200-½)			
S-LOC 29 *	560/24 551 (600-½)		560/50 551 (600-1)	560/60 551 (600-1¼)
CIRCLING	560-1 551 (600-1)		560-1½ 551 (600-1½)	560-2 551 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-INB	APP CRS	Rwy Idg	10000
108.7	294°	TDZE	9
		Apt Elev	9

ILS RWY 29 (CAT II)

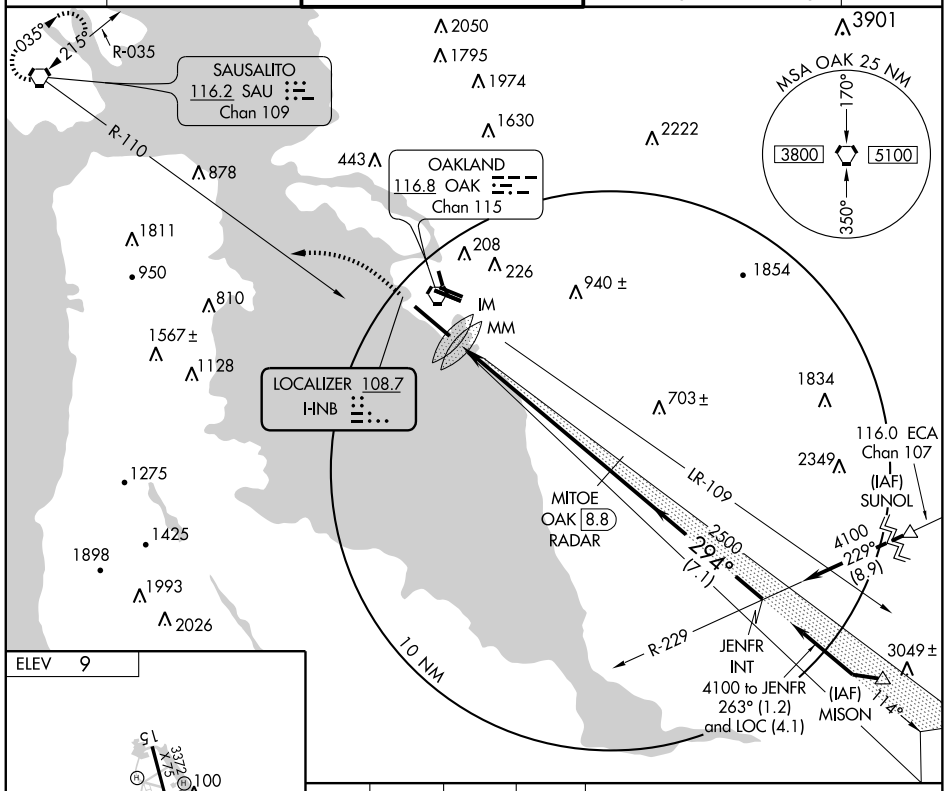
OAKLAND/ METROPOLITAN OAKLAND INTL (OAK)

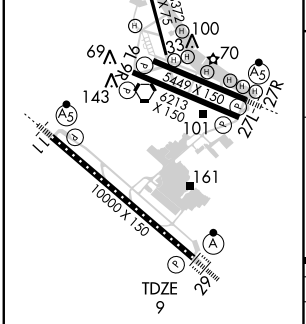
Obstructions in the missed approach area require a rate of climb of at least 300 FPM/100K, 450 FPM/ 150K, 600 FPM/200K to 600 feet, no wind conditions.

ALSF-2

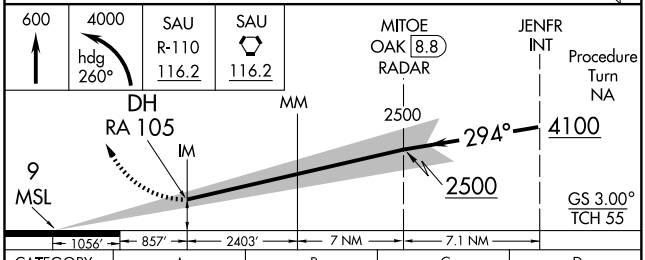
MISSED APPROACH: Climb to 600 then climbing left turn to 4000 via heading 260° and SAU R-110 to SAU VORTAC and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1





TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L



CATEGORY	A	B	C	D
S-ILS 29	109/12 100 RA 105			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-INB	APP CRS	Rwy Idg	10000
108.7	294°	TDZE	9
		Apt Elev	9

ILS RWY 29 (CAT III)

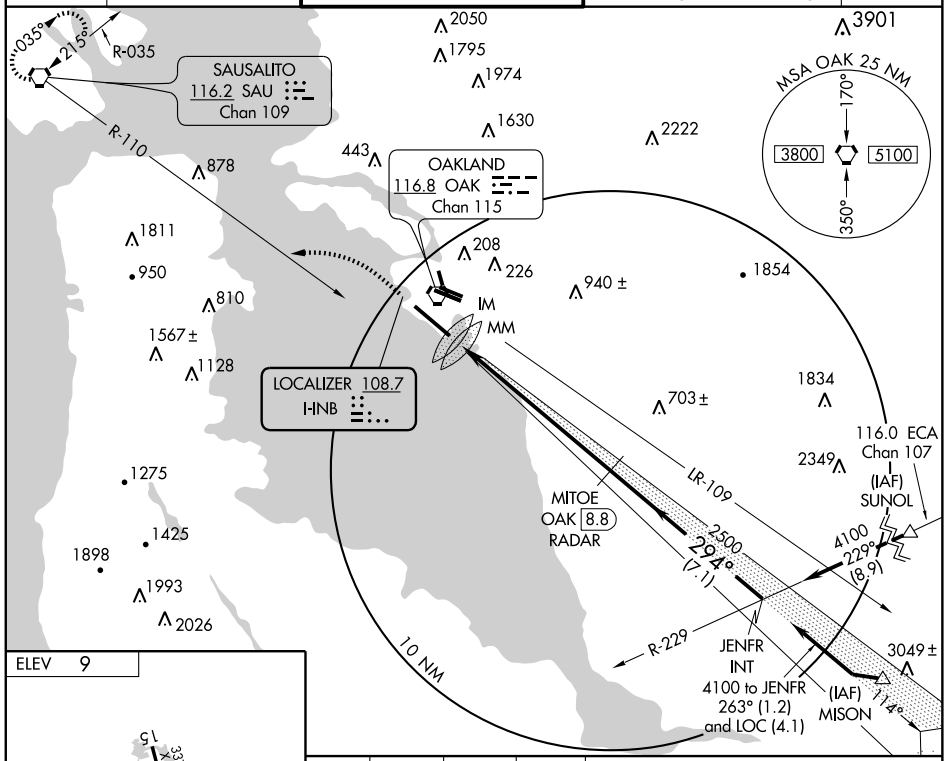
OAKLAND/ METROPOLITAN OAKLAND INTL (OAK)

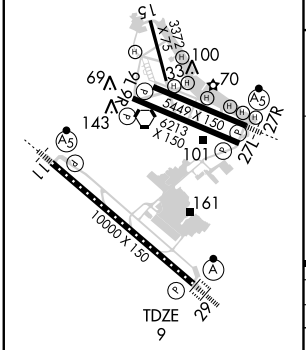
Obstructions in the missed approach area require a rate of climb of at least 300 FPM/100K, 450 FPM/ 150K, 600 FPM/200K to 600 feet, no wind conditions.

ALSF-2

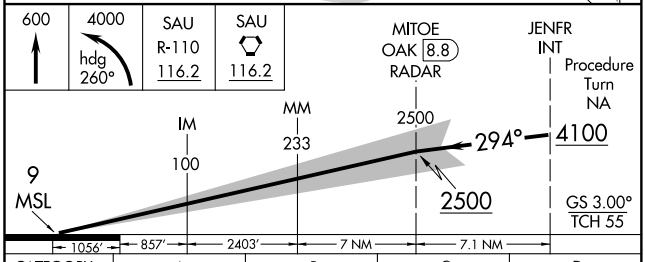
MISSED APPROACH: Climb to 600 then climbing left turn to 4000 via heading 260° and SAU R-110 to SAU VORTAC and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1





TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L



CATEGORY	A	B	C	D
S-ILS 29	CAT IIIa RVR 07			
S-ILS 29	CAT IIIb RVR 06			
S-ILS 29	CAT IIIc NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

CLOVIS TRANSITION (CZQ.LOCKE1): From over CZQ VORTAC via CZQ R-305 and MOD R-093 to MOD VOR/DME. Thence....

COALDALE TRANSITION (OAL.LOCKE1): From over OAL VORTAC via OAL R-246 and MOD R-064 to MOD VOR/DME. Thence...

MINA TRANSITION (MVA.LOCKE1): From over MVA VORTAC via MVA R-204, OAL R-246 and MOD R-064 to MOD VOR/DME. Thence....

MUSTANG TRANSITION (FMG.LOCKE1): From over FMG VORTAC via FMG R-182 and MOD R-064 to MOD VOR/DME. Thence....

....From over MOD VOR/DME via MOD R-245 to GROAN INT, then via SGD VORTAC R-107 to UPEND INT. Expect vectors to final approach course.

LOST COMMUNICATIONS METRO OAKLAND INTL ONLY: Depart UPEND INT via SGD R-107 to intercept and proceed via SAU R-035 to COMMO INT.

OAKLAND CENTER
134.37 281.5
NORCAL APP CON
128.325 254.3
SAN FRANCISCO INTL ATIS
113.7 118.85

MUSTANG
117.9 FMG
Chan 126
N39°31.88'-W119°39.36'
L-9, H-3

MINA
115.1 MVA
Chan 98
N38°33.92'-W118°01.97'
L-9, H-3

COALDALE
117.7 OAL
Chan 124
N38°00.20'-W117°46.23'
L-9, H-3

CLOVIS
112.9 CZQ
Chan 76
N36°53.06'-W119°48.91'
L-3-9, H-3

SCAGGS ISLAND
112.1 SGD
Chan 58

LOCALIZER 108.9
I-SIA
Chan 26

MANTECA
116.0 ECA
Chan 107

MODESTO
114.6 MOD
Chan 93
N37°37.64'-W120°57.47'

COMMO
N37°52.45'
W122°29.52'

116.2 SAU
R-035
Chan 109

UPEND
N38°01.92'
W122°05.82'

GROAN
N37°35.42'
W121°17.11'

(ITGIJ)
N37°49.56'
W119°22.09'

INYOE
N37°53.74'
W118°45.90'

TROSE
N37°41.95'
W120°24.25'

(IVIPY)
N37°28.56'
W120°26.39'

LOCKE
N37°42.81'
W121°30.58'

METRO OAKLAND INTL

SAN FRANCISCO INTL

OAKLAND
116.8 OAK
Chan 115

SAN FRANCISCO
115.8 SFO
Chan 105

R-107
191°
R-229
R-288
R-011
287° (34) 50
6000
287° (13) 63
8000
245° (16)
R-064
R-093
FL180
244° (27)
273° (26)
FL180
244° (50) 77
77
246° (29)
FL220
182° (115)
FL190
204° (53)
FL190
246° (48)
8000
305° (47)

Expect clearance to cross at 10,000 feet. Turbojets cross at 250K IAS.

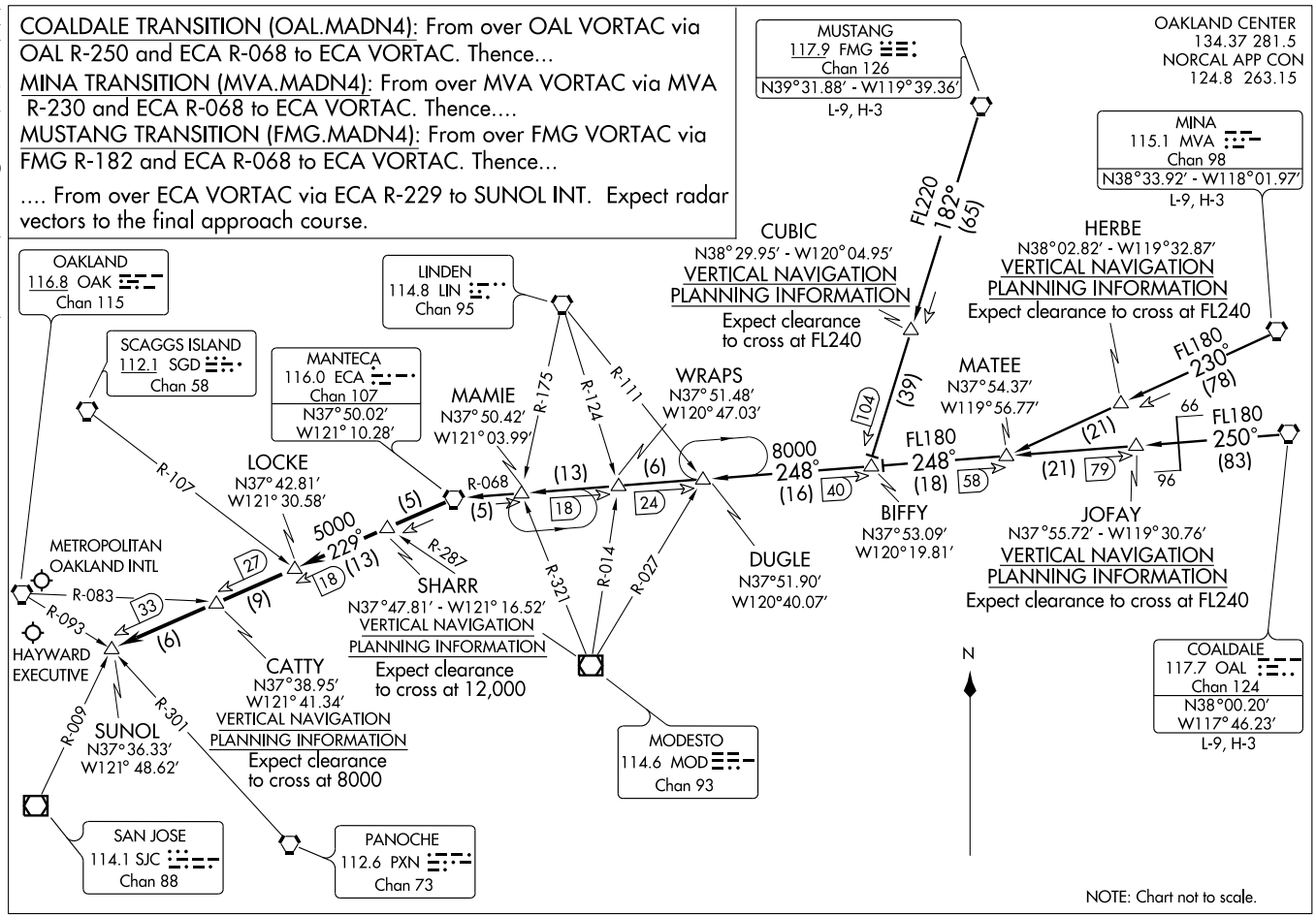
NOTE: Chart not to scale.

COALDALE TRANSITION (OAL.MADN4): From over OAL VORTAC via OAL R-250 and ECA R-068 to ECA VORTAC. Thence...

MINA TRANSITION (MVA.MADN4): From over MVA VORTAC via MVA R-230 and ECA R-068 to ECA VORTAC. Thence....

MUSTANG TRANSITION (FMG.MADN4): From over FMG VORTAC via FMG R-182 and ECA R-068 to ECA VORTAC. Thence...

.... From over ECA VORTAC via ECA R-229 to SUNOL INT. Expect radar vectors to the final approach course.



(ECA.MADN4) 08101

MADWIN FOUR ARRIVAL

ST-294 (FAA)

OAKLAND, CALIFORNIA

COALDALE TRANSITION (OAL.ECA1): From over OAL VORTAC via OAL R-250 and ECA R-068 to ECA VORTAC. Thence...

MINA TRANSITION (MVA.ECA1): From over MVA VORTAC via MVA R-230 and ECA R-068 to ECA VORTAC. Thence....

MUSTANG TRANSITION (FMG.ECA1): From over FMG VORTAC via FMG R-182 and ECA R-068 to ECA VORTAC. Thence...

.... From over ECA VORTAC via ECA R-229 to LOCKE INT, then via SGD R-107 to UPEND INT. Expect vectors to the final approach course.

LOST COMMUNICATIONS: Depart UPEND INT via SGD R-107 to intercept and proceed via SAU R-035 to COMMO INT.

MANTECA ONE ARRIVAL (ECA.ECA1) 08045

OAKLAND CENTER
134.37 281.5
NORCAL APP CON
124.8 263.15

MUSTANG
117.9 FMG
Chan 126
N39°31.88' - W119°39.36'
L-9, H-3

MINA
115.1 MVA
Chan 98
N38°33.92' - W118°01.97'
L-9, H-3

FL200
182°
(65)

CUBIC
N38°29.95' - W120°04.95'
VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance
to cross at FL240

HERBE
N38°02.82' - W119°32.87'
VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at FL240

SCAGGS ISLAND
112.1 SGD
Chan 58

LINDEN
114.8 LIN
Chan 95

MANTECA
116.0 ECA
Chan 107
N37°50.02'
W121°10.28'

UPEND
N38°01.92'
W122°05.82'

MAMIE
N37°50.42'
W121°03.99'

WRAPS
N37°51.48'
W120°47.03'

MATEE
N37°54.37'
W119°56.77'

FL180
230°
(78)

R-107

R-175

R-124

R-111

(39)

104

(21)

66

FL180
250°
(83)

COMMO
N37°52.45'
W122°29.52'

LOCKE
N37°42.81'
W121°30.58'

R-068

(13)

(6)

8000
248°
(16)
40

FL180
248°
(18)
58

(21)
79

96

(5)

(5)

18

24

R-035

287°
(34)
50

5000
229°
(13)

18

JOFAY
N37°55.72' - W119°30.76'
VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at FL240

R-011

R-288

R-287

R-321

R-014

R-027

DUGLE
N37°51.90'
W120°40.07'

BIFFY
N37°53.09'
W120°19.81'

SHARR
N37°47.81' - W121°16.52'
VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance
to cross at 9000

VERTICAL NAVIGATION
PLANNING INFORMATION
Expect clearance to cross at 20,000'.

N

COALDALE
117.7 OAL
Chan 124
N38°00.20'
W117°46.23'
L-9, H-3

SAN FRANCISCO
115.8 SFO
Chan 105

OAKLAND
116.8 OAK
Chan 115

MODESTO
114.6 MOD
Chan 93

SAUSALITO
116.2 SAU
Chan 109

NOTE: Chart not to scale.

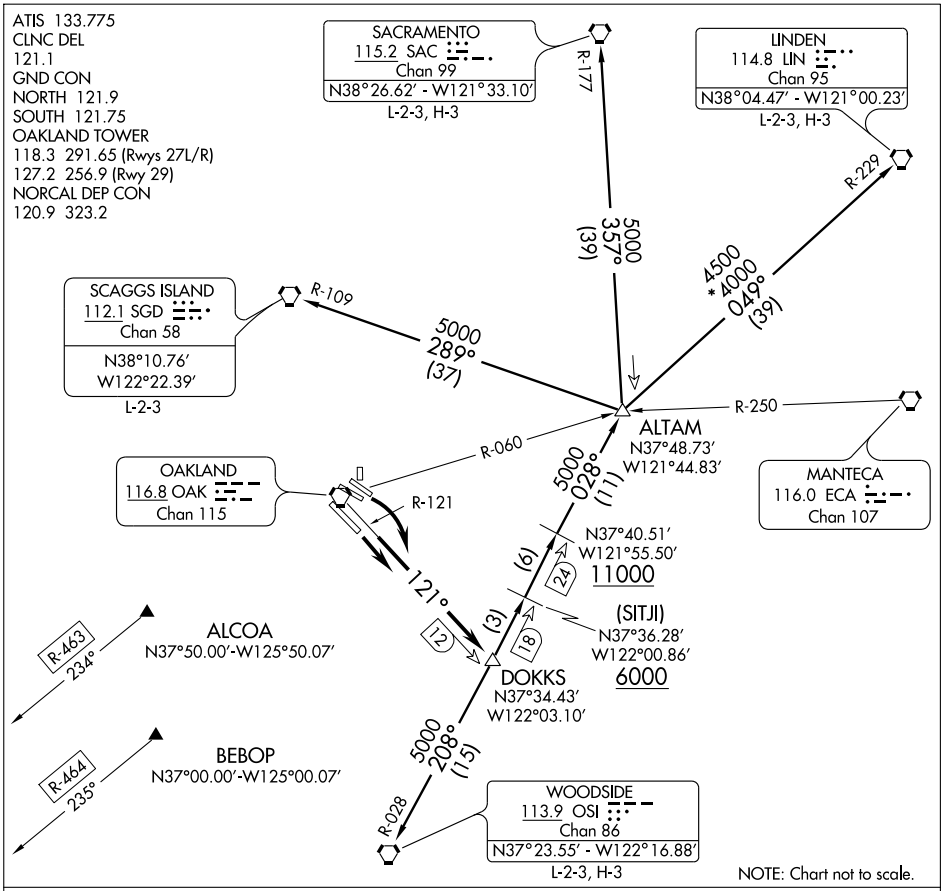
ST-294 (FAA)

METROPOLITAN OAKLAND INTL
OAKLAND, CALIFORNIA

(MARI4.DOKKS) 09127

MARINA FOUR DEPARTURE

OAKLAND/METROPOLITAN OAKLAND INTL (OAK)
SL-294 (FAA)
OAKLAND, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R: Turn right and climb via OAK-121 to DOKKS INT. Thence via (transition) or (assigned route/fix). Expect clearance to filed altitude ten minutes after departure.

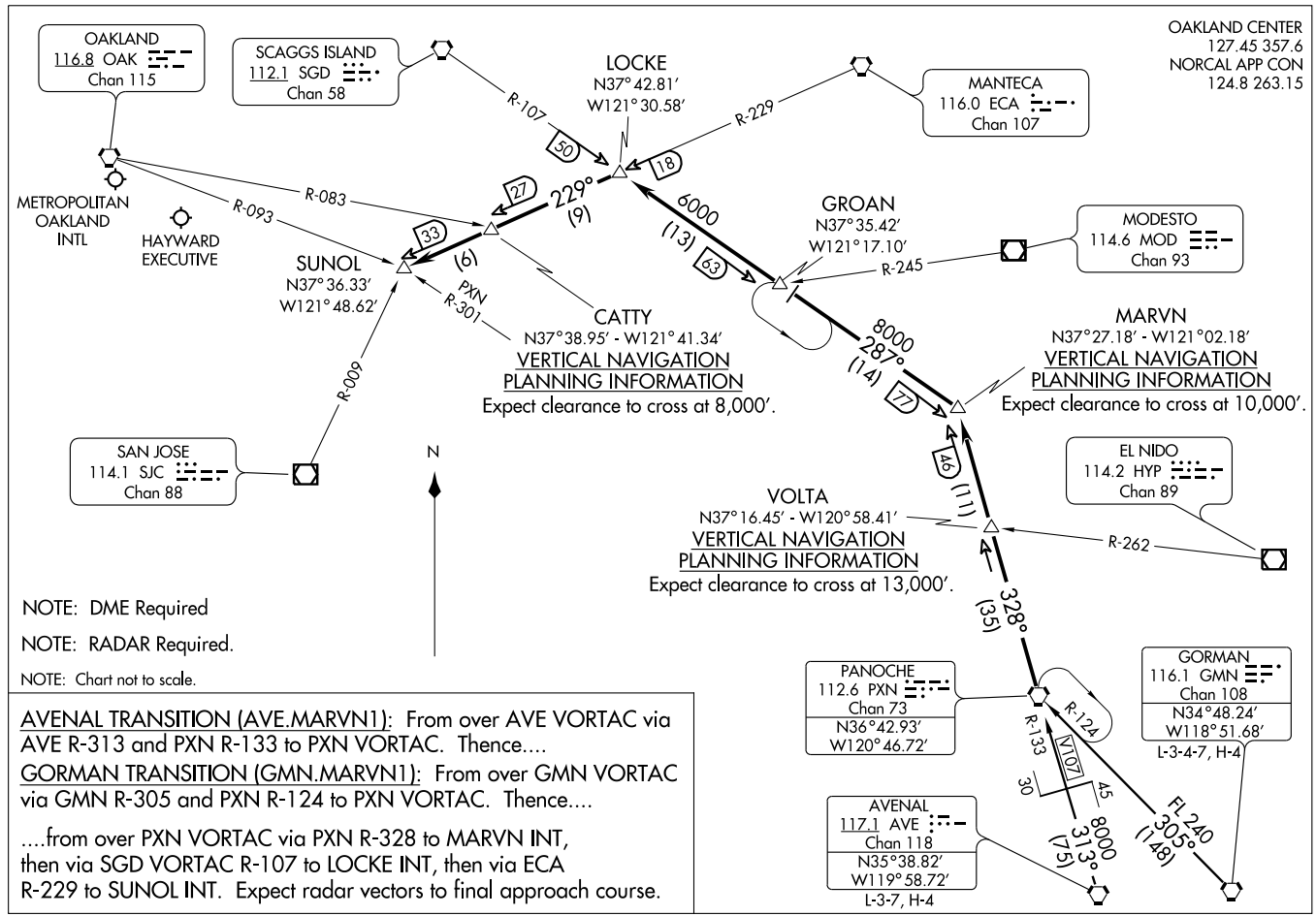
TAKE-OFF RUNWAY 11: Maintain runway heading to intercept and proceed via the OAK R-121 to DOKKS INT. Thence via (transition) or (assigned route/fix). Except clearance to filed altitude ten minutes after departure.

LINDEN TRANSITION (MARI4.LIN): From over DOKKS INT via OSI R-028 and LIN R-229 to LIN VORTAC. Cross OSI R-028 18 DME at or above 6000', OSI R-028 24 DME at or above 11000'.

SACRAMENTO TRANSITION (MARI4.SAC): From over DOKKS INT via OSI R-028 and SAC R-177 to SAC VORTAC. Cross OSI R-028 18 DME at or above 6000' and OSI R-028 24 DME at or above 11000'.

SCAGGS ISLAND TRANSITION (MARI4.SGD): From over DOKKS INT via OSI R-028 and SGD R-109 to SGD VORTAC. Cross OSI R-028 18 DME at or above 6000' and OSI R-028 24 DME at or above 11000'.

WOODSIDE TRANSITION (MARI4.OSI): From over DOKKS INT via OSI R-028 to OSI VORTAC.

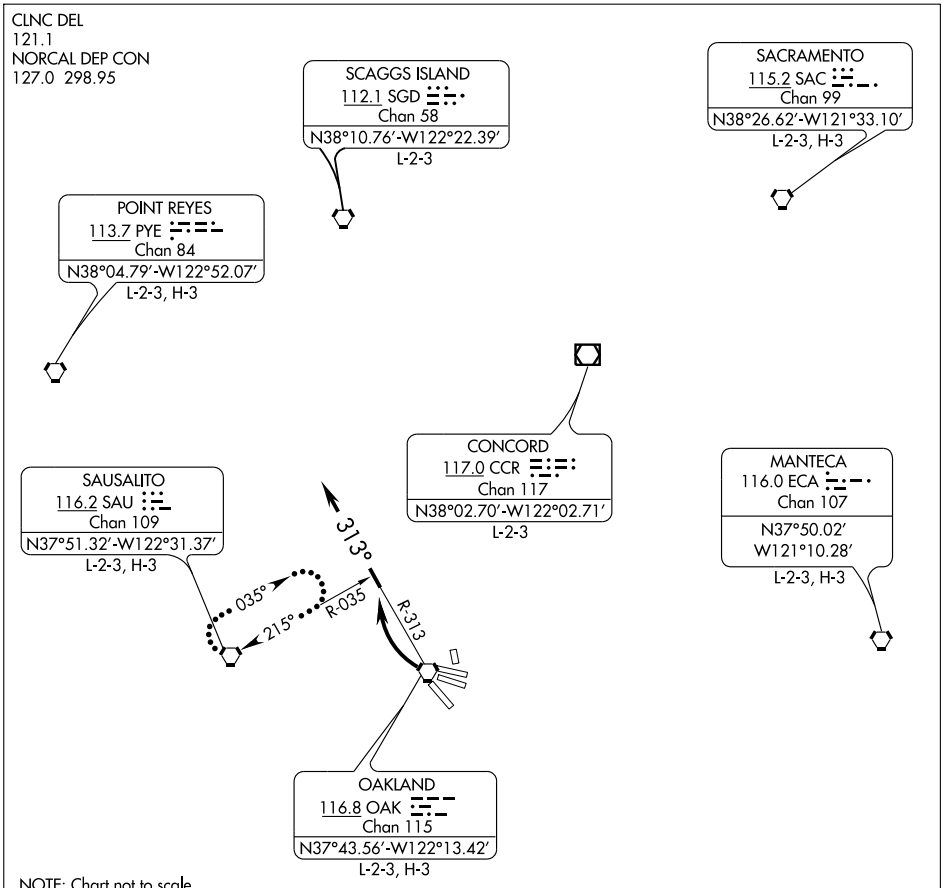


(PXN.MARVN1) 09295
MARVN ONE ARRIVAL
ST-294 (FAA)
OAKLAND, CALIFORNIA

NIMITZ TWO DEPARTURE

SL-294 (FAA)

OAKLAND/METROPOLITAN OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA



NOTE: Chart not to scale.

NOTE: RADAR required.

NOTE: Departure Rwys 27L/R: A minimum climb of 375′ per NM to 2000′ is required.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 27L/R and 29: Turn right, intercept and proceed via OAK R-313 for vectors to assigned fix/route. Expect clearance to filed altitude 10 minutes after departure.

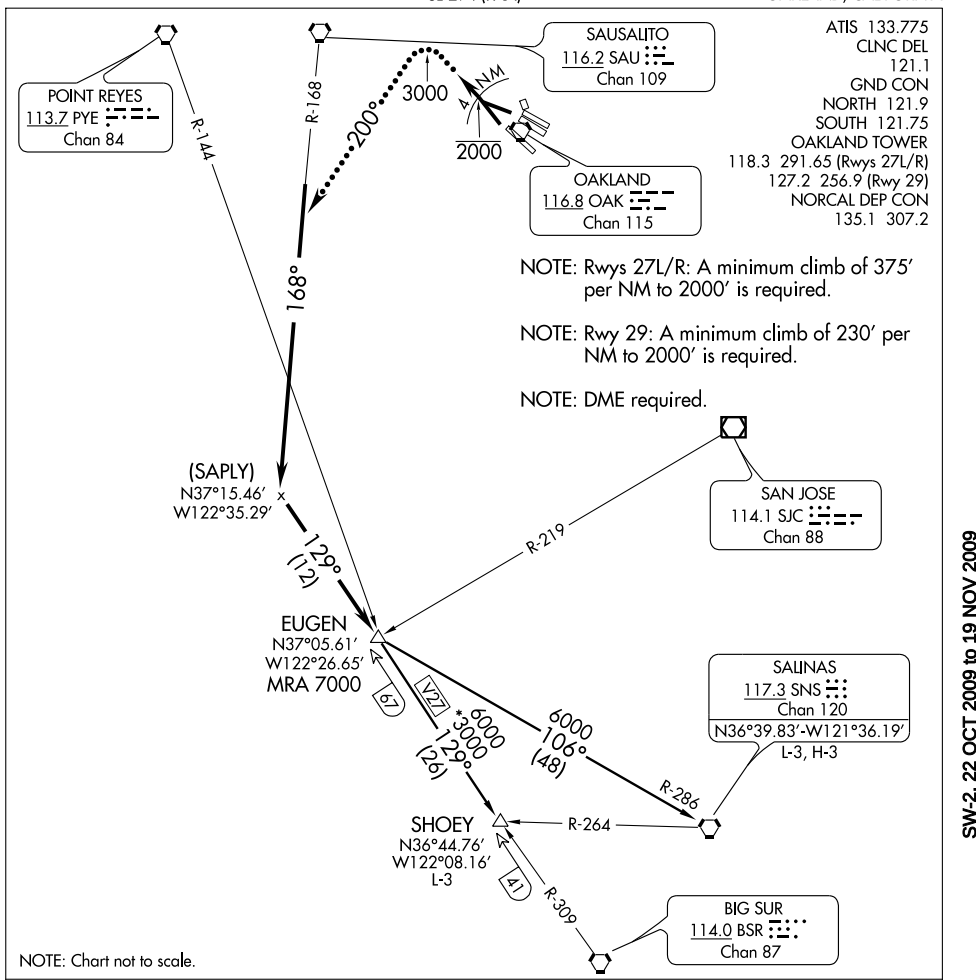
LOST COMMUNICATIONS: If not in contact with departure after reaching 3000′, proceed direct to SAU VORTAC and hold on SAU R-035. Climb in holding pattern to assigned altitude, then proceed to assigned fix/route.

SW-2, 22 OCT 2009 to 19 NOV 2009

(NUEVO5.EUGEN) 07298

NUEVO FIVE DEPARTURE

OAKLAND/METROPOLITAN OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA
SL-294 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 27L/R and 29: Maintain runway heading for vector to the SAU R-168. Cross 4 miles northwest of OAK VORTAC at or below 2000′. Then via the SAU R-168 and the BSR R-309 to EUGEN INT. Then via (transition) or (assigned route). Expect clearance to filed altitude ten minutes after departure.

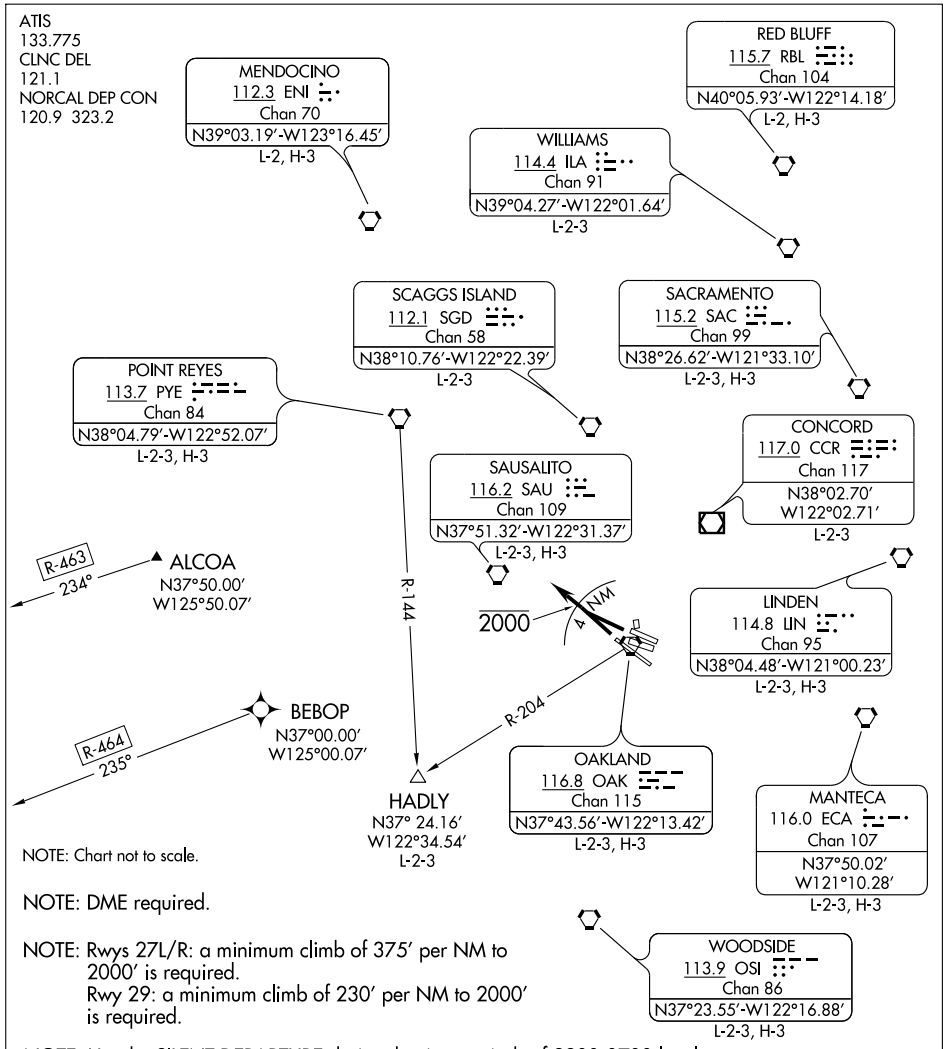
LOST COMMUNICATIONS: Take-off runways 27L/R and 29: After reaching 3000′, turn left heading 200°, intercept the SAU R-168, resume own navigation.

SALINAS TRANSITION (NUEVO5.SNS): From over EUGEN INT via the SNS R-286 to SNS VORTAC.

SHOEY TRANSITION (NUEVO5.SHOEY): From over EUGEN INT via the BSR R-309 to SHOEY INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

OAKLAND FIVE DEPARTURE



NOTE: Chart not to scale.

NOTE: DME required.

NOTE: Rwys 27L/R: a minimum climb of 375′ per NM to 2000′ is required.
Rwy 29: a minimum climb of 230′ per NM to 2000′ is required.

NOTE: Use the SILENT DEPARTURE during the time periods of 2200-0700 local in lieu of the OAKLAND DEPARTURE.

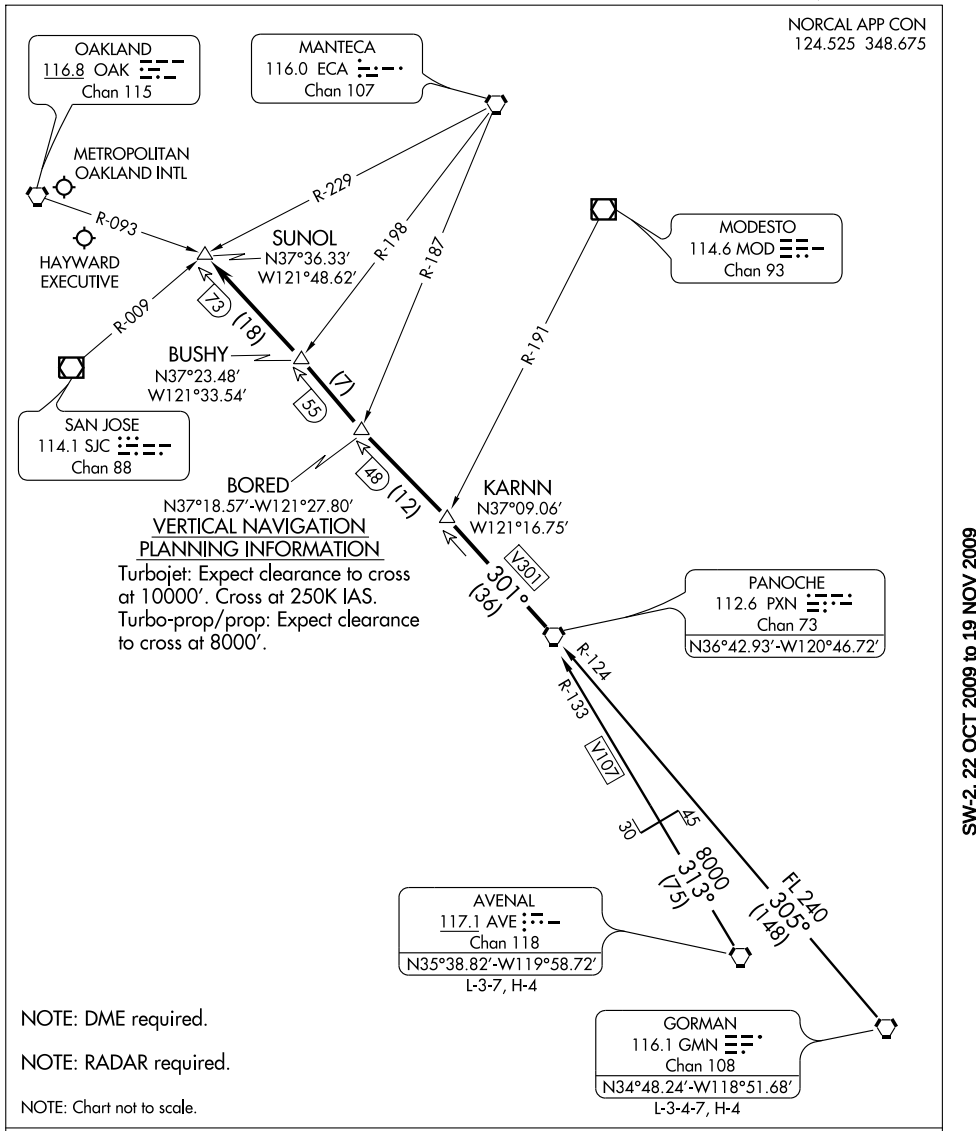
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 27L/R and 29: Climb via runway heading or as assigned for vector to assigned route/fix. Cross 4 miles northwest of OAK VORTAC at or below 2000′, maintain assigned altitude. Expect clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control after reaching 3000′, continue climb to assigned altitude and proceed direct to assigned route/fix.

SW-2, 22 OCT 2009 to 19 NOV 2009

PANOCHE TWO ARRIVAL



AVENAL TRANSITION (AVE.PXN2): From over AVE VORTAC via AVE R-313 and PXN R-133 to PXN VORTAC. Thence....

GORMAN TRANSITION (GMN. PXN2): From over GMN VORTAC via GMN R-305 and PXN R-124 to PXN VORTAC. Thence....

....From over PXN VORTAC via PXN R-301 to SUNOL INT. Expect radar vectors to the final approach course.

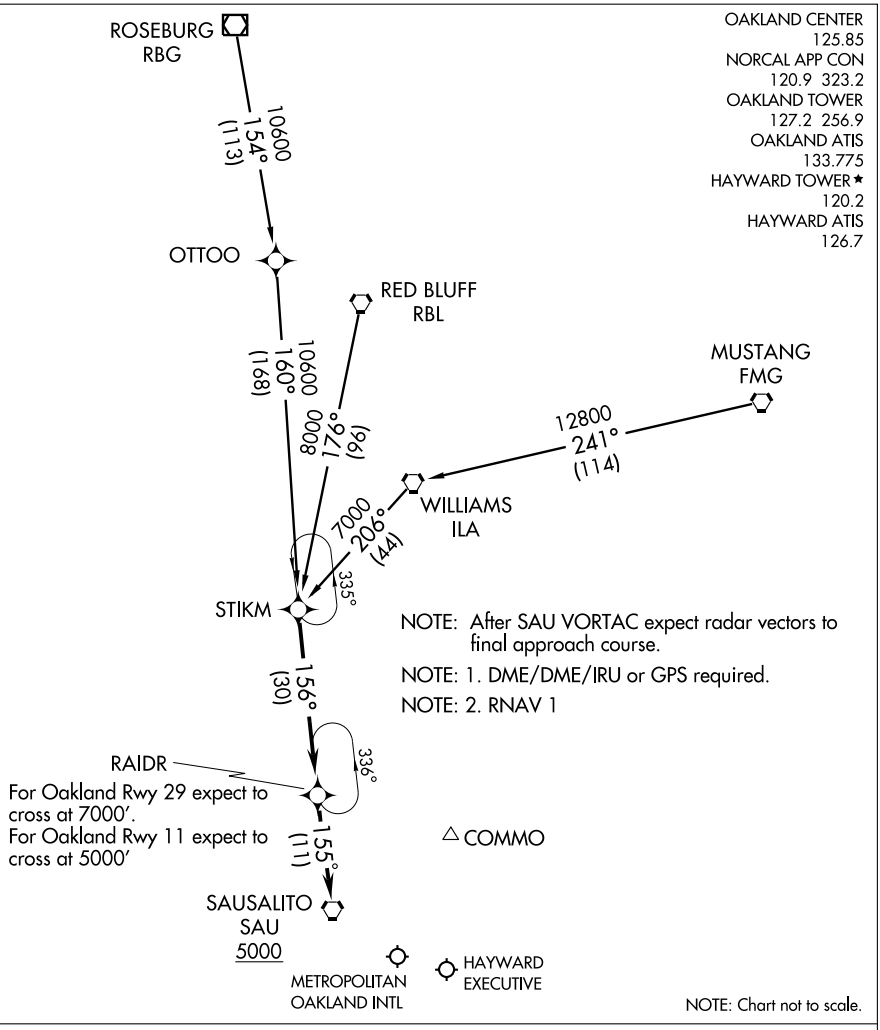
SW-2, 22 OCT 2009 to 19 NOV 2009

(RAIDR.RAIDR2) 07354

RAIDR TWO ARRIVAL (RNAV)

ST-294 (FAA)

OAKLAND, CALIFORNIA



MUSTANG TRANSITION (FMG.RAIDR2)

RED BLUFF TRANSITION (RBL.RAIDR2)

ROSEBURG TRANSITION (RBG.RAIDR2)

From over STIKM WP via 156° track to RAIDR WP, thence as depicted to cross SAU VORTAC at or above 5000. Expect radar vectors to final approach course.

LOST COMMUNICATIONS:

Depart SAU VORTAC and proceed direct to COMMO INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5449
107°	TDZE	3
	Apt Elev	6

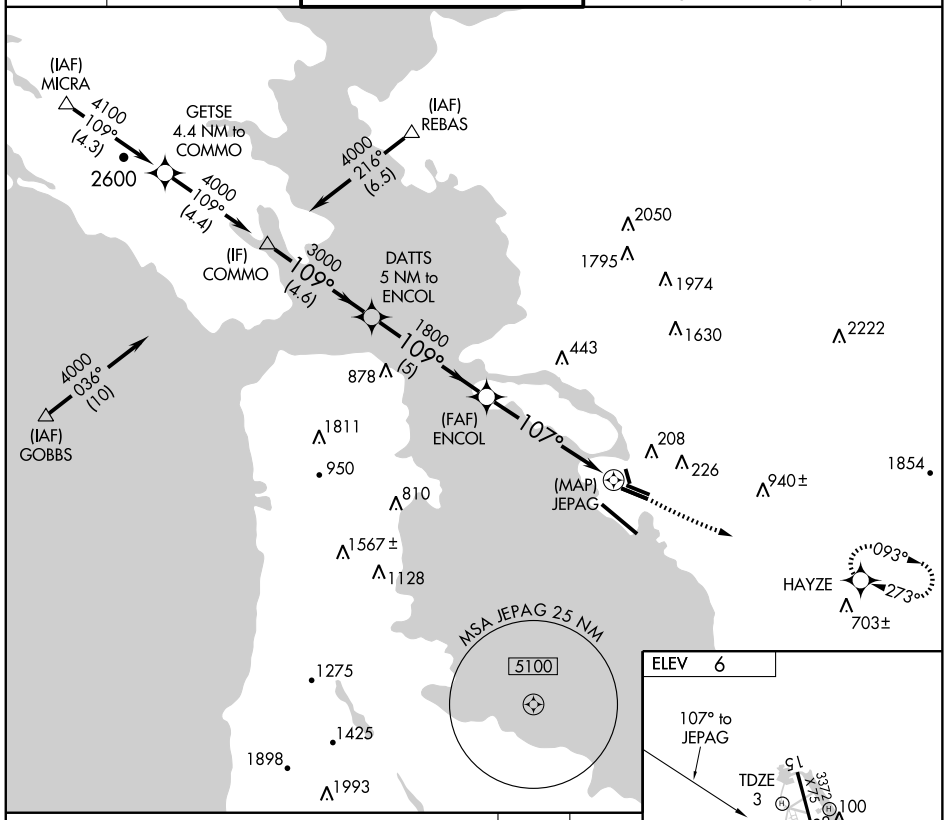
RNAV (GPS) RWY 9L

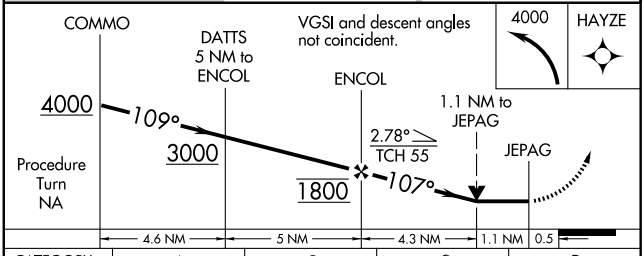
OAKLAND/ METROPOLITAN OAKLAND INTL (OAK)

NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

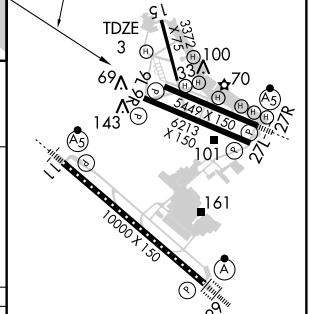
MISSED APPROACH: Climbing left turn to 4000 direct HAYZE WP and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2	256.9 121.9	121.75	121.1





CATEGORY	A	B	C	D
LNAV MDA	540-1	537 (600-1)	540-1½ 537 (600-1½)	540-1¾ 537 (600-1¾)
CIRCLING	540-1	534 (600-1)	540-1½ 534 (600-1½)	560-2 554 (600-2)



TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6213
109°	TDZE	5
	Apt Elev	6

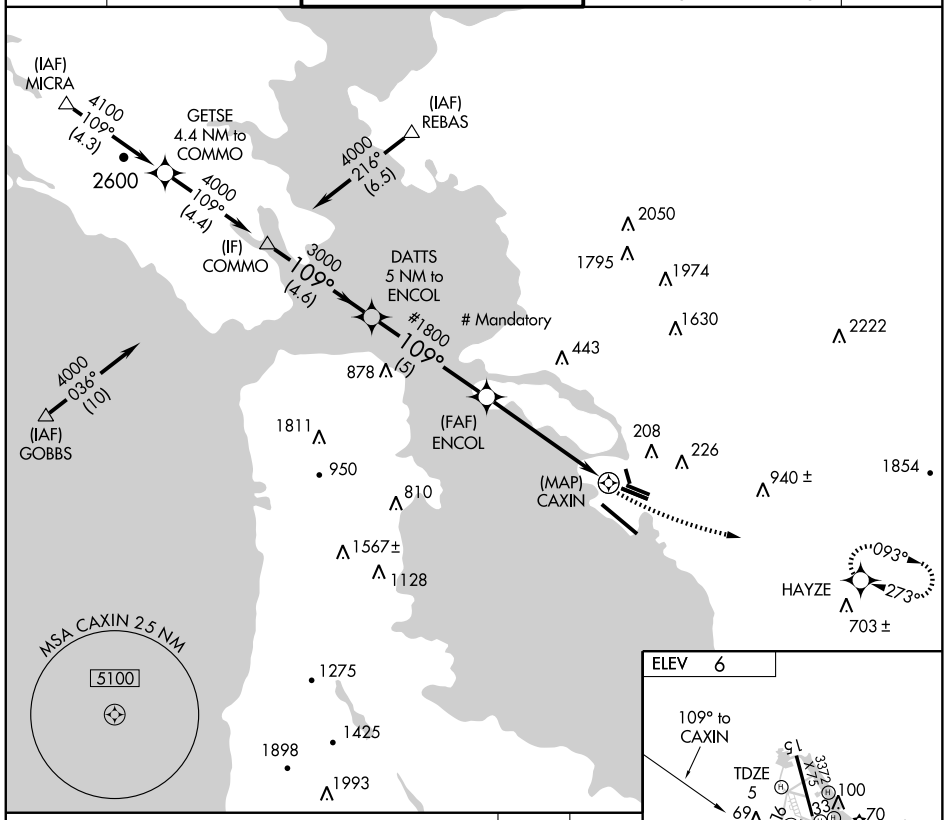
RNAV (GPS) RWY 9R

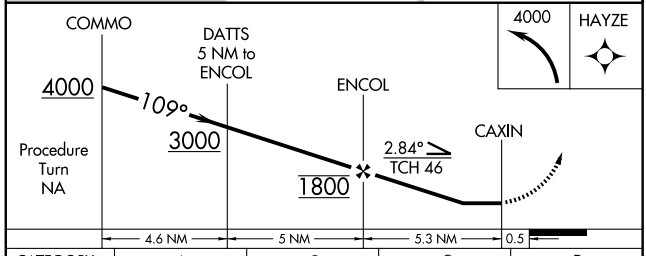
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

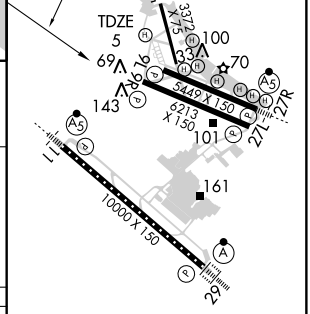
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 4000 direct HAYZE WP and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1







CATEGORY	A	B	C	D
LNAV MDA	520-1 515 (600-1)		520-1½ 515 (600-1½)	520-1¾ 515 (600-1¾)
CIRCLING	520-1 514 (600-1)	540-1 534 (600-1)	540-1½ 534 (600-1½)	560-2 554 (600-2)

TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10000
114°	TDZE	9
	Apt Elev	9

RNAV (GPS) RWY 11

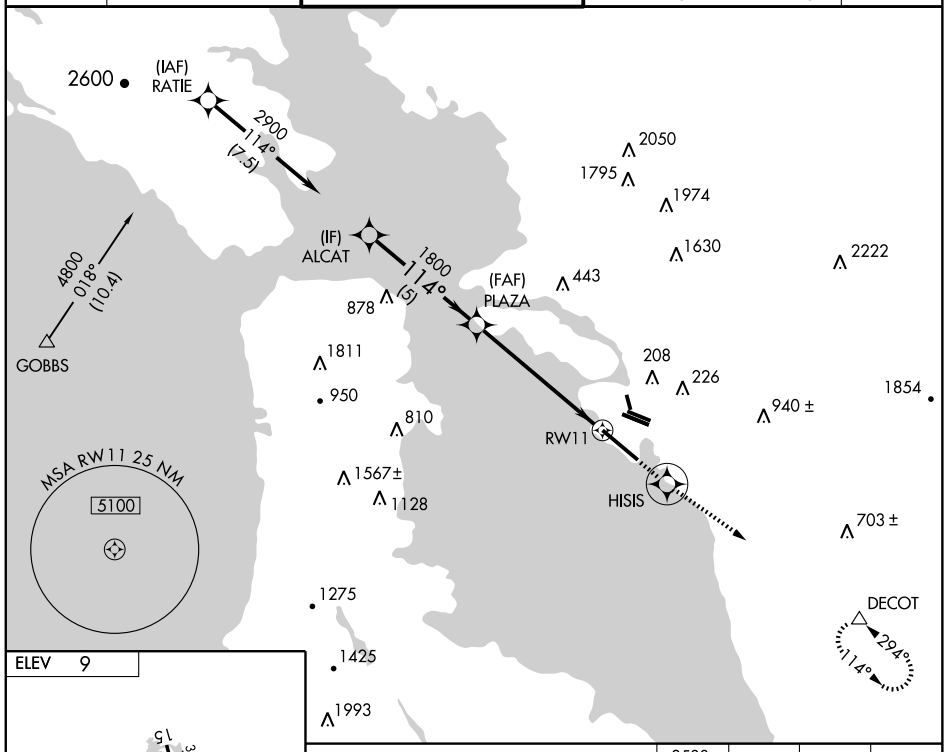
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

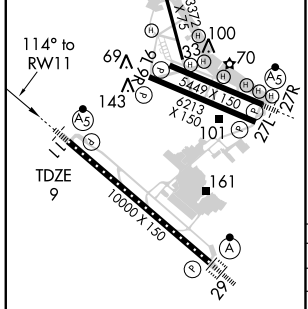
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).

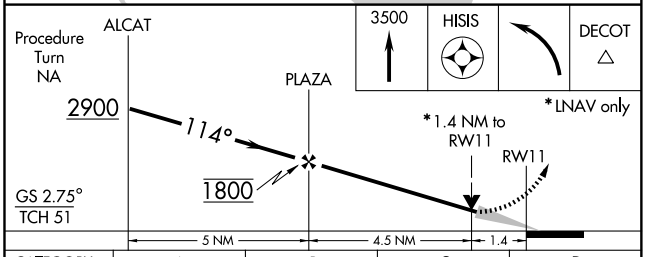
MALSR

MISSED APPROACH: Climb to 3500 direct HISIS WP, then left turn direct DECOT WP and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	333/40 324 (400-¾)			
LNAV MDA	460/24 451 (500-½)		460/40 451 (500-¾)	460/50 451 (500-1)
CIRCLING	520-1¼ 511 (600-1¼)	540-1¼ 531 (600-1¼)	540-1½ 531 (600-1½)	560-2 551 (600-2)

TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	6213
CH 72700	276°	TDZE	9
W27A		Apt Elev	9

RNAV (GPS) RWY 27L

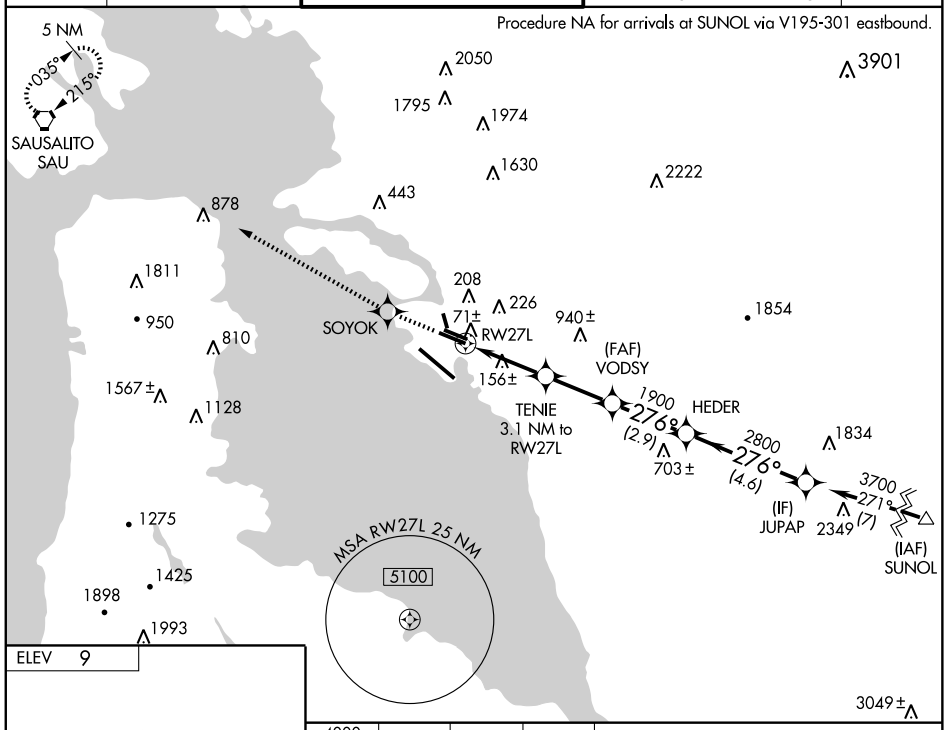
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

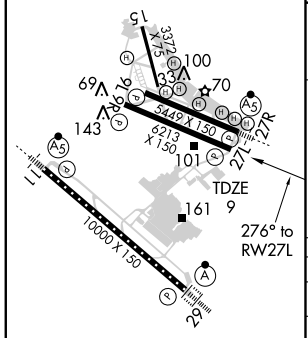
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F) DME/DME RNP -0.3 NA.

MISSED APPROACH: Climb to 4000 direct SOYOK then via 283° track to SAU VORTAC and hold, continue climb-in-hold to 4000.

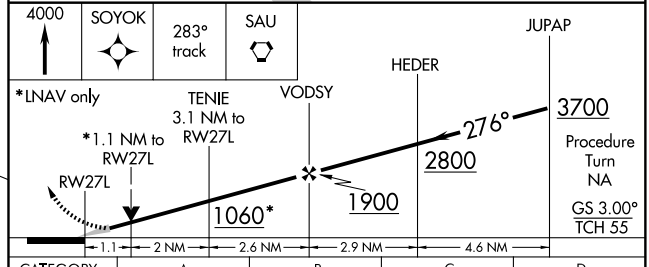
ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1

Procedure NA for arrivals at SUNOL via V195-301 eastbound.





TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L



CATEGORY	A	B	C	D
LPV DA	259/40 250 (300-¾)			
LNAV/VNAV DA	359/60 350 (400-1¼)			
LNAV MDA	420/50 411 (500-1)		420/60 411 (500-1¼)	
CIRCLING	520-1¼ 511 (600-1¼)	540-1¼ 531 (600-1¼)	540-1½ 531 (600-1½)	560-2 551 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5449
276°	TDZE	4
	Apt Elev	6

RNAV (GPS) RWY 27R

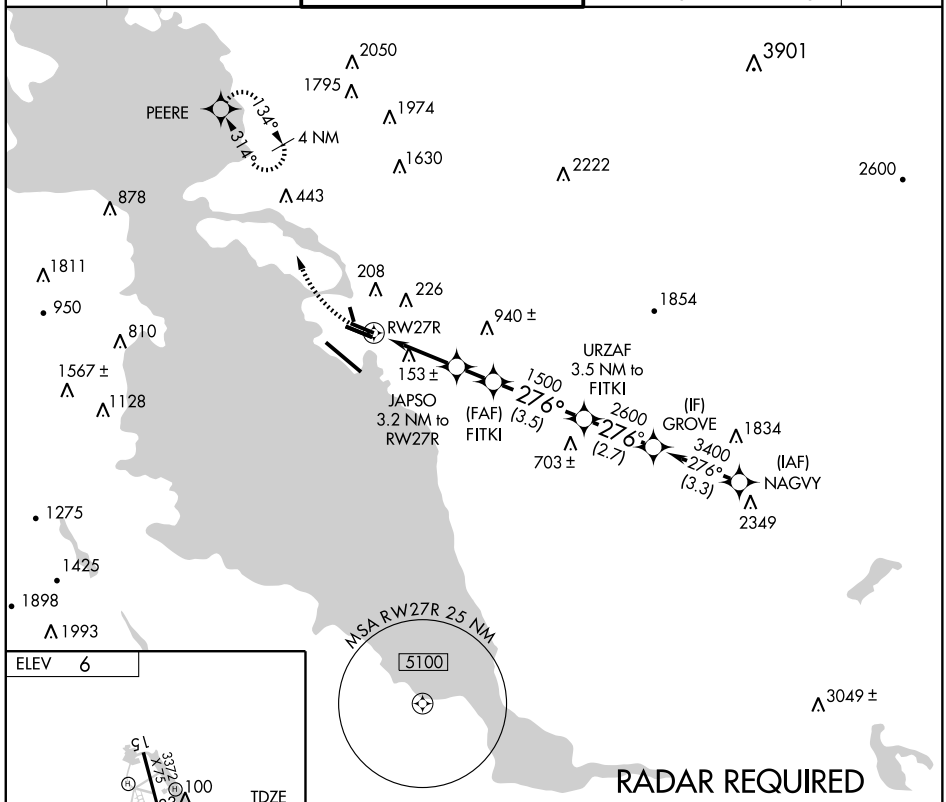
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

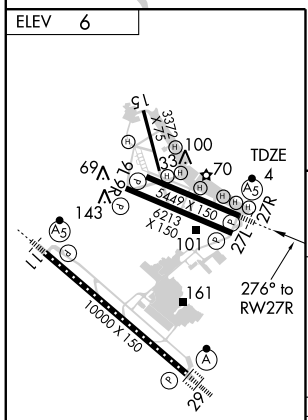
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA For inoperative MALSR increase Cat D visibility to RVR 6000.

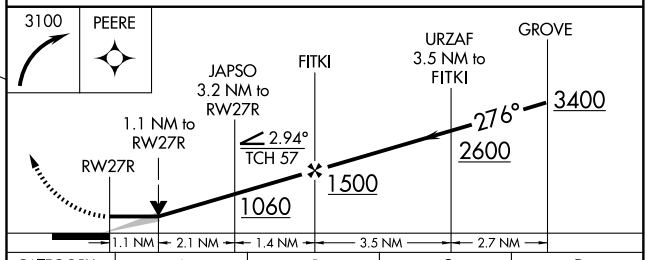
MALSR

MISSED APPROACH: Climbing right turn to 3100 direct PEERE WP and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2	256.9 121.9	121.75	121.1







CATEGORY	A	B	C	D
LNAV MDA	420/24 416 (500-½)		420/40 416 (500-¾)	420/50 416 (500-1)
CIRCLING	520-1 514 (600-1)	540-1 534 (600-1)	540-1½ 534 (600-1½)	560-2 554 (600-2)

TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10000
294°	TDZE	6
	Apt Elev	6

RNAV (GPS) RWY 29

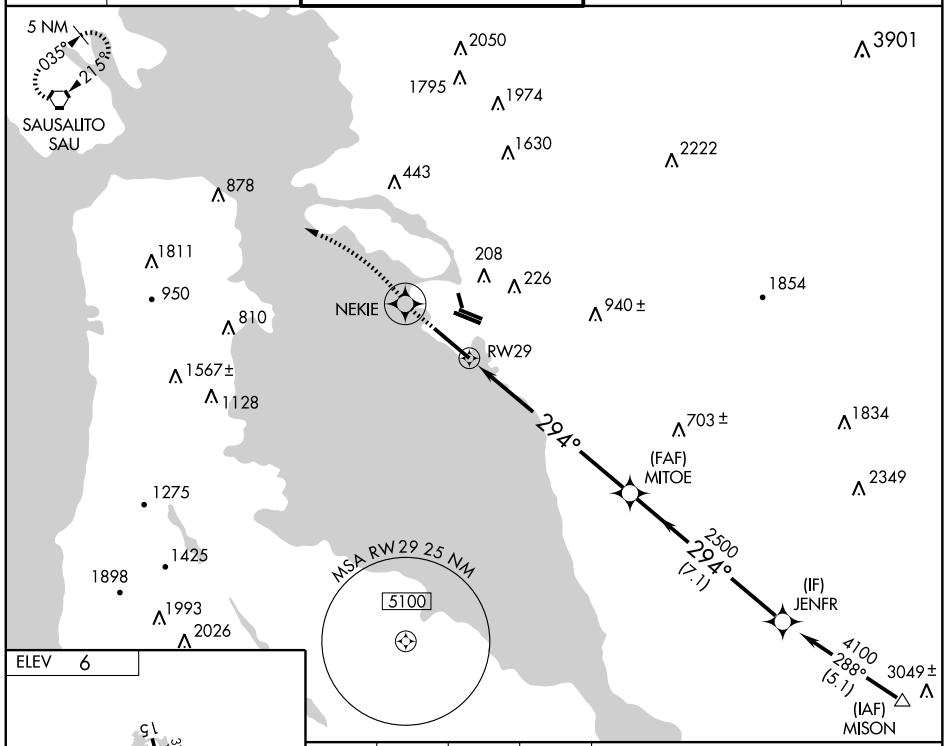
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

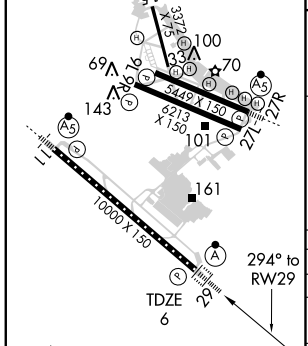
T A NA W — GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Baro-VNAV NA below -15°C (5°F). For inoperative ALSF, increase LNAV/VNAV Cat. D visibility to RVR 5000.

ALSF-2

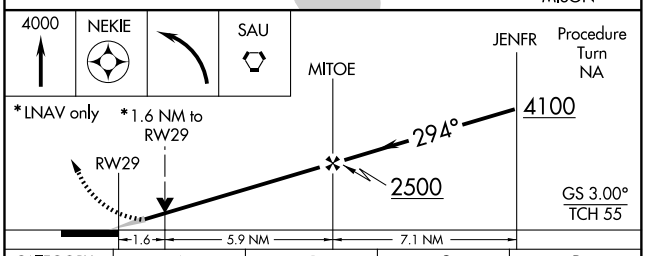
MISSED APPROACH: Climb to 4000 direct NEKIE WP, then left turn direct SAU VORTAC and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER (Rwys 9-27, 15-33)	OAKLAND TOWER (Rwy 11-29)	GND CON (Rwys 9-27, 15-33)	GND CON (Rwy 11-29)	CLNC DEL
133.775	125.35 310.8 354.1	118.3	291.65 127.2 256.9	121.9	121.75	121.1



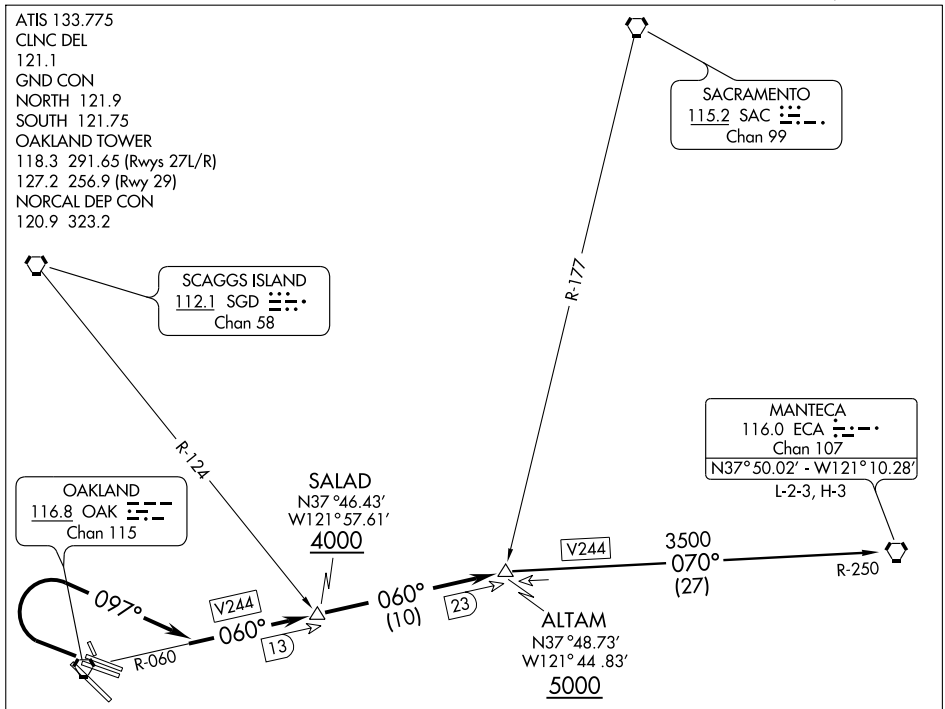


TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	300/24 294 (300-½)			300/40 294 (300-¾)
LNAV MDA	580/24 574 (600-½)		580/50 574 (600-1)	580/60 574 (600-1¼)
CIRCLING	580-1 574 (600-1)		580-1½ 574 (600-1½)	580-2 574 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009



TAKE-OFF MINIMUMS

Rwys 9L/R, 11, 15, 29, 33: not authorized.

Rwy 27L/R: 2100-3 or standard with a minimum climb of 270' per NM to 2000.

NOTE: For use 2200-0600L.

NOTE: For Cat A/B prop aircraft only.

NOTE: Chart not to scale.

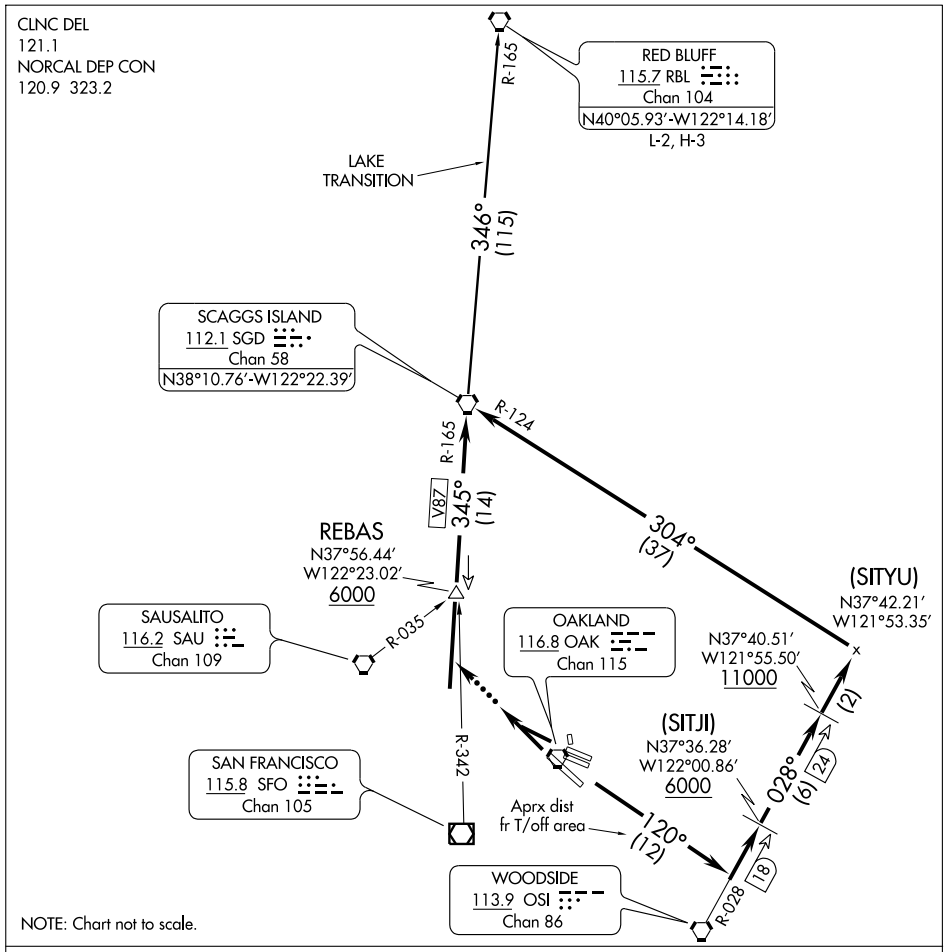
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 27 L/R: Climbing right turn heading 097° to intercept and proceed via OAK VORTAC R-060 (V28-109-244-392) to ALTAM INT. Cross SALAD INT/OAK 13 DME at or above 4000, cross ALTAM INT/OAK 23 DME at or above 5000. Then via transition or assigned route. Expect clearance to filed altitude 10 minutes after departure.

MANTECA TRANSITION (SALAD1.ECA): From over ALTAM INT via ECA R-250 to ECA VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

SCAGGS ISLAND ONE DEPARTURE



SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 11: Turn right heading 120° to intercept and proceed via the OSI R-028 to intercept and proceed via the SGD R-124 to SGD VORTAC. Thence via (transition) or (assigned route). Expect clearance to filed altitude ten minutes after departure.

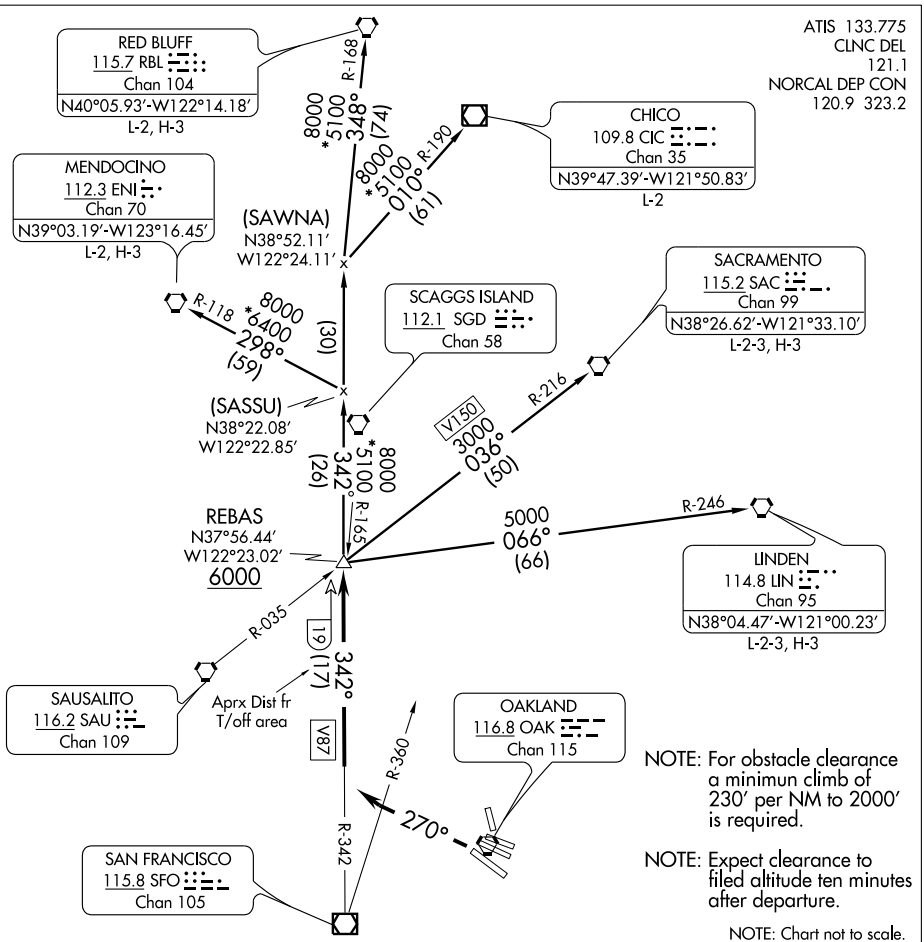
TAKE-OFF RUNWAYS 27L/R AND 29: Maintain runway heading for vector to the SGD R-165, then via the SGD R-165 to the SGD VORTAC. Cross the SGD R-165 14 DME at or above 6000'. Thence via (transition) or (assigned route). Expect clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS: Take-off runways 27L/R and 29: Intercept the SGD R-165, resume normal navigation.

LAKE TRANSITION (SGD1.RBL): From over SGD VORTAC via SGD R-346 and RBL R-165 to RBL VORTAC.

SILENT SEVEN DEPARTURE

OAKLAND/METROPOLITAN OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA
SL-294 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 29: Turn left heading 270° to intercept and proceed via SFO R-342 (commence right turn at SFO R-360) to REBAS INT. Cross REBAS INT at or above 6000'. Thence via (transition) or (assigned route).

CHICO TRANSITION (SLNT7.CIC): From over REBAS INT via SFO R-342 and CIC R-190 to CIC VOR/DME.

LINDEN TRANSITION (SLNT7.LIN): From over REBAS INT via LIN R-246 to LIN VORTAC.

MENDOCINO TRANSITION (SLNT7.ENI): From over REBAS INT via SFO R-342 and ENI R-118 to ENI VORTAC.

RED BLUFF TRANSITION (SLNT7.RBL): From over REBAS INT via SFO R-342 and RBL R-168 to RBL VORTAC

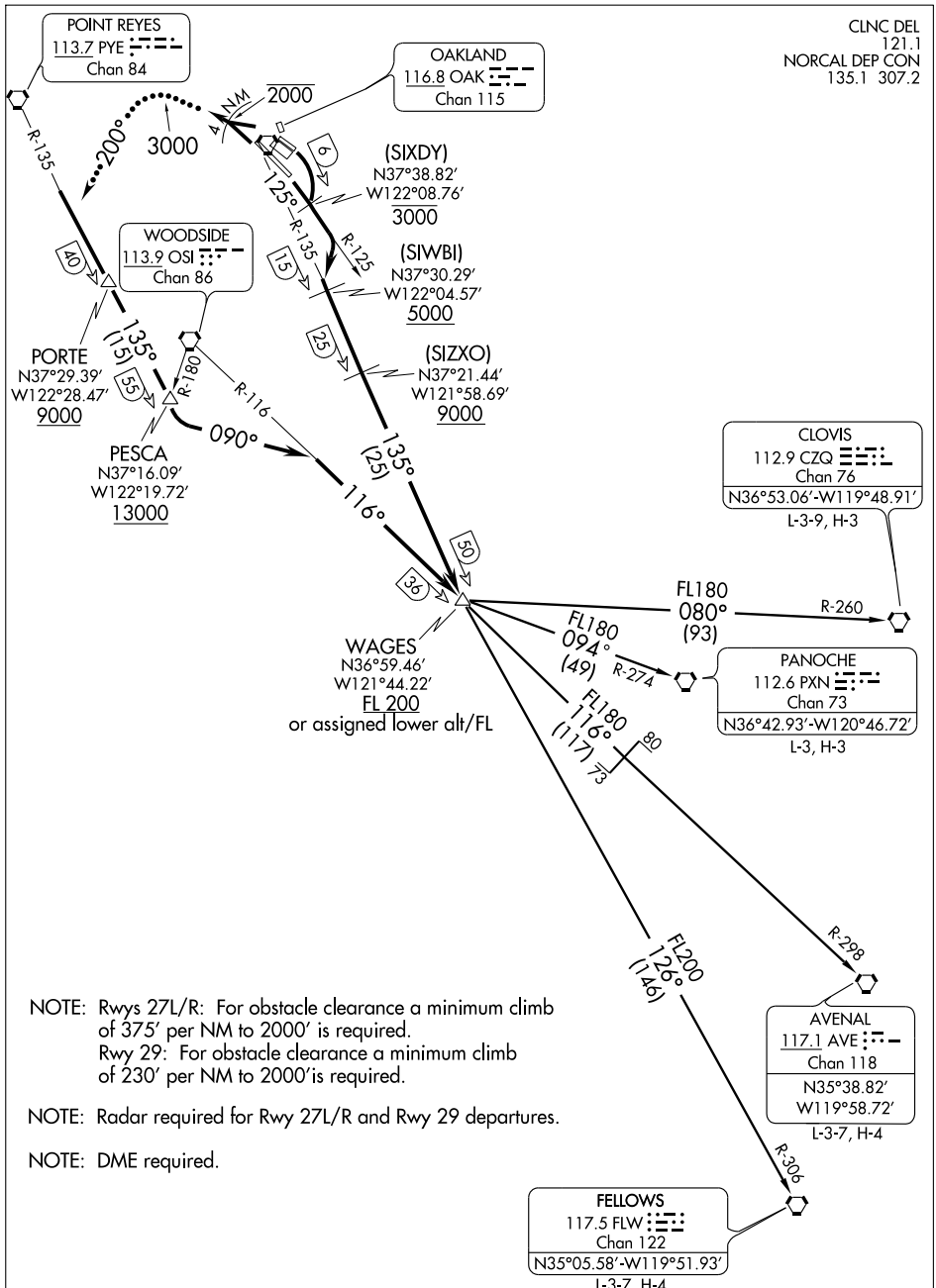
SACRAMENTO TRANSITION (SLNT7.SAC): From over REBAS INT via SAC R-216 to SAC VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

(SKYL3.WAGES) 07298

SKYLINE THREE DEPARTURE

OAKLAND/ METROPOLITAN OAKLAND INTL (OAK)
SL-294 (FAA)
OAKLAND, CALIFORNIA



NOTE: Rwys 27L/R: For obstacle clearance a minimum climb of 375' per NM to 2000' is required.
Rwy 29: For obstacle clearance a minimum climb of 230' per NM to 2000'is required.

NOTE: Radar required for Rwy 27L/R and Rwy 29 departures.

NOTE: DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R: Turn right to intercept and proceed via the OAK R-125, cross the OAK R-125/6 DME fix at or below 3000'; then turn right to intercept and proceed via the OAK R-135 to WAGES INT. Cross the OAK R-135/15 DME fix at or above 5000'. Cross the OAK R-135/25 DME fix at or above 9000'. Thence....

TAKE-OFF RUNWAY 11: Maintain runway heading to intercept and proceed via the OAK R-125, cross the OAK R-125/6 DME fix at or below 3000'; then turn right to intercept and proceed via the OAK R-135 to WAGES INT. Cross the OAK R-135/15 DME fix at or above 5000'. Cross the OAK R-135/25 DME fix at or above 9000'. Thence....

TAKE-OFF RUNWAYS 27L/R and 29: Maintain runway heading for vector to the PYE R-135, then via the PYE R-135 to PESCA INT. Cross a point 4 miles northwest of OAK VORTAC at or below 2000'. Cross PORTE DME FIX at or above 9000' and PESCA INT at or above 13000'. Then turn left heading 090° to intercept and proceed via the OSI R-116 to WAGES INT. Thence....

....via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure. Cross WAGES INT at or above FL200 or assigned lower altitude or flight level.

LOST COMMUNICATIONS:
Take-off runways 27L/R and 29: After reaching 3000', turn left heading 200°, intercept and proceed via the PYE R-135. Resume your own navigation.

AVENAL TRANSITION (SKYL3.AVE): From over WAGES INT via OSI R-116 and AVE R-298 to AVE VORTAC.

CLOVIS TRANSITION (SKYL3.CZQ): From over WAGES INT via CZQ R-260 to CZQ VORTAC.

FELLOWS TRANSITION (SKYL3.FLW): From over WAGES INT via FLW R-306 to FLW VORTAC.

PANOCHE TRANSITON (SKYL3.PXN): From over WAGES INT via PXN R-274 to PXN VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

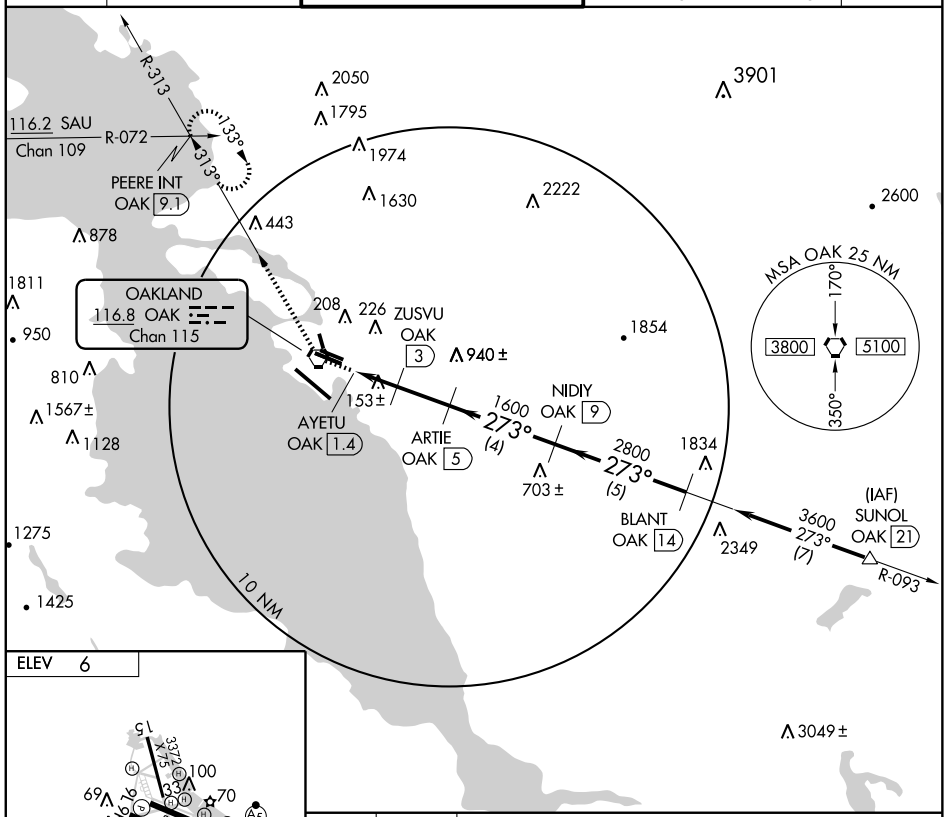
VORTAC OAK	APP CRS	Rwy Idg	6213
116.8	273°	TDZE	5
Chan 115		Apt Elev	6

VOR/DME RWY 27L

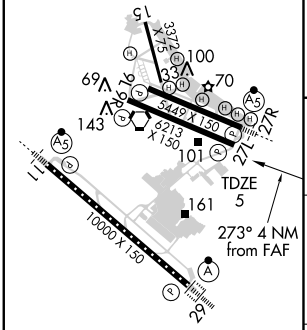
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

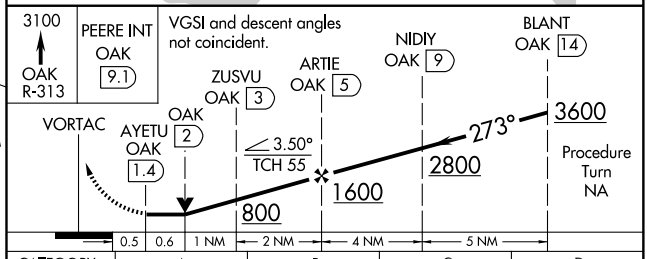
MISSED APPROACH: Climb to 3100 via OAK R-313 to PEERE Int/OAK 9.1 DME and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER		GND CON		CLNC DEL
		(Rwys 9-27, 15-33)	(Rwy 11-29)	(Rwys 9-27, 15-33)	(Rwy 11-29)	
133.775	125.35 310.8 354.1	118.3 291.65	127.2 256.9	121.9	121.75	121.1



ELEV 6





CATEGORY	A	B	C	D
S-27L	420/50 415 (500-1)		420/60 415 (500-1¼)	
CIRCLING	520-1 514 (600-1)	540-1 534 (600-1)	540-1½ 534 (600-1½)	560-2 554 (600-2)

TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC OAK	APP CRS	Rwy Idg	6213
116.8	108°	TDZE	5
Chan 115		Apt Elev	6

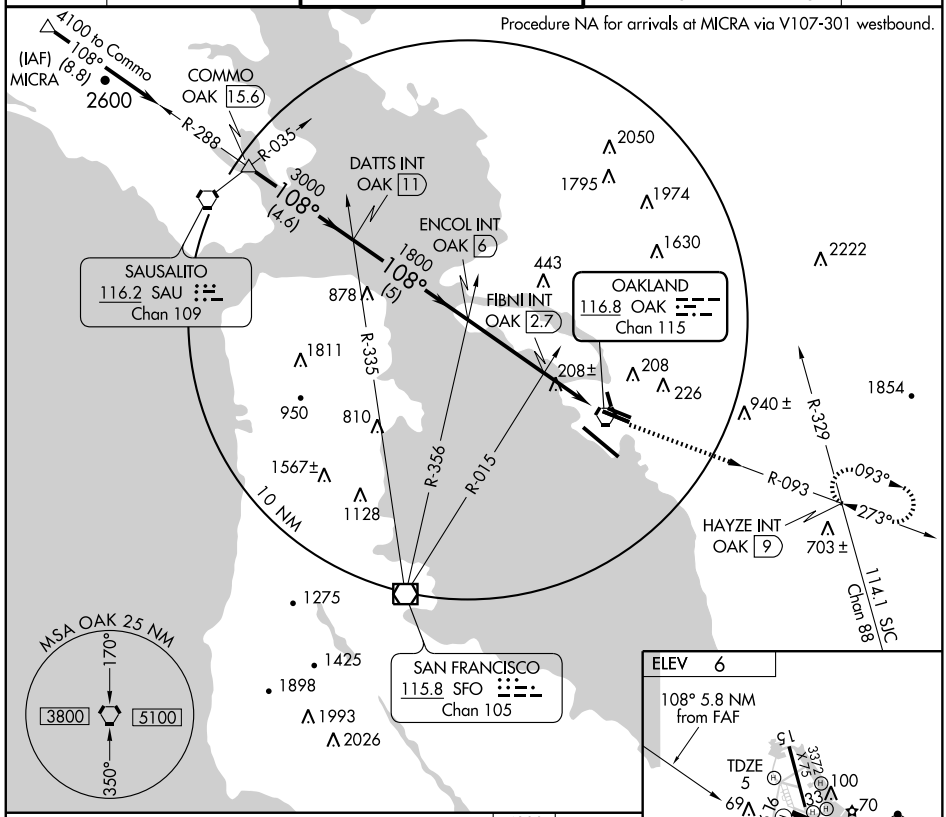
VOR RWY 9R

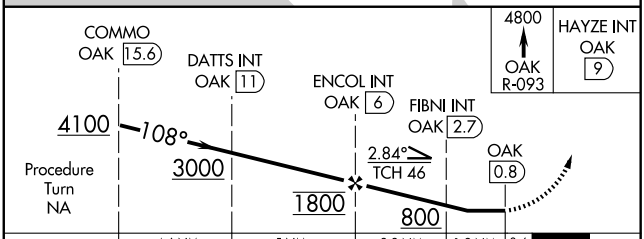
OAKLAND/ METROPOLITAN OAKLAND INTL (OAK)

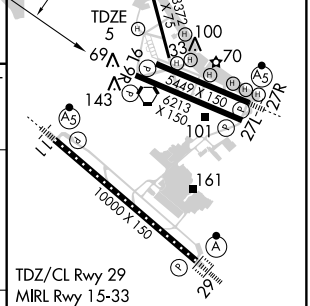
MISSED APPROACH: Climb to 4800 via OAK R-093 to HAYZE Int/OAK 9 DME and hold.

ATIS	NORCAL APP CON	OAKLAND TOWER		GND CON		CLNC DEL
		(Rwys 9-27, 15-33)	(Rwy 11-29)	(Rwys 9-27, 15-33)	(Rwy 11-29)	
133.775	125.35 310.8 354.1	118.3 291.65	127.2 256.9	121.9	121.75	121.1

Procedure NA for arrivals at MICRA via V107-301 westbound.







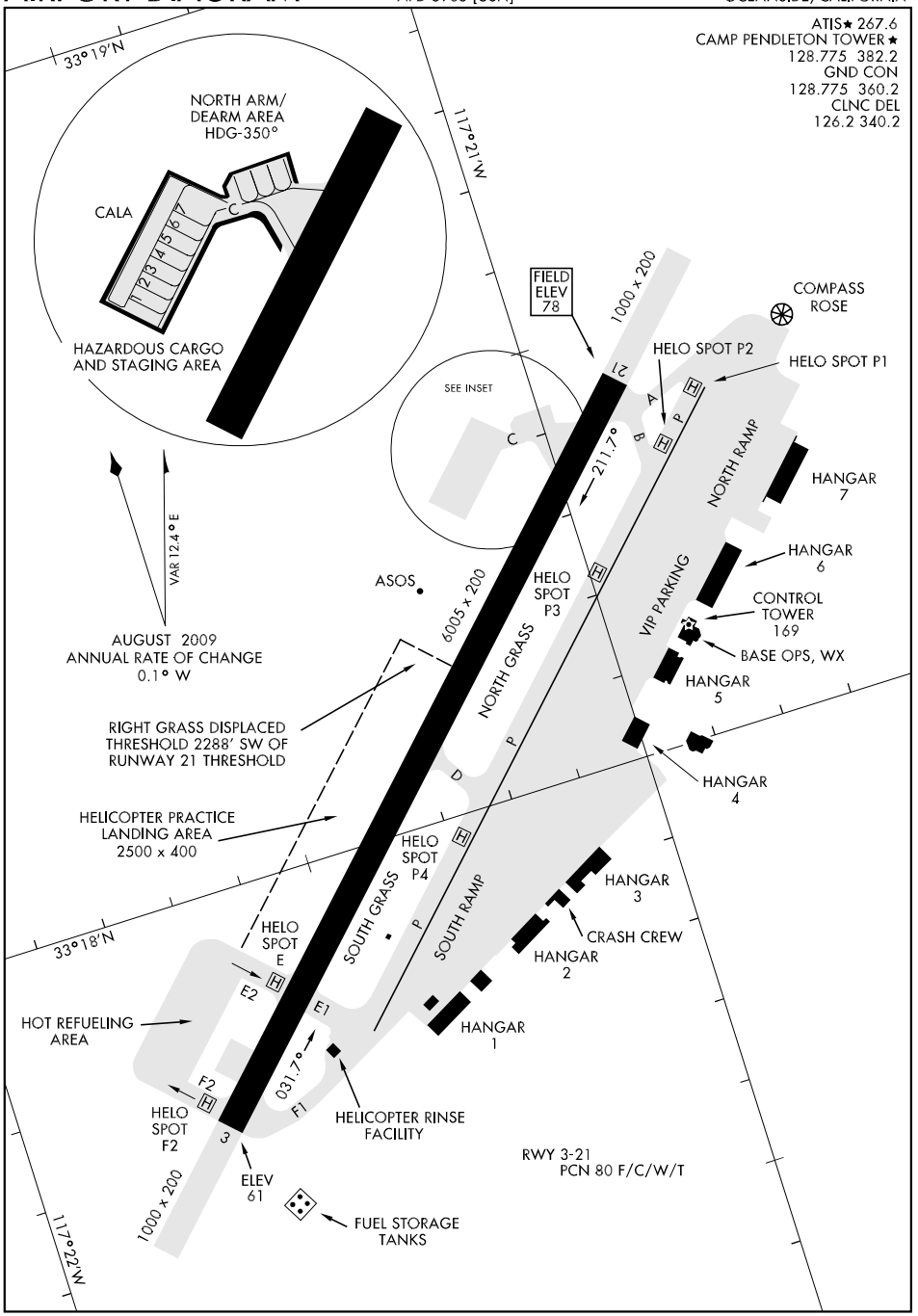
TDZ/CL Rwy 29
MIRL Rwy 15-33
REIL Rwy 9R
HIRL Rwys 11-29, 9L-27R, and 9R-27L

CATEGORY	A	B	C	D
S-9R	460-1 455 (500-1)		460-1¼ 455 (500-1¼)	460-1½ 455 (500-1½)
CIRCLING	520-1 514 (600-1)	540-1 534 (600-1)	540-1½ 534 (600-1½)	560-2 554 (600-2)

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

SW-2, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS ★267.6
CLNC DEL
126.2 340.2
GND CON
128.775 360.2
CAMP PENDLETON TOWER ★
128.775 382.2
SOCAL DEP CON
127.3 323.0

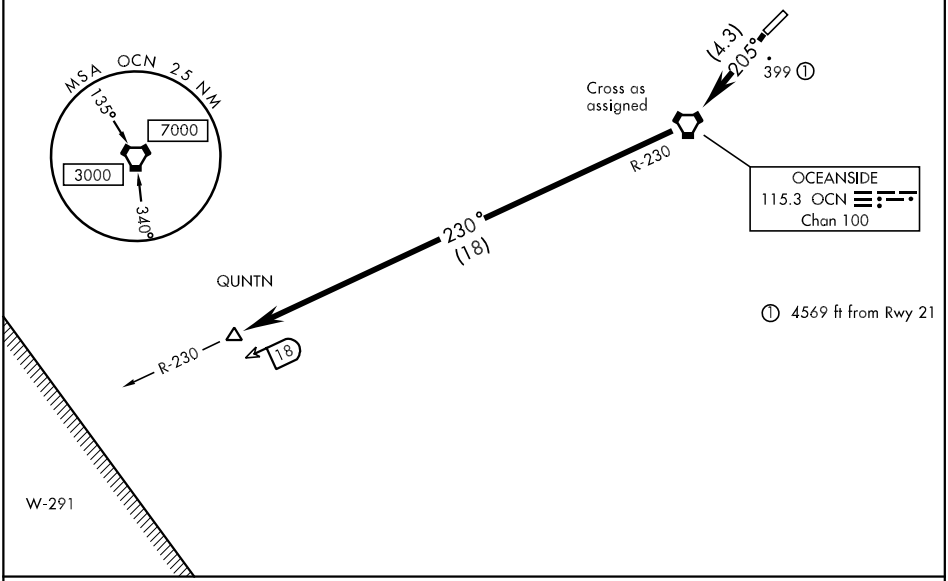
SL-5985 [USN]

Rwy	Knots	60	120	180	240
21 *	V/V(fpm)	430	860	1290	1720

* Minimum Climb Rate to 800

(800-2 ceiling and vis authorized in lieu of Minimum Climb Rate)

MILITARY USE ONLY



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 21: Climb direct to OCN. Cross OCN at assigned altitude.

QUINTON TRANSITION (BECH 5 • QUNTN): Fly OCN R-230 to 18 DME (QUNTN).

SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS ★267.6
CLNC DEL
126.2 340.2
GND CON
128.775 360.2
CAMP PENDLETON TOWER ★
128.775 382.2
SOCAL DEP CON
127.3 323.0

SL-5985 [USN]

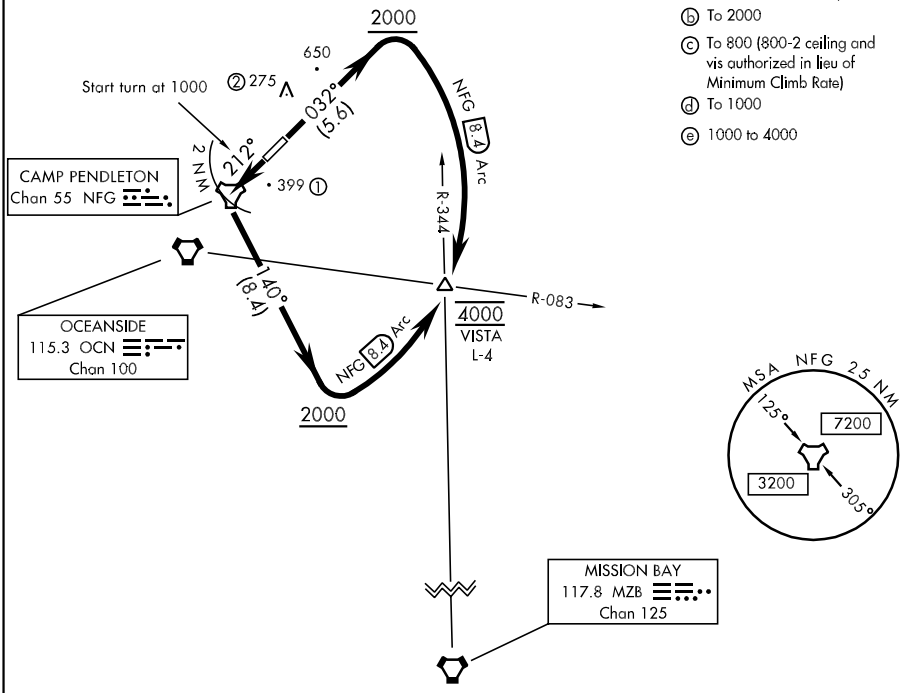
MILITARY USE ONLY

Rwy	Knots	60	120	180	240
*3 ⓐ	V/V(fpm)	320	640	960	1280
†3 ⓑ	V/V(fpm)	350	700	1050	1400
*21 ⓒ	V/V(fpm)	430	860	1290	1720
†21 ⓓ	V/V(fpm)	470	940	1410	1880
†21 ⓔ	V/V(fpm)	220	440	660	880

* Minimum † ATC Climb Rate

ⓐ To 900 (800-2 ceiling and vis authorized in lieu of Minimum Climb Rate)
ⓑ To 2000
ⓒ To 800 (800-2 ceiling and vis authorized in lieu of Minimum Climb Rate)
ⓓ To 1000
ⓔ 1000 to 4000

① 5470 ft from Rwy 21
② 4680 ft from Rwy 3



SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climb to 2000 via track 032°. Join the NFG TACAN 8.4 DME ARC at or above 2000 and arc E to VISTA int. Cross VISTA INT at 4000 or assigned altitude.

TAKE-OFF RWY 21: Climb to 1000 within 2 NM via track 212° then turn left heading 140°. Join the NFG TACAN 8.4 DME arc at or above 2000 and arc E to VISTA int. Cross VISTA INT at 4000 or assigned altitude.

COPTER TACAN RWY 21

TACAN	APCH CRS	Rwy ldg / TDZE / Arpt Elev
NFG Chan 55	212°	6005 / 78 / 78

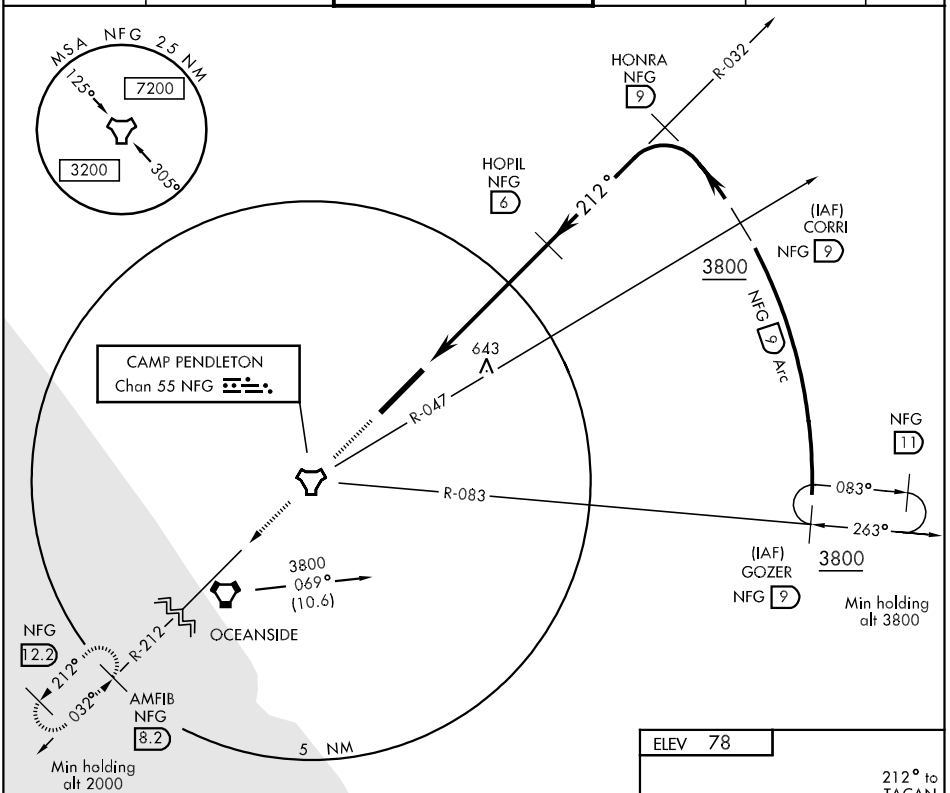
AL-5985 [USN] CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

▼ * When ALS inop, increase vis to 1 mile.
** When ALS inop, increase vis to CATS ABCD to 1 mile.

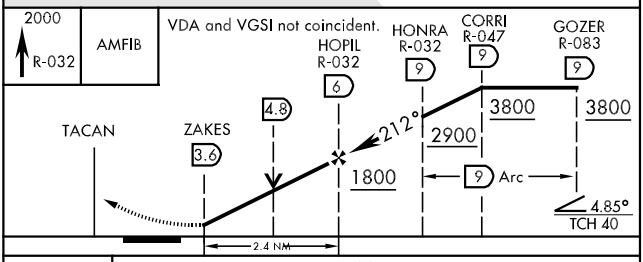
SALSF (A2)

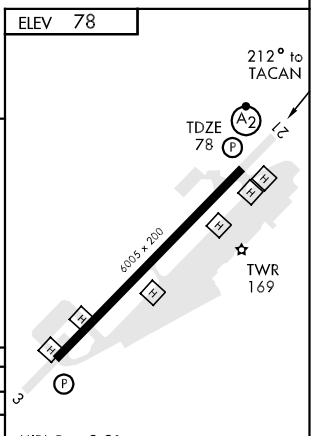
MISSED APPROACH: Climb to 2000 via R-032 and R-212 to AMFIB (NFG R-212/8.2 DME) and hold.

ATIS ★	SOCAL APP CON	CAMP PENDLETON TOWER ★	GND CON	CLNC DEL	ASR/PAR
267.6	127.3 323.0	128.775 382.2	128.775 360.2	126.2 340.2	



EMERG SAFE ALT 100 NM 13,600



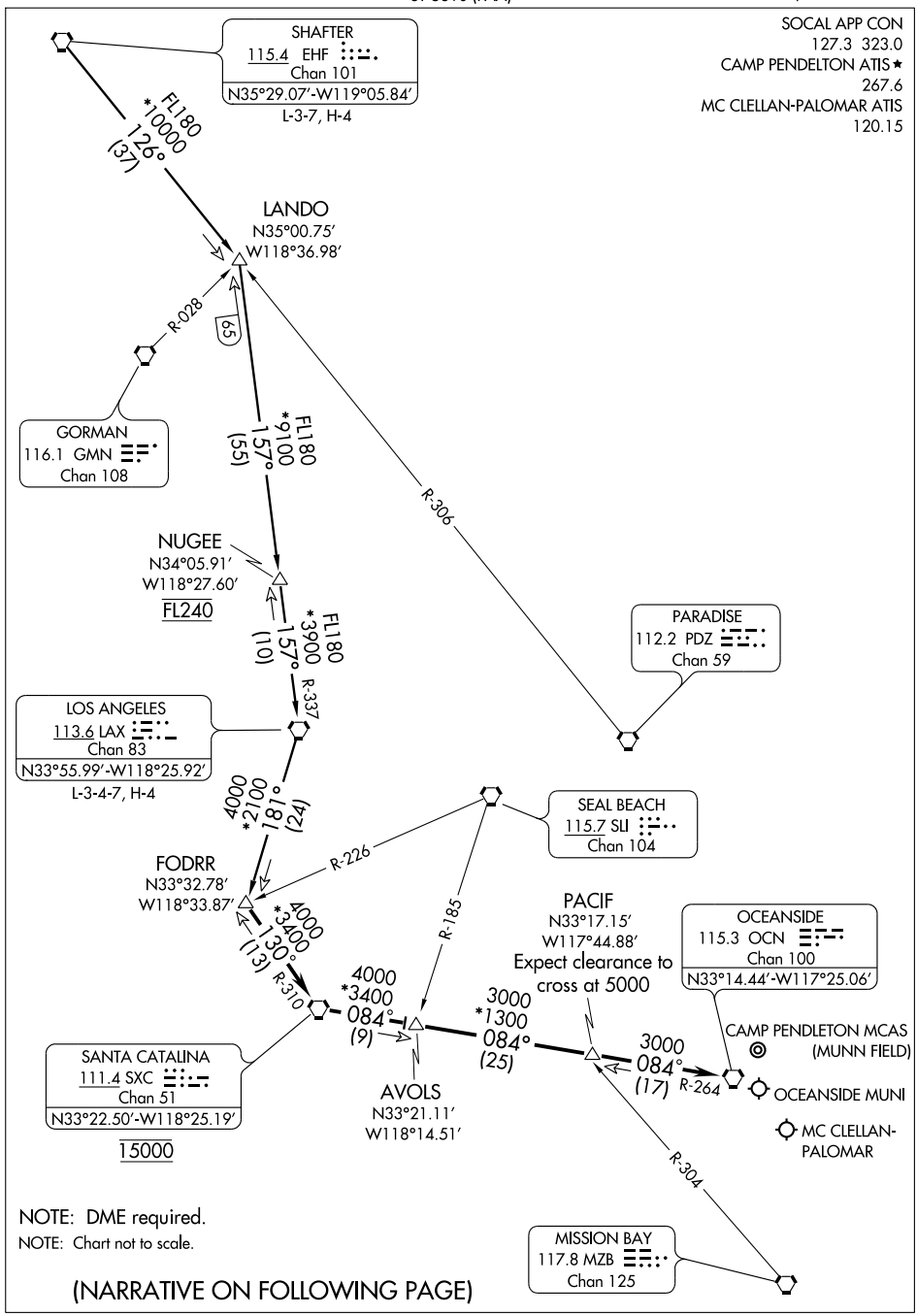


CATEGORY	COPTER			
H-21*	900-¾	822	(900-¾)	
CIRCLING	NOT AUTHORIZED			
S-PAR 21**	438-¾	360	(400-¾)	GS 3.5°

FODRR ONE ARRIVAL

ST-5310 (FAA)

CARLSBAD, CALIFORNIA



NOTE: DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-3, 22 OCT 2009 to 19 NOV 2009

ARRIVAL ROUTE DESCRIPTION

LOS ANGELES TRANSITION (LAX.FODRR1): From over LAX VORTAC via LAX R-181 to FODRR INT/DME FIX. Thence....
SHAFTER TRANSITION (EHF.FODRR1): From over EHF VORTAC via EHF R-126 and LAX R-337 to LAX VORTAC, then via LAX R-181 to FODRR INT/DME FIX. Thence....

....From over FODRR INT/DME FIX via SXC R-310 to SXC VORTAC, cross SXC VORTAC at 15000, then via SXC R-084 to AVOLS INT/DME FIX, then via SXC R-084 and OCN R-264 to PACIF INT/DME FIX, then via OCN R-264 to OCN VORTAC. Thence....

....LANDING CARLSBAD/MC CLELLAN-PALOMAR: From over OCN VORTAC expect the ILS or LOC RWY 24 approach.
....LANDING CAMP PENDLETON MCAS (MUNN FIELD): From over OCN VORTAC expect the VOR/DME or TACAN RWY 21 approach.
....LANDING OCEANSIDE MUNI: From over OCN VORTAC expect the VOR-A approach.

SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS ★267.6
CLNC DEL
126.2 340.2
GND CON
128.775 360.2
CAMP PENDLETON TOWER ★
128.775 382.2
SOCAL DEP CON
127.3 323.0

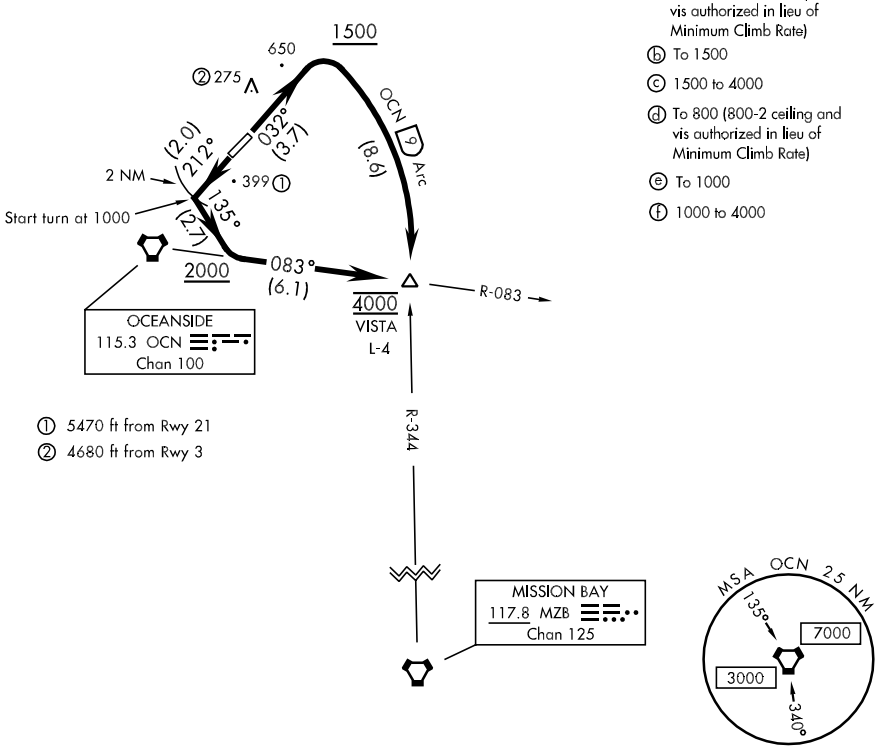
SL-5985 [USN]

MILITARY USE ONLY

Rwy	Knots	60	120	180	240
∗3 ⓐ	V/V(fpm)	320	640	960	1280
†3 ⓑ	V/V(fpm)	390	780	1170	1560
†3 ⓒ	V/V(fpm)	290	580	870	1160
∗21 ⓓ	V/V(fpm)	430	860	1290	1720
†21 ⓔ	V/V(fpm)	470	940	1410	1880
†21 ⓕ	V/V(fpm)	370	740	1110	1480

∗ Minimum climb rate † ATC Climb Rate

ⓐ To 900 (800-2 ceiling and vis authorized in lieu of Minimum Climb Rate)
ⓑ To 1500
ⓒ 1500 to 4000
ⓓ To 800 (800-2 ceiling and vis authorized in lieu of Minimum Climb Rate)
ⓔ To 1000
ⓕ 1000 to 4000



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climb to 1500 via track 032°. Join the OCN VORTAC 9 DME arc at or above 1500 and arc E to VISTA int. Cross VISTA at 4000 or assigned altitude.

TAKE-OFF RWY 21: Climb to 1000 within 2 NM via track 212°turn left heading 135°, to join the OCN VORTAC R-083 at or above 2000 to VISTA int. Cross VISTA at 4000 or assigned altitude.

LIMA SIX DEPARTURE (LIMA•6)(VECTOR)

OCEANSIDE, CALIFORNIA

SL-5985 [USN]

ATIS ★267.6
CLNC DEL
126.2 340.2
GND CON
128.775 360.2
CAMP PENDLETON TOWER ★
128.775 382.2
SOCAL DEP CON
127.3 323.0

MILITARY USE ONLY
RADAR REQUIRED

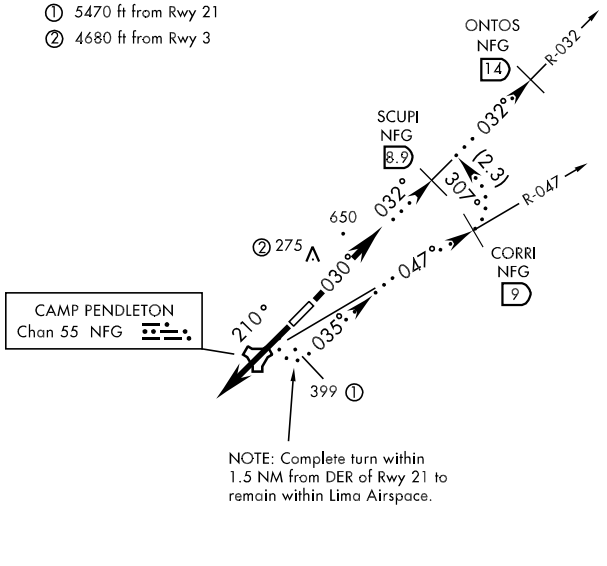
Rwy	Knots	60	120	180	240
* 3 (a)	V/V(fpm)	320	640	960	1280
*21 (b)	V/V(fpm)	430	860	1290	1720
† 21 (c)	V/V(fpm)	630	1260	1890	2520
** 3 (d)	V/V(fpm)	580	1160	1740	2320
** 21 (e)	V/V(fpm)	630	1260	1890	2520

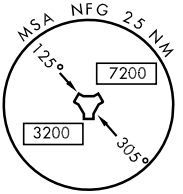
* Minimum † ATC Climb Rate
** Lost Communications

(a) To 900 (800-2 ceiling and vis authorized in lieu of Minimum Climb Rate)
(b) To 800 (800-2 ceiling and vis authorized in lieu of Minimum Climb Rate)
(c) To 1000
(d) To 3600
(e) To 1000

Procedure restricted to 150 KIAS max.

① 5470 ft from Rwy 21
② 4680 ft from Rwy 3





DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3 (LIMA 6•ONTOS): Climb heading 030° for radar vectors.

TAKE-OFF RWY 21 (LIMA 6•CORRI): Climb heading 210° for radar vectors.

NOTE: Vectors not auth NW of Rwy 3-21. No turns auth prior to reaching 1000 ft.

Lost Communications:

Runway 3: Climb to 3600 via heading 030°. Intercept NFG R-032 to SCUPI (NFG R-032/8.9 DME).

Runway 21: Climb to 1000 via heading 210°. Then climbing left turn to 3500 via heading 035° prior to NFG 0.2 DME to intercept NFG R-047 to CORRI (NFG R-047/9 DME).†

† F/W: At CORRI, climbing left turn to 5000 heading 307° to intercept NFG R-032 to ONTOS (NFG R-032/14 DME). Proceed with TACAN Z RWY 21.
† Copter: At CORRI, proceed with COPTER TACAN RWY 21.

LIMA SIX DEPARTURE (LIMA•6)(VECTOR)

OCEANSIDE, CALIFORNIA

RNAV (GPS) RWY 21

APCH CRS	Rwy ldg	6005
211°	TDZE	78
	Arpt Elev	78

AL-5985 [USN] CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

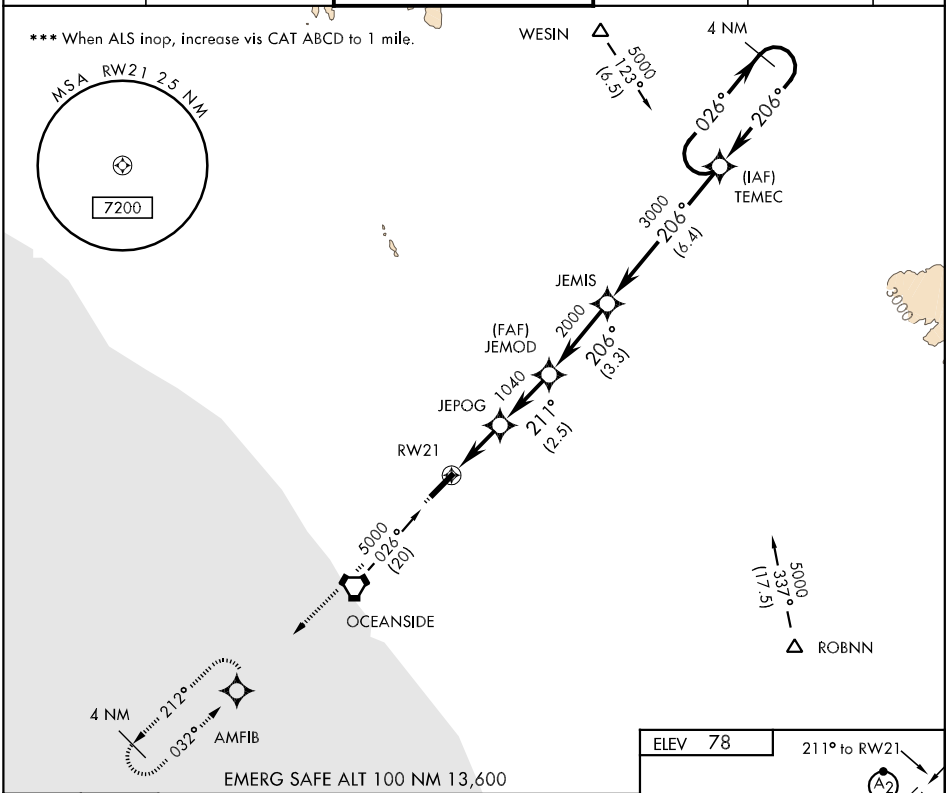
* When ALS inop, increase vis CAT AB to 1 mile, CAT C to 2 miles, CAT D to 2¼ miles.
** Circling RWY 3 NA at night.

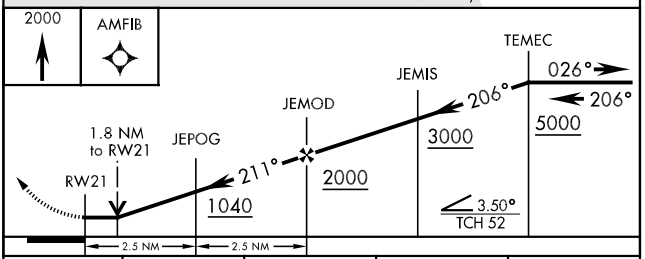
SALSF

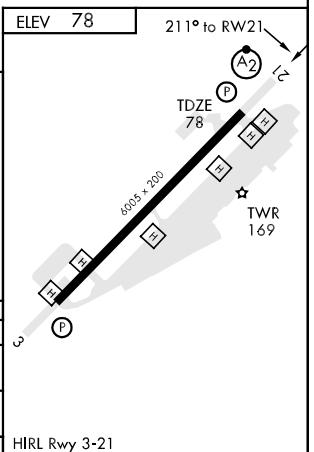
MISSED APPROACH: Climb to 2000 direct AMFIB and hold.

ATIS ★	SOCAL APP CON	CAMP PENDLETON TOWER ★	GND CON	CLNC DEL	ASR/PAR
267.6	127.3 323.0	128.775 382.2	128.775 360.2	126.2 340.2	

*** When ALS inop, increase vis CAT ABCD to 1 mile.







CATEGORY	A	B	C	D
LNAV MDA *	800-¾ 722 (800-¾)		800-1¾ 722 (800-1¾)	800-2 722 (800-2)
CIRCLING **	960-1¼ 882 (900-1¼)	1080-1½ 1002 (1100-1½)	1180-3 1102 (1200-3)	1200-3 1122 (1200-3)
S-PAR 21 ***	438-¾ 360 (400-¾) GS 3.5°			

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 3

TACAN NFG Chan 55	APCH CRS 032°	Rwy ldg 6005 TDZE 67 Arpt Elev 78

AL-5985 [USN] CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

Procedure not authorized at night when VGSI inop

* MISSED APPROACH: Climb to 3700 via NFG TACAN R-032 to SCUPI (NFG R-032/8.9 DME) and hold.

ATIS *	SOCAL APP CON	CAMP PENDLETON TOWER *	GND CON	CLNC DEL	ASR/PAR
267.6	127.3 323.0	128.775 382.2	128.775 360.2	126.2 340.2	

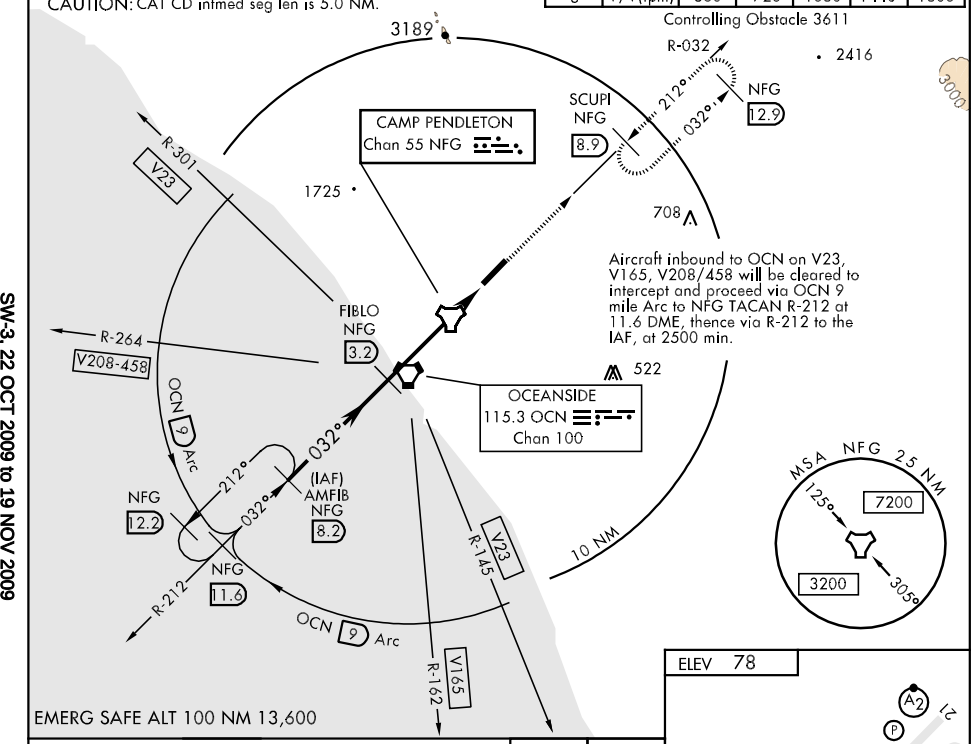
CAUTION: High terrain on final approach. Do not descend below MDA prior to MAP.

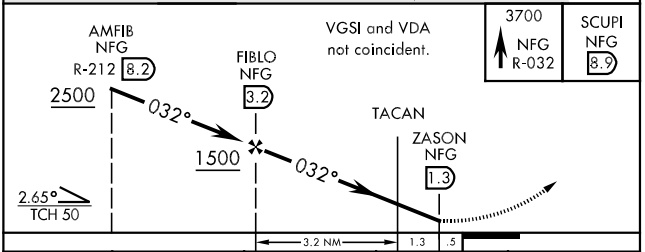
CAUTION: CAT CD intmed seg len is 5.0 NM.

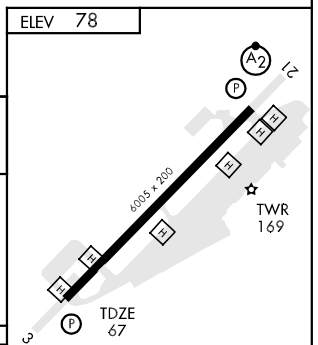
* CAUTION: Missed Approach Minimum Climb Rate to 3700

Rwy	Knots	60	120	180	240	300
3	V/V(fpm)	360	720	1080	1440	1800

Controlling Obstacle 3611







CATEGORY	A	B	C	D
S-3	980-1¼ 913 (1000-1¼)		980-2¾ 913 (1000-2¾)	980-3 913 (1000-3)
CIRCLING	980-1¼ 902 (1000-1¼)	1080-1½ 1002 (1100-1½)	1180-3 1102 (1200-3)	1200-3 1122 (1200-3)

HIRL Rwy 3-21

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN Z RWY 21

TACAN	APCH CRS	Rwy ldg	6005
Chan 55	212°	TDZE	78
		Arpt Elev	78

AL-5985 [USN] CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

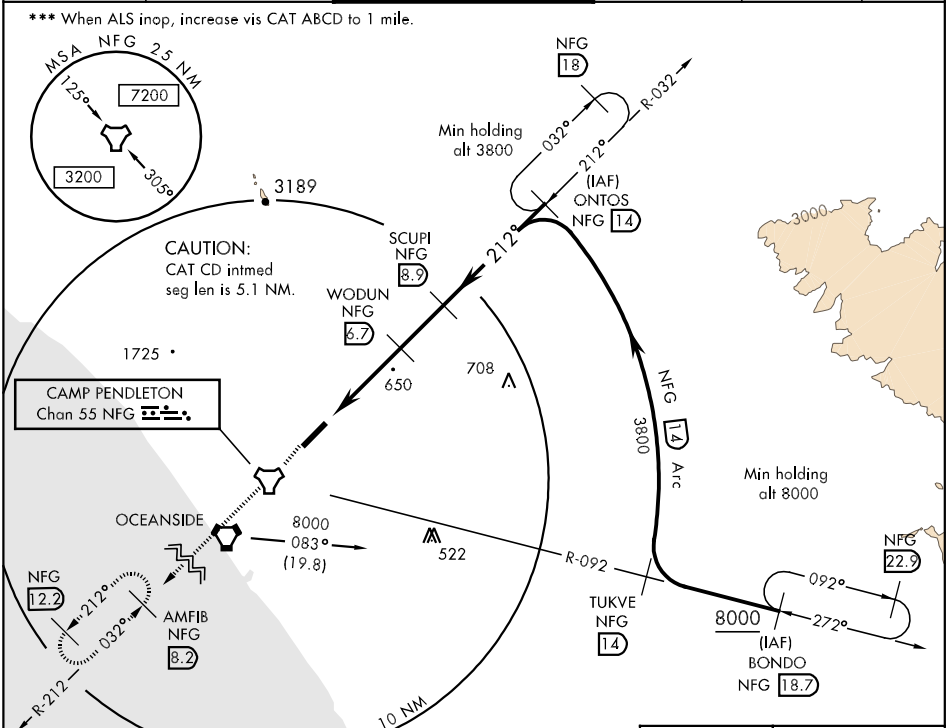
T * When ALS inop, increase vis CAT A to 1 mile, CAT B to 1¼ miles, CAT C to 2½ miles, CAT D to 2¾ miles.
** Circling Rwy 3 not authorized at night.

SALSF (A2)

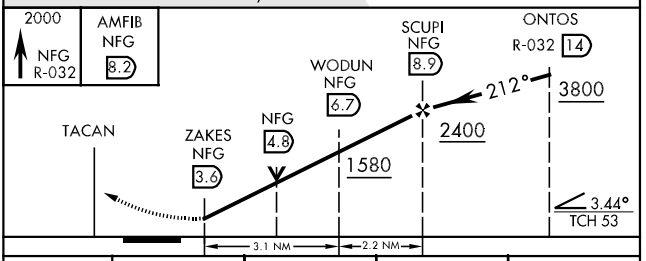
MISSED APPROACH: Climb to 2000 via NFG TACAN R-032 and R-212 to AMFIB (NFG R-212/8.2 DME) and hold.

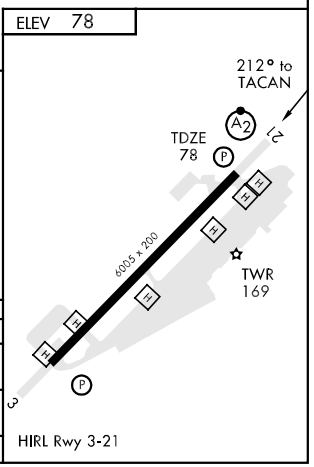
ATIS ★	SOCAL APP CON	CAMP PENDLETON TOWER ★	GND CON	CLNC DEL	ASR/PAR
267.6	127.3 323.0	128.775 382.2	128.775 360.2	126.2 340.2	

*** When ALS inop, increase vis CAT ABCD to 1 mile.



EMERG SAFE ALT 100 NM 13,600





CATEGORY	A	B	C	D
S-21*	900-¾ 822 (900-¾)	900-1 822 (900-1)	900-2¼ 822 (900-2¼)	900-2½ 822 (900-2½)
CIRCLING**	960-1¼ 882 (900-1¼)	1080-1½ 1002 (1100-1½)	1180-3 1102 (1200-3)	1200-3 1122 (1200-3)
S-PAR 21***	438 - ¾ 360 (400-¾) GS 3.5°			

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME or TACAN Y RWY 21

AL-5985 [USN] CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

VORTAC OCN	APCH CRS	Rwy ldg 6005
115.3	206°	TDZE 78
Chan 100		Arpt Elev 78

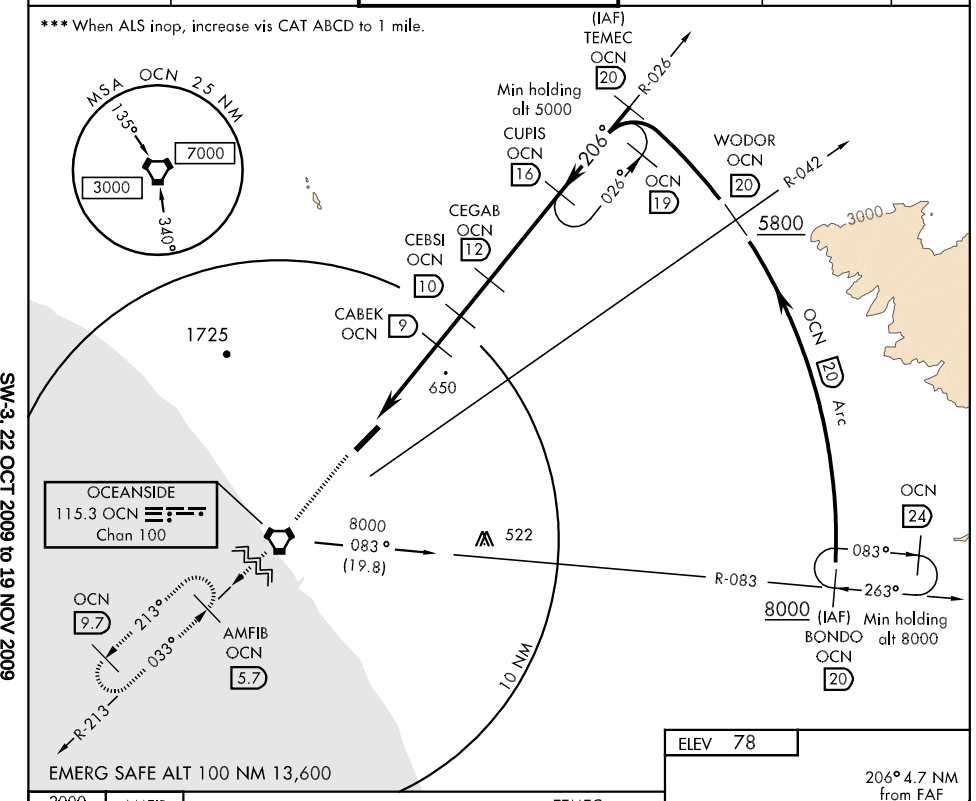
* When ALS inop, increase vis CAT AB to 1¼ mile, CAT C to 2¾ miles, CAT D to 3 miles.
** Circling Rwy 3 not authorized at night.

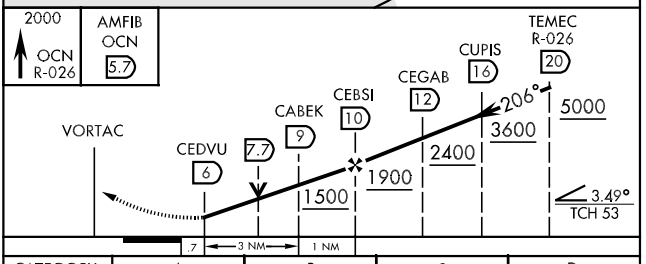
SALSF

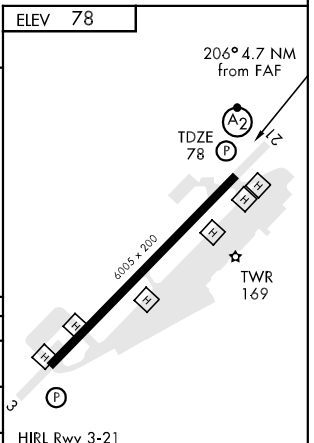
MISSED APPROACH: Climb to 2000 via OCN VORTAC R-026 and R-213 to AMFIB (OCN R-213/5.7 DME) and hold.

ATIS ★	SOCAL APP CON	CAMP PENDLETON TOWER ★	GND CON	CLNC DEL	ASR/PAR
267.6	127.3 323.0	128.775 382.2	128.775 360.2	126.2 340.2	

*** When ALS inop, increase vis CAT ABCD to 1 mile.







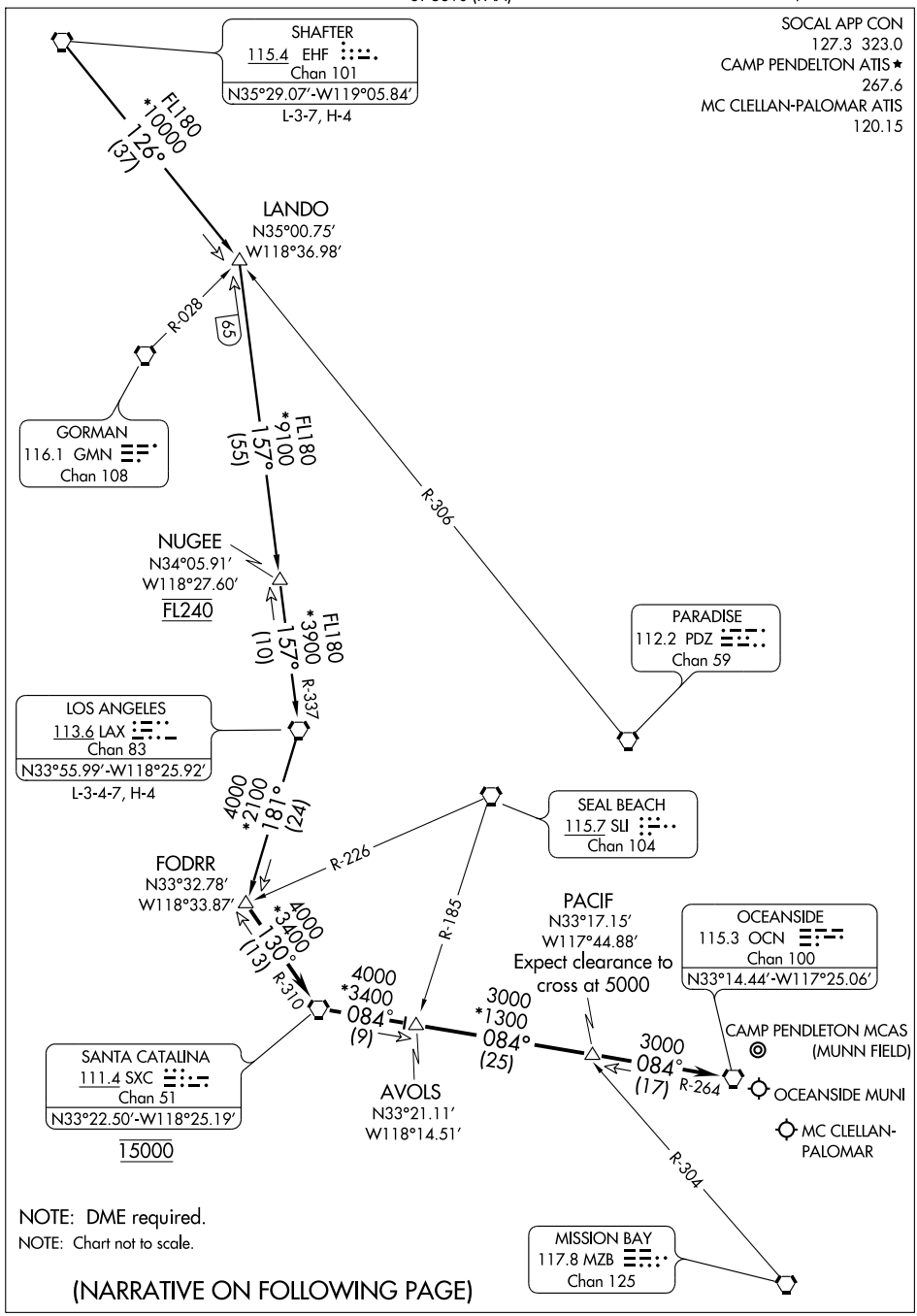
CATEGORY	A	B	C	D
S-21*	1020-1 942 (1000-1)		1020-2½ 942 (1000-2½)	1020-2¾ 942 (1000-2¾)
CIRCLING**	1020-1¼ 942 (1000-1¼)	1080-1½ 1002 (1100-1½)	1180-3 1102 (1200-3)	1200-3 1122 (1200-3)
S-PAR 21***	438 - ¾ 360 (400-¾) GS 3.5°			

SW-3, 22 OCT 2009 to 19 NOV 2009

FODRR ONE ARRIVAL

ST-5310 (FAA)

CARLSBAD, CALIFORNIA



NOTE: DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-3, 22 OCT 2009 to 19 NOV 2009

ARRIVAL ROUTE DESCRIPTION

LOS ANGELES TRANSITION (LAX.FODRR1): From over LAX VORTAC via LAX R-181 to FODRR INT/DME FIX. Thence....
SHAFTER TRANSITION (EHF.FODRR1): From over EHF VORTAC via EHF R-126 and LAX R-337 to LAX VORTAC, then via LAX R-181 to FODRR INT/DME FIX. Thence....

....From over FODRR INT/DME FIX via SXC R-310 to SXC VORTAC, cross SXC VORTAC at 15000, then via SXC R-084 to AVOLS INT/DME FIX, then via SXC R-084 and OCN R-264 to PACIF INT/DME FIX, then via OCN R-264 to OCN VORTAC. Thence....

....LANDING CARLSBAD/MC CLELLAN-PALOMAR: From over OCN VORTAC expect the ILS or LOC RWY 24 approach.
....LANDING CAMP PENDLETON MCAS (MUNN FIELD): From over OCN VORTAC expect the VOR/DME or TACAN RWY 21 approach.
....LANDING OCEANSIDE MUNI: From over OCN VORTAC expect the VOR-A approach.

SW-3, 22 OCT 2009 to 19 NOV 2009

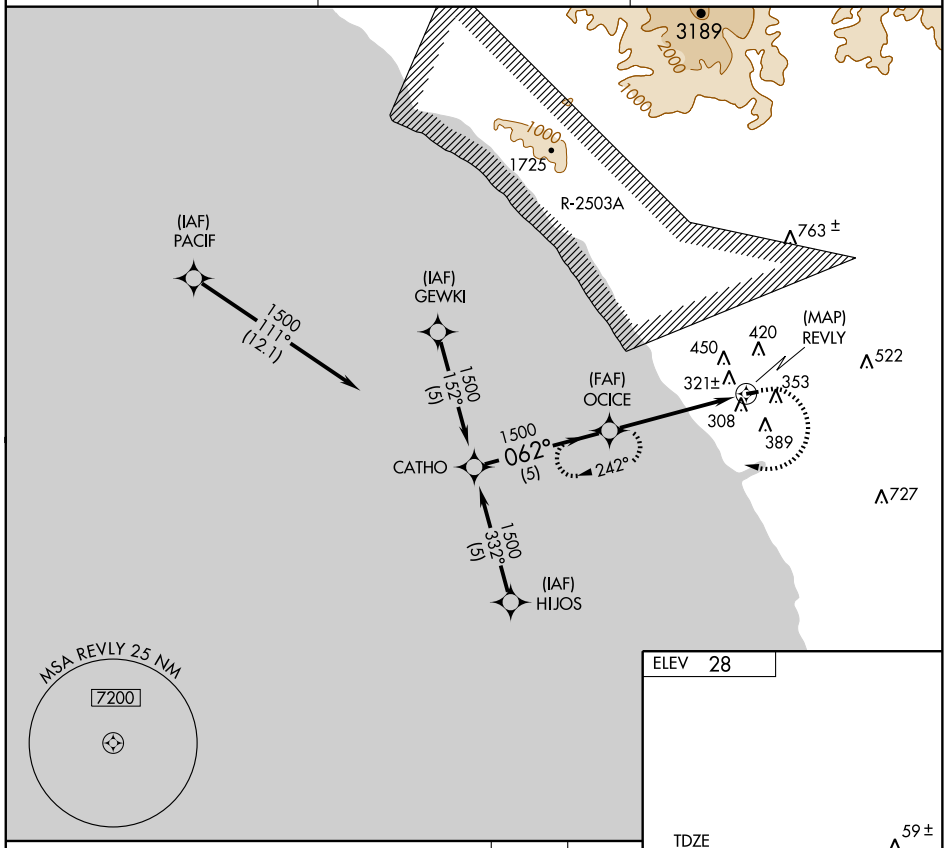
APP CRS	Rwy Idg	2712
062°	TDZE	28
	Apt Elev	28

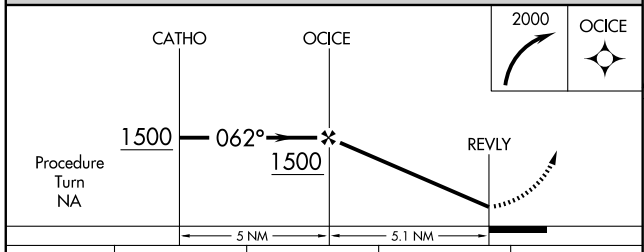
GPS RWY 6
OCEANSIDE MUNI (OKB)

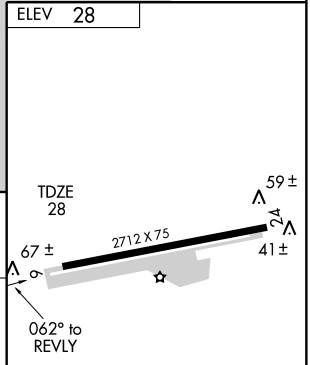
T
NA

MISSED APPROACH: Climbing right turn to 2000 direct OCICE WP and hold.

ASOS	SOCAL APP CON	UNICOM
127.8	127.3 323.0	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-6	720-1	692 (700-1)	NA	
CIRCLING	880-1 852 (900-1)	880-1¼ 852 (900-1¼)	NA	

MIRL Rwy 6-24 L
REIL Rwy 24

SW-3, 22 OCT 2009 to 19 NOV 2009

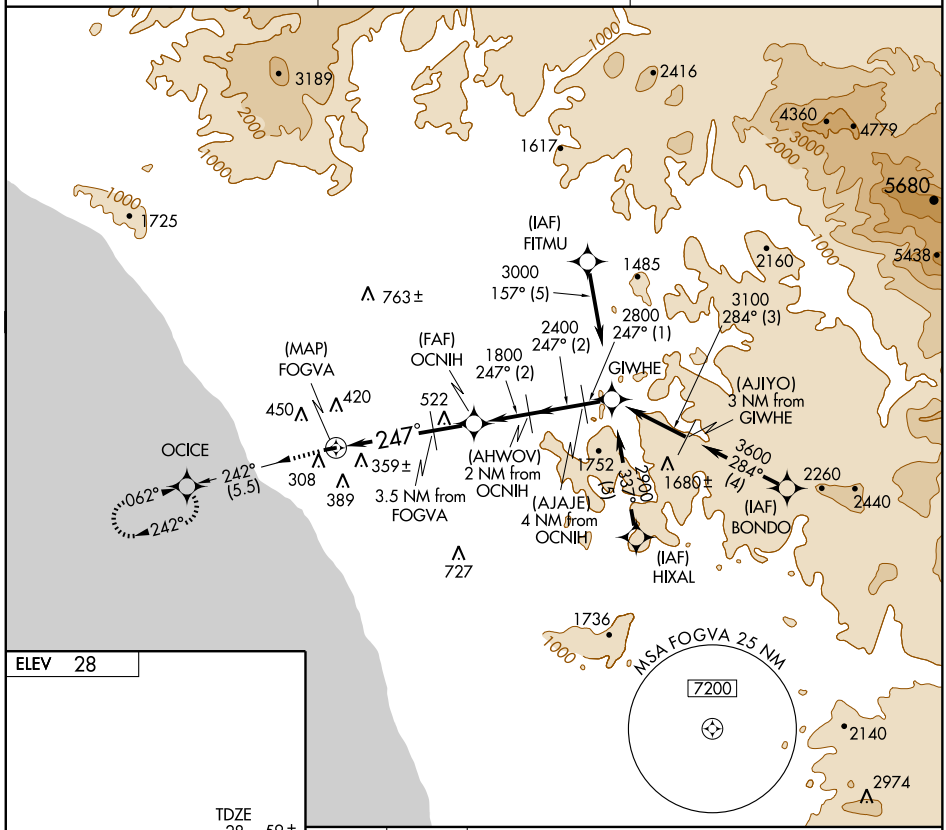
APP CRS	Rwy Idg	2712
247°	TDZE	28
	Apt Elev	28

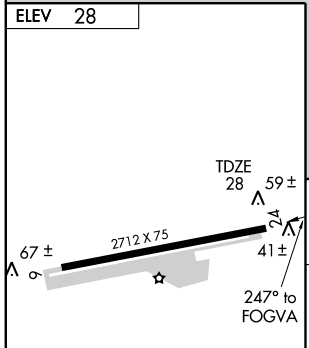
GPS RWY 24
OCEANSIDE MUNI (OKB)

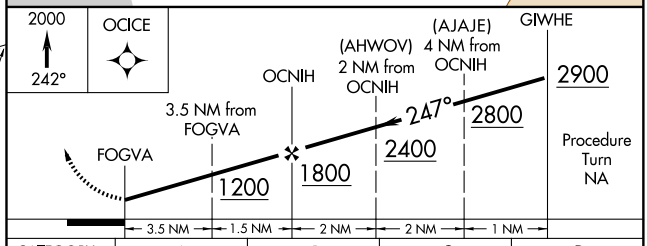
T
NA

MISSED APPROACH: Climb to 2000 via 242° course to OCICE WP and hold.

ASOS	SOCAL APP CON	UNICOM
127.8	127.3 323.0	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-24	740-1 712 (800-1)		NA	
CIRCLING	880-1 852 (900-1)	880-1¼ 852 (900-1¼)	NA	

MIRL Rwy 6-24 L
REIL Rwy 24

SW-3, 22 OCT 2009 to 19 NOV 2009

OCEANSIDE, CALIFORNIA

AL-5666 (FAA)

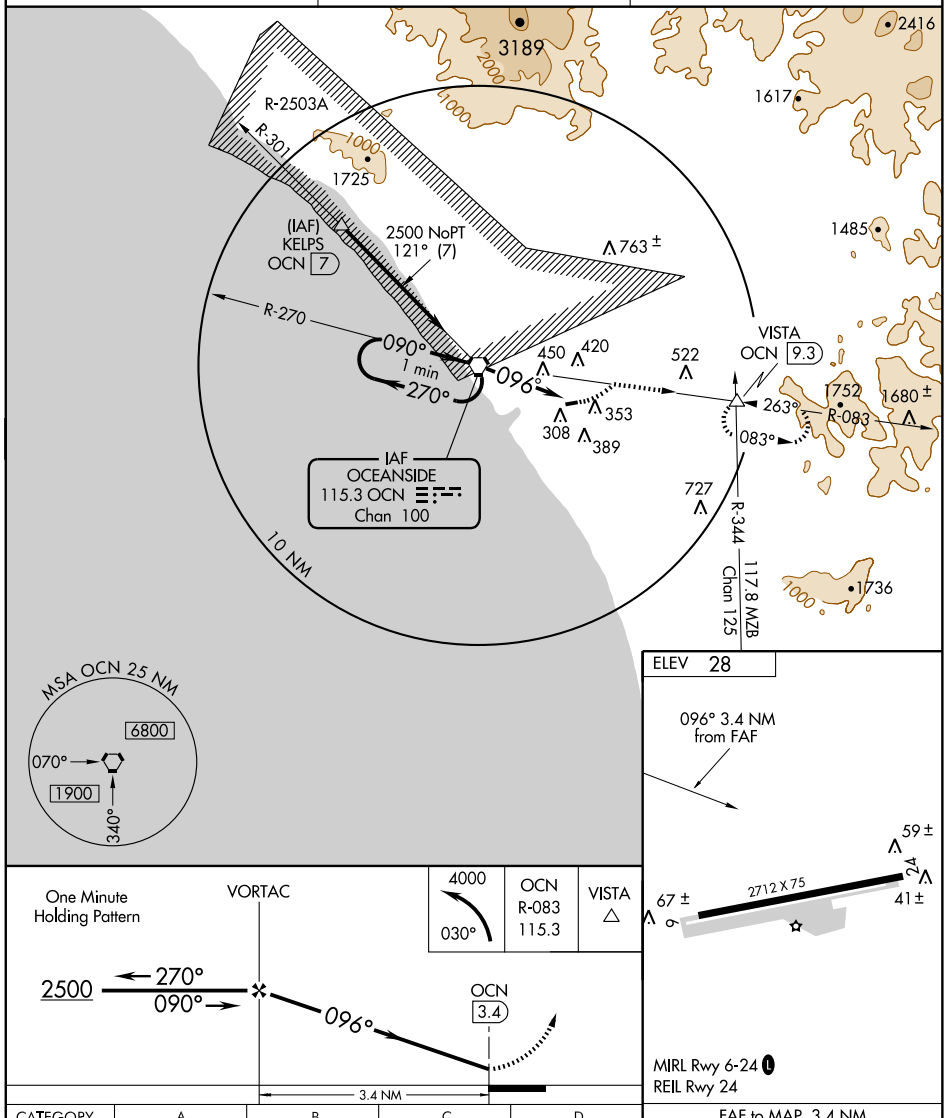
VORTAC OCN	APP CRS	Rwy Idg	N/A
115.3	096°	TDZE	N/A
Chan 100		Apt Elev	28

VOR-A

OCEANSIDE MUNI (OKB)

MISSED APPROACH: Climbing left turn to 4000 via heading 030° and OCN R-083 to VISTA Int/OCN 9.3 DME and hold.

ASOS	SOCAL APP CON	UNICOM
127.8	127.3 323.0	123.0 (CTAF) L



MIRL Rwy 6-24 L

REIL Rwy 24

CATEGORY	A	B	C	D
CIRCLING	1140-1¼ 1112 (1200-1¼)	1140-1½ 1112 (1200-1½)	NA	

FAF to MAP 3.4 NM

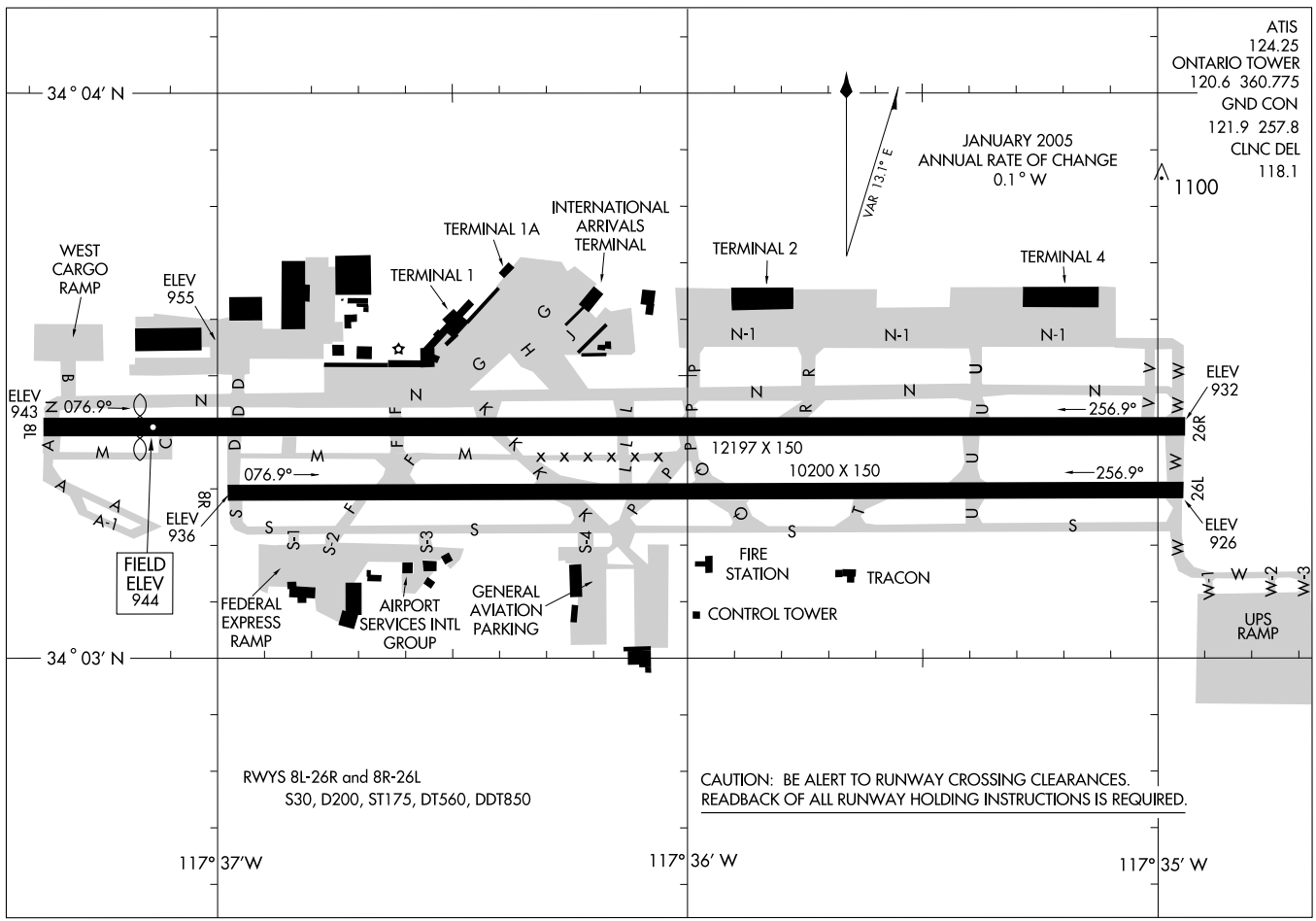
Knots	60	90	120	150	180
Min:Sec	3:24	2:16	1:42	1:21	1:08

SW-3, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-965 (FAA)

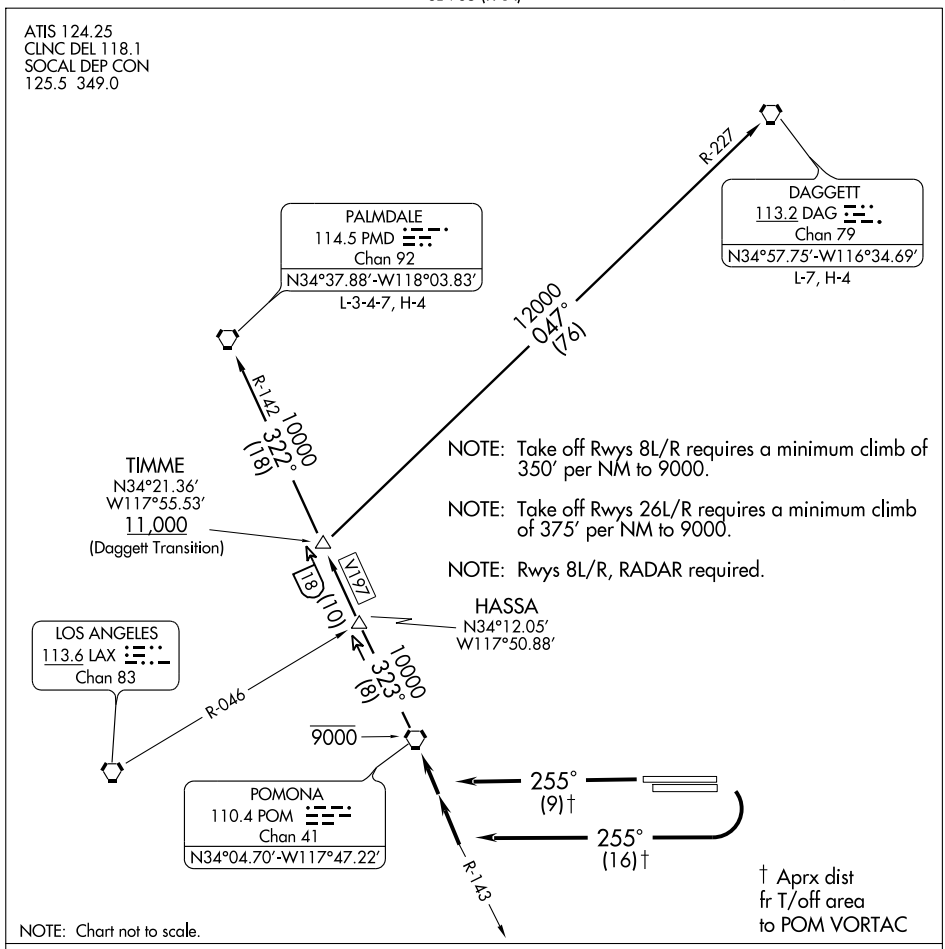
ONTARIO INTL (ONT)
ONTARIO, CALIFORNIA



HASSA FOUR DEPARTURE

SL-965 (FAA)

ONTARIO INTL (ONT)
ONTARIO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8L/R: Turn right heading 255° to intercept and proceed via POM R-143 to POM VORTAC. Thence....

TAKE-OFF RUNWAYS 26L/R: Fly heading 255° to intercept and proceed via POM R-143 to POM VORTAC. Thence....

....via (transition) or (assigned route). Cross POM VORTAC at or below 9000'.

Expect filed altitude 10 minutes after departure.

DAGGETT TRANSITION (HASSA4.DAG): From over POM VORTAC via POM R-323 and DAG R-227 to DAG VORTAC.

PALMDALE TRANSITION (HASSA4.PMD): From over PMD VORTAC via POM R-323 and PMD R-142 to PMD VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

ONTARIO, CALIFORNIA AL-965 (FAA)

LOC I-AOD	APP CRS	Rwy Idg 8L	TDZE	Apt Elev	Rwy Idg 8R	TDZE	Apt Elev
109.7	076°	11200	944	944	10200	936	944

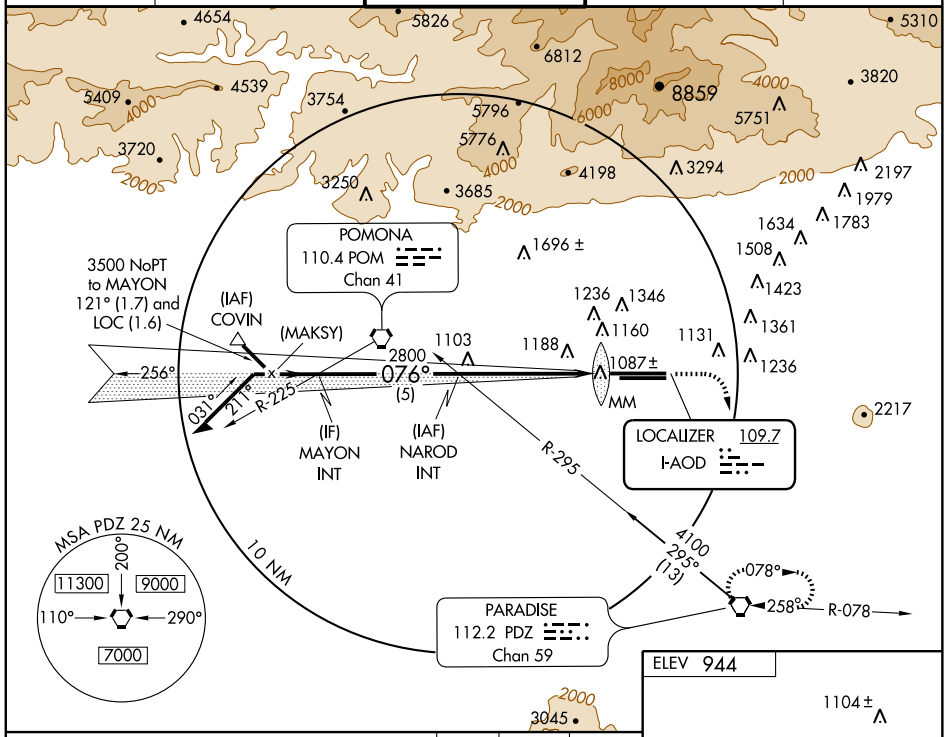
ILS or LOC RWY 8L
ONTARIO INTL (ONT)

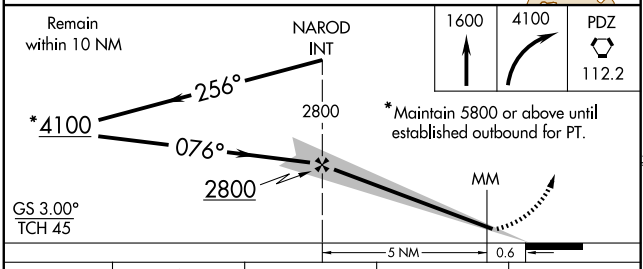
Circling NA north of Rwy 8L-26R.
RVR 1800 authorized with the use of FD or AP or HUD to DA.

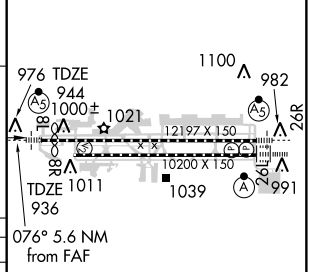
MALSR Rwy 8L

MISSED APPROACH: Climb to 1600 then climbing right turn to 4100 direct PDZ VORTAC and hold.

ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1







CATEGORY	A	B	C	D
S-ILS 8L	# 1144/24 200 (200-½)			
S-LOC 8L	1340/24 396 (400-½)			1340/40 396 (400-¾)
SIDESTEP RWY 8R	1340-1 404 (400-1)		1340-1½ 404 (400-1½)	1340-2 404 (400-2)
CIRCLING	1380-1 436 (500-1)	1400-1 456 (500-1)	1400-1½ 456 (500-1½)	1500-2 556 (600-2)

TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

SW-3, 22 OCT 2009 to 19 NOV 2009

ONTARIO, CALIFORNIA — AL-965 (FAA)

LOC/DME I-TWO	APP CRS	Rwy Idg 26L	Rwy Idg 26R
111.35	256°	10200	12197
Chan 50(Y)		TDZE 926	TDZE 932
		Apt Elev 944	Apt Elev 944

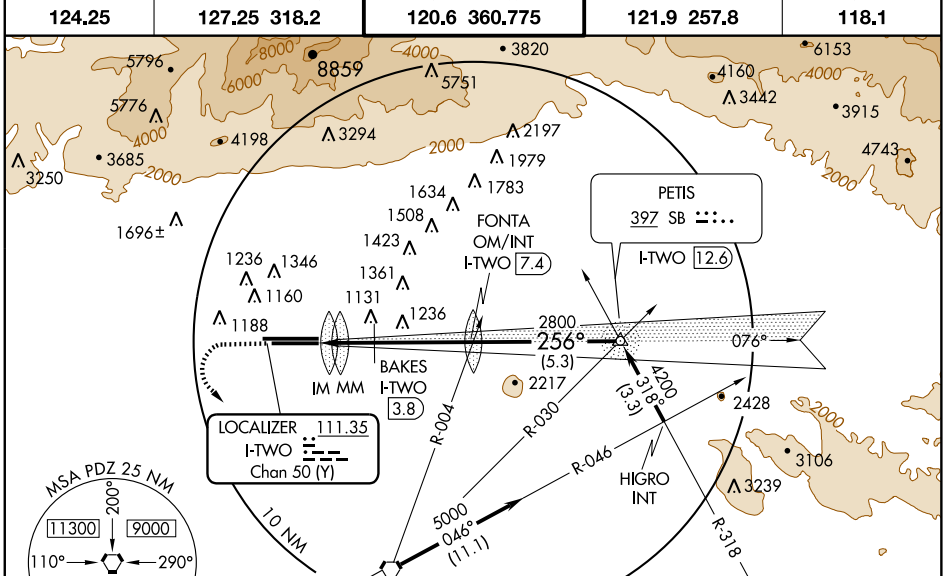
ILS or LOC RWY 26L
ONTARIO INTL (ONT)

Circling NA north of Rwy 8L-26R.
SIDESTEP 26R: Inoperative table does not apply to Cats. A and B.

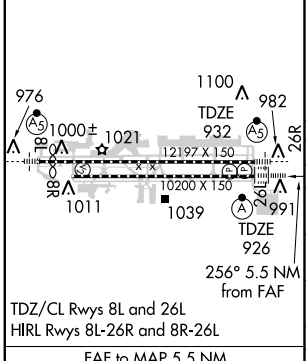
ALSF-2 Rwy 26L (A) | MALSR Rwy 26R (A5)

MISSED APPROACH: Climb to 1700 then climbing left turn to 4000 direct PDZ VORTAC.

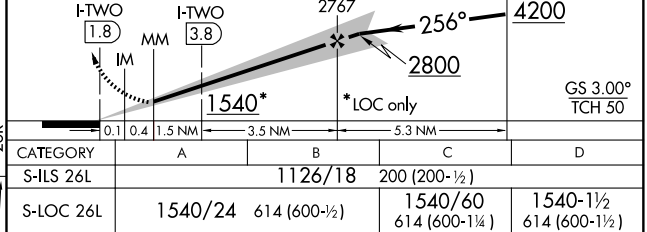
ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1



ELEV 944



TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L



CATEGORY	A	B	C	D
S-ILS 26L	1126/18 200 (200-½)			
S-LOC 26L	1540/24 614 (600-½)		1540/60 614 (600-1¼)	1540-1½ 614 (600-1½)
SIDESTEP RWY 26R	1540/50 608 (600-1)		1540/60 608 (600-1¼)	1540-1½ 608 (600-1½)
CIRCLING	1540-1 596 (600-1)		1540-1¾ 596 (600-1¾)	1540-2 596 (600-2)
BAKES DME MINIMUMS				
S-LOC 26L	1340/24 414 (400-½)		1340/40 414 (400-¾)	
CIRCLING	1380-1 436 (500-1)	1400-1 456 (500-1)	1400-1½ 456 (500-1½)	1500-2 556 (600-2)

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

SW-3, 22 OCT 2009 to 19 NOV 2009

ONTARIO, CALIFORNIA AL-965 (FAA)

LOC/DME I-ONT	APP CRS	Rwy Idg 26R	TDZE	Apt Elev	Rwy Idg 26L	TDZE	Apt Elev
109.7 Chan 34	256°	12197	932	944	10200	926	944

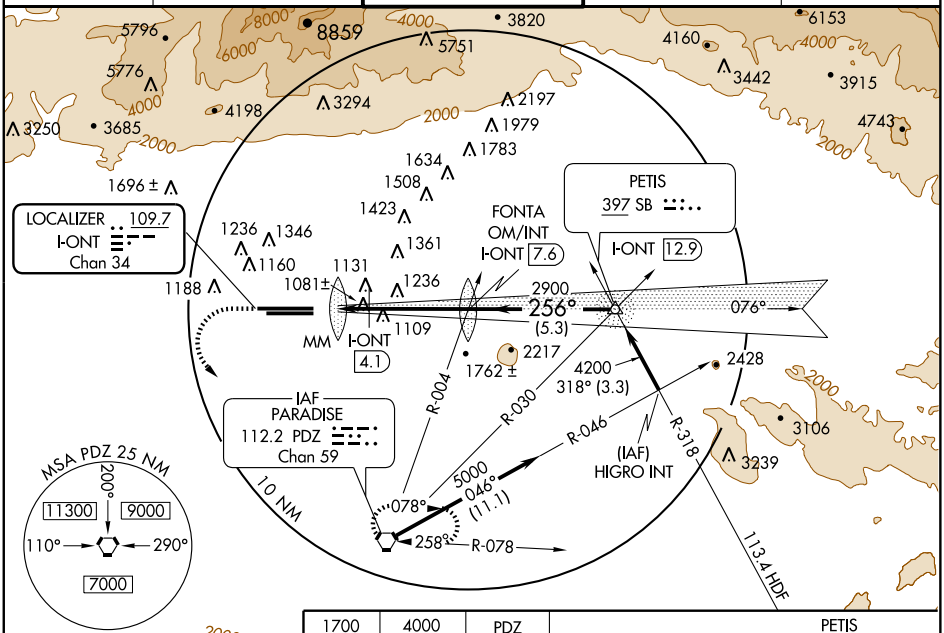
ILS or LOC RWY 26R
ONTARIO INTL (ONT)

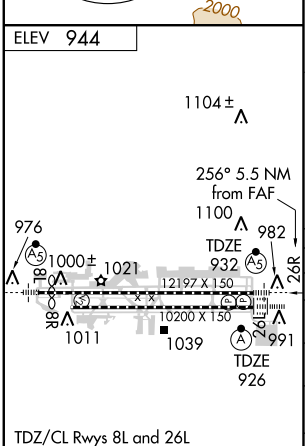
Circling NA north of Rwy 8L-26R
Inoperative table does not apply to sidestep Rwy 26L Cats A and B.

ALSF-2 Rwy 26L (A) MALSR Rwy 26R (A5)

MISSED APPROACH: Climb to 1700 then climbing left turn to 4000 direct PDZ VORTAC and hold.

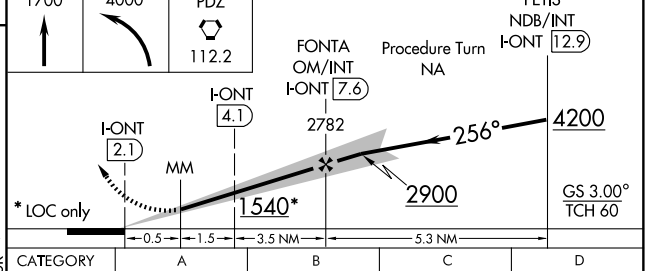
ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-ILS 26R	1132/24 200 (200-½)			
S-LOC 26R	1540/24 608 (600-½)		1540/60 608 (600-1¼)	1540-1½ 608 (600-1½)
SIDESTEP RWY 26L	1540/50 614 (600-1)		1540/60 614 (600-1¼)	1540-1½ 614 (600-1½)
CIRCLING	1540-1 596 (600-1)		1540-1¾ 596 (600-1¾)	1540-2 596 (600-2)
DME MINIMUMS				
S-LOC 26R	1340/24 408 (400-½)		1340/40 408 (400-¾)	
CIRCLING	1380-1 436 (500-1)	1400-1 456 (500-1)	1400-1¾ 456 (500-1¾)	1500-2 556 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

ONTARIO, CALIFORNIA

AL-965 (FAA)

LOC/DME I-TWO	APP CRS	Rwy Idg	10200
111.35	256°	TDZE	926
Chan 50(Y)		Apt Elev	944

ILS RWY 26L (CAT II)

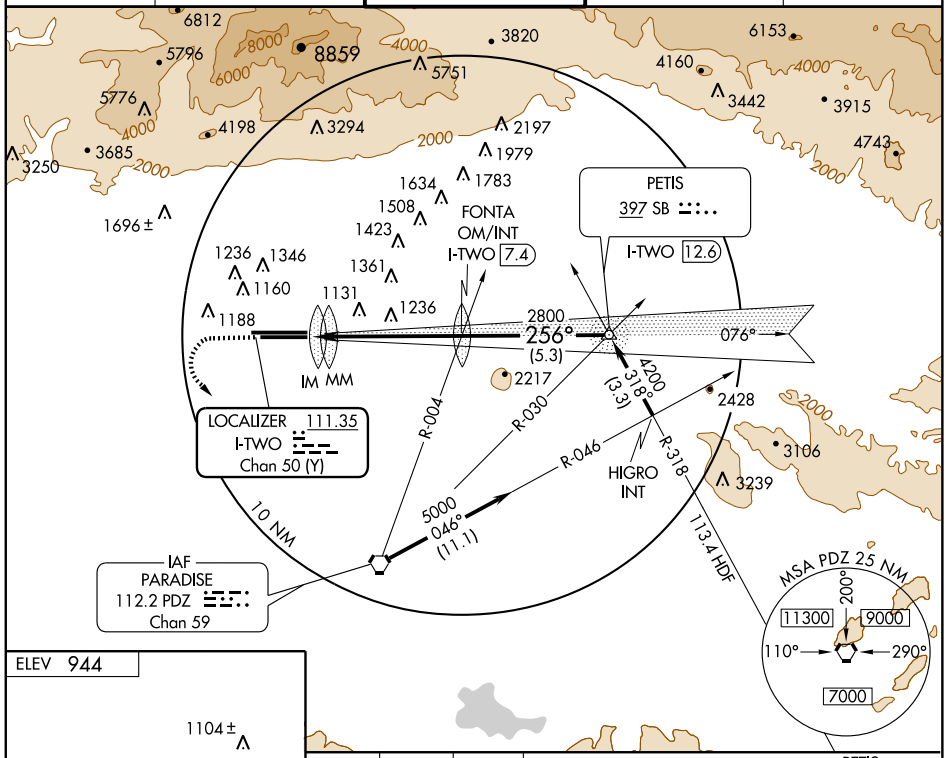
ONTARIO INTL (ONT)

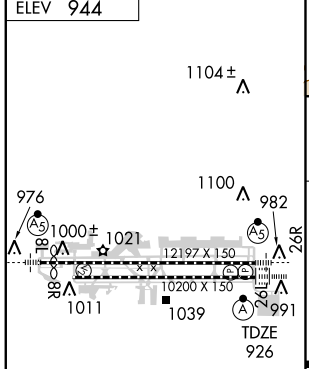
Circling NA north of Rwy 8L-26R.

ALSF-2

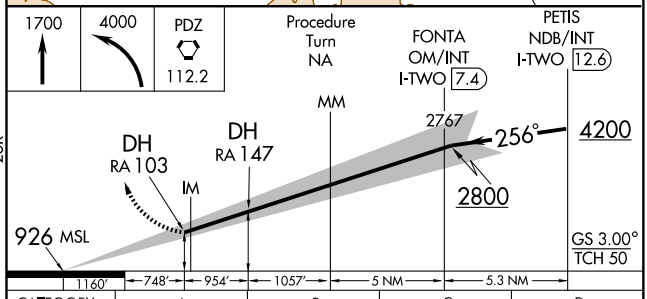
MISSED APPROACH: Climb to 1700 then climbing left turn to 4000 direct PDZ VORTAC.

ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L



CATEGORY	A	B	C	D
S-ILS 26L	1076/16 150 RA 147			
S-ILS 26L	1026/12 100 RA 103			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

ONTARIO, CALIFORNIA

AL-965 (FAA)

ILS RWY 26L (CAT III)

ONTARIO INTL (ONT)

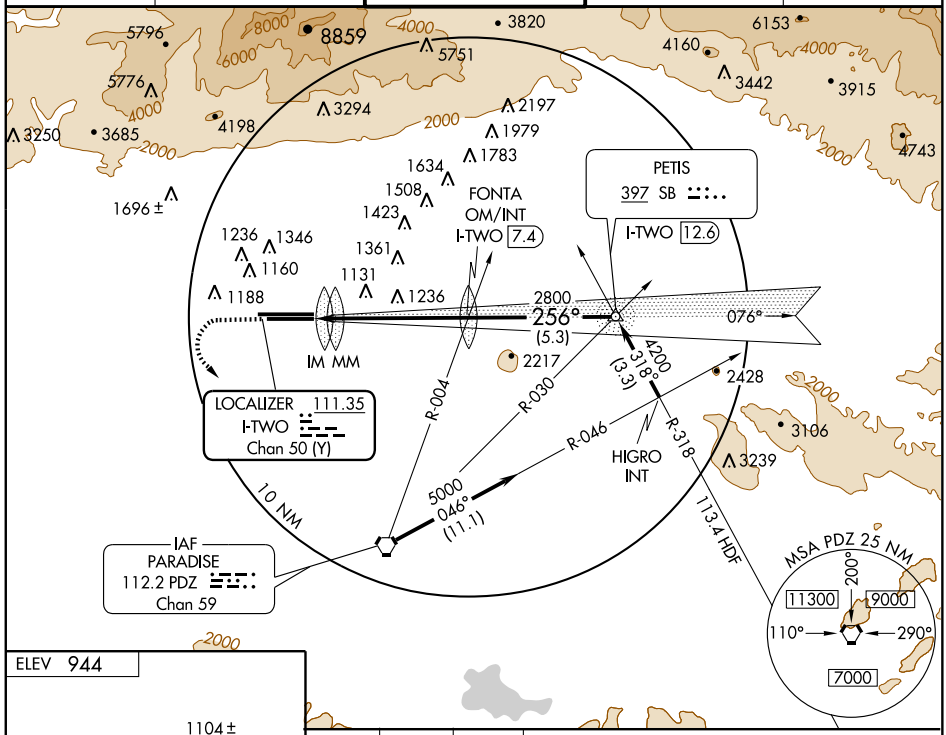
LOC/DME I-TWO	APP CRS	Rwy Idg	10200
111.35	256°	TDZE	926
Chan 50 (Y)		Apt Elev	944

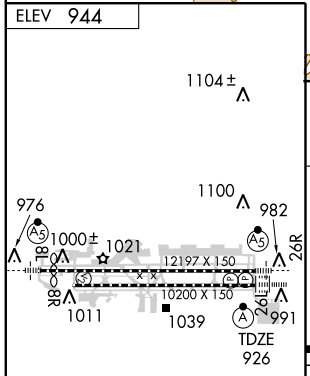
Circling NA north of Rwy 8L-26R.

ALSF-2

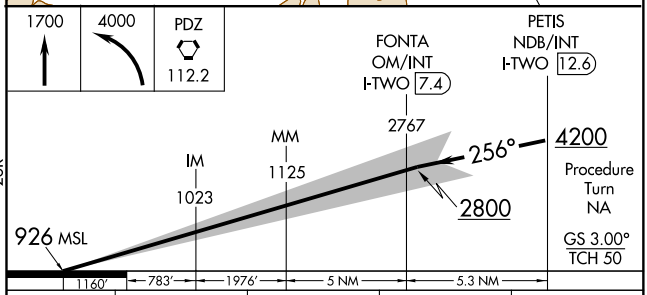
MISSED APPROACH: Climb to 1700 then climbing left turn to 4000 direct PDZ VORTAC.

ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L



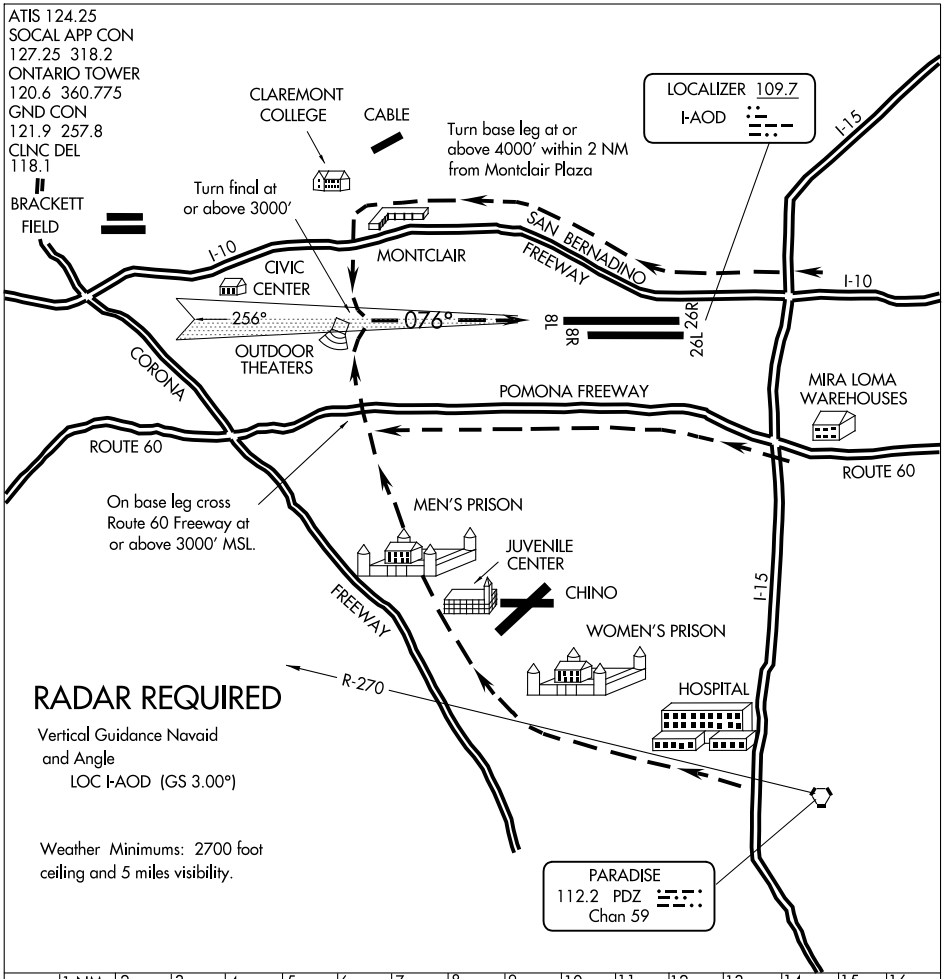
CATEGORY	A	B	C	D
S-ILS 26L	CAT IIIa		RVR 07	
S-ILS 26L	CAT IIIb		RVR 06	
S-ILS 26L	CAT IIIc		NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

INTERSTATE VISUAL RWY 8L

AL-965 (FAA)



INTERSTATE VISUAL RWY 8L

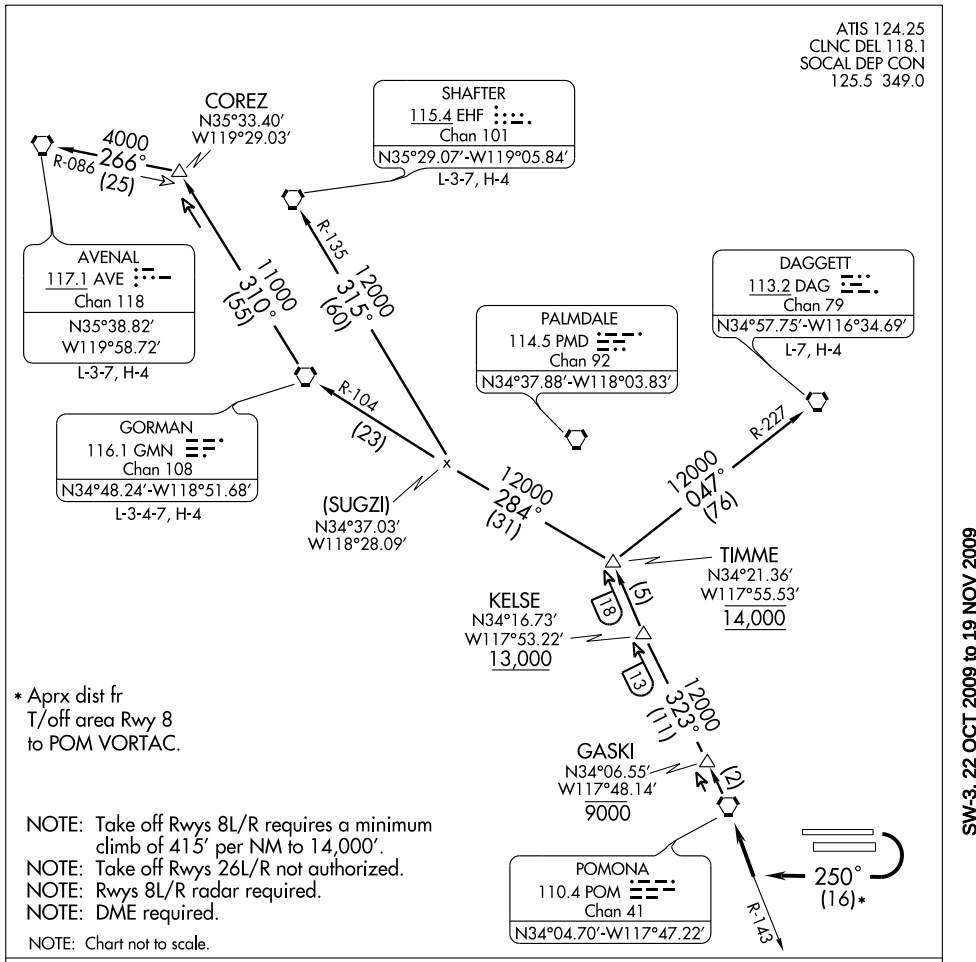
When Visual Approaches to Runway 8L are in progress, clearances will be given utilizing in part the following phraseology:

"(IDENT) CLEARED FOR INTERSTATE VISUAL RUNWAY 8L APPROACH."

ONTARIO TWO DEPARTURE

SL-965 (FAA)

ONTARIO INTL (ONT)
ONTARIO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8L/R: Turn right heading 250° to intercept and proceed via POM R-143 to POM VORTAC. Cross GASKI at or below 9000, cross KELSE at or above 13,000, cross TIMME at 14,000. Then via (transition) or (assigned route). Expect clearance to filed altitude 10 minutes after departure.

AVENAL TRANSITION (ONT2.AVE):

DAGGETT TRANSITION (ONT2.DAG):

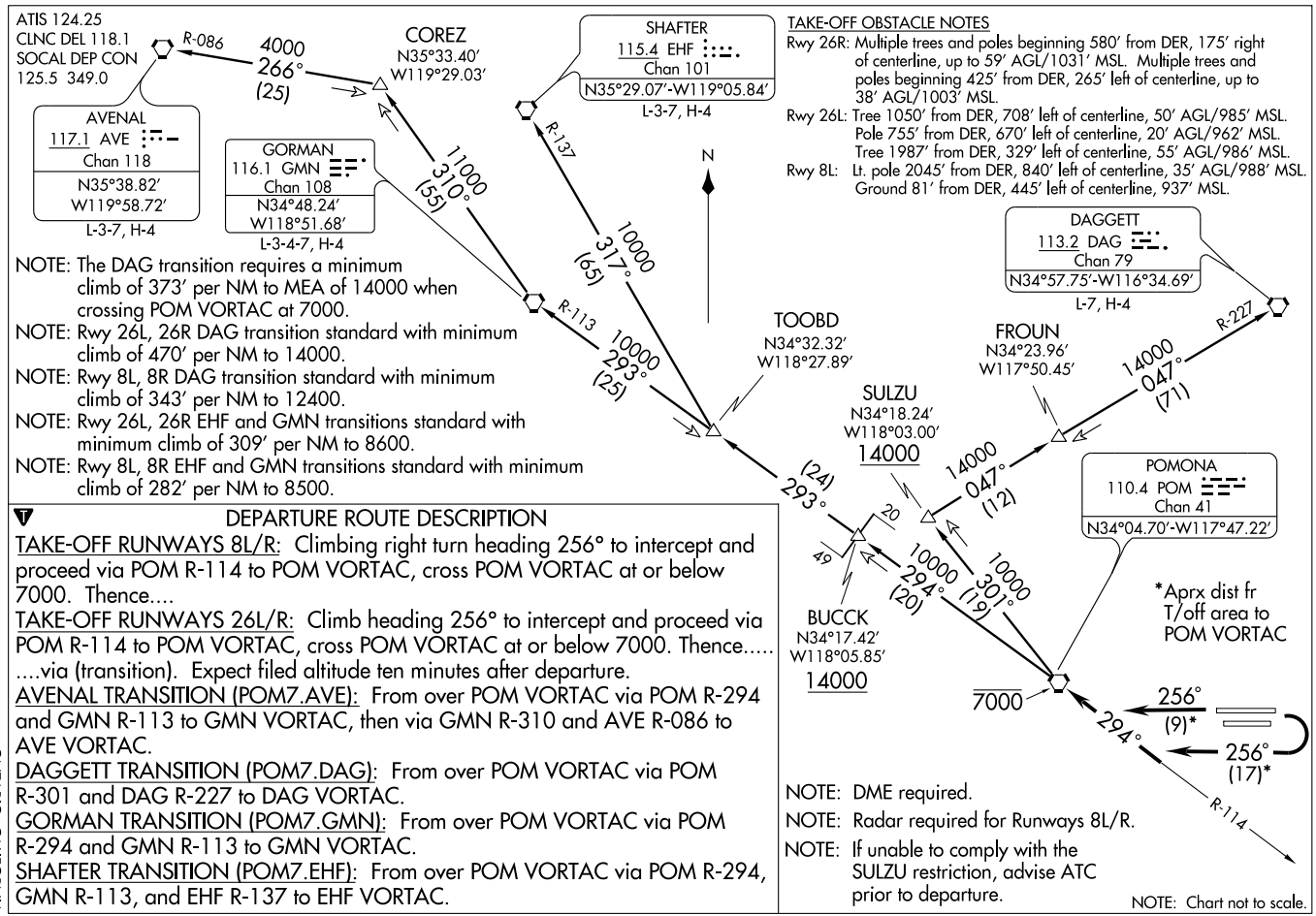
GORMAN TRANSITION (ONT2.GMN):

SHAFTER TRANSITION (ONT2.EHF):

SW-3, 22 OCT 2009 to 19 NOV 2009

POMONA SEVEN DEPARTURE

ONTARIO INTL (ONT)
ONTARIO, CALIFORNIA



NOTE: The DAG transition requires a minimum climb of 373' per NM to MEA of 14000 when crossing POM VORTAC at 7000.
NOTE: Rwy 26L, 26R DAG transition standard with minimum climb of 470' per NM to 14000.
NOTE: Rwy 8L, 8R DAG transition standard with minimum climb of 343' per NM to 12400.
NOTE: Rwy 26L, 26R EHF and GMN transitions standard with minimum climb of 309' per NM to 8600.
NOTE: Rwy 8L, 8R EHF and GMN transitions standard with minimum climb of 282' per NM to 8500.

TAKE-OFF OBSTACLE NOTES

Rwy 26R: Multiple trees and poles beginning 580' from DER, 175' right of centerline, up to 59' AGL/1031' MSL. Multiple trees and poles beginning 425' from DER, 265' left of centerline, up to 38' AGL/1003' MSL.
Rwy 26L: Tree 1050' from DER, 708' left of centerline, 50' AGL/985' MSL. Pole 755' from DER, 670' left of centerline, 20' AGL/962' MSL. Tree 1987' from DER, 329' left of centerline, 55' AGL/986' MSL.
Rwy 8L: Lt. pole 2045' from DER, 840' left of centerline, 35' AGL/988' MSL. Ground 81' from DER, 445' left of centerline, 937' MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8L/R: Climbing right turn heading 256° to intercept and proceed via POM R-114 to POM VORTAC, cross POM VORTAC at or below 7000. Thence....

TAKE-OFF RUNWAYS 26L/R: Climb heading 256° to intercept and proceed via POM R-114 to POM VORTAC, cross POM VORTAC at or below 7000. Thence..... ....via (transition). Expect filed altitude ten minutes after departure.

AVENAL TRANSITION (POM7.AVE): From over POM VORTAC via POM R-294 and GMN R-113 to GMN VORTAC, then via GMN R-310 and AVE R-086 to AVE VORTAC.

DAGGETT TRANSITION (POM7.DAG): From over POM VORTAC via POM R-301 and DAG R-227 to DAG VORTAC.

GORMAN TRANSITION (POM7.GMN): From over POM VORTAC via POM R-294 and GMN R-113 to GMN VORTAC.

SHAFTER TRANSITION (POM7.EHF): From over POM VORTAC via POM R-294, GMN R-113, and EHF R-137 to EHF VORTAC.

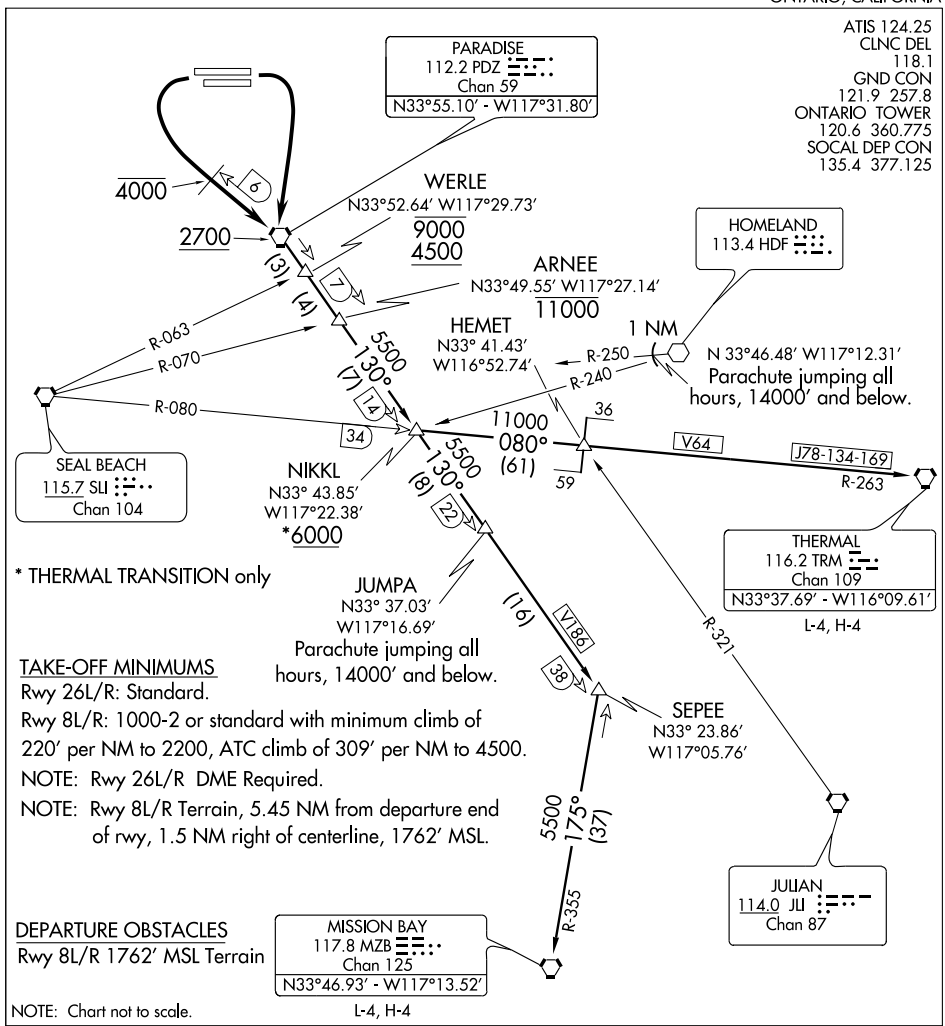
NOTE: DME required.
NOTE: Radar required for Runways 8L/R.
NOTE: If unable to comply with the SULZU restriction, advise ATC prior to departure.

NOTE: Chart not to scale.

PRADO SEVEN DEPARTURE

SL-965 (FAA)

ONTARIO INTL (ONT)
ONTARIO, CALIFORNIA



TAKE-OFF MINIMUMS

Rwy 26L/R: Standard.

Rwy 8L/R: 1000-2 or standard with minimum climb of 220' per NM to 2200, ATC climb of 309' per NM to 4500.

NOTE: Rwy 26L/R DME Required.

NOTE: Rwy 8L/R Terrain, 5.45 NM from departure end of rwy, 1.5 NM right of centerline, 1762' MSL.

DEPARTURE OBSTACLES

Rwy 8L/R 1762' MSL Terrain

NOTE: Chart not to scale.

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 8L/R: Climbing right turn direct PDZ VORTAC. Thence...

TAKE-OFF RWY 26L/R: Climbing left turn direct PDZ VORTAC, cross 6 DME northwest of PDZ VORTAC at or below 4000'. Thence...

...via (assigned transition) or (assigned route). Cross PDZ VORTAC at or above 2700', expect filed altitude ten minutes after departure.

MISSION BAY TRANSITION (PRDO7.MZB): From over PDZ VORTAC via PDZ R-130 and MZB R-355 to MZB VORTAC.

THERMAL TRANSITION (PRDO7.TRM): From over PDZ VORTAC via PDZ R-130, SLI R-080 and TRM R-263 to TRM VORTAC.

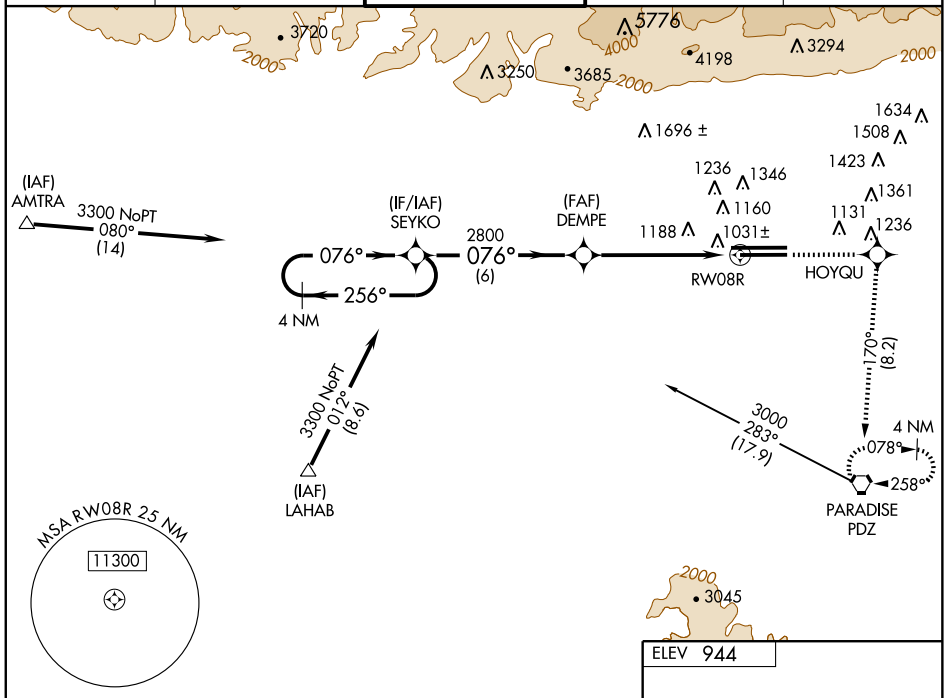
WAAS CH 70329 W08A	APP CRS 076°	Rwy Idg 10200 TDZE 936 Apt Elev 944

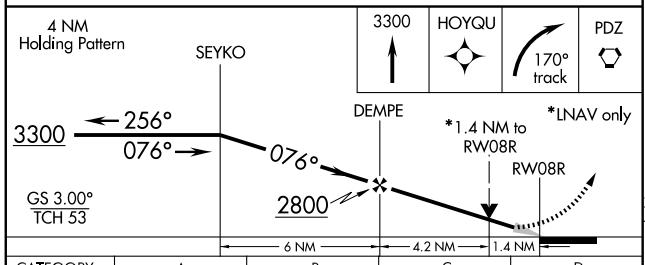
RNAV (GPS) RWY 8R
ONTARIO INTL (ONT)

Circling NA north of Rwy 8L-26R.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP- 0.3 NA.

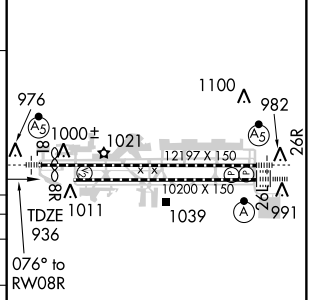
MISSED APPROACH: Climb to 3300 direct HOYQU and turn right via 170° track to PDZ VORTAC and hold.

ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





CATEGORY	A	B	C	D
LPV DA	1220/50 284 (300-1)			
LNAV/VNAV DA	1494-2 558 (600-2)			
LNAV MDA	1440/50 504 (500-1)		1440-1½ 504 (500-1½)	
CIRCLING	1440-1 496 (500-1)		1440-1½ 496 (500-1½)	1500-2 556 (600-2)



TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS CH 45807 W08A	APP CRS 076°	Rwy Idg 11200 TDZE 944 Apt Elev 944

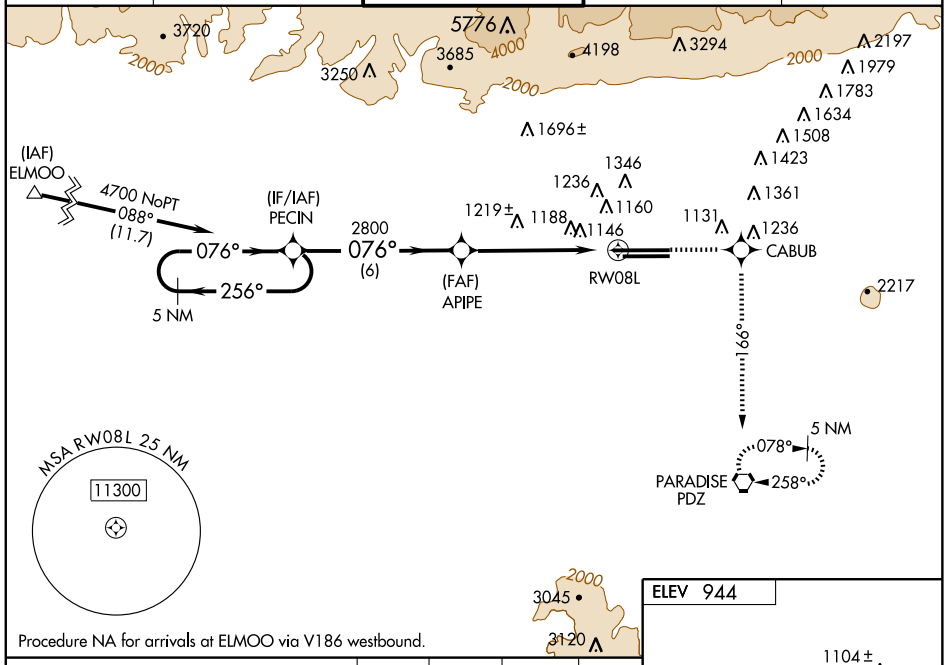
RNAV (GPS) Y RWY 8L
ONTARIO INTL (ONT)

DME/DME RNP -0.3 NA. Circling NA north of Rwy 8L-26R.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
VDP and Baro-VNAV NA when using Chino altimeter setting.
When local altimeter setting not received, use Chino altimeter setting and increase all DAs/MDAs 60 feet and all visibilities ½ mile.
For inoperative MALSR increase LPV visibility all Cats to RVR 6000.

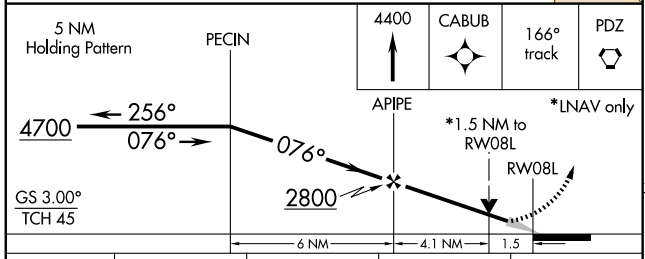
MALSR (A5)

MISSED APPROACH: Climb to 4400 direct CABUB and via 166° track to PDZ VORTAC and hold, continue climb-in-hold to 4400.

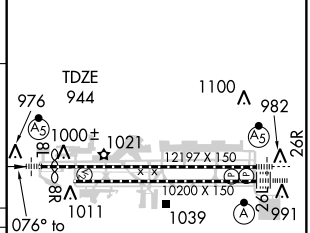
ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1



Procedure NA for arrivals at ELMOO via V186 westbound.



CATEGORY	A	B	C	D
LPV DA	1266/40 322 (400-¾)			
LNAV/VNAV DA	1520-1½ 576 (600-1½)			
LNAV MDA	1480/24 536 (600-½)		1480/50 536 (600-1)	1480/60 536 (600-1¼)
CIRCLING	1480-1 536 (600-1)		1480-1½ 536 (600-1½)	1500-2 556 (600-2)



TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

SW-3, 22 OCT 2009 to 19 NOV 2009

ONTARIO, CALIFORNIA AL-965 (FAA)

WAAS	APP CRS	Rwy Idg	10200
CH 90407	256°	TDZE	926
W26B		Apt Elev	944

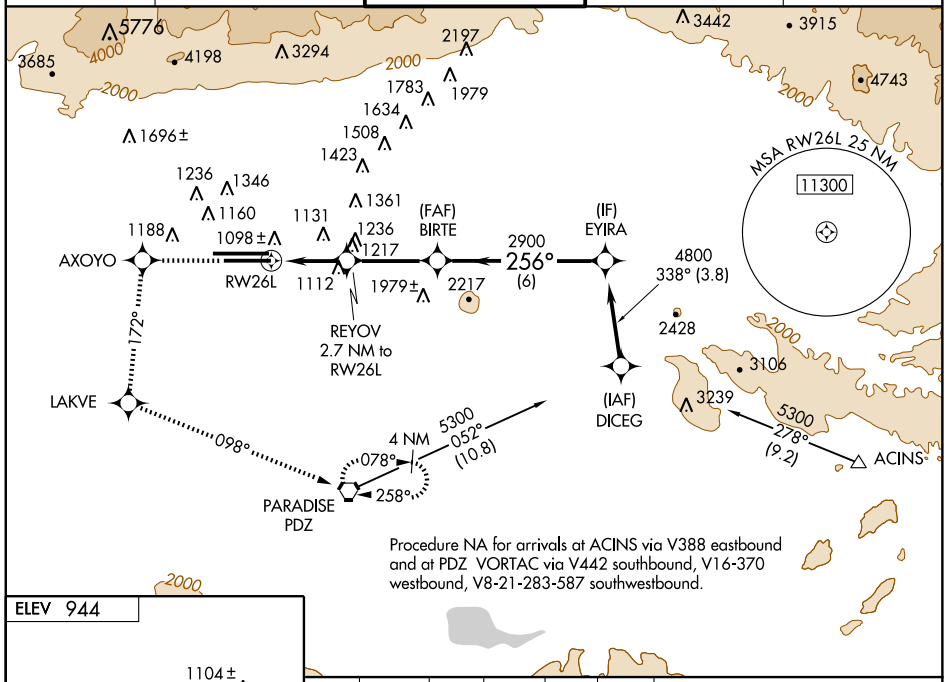
RNAV (GPS) Y RWY 26L
ONTARIO INTL (ONT)

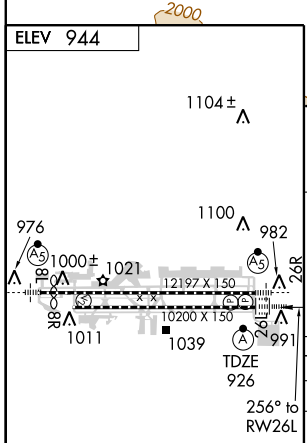
DME/DME RNP -0.3 NA. Circling NA north of Rwy 8L-26R.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
Baro-VNAV and VDP NA when using Chino altimeter setting.
When local altimeter setting not received, use Chino altimeter setting and increase all DAs/MDAs 60 feet and all visibilities ½ mile.

ALSF-2

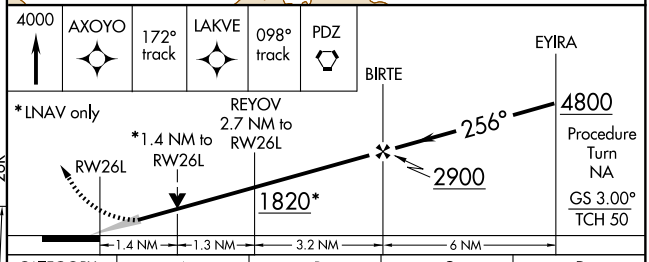
MISSED APPROACH: Climb to 4000 direct AXOYO and via 172° track to LAKVE and via 098° track to PDZ VORTAC and hold.

ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L



CATEGORY	A	B	C	D
LPV DA	1176/24 250 (300-½)			
LNAV/VNAV DA	1405/60 479 (500-1¼)			
LNAV MDA	1420/24 494 (500-½)		1420/40 494 (500-¾)	1420/50 494 (500-1)
CIRCLING	1420-1 476 (500-1)		1420-1½ 476 (500-1½)	1500-2 556 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS CH 53406 W26A	APP CRS 256°	Rwy Idg 12197 TDZE 932 Apt Elev 944

RNAV (GPS) Y RWY 26R

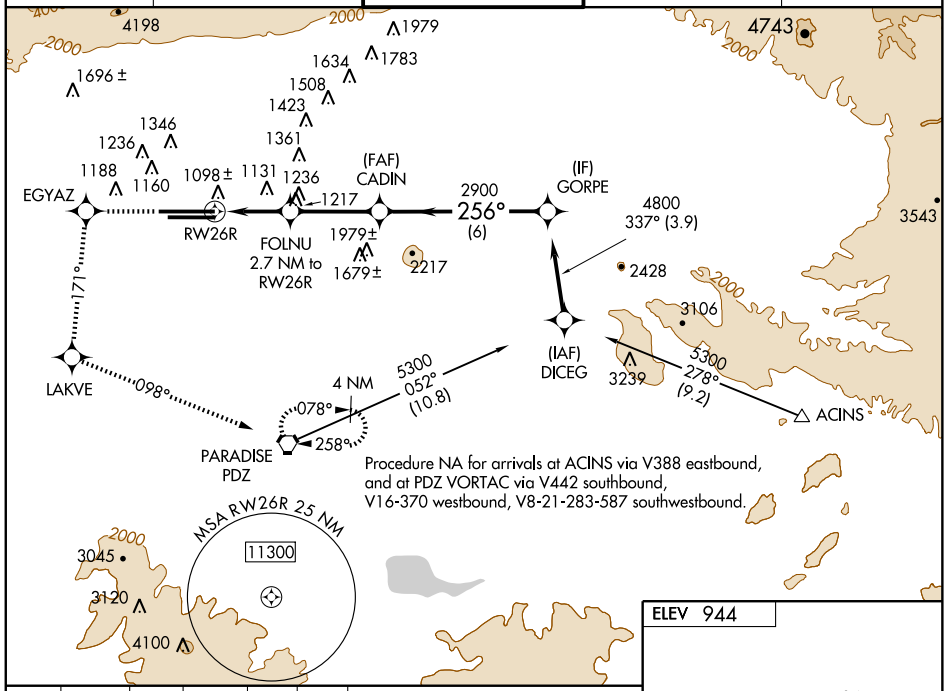
ONTARIO INTL (ONT)

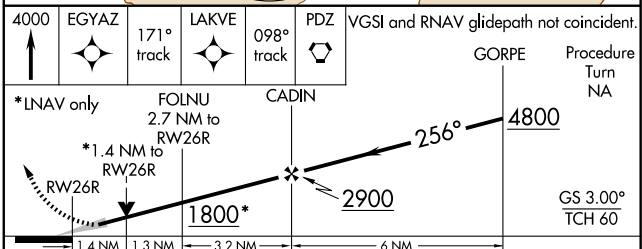
When local altimeter setting not received, use Chino altimeter setting and increase all DAs/MDAs 60 feet and all visibilities ½ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
VDP and Baro-VNAV NA when using Chino altimeter setting.
DME/DME RNP-0.3 NA. Circling NA north of Rwy 8L-26R.

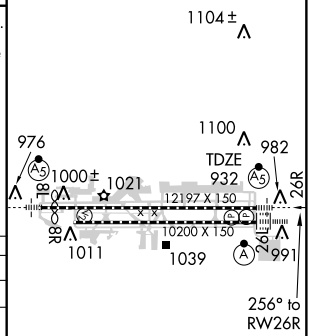
MALSR

MISSED APPROACH: Climb to 4000 direct to EGYAZ and via 171° track to LAKVE and via 098° track to PDZ VORTAC and hold.

ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1







CATEGORY	A	B	C	D
LPV DA	1182/24 250 (300-½)			
LNAV/VNAV DA	1406/50 474 (500-1)			
LNAV MDA	1440/24 508 (500-½)		1440/50 508 (500-1)	
CIRCLING	1440-1 496 (500-1)		1440-1½ 496 (500-1½)	1500-2 556 (600-2)

TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	11200
076°	TDZE	944
	Apt Elev	944

RNAV (RNP) Z RWY 8L

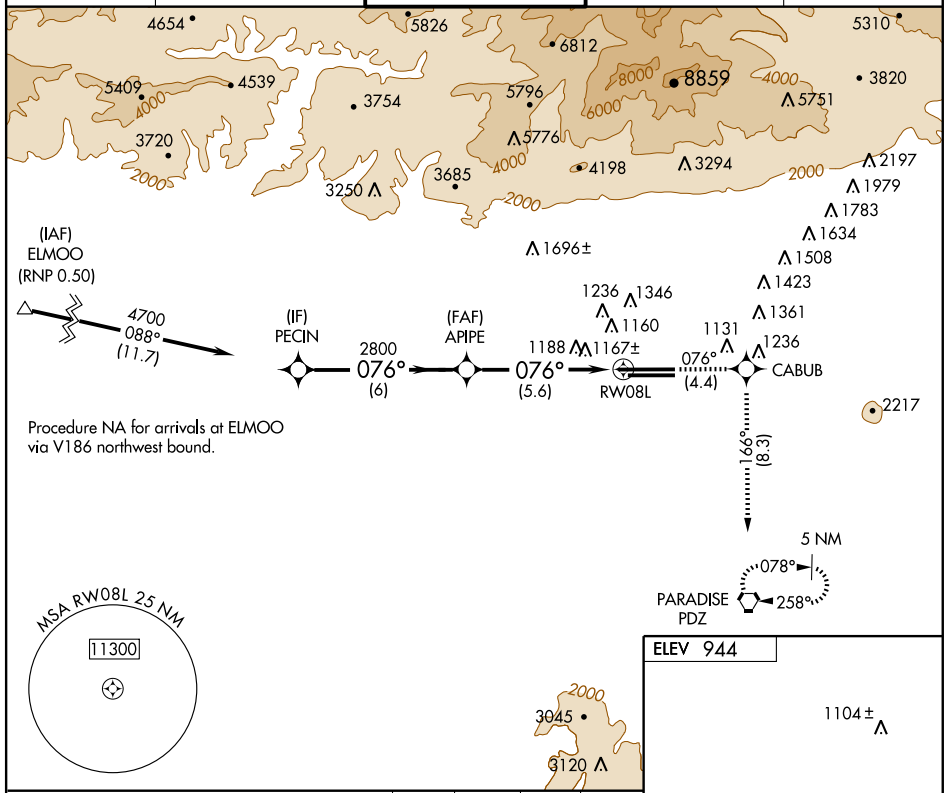
ONTARIO INTL (ONT)

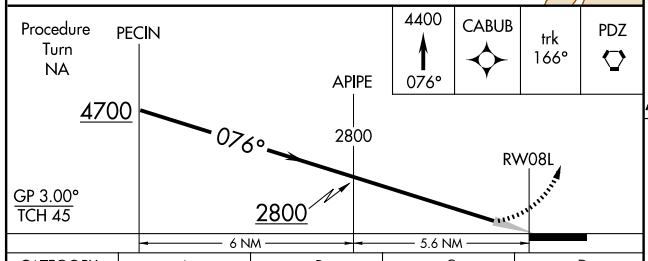
GPS required.
For uncompensated Baro-VNAV systems, LNAV/VNAV, procedure NA below -1°C (31°F) or above 47°C (116°F). Inoperative table does not apply.

MALSR

MISSED APPROACH: Climb to 4400 via track 076° to CABUB and via track 166° to PDZ VORTAC and hold, continue climb-in-hold to 4400.

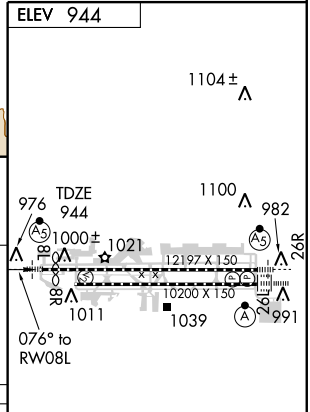
ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





CATEGORY	A	B	C	D
RNP 0.30 DA	1490-2	546 (600-2)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10200
256°	TDZE	926
	Apt Elev	944

RNAV (RNP) Z RWY 26L

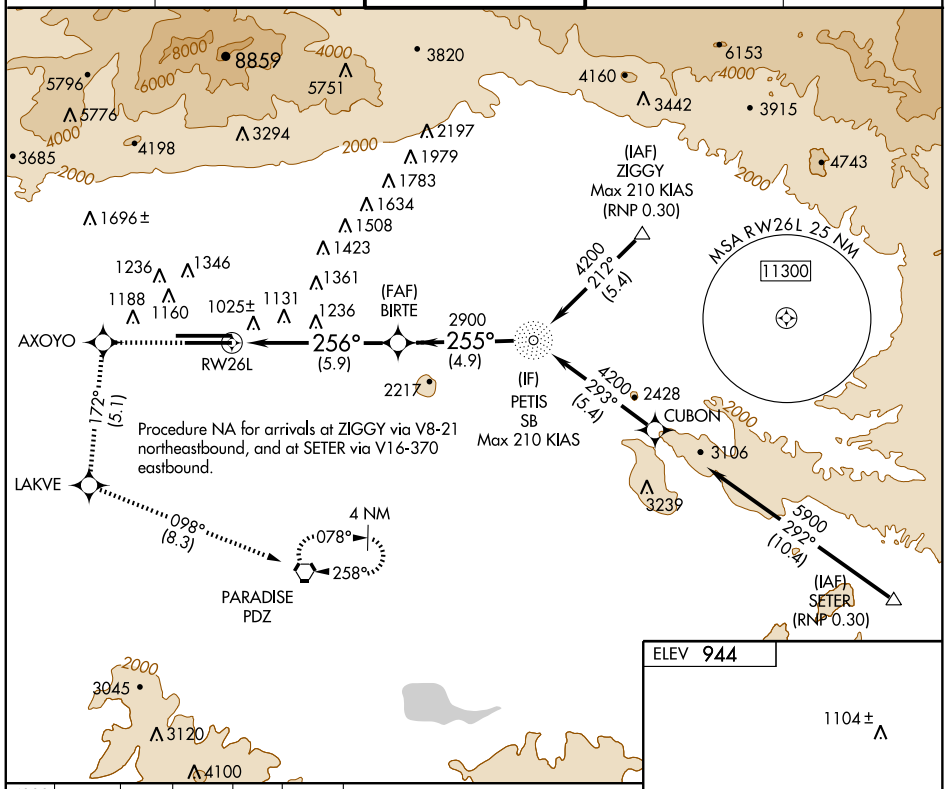
ONTARIO INTL (ONT)

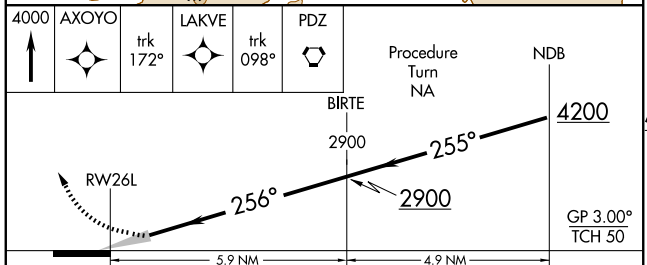
GPS required.
For uncompensated Baro-VNAV systems, procedure NA below 2°C (36°F) or above 47°C (116°F).
For inoperative ALSF increase RNP 0.30 visibility to RVR 6000.

ALSF-2

MISSED APPROACH: Climb to 4000 direct AXOYO and via track 172° to LAKVE and via track 098° to PDZ VORTAC and hold.

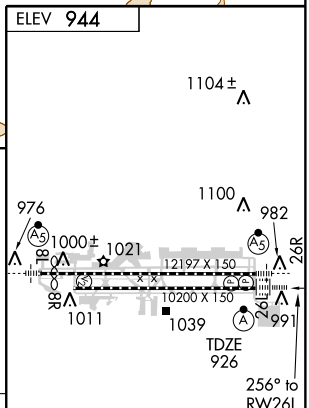
ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





CATEGORY	A	B	C	D
RNP 0.30 DA	1319/45 393 (400-⅞)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12197
256°	TDZE	932
	Apt Elev	944

RNAV (RNP) Z RWY 26R

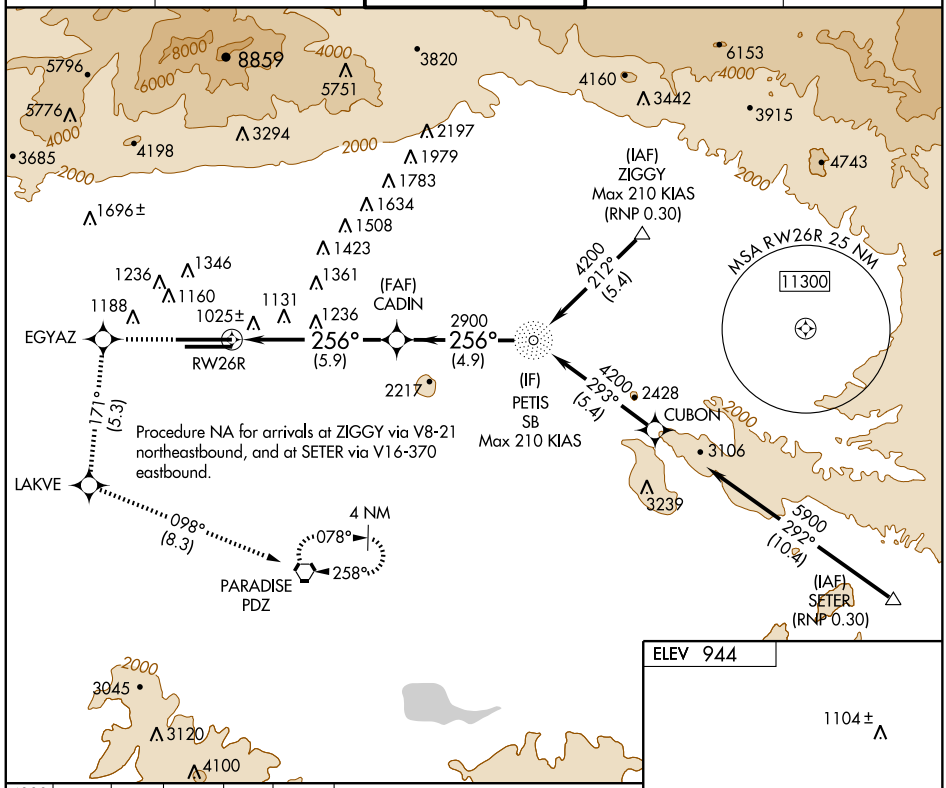
ONTARIO INTL (ONT)

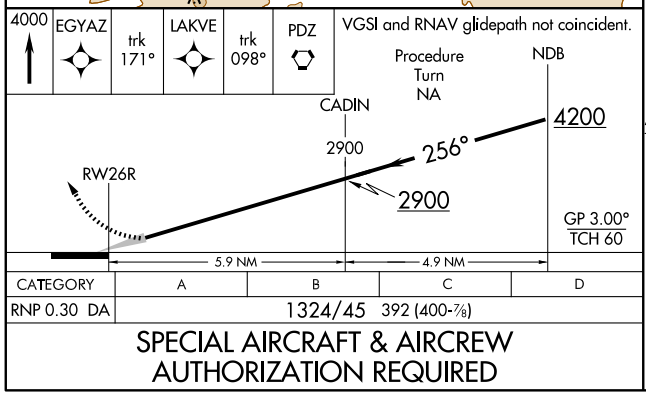
GPS required.
For uncompensated Baro-VNAV systems, procedure NA below -1°C (28°F) or above 47°C (116°F).
For inoperative MALSR increase RNP 0.30 visibility to RVR 6000.

MALSR

MISSED APPROACH: Climb to 4000 direct EGYAZ and via track 171° to LAKVE and via track 098° to PDZ VORTAC and hold.

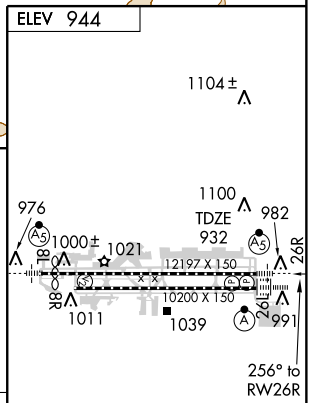
ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1





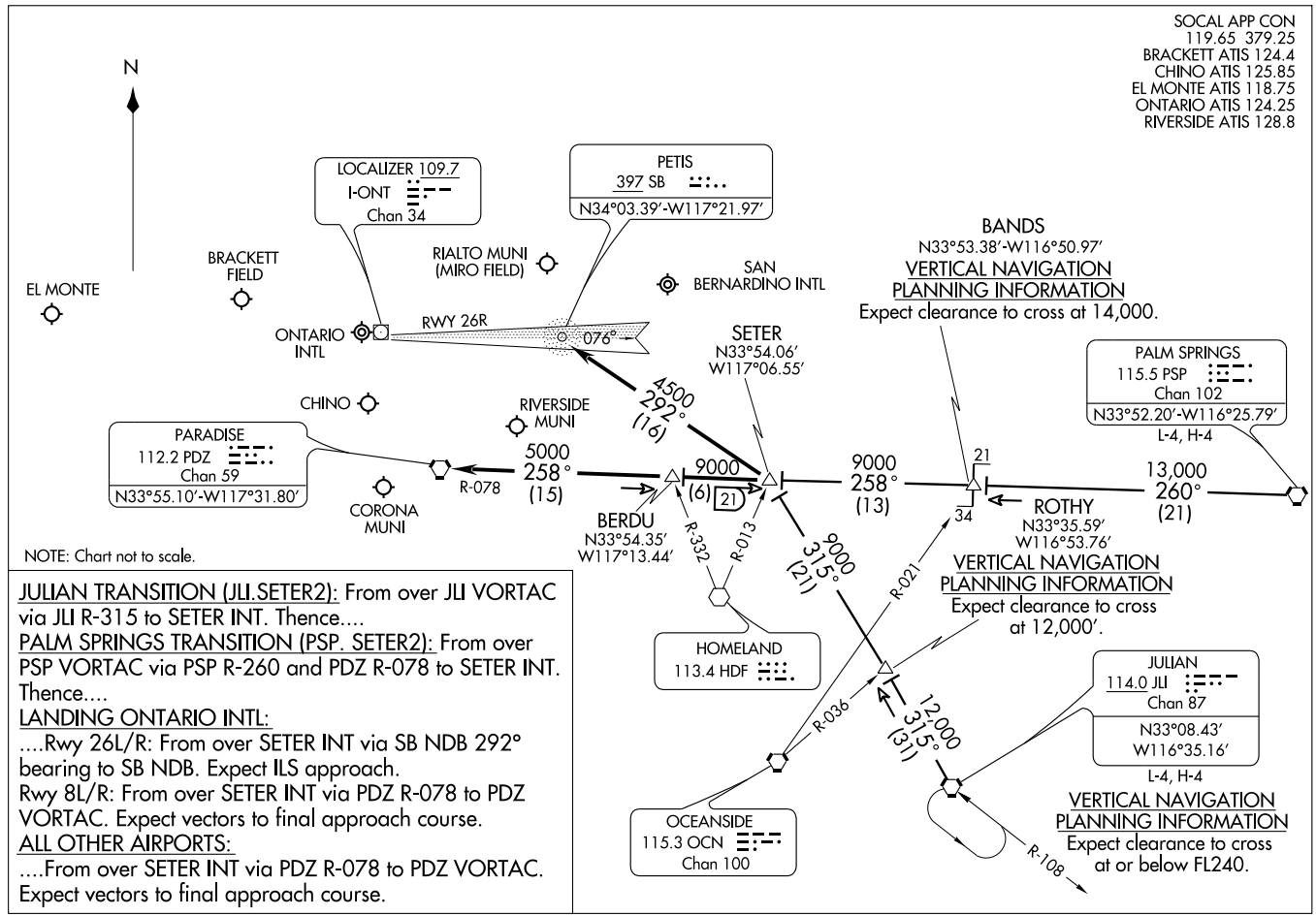
CATEGORY	A	B	C	D
RNP 0.30 DA	1324/45	392 (400-⅞)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

SW-3, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ONTARIO, CALIFORNIA AL-965 (FAA)

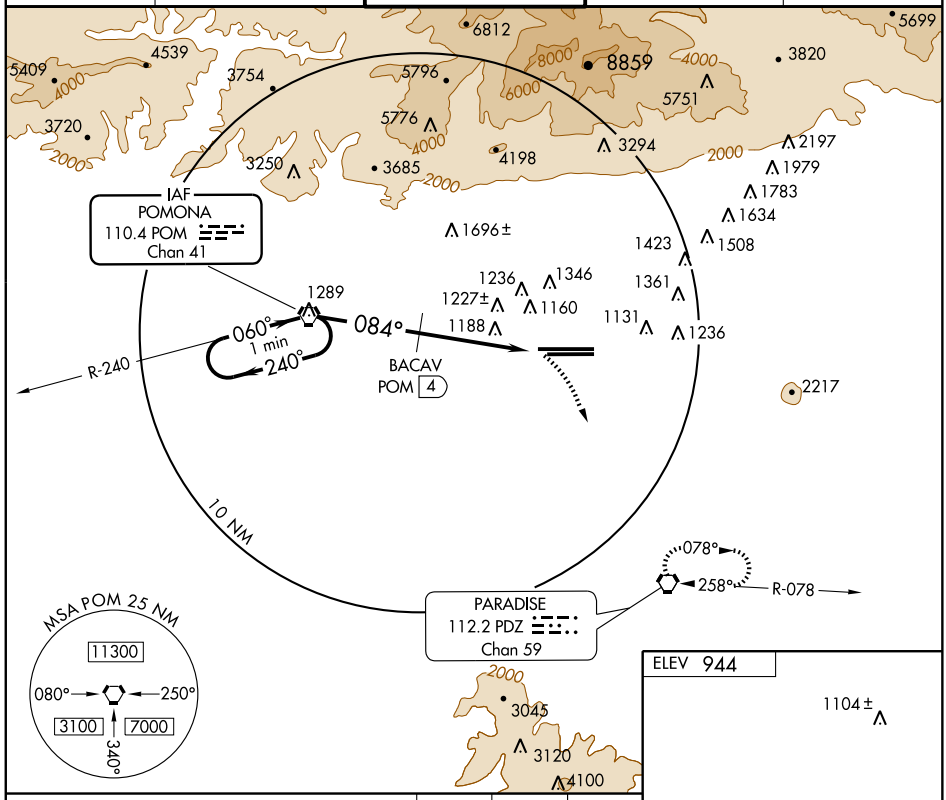
VORTAC POM 110.4 Chan 41	APP CRS 084°	Rwy Idg 10200 TDZE 936 Apt Elev 944

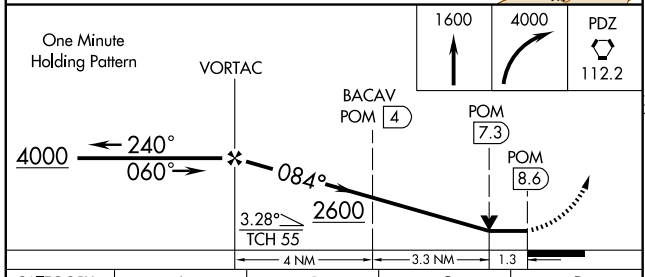
VOR/DME RWY 8R
ONTARIO INTL (ONT)

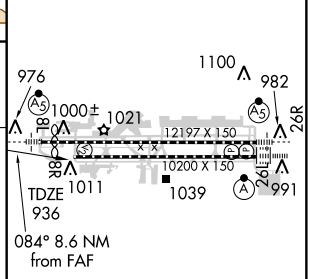
Circling NA north of Rwy 8L-26R.

MISSED APPROACH: Climb to 1600 then climbing right turn to 4000 direct PDZ VORTAC and hold.

ATIS	SOCAL APP CON	ONTARIO TOWER	GND CON	CLNC DEL
124.25	127.25 318.2	120.6 360.775	121.9 257.8	118.1



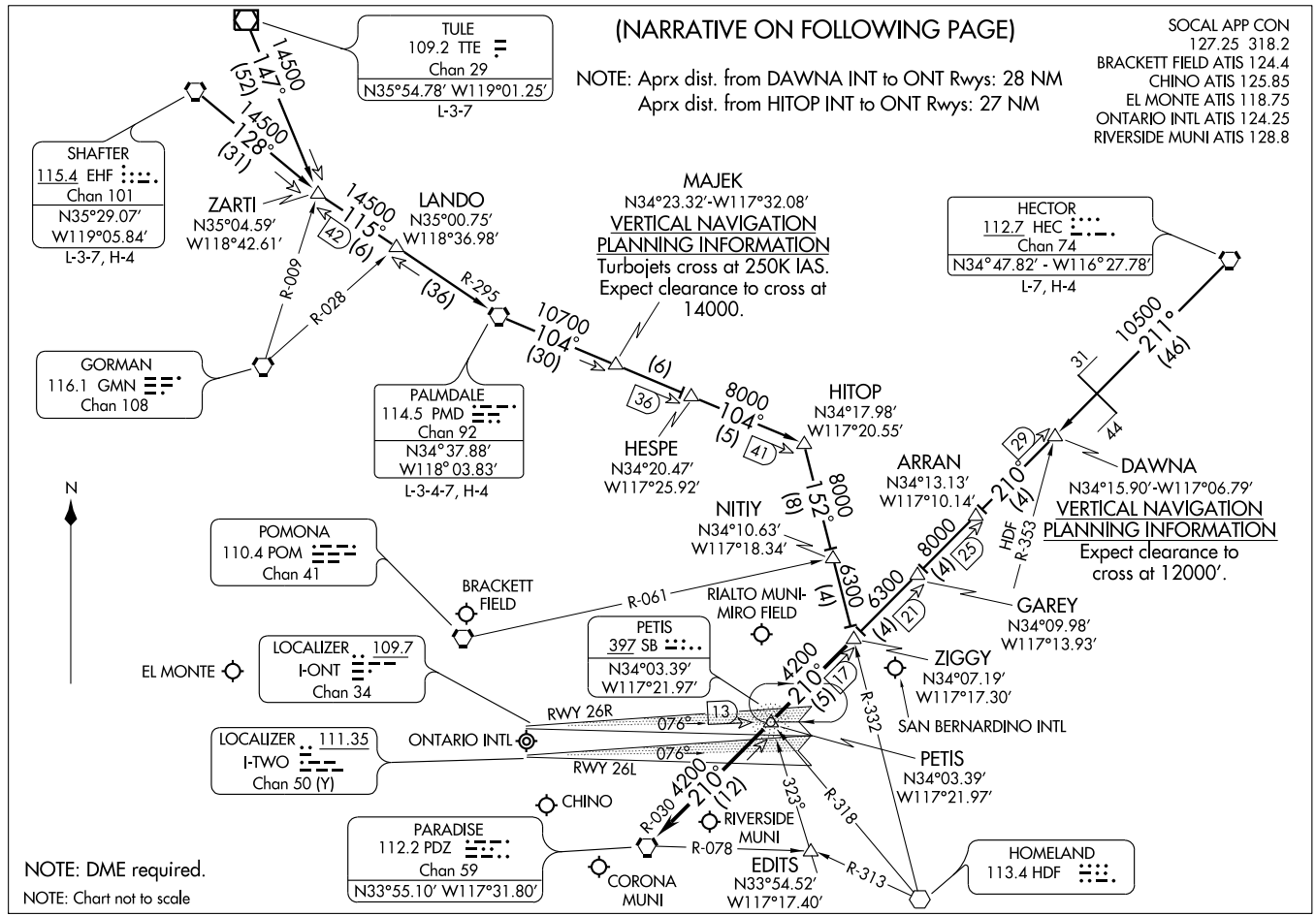




CATEGORY	A	B	C	D
S-8R	1480/50	544 (600-1)	1480-1½ 544 (600-1½)	1480-1¾ 544 (600-1¾)
CIRCLING	1480-1	536 (600-1)	1480-1½ 536 (600-1½)	1500-2 556 (600-2)

TDZ/CL Rwys 8L and 26L
HIRL Rwys 8L-26R and 8R-26L

SW-3, 22 OCT 2009 to 19 NOV 2009



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME CIC	APP CRS	Rwy Idg	N/A
109.8	238°	TDZE	N/A
Chan 35		Apt Elev	215

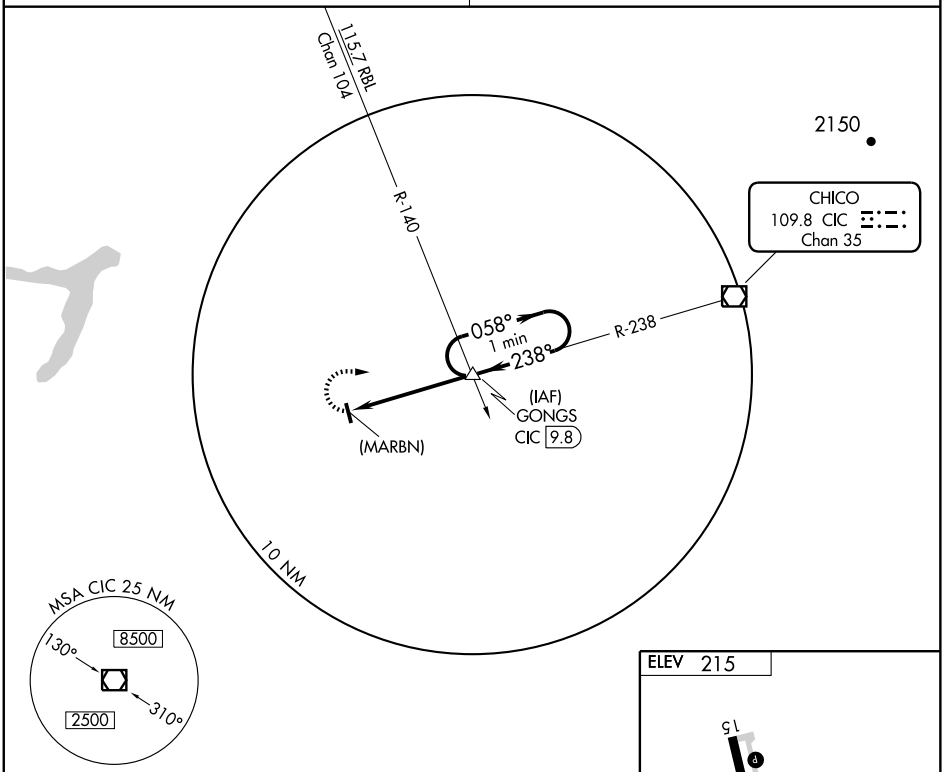
VOR or GPS-A

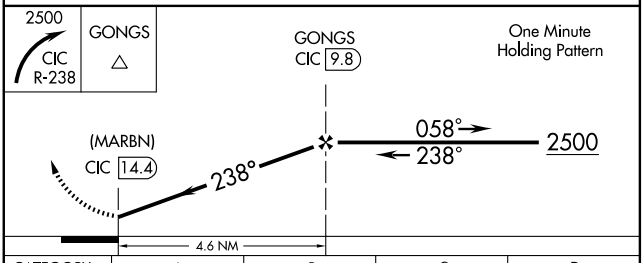
ORLAND/ HAIGH FIELD (037)

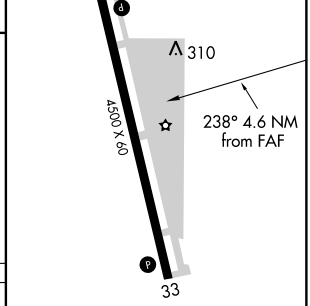
T
A NA — Use Chico altimeter setting, when not received, use Redding altimeter setting.

MISSED APPROACH: Climbing right turn to 2500 via CIC R-238 to GONGS INT and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	900-1 685 (700-1)		900-2 685 (700-2)	900-2¼ 685 (700-2¼)

MIRL Rwy 15-33 L

REDDING ALTIMETER SETTING MINIMUMS

CIRCLING	1020-1 805 (900-1)	1020-1¼ 805 (900-1¼)	1020-2¼ 805 (900-2¼)	1020-2½ 805 (900-2½)

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

SW-2, 22 OCT 2009 to 19 NOV 2009

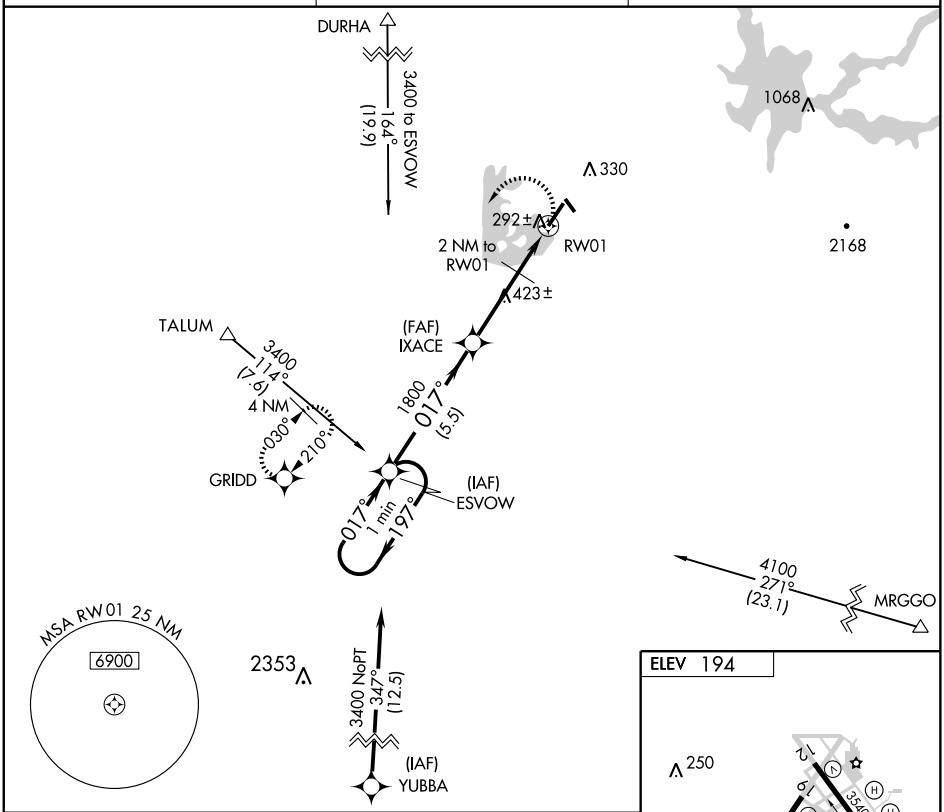
APP CRS	Rwy Idg	6020
017°	TDZE	181
	Apt Elev	194

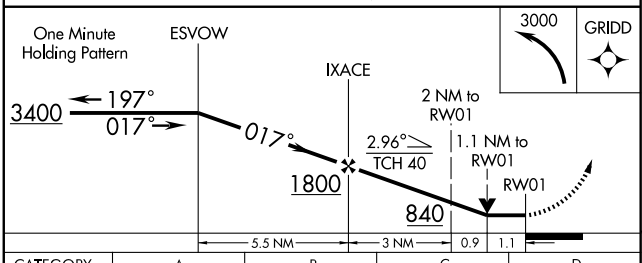
GPS RWY 1
OROVILLE MUNI (OVE)

NA Circling not authorized northeast of Rwy 12-30

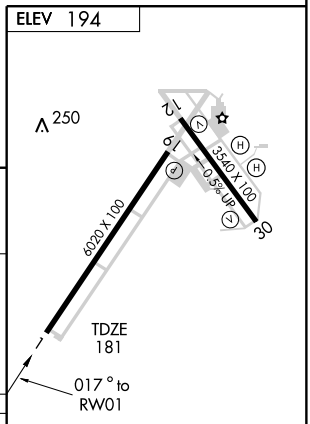
MISSED APPROACH: Climbing left turn to 3000 direct GRIDD WP and hold.

ASOS	NORCAL APP CON	UNICOM
121.425	125.4 259.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-1	560-1 379 (400-1)			NA
CIRCLING	600-1 406 (500-1)	660-1 466 (500-1)	660-1½ 466 (500-1½)	NA



HIRL Rwys 1-19 and 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

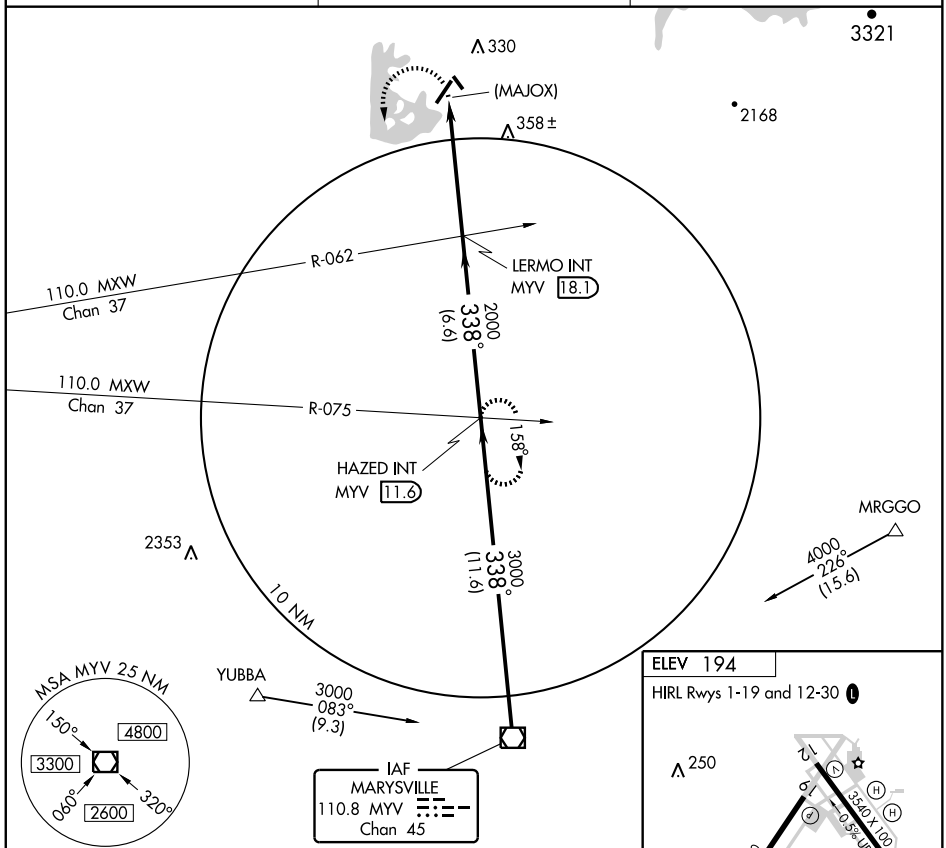
VORTAC MYV 110.8 Chan 45	APP CRS 338°	Rwy Idg N/A TDZE N/A Apt Elev 194

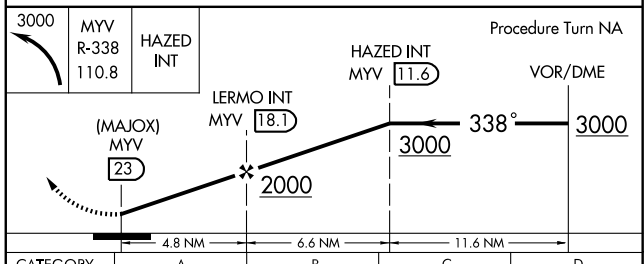
VOR or GPS-A
OROVILLE MUNI (OVE)

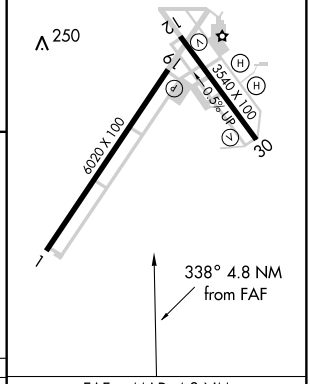
NA — Circling not authorized Northeast Rwy 12-30

MISSED APPROACH: Climbing left turn to 3000 via MYV R-338 to HAZED Int/MYV 11.6 DME and hold.

ASOS	NORCAL APP CON	UNICOM
121.425	125.4 259.1	122.8 (CTAF) L





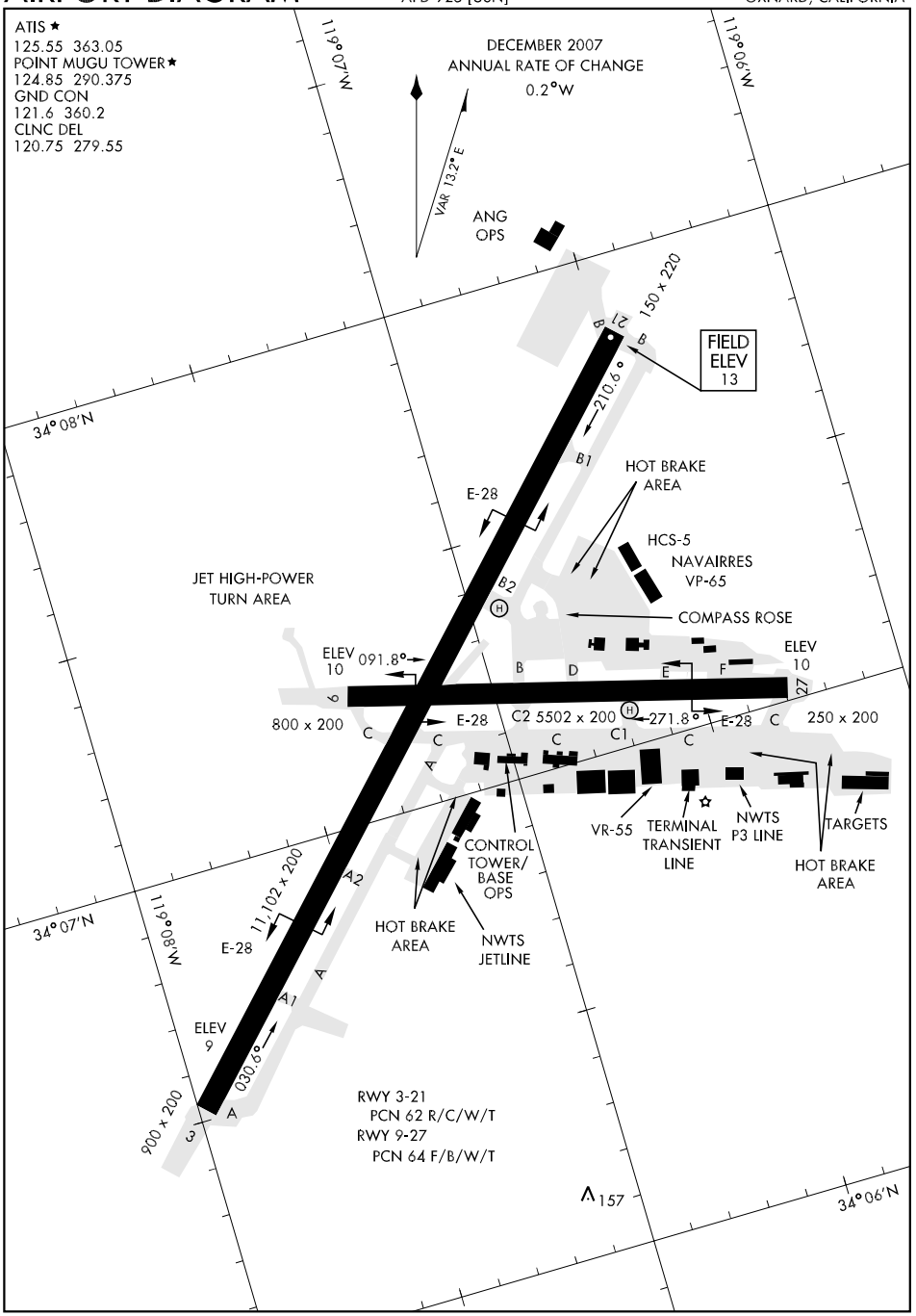


CATEGORY	A	B	C	D
CIRCLING	620-1 426 (500-1)	660-1 466 (500-1)	660-1½ 466 (500-1½)	NA

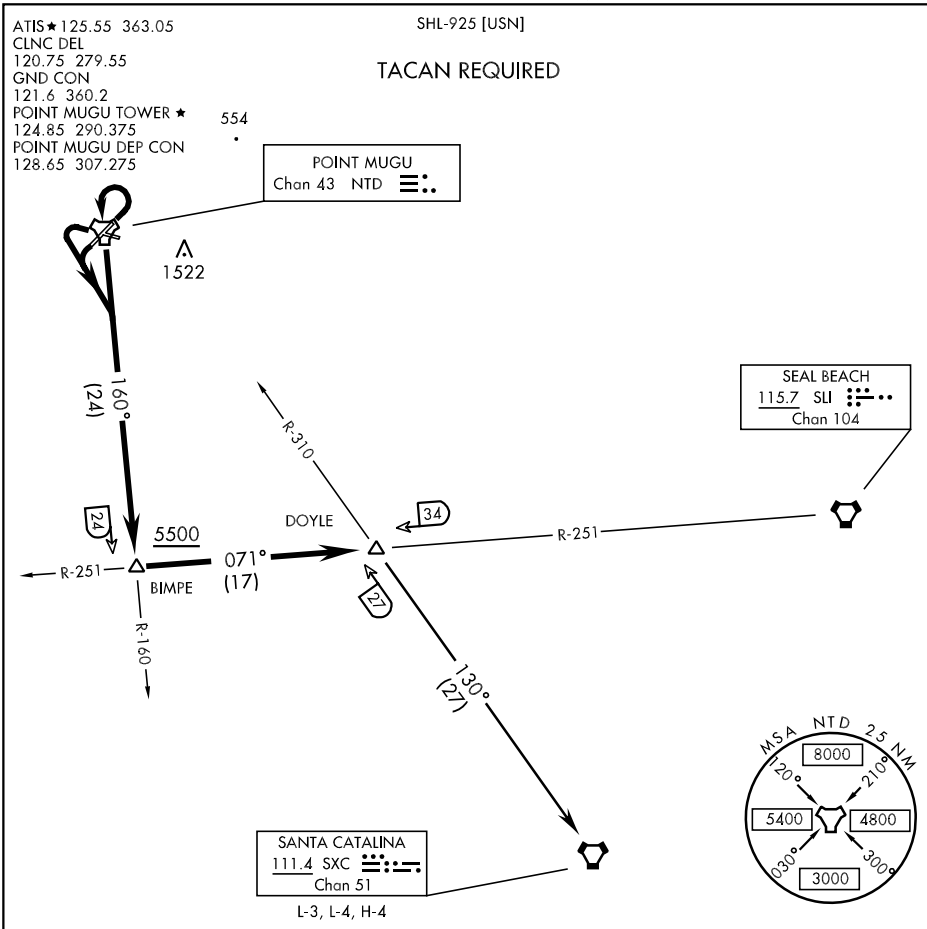
FAF to MAP 4.8 NM

Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

SW-2, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climbing left turn within 3 DME of NTD TACAN, direct NTD, thence...

TAKE-OFF RWY 21, 27: Left turn, thence...

Intercept NTD R-160 and via NTD R-160 to BIMPE (NTD R-160/24 DME), then via SLI VORTAC R-251 to DOYLE, then via assigned routing. Cross BIMPE at or above 5500.

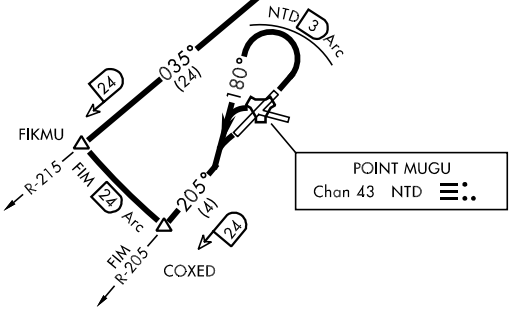
SANTA CATALINA TRANSITION (DOYLE 7 • SXC): DOYLE (SLI R-251/34 DME) to SANTA CATALINA VORTAC via SXC R-310. Then as filed.

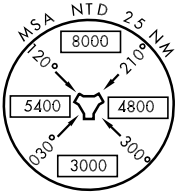
ATIS ★125.55 363.05
CLNC DEL
120.75 279.55
GND CON
121.6 360.2
POINT MUGU TOWER ★
124.85 290.375
POINT MUGU DEP CON
128.65 307.275

SHL-925 [USN]

FILLMORE
112.5 FIM
Chan 72
L-3, L-4, L-7, H-4, A-2

TACAN REQUIRED





SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climbing left turn to heading 180° within 3 DME of NTD TACAN, thence...

TAKE-OFF RWY 21, 27: Left turn, thence...

Intercept FIM VORTAC R-205 to COXED (FIM R-205/24 DME), arc SW of FIM to FIKMU (FIM R-215/24 DME) via FIM 24 mile arc, then via FIM R-215 to FIM, then via assigned routing.

HI-TACAN RWY 21

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
NTD Chan **43**	**213°**	**11,102**	**13**	**13**

JAL-925 [USN]

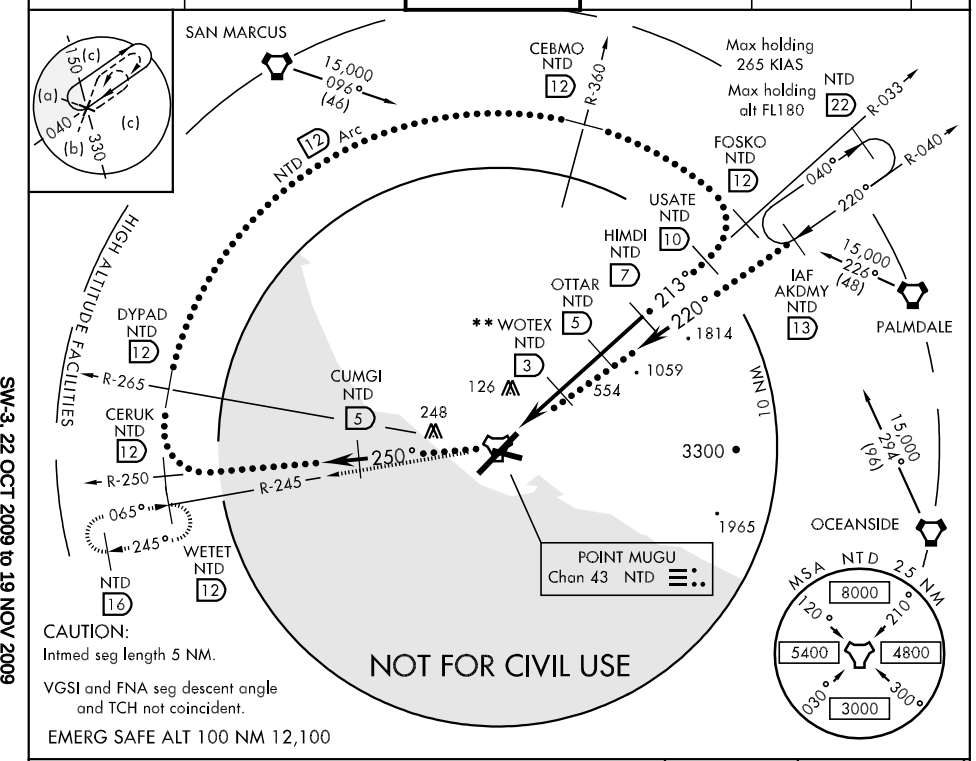
POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)

▼ * When ALS inop, increase CAT C vis to 1 mile, CAT DE to 1¼ miles.
** Alternate MAP, Fly visual to airport.
*** Circling not authorized E of Rwy 3-21 or when alternate MAP Rwy 21 in use.

MALSR A5

MISSED APPROACH: Climb to 5000 via NTD TACAN R-033 to NTD, then via NTD R-245 to WETET and hold.

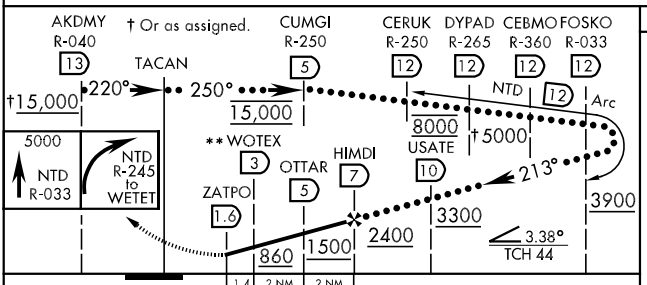
ATIS ★	POINT MUGU APP CON	POINT MUGU TOWER ★	GND CON	CLNC DEL	ASR/PAR
125.55 363.05	128.65 307.275	124.85 290.375	121.6 360.2	120.75 279.55	

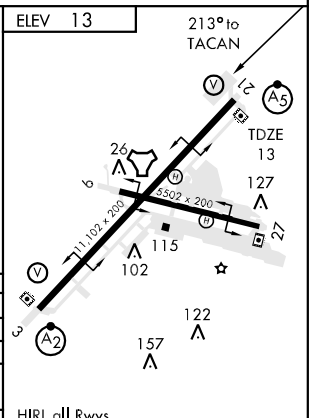


CAUTION:
Intmed seg length 5 NM.

VGSI and FNA seg descent angle and TCH not coincident.

EMERG SAFE ALT 100 NM 12,100





CATEGORY	C	D	E
S-21 *	380-¾	367 (400-¾)	
S-21 **	860-2	847 (900-2)	
CIRCLING ***	480-1½ 467 (500-1½)	580-2 567 (600-2)	
S-PAR 21	113-½	100 (100-½) GS 3.00°	

OXNARD, CALIFORNIA

ILS or LOC/DME RWY 21

LOC I-RRG	APCH CRS	Rwy ldg 11,102
109.3	210°	TDZE 13
Chan 30		Arpt Elev 13

AL-925 [USN]

POINT MUGU NAS
(NAVAL BASE VENTURA CO)(KNTD)

* When ALS inop, increase vis (ILS) CAT ABCD to ¾ mile, (LOC) CAT ABC to 1 mile, CAT D to 1¼ miles.
** Circling not authorized E of Rwy 3-21 or when alternate MAP Rwy 21 in use.

MALSR A5

MISSED APPROACH: Climb to 500 via hdg 210°, then climbing right turn to 3000 via hdg 245°, then climbing right turn to 5000 direct CMA VOR/DME, then via CMA R-071 to CIELO and hold.

ATIS ★	POINT MUGU APP CON	POINT MUGU TOWER ★	GND CON	CLNC DEL	ASR/PAR
125.55 363.05	128.65 307.275	124.85 290.375	121.6 360.2	120.75 279.55	

*** Alternate MAP, Fly visual to airport.

DME or
RADAR REQUIRED

FILLMORE
112.5 FIM
Chan 72

Max holding alt 6000
Min holding alt 4300
Max holding 230 KIAS

1855
1383
I-RRG 15.2
4300
124°
(4.8) 030°
1015

CIELO I-RRG 9.2
030°
210°
(IAF) TROYE I-RRG 15
FELMI I-RRG 13
R-194
1310

CAMARILLO
115.8 CMA
Chan 105
R-071
R-147
600
126
MM
186
WINIE I-RRG 4.5
248
3111

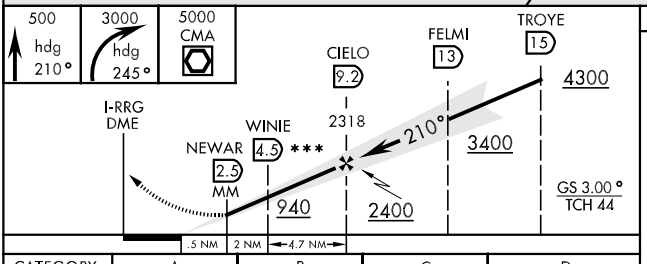
LOCALIZER 109.3
I-RRG
Chan 30

10 NM

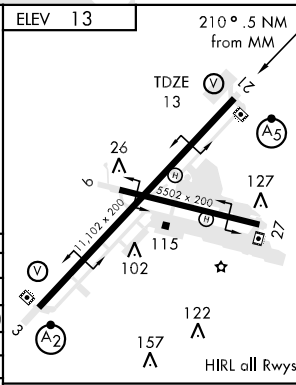
MSA CMA 2.5 NM
8600
210°
090°
5600
3500
320°

EMERG SAFE ALT 100 NM 12,100

500 hdg 210°	3000 hdg 245°	5000 CMA



ELEV 13



CATEGORY	A	B	C	D
S-ILS 21 *	213- ½ 200 (200-½)			
S-LOC 21 *	360- ½ 347 (400-½)			360-¾ 347 (400-¾)
S-ILS 21 ***	886-2 873 (900-2)			
S-LOC 21 ***	940-2 927 (1000-2)			
CIRCLING **	420-1 407 (500-1)	480-1 467 (500-1)	480-1½ 467 (500-1½)	580-2 567 (600-2)
S-PAR 21	113- ½ 100 (100-½) GS 3.0°			

FAF to MAP 6.7 NM					
Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14

RNAV (GPS) RWY 3

POINT MUGU NAS
(NAVAL BASE VENTURA CO)(KNTD)

APCH CRS	Rwy ldg	11,102
030°	TDZE	11
	Arpt Elev	13

AL-925 [USN]

▼ * When ALS inop, increase CAT ABCD vis to 1 mile.
** Circling not authorized E of Rwy 3-21.
*** When ALS inop, increase CAT ABCD vis to ½ mile.

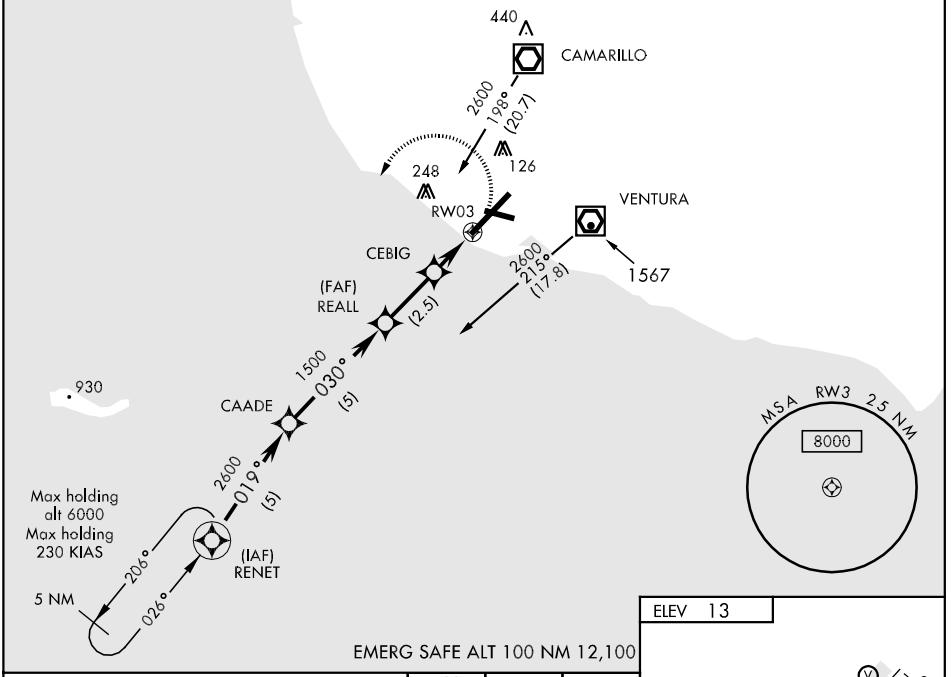
SALSF

MISSED APPROACH: Climb to 500, then climbing left turn to 2600 direct RENET and hold.

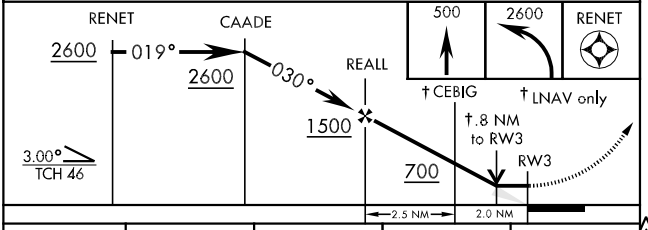
ATIS ★	POINT MUGU APP CON	POINT MUGU TOWER ★	GND CON	CLNC DEL	ASR/PAR
125.55 363.05	128.65 307.275	124.85 290.375	121.6 360.2	120.75 279.55	

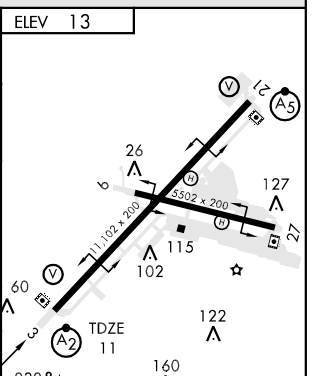
For uncompensated BARO-VNAV systems, LNAV/VNAV NA below -15° C (5° F) or above 42° C (108° F).

DME/DME RNP-0.3 NA



EMERG SAFE ALT 100 NM 12,100





CATEGORY	A	B	C	D
LNAV MDA *	320-¾ 309 (400-¾)			
LNAV/VNAV* DA	321-¾ 310 (400-¾)			
CIRCLING **	420-1 407 (500-1)	480-1 467 (500-1)	480-1½ 467 (500-1½)	580-2 567 (600-2)
S-PAR 3 ***	111-¼ 100 (100-¼) GS 3.0°			

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 21

POINT MUGU NAS (KNTD)
(NAVAL BASE VENTURA CO)

APCH CRS	Rwy ldg	11,102
210°	TDZE	13
	Arpt Elev	13

AL-925 [USN]

* When ALS inop, increase CAT ABC vis to 1 mile, CAT D vis to 1¼ miles.
** When ALS inop, increase CAT ABCD vis to 1 mile.
*** Circling not authorized E of Rwy 3-21.

MALSR

MISSED APPROACH: Climb to 2600 direct RENET and hold.

ATIS ★	POINT MUGU APP CON	POINT MUGU TOWER ★	GND CON	CLNC DEL	ASR/PAR
125.55 363.05	128.65 307.275	124.85 290.375	121.6 360.2	120.75 279.55	

For uncompensated BARO-VNAV systems, LNAV/VNAV NA below -15° C (5° F) or above 37° C (99° F).

DME/DME RNP-0.3 NA

FILLMORE 2287

1855 4000 (4.8) 194° 213° 4 NM

(IAF) TROYE

033°

Mand holding alt 4000

Max holding 230 KIAS

2400 210° (5.8)

CAMARILLO 4000 047° (9.4)

1310

(FAF) CIELO

900 210° (4.6)

KOCKA

126 554

Max airspeed from IAF to FAF 230 KIAS

RW21

248

MSA RW21 25 NM

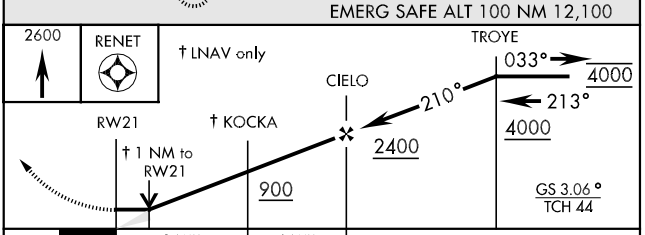
8000

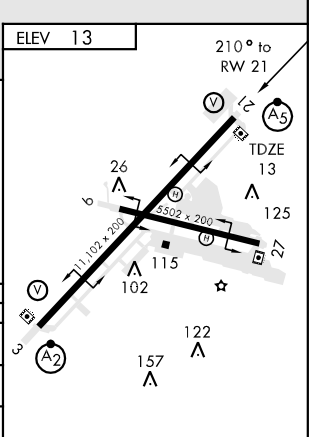
930

RENET

5 NM 206° 026°

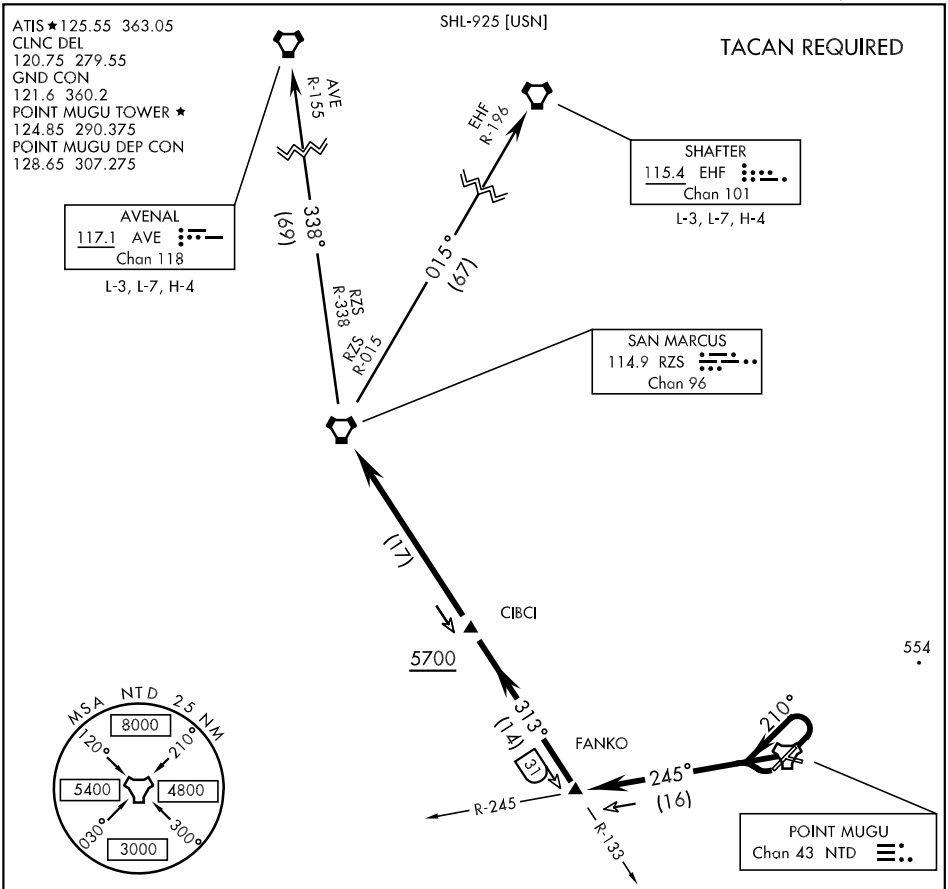
EMERG SAFE ALT 100 NM 12,100





CATEGORY	A	B	C	D
LNAV MDA*	380-¾ 367 (400-¾)			380-1 367 (400-1)
LNAV/VNAV** DA	286-¾ 273 (300-¾)			
CIRCLING ***	420-1 407 (500-1)	480-1 467 (500-1)	480-1½ 467 (500-1½)	580-2 567 (600-2)
S-PAR 21	111-¼ 100 (100-¼) GS 3.0°			

HIRL Rwy 3-21, 9-27



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climbing left turn to 210° within 3 DME of NTD TACAN, thence...

TAKE-OFF RWY 21: Turn right, thence...

TAKE-OFF RWY 27: Turn left, thence...

Intercept NTD R-245 and via NTD R-245 to FANKO (NTD R-245/16 DME), then via RZS VORTAC R-133 to RZS VORTAC, then via assigned routing.
Cross CIBCI (RZS R-133/17 DME) at or above 5700.

AVENAL TRANSITION (RZS 7•AVE): From over SAN MARCUS VORTAC via RZS R-338 to AVENAL VORTAC. Cross SAN MARCUS VORTAC at or above 7900.

SHAFTER TRANSITION (RZS 7•EHF): From over SAN MARCUS VORTAC via RZS R-015 to SHAFTER VORTAC. Cross SAN MARCUS VORTAC at or above 8900.

OXNARD, CALIFORNIA

TACAN or VOR/DME RWY 3

VORTAC FIM 112.5 Chan 72	APCH CRS 025°	Rwy ldg 11,102 TDZE 11 Arpt Elev 13

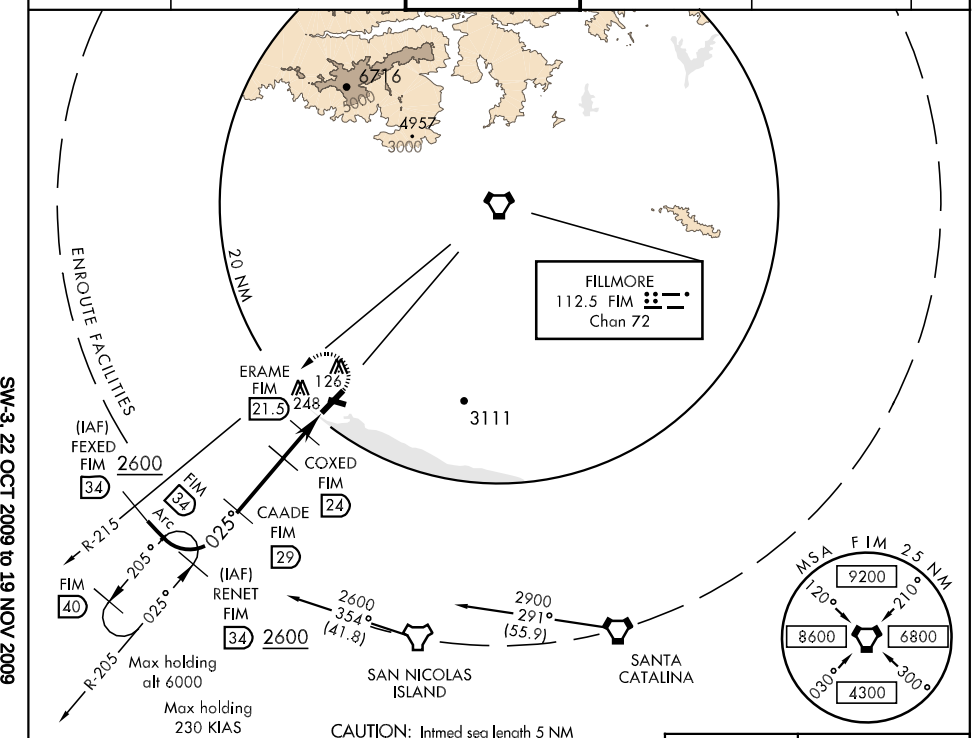
AL-925 [USN] POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)

* When ALS inop, increase vis CAT AB to 1 mile, CAT CD to 1¼ miles, CAT E to 1½ miles; PAR to ½ mile.
** Circling not authorized E of Rwy 3-21.

SALSF

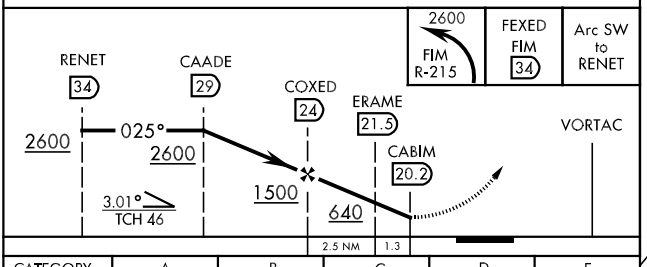
MISSED APPROACH: Climbing left turn to 2600. Intercept the FIM VORTAC R-215, then via FIM R-215 to FEXED, Arc SW of FIM via the 34 DME arc to RENET and hold.

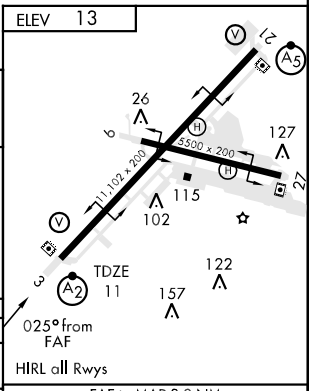
ATIS *	POINT MUGU APP CON	POINT MUGU TOWER *	GND CON	CLNC DEL	ASR/ PAR
125.55 363.05	128.65 307.275	124.85 290.375	121.6 360.2	120.75 279.55	



SW-3, 22 OCT 2009 to 19 NOV 2009

EMERG SAFE ALT 100 NM 12,100





CATEGORY	A	B	C	D	E
S-3 *	420-¾ 409 (500-¾)		420-1 409 (500-1)		420-1¼ 409 (500-1¼)
CIRCLING **	420-1 407 (500-1)	480-1 467 (500-1)	480-1½ 467 (500-1½)	580-2 567 (600-2)	NA
S-PAR 3 *	111-¼		100	(100-¼) GS 3.00°	

FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

TACAN RWY 21

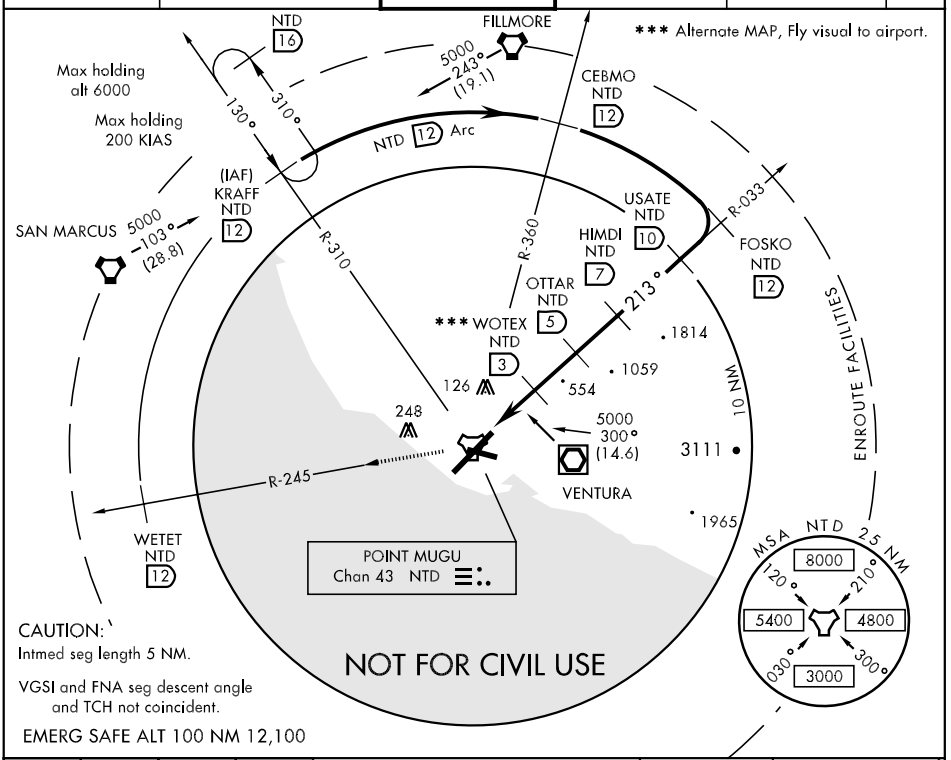
TACAN NTD Chan 43	APCH CRS 213°	Rwy ldg 11,102 TDZE 13 Arpt Elev 13	AL-925 [USN]	POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)

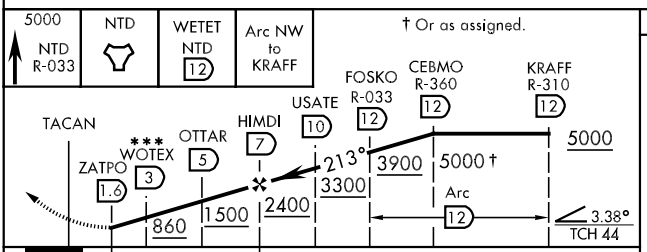
* When ALS inop, increase vis CAT ABC to 1 mile, CAT D to 1¼ miles.
** Circling not authorized E of Rwy 3-21 or when alternate MAP Rwy 21 in use.

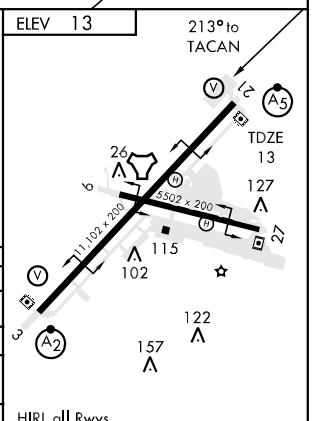
MALSR

MISSED APPROACH: Climb to 5000 via NTD TACAN R-033 to NTD, then via NTD R-245 to WETET. Arc NW on NTD 12 DME arc to KRAFF and hold.

ATIS ★	POINT MUGU APP CON	POINT MUGU TOWER ★	GND CON	CLNC DEL	ASR/ PAR
125.55 363.05	128.65 307.275	124.85 290.375	121.6 360.2	120.75 279.55	





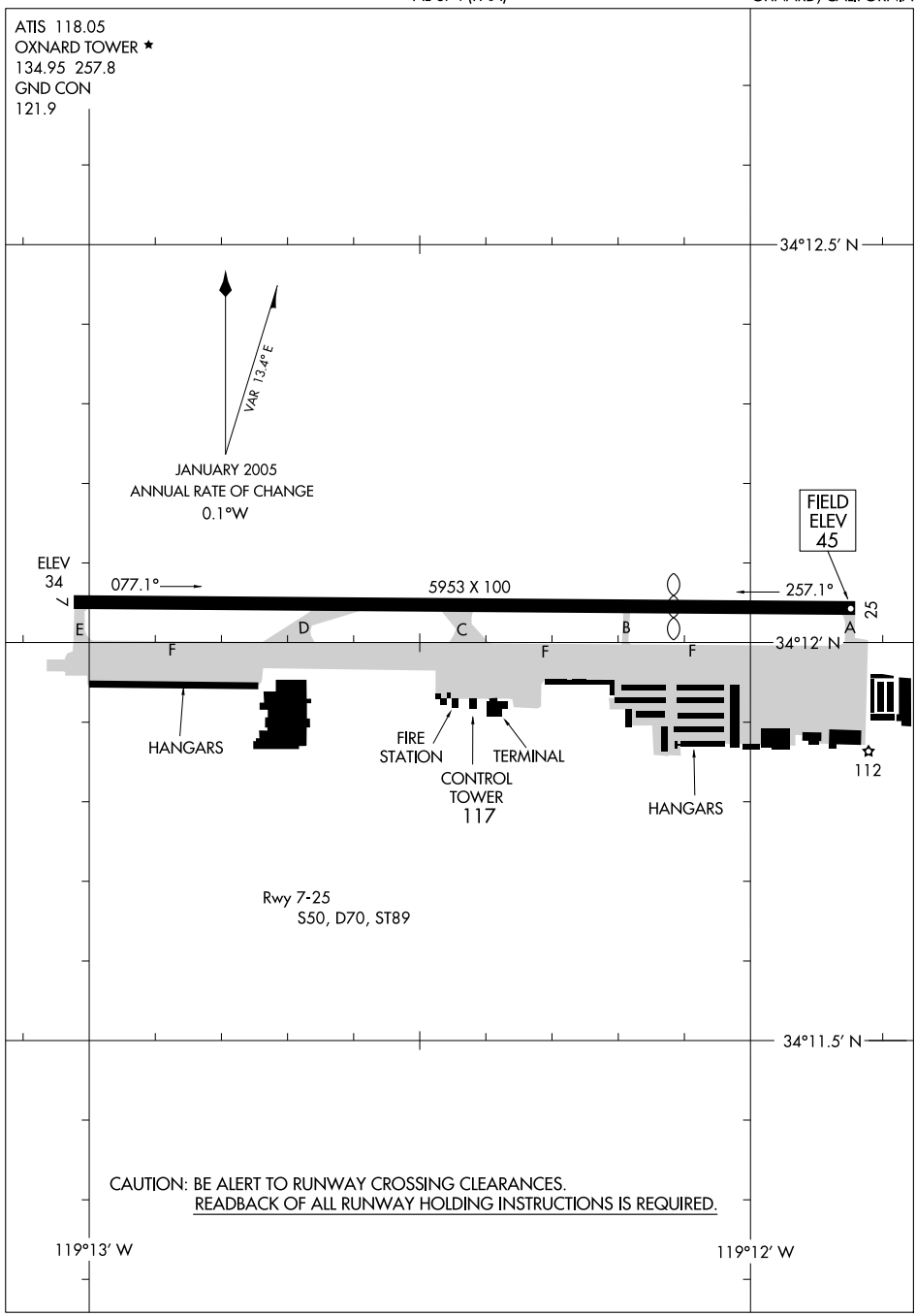


CATEGORY	A	B	C	D	E
S-21 *	380-½ 367 (400-½)		380-¾ 367 (400-¾)		NA
S-21 ***	860-2 847 (900-2)				NA
CIRCLING **	420-1 407 (500-1)	480-1 467 (500-1)	480-1½ 467 (500-1½)	580-2 567 (600-2)	NA
S-PAR 21	113-½ 100 (100-½) GS 3.0°				

AIRPORT DIAGRAM

AL-674 (FAA)

OXNARD (OXR)
OXNARD, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

CAMARILLO FOUR DEPARTURE

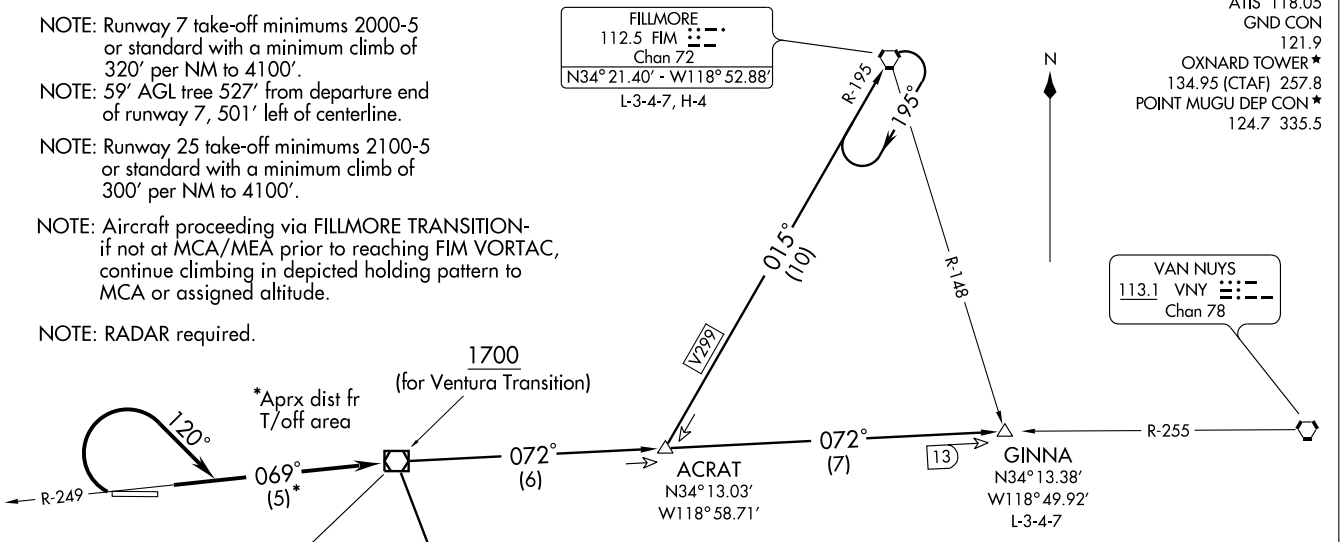
NOTE: Runway 7 take-off minimums 2000-5 or standard with a minimum climb of 320′ per NM to 4100′.

NOTE: 59′ AGL tree 527′ from departure end of runway 7, 501′ left of centerline.

NOTE: Runway 25 take-off minimums 2100-5 or standard with a minimum climb of 300′ per NM to 4100′.

NOTE: Aircraft proceeding via FILLMORE TRANSITION- if not at MCA/MEA prior to reaching FIM VORTAC, continue climbing in depicted holding pattern to MCA or assigned altitude.

NOTE: RADAR required.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Climb to 8000 (or assigned altitude) via CMA R-249 to CMA VOR/DME. . . .

TAKE-OFF RUNWAY 25: Turn right heading 120° to intercept and climb to 8000 (or assigned altitude) via CMA R-249 to CMA VOR/DME. . . . . .thence via (assigned route) or (transition).

FILLMORE TRANSITION (CMA4.FIM): From over CMA VOR/DME via CMA R-072 to ACRAT INT then via FIM R-195 to FIM VORTAC.

GINNA TRANSITION (CMA4.GINNA): From over CMA VOR/DME via CMA R-072 to GINNA INT.

VENTURA TRANSITION (CMA4.VTU): From over CMA VOR/DME via CMA R-144 and VTU R-324 to VTU VOR/DME.

LOC I-OXR	APP CRS	Rwy Idg	4576
108.7	256°	TDZE	41
		Apt Elev	45

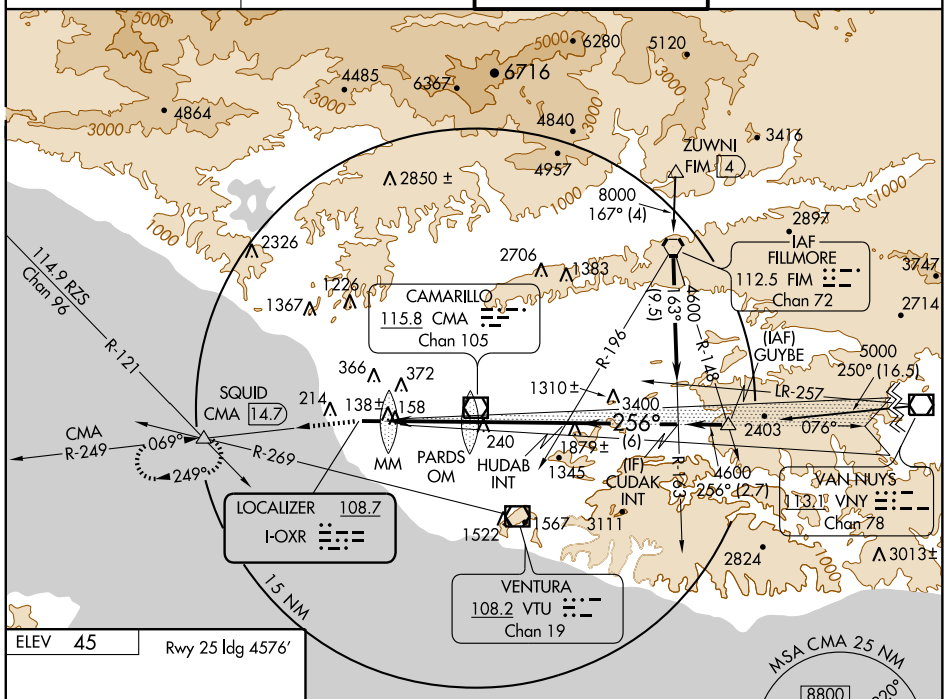
ILS RWY 25
OXNARD (OXR)

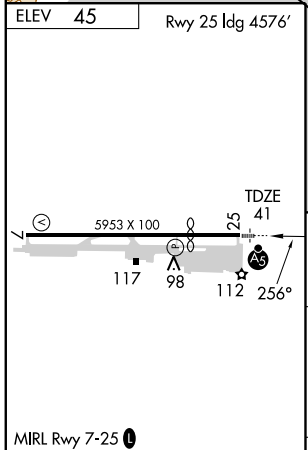
Inoperative table does not apply.
Visibility reduction by helicopters NA.
Autopilot coupled approach NA below 867.
When local altimeter not received, use Camarillo altimeter setting and increase DA to 309 feet.

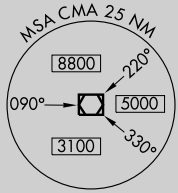
MALSR

MISSED APPROACH: Climb to 2000 via CMA VOR/DME R-249 to SQUID INT/CMA 14.7 DME and hold.

ATIS	POINT MUGU APP CON ★	OXNARD TOWER ★	GND CON
118.05	124.7 335.5	134.95 (CTAF) L 257.8	121.9

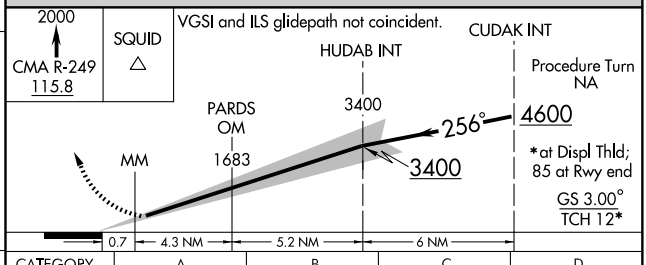






Procedure NA for arrivals on FIM VORTAC airway radials 148 CW 195.

When GS not used, use LOC Rwy 25 procedure.



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-ILS 25	291-1	250 (300-1)		

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-OXR	APP CRS	Rwy Idg	4576
108.7	256°	TDZE	41
		Apt Elev	45

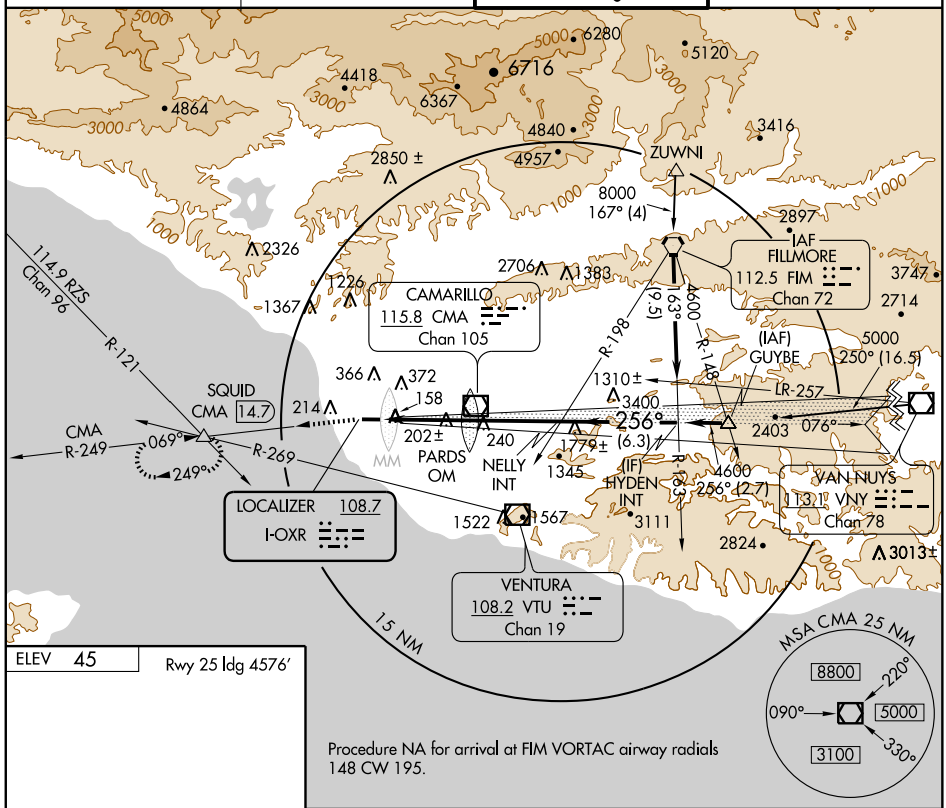
LOC RWY 25
OXNARD (OXR)

T A Inoperative table does not apply. Visibility reduction by helicopters NA. If local altimeter setting not received, use Camarillo altimeter setting and increase all MDAs 20 feet.

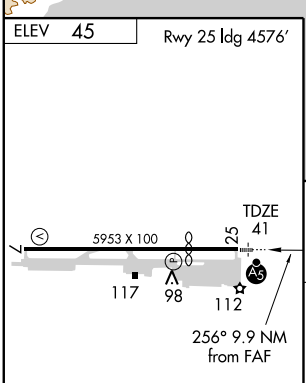
MALSR A5

MISSED APPROACH: Climb to 2000 via CMA VOR/DME R-249 to SQUID INT/CMA 14.7 DME and hold.

ATIS	POINT MUGU APP CON ★	OXNARD TOWER ★	GND CON
118.05	124.7 335.5	134.95 (CTAF) L 257.8	121.9

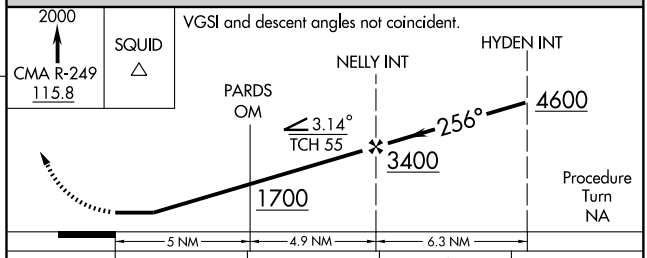


Procedure NA for arrival at FIM VORTAC airway radials 148 CW 195.



MIRL Rwy 7-25 L

FAF to MAP 9.9 NM					
Knots	60	90	120	150	180
Min:Sec	9:54	6:36	4:57	3:58	3:18



CATEGORY	A	B	C	D
S-LOC 25	460-1 419 (500-1)		460-1¼ 419 (500-1¼)	
CIRCLING	500-1 455 (500-1)		500-1½ 455 (500-1½)	700-2 655 (700-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

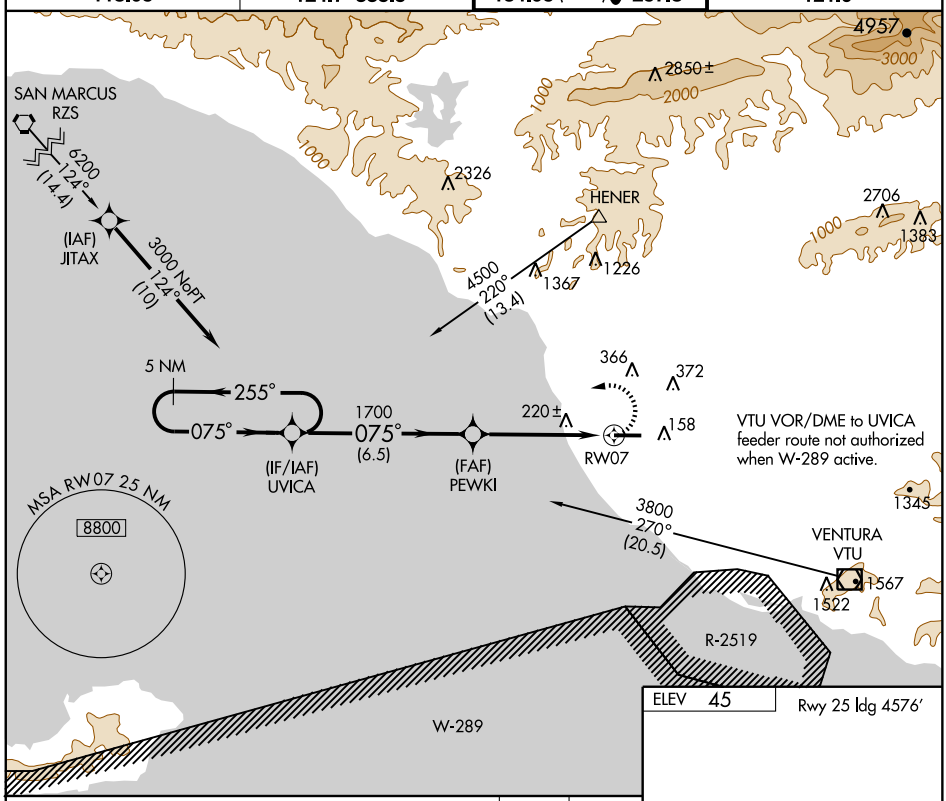
APP CRS	Rwy Idg	5953
075°	TDZE	37
	Apt Elev	45

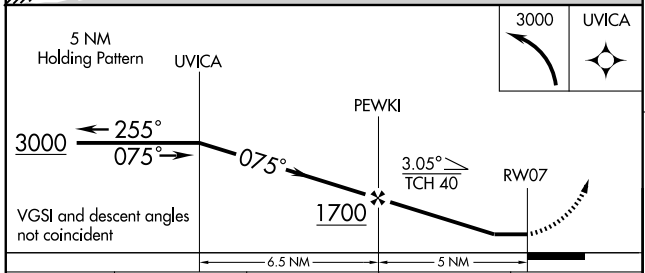
RNAV (GPS) RWY 7
OXNARD (OXR)

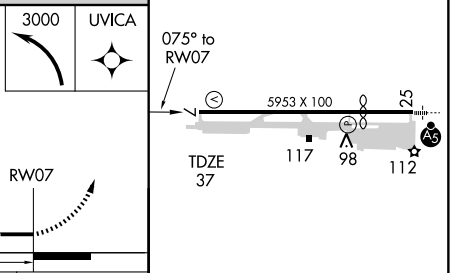
DME/DME RNP -0.3 NA.

MISSED APPROACH: Climbing left turn to 3000 direct UVICA and hold.

ATIS	POINT MUGU APP CON★	OXNARD TOWER★	GND CON
118.05	124.7 335.5	134.95 (CTAF) L 257.8	121.9







CATEGORY	A	B	C	D
LNAV MDA	480-1	443 (500-1)	480-1¼ 443 (500-1¼)	560-1¾ 523 (600-1¾)
CIRCLING	500-1	455 (500-1)	500-1½ 455 (500-1½)	700-2 655 (700-2)

MIRL Rwy 7-25 L

SW-3, 22 OCT 2009 to 19 NOV 2009

OXNARD, CALIFORNIA AL-674 (FAA)

WAAS CH 86299 W25A	APP CRS 256°	Rwy Idg 4576 TDZE 41 Apt Elev 45

RNAV (GPS) RWY 25
OXNARD (OXR)

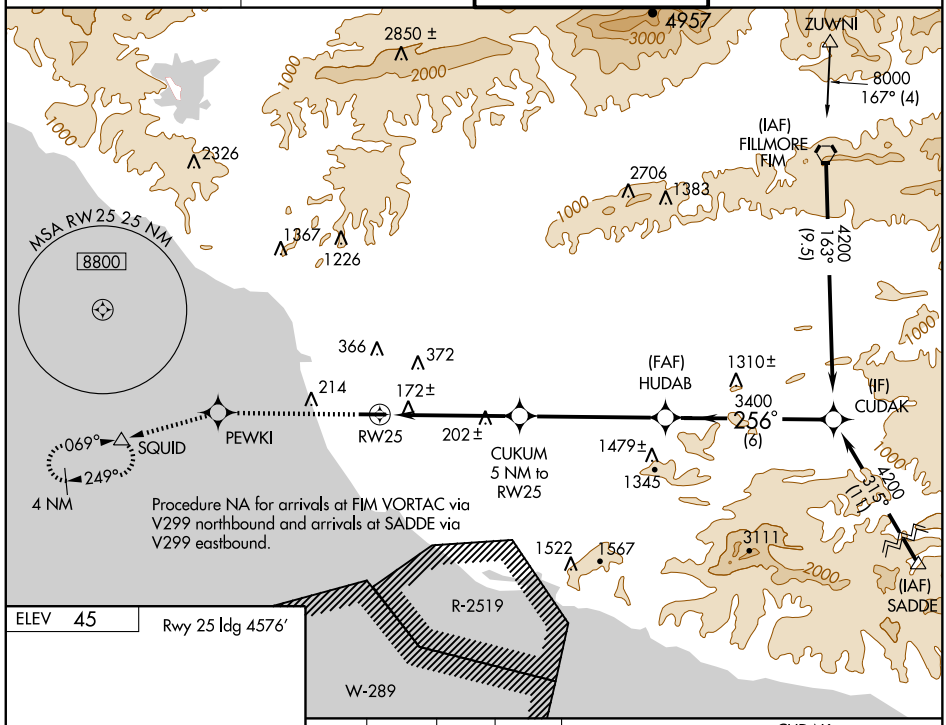
TAW

Inoperative table does not apply. DME/DME RNP -0.3 NA.
Visibility reductions by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (121°F).
If local altimeter setting not received, use Camarillo altimeter setting and increase LPV DA/MDAs 20 feet, and LNAV/VNAV DA 55 feet.
Baro-VNAV NA when using Camarillo altimeter setting.

MALSR

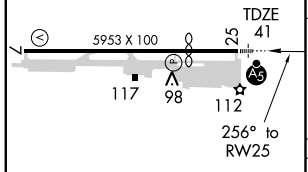
MISSED APPROACH: Climb to 2000 direct PEWKI and via 239° track to SQUID and hold.

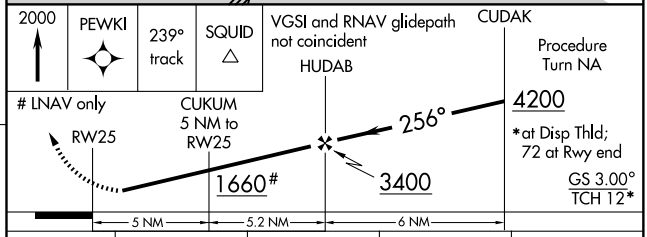
ATIS	POINT MUGU APP CON★	OXNARD TOWER★	GND CON
118.05	124.7 335.5	134.95 (CTAF) L 257.8	121.9



ELEV 45

Rwy 25 Idg 4576′



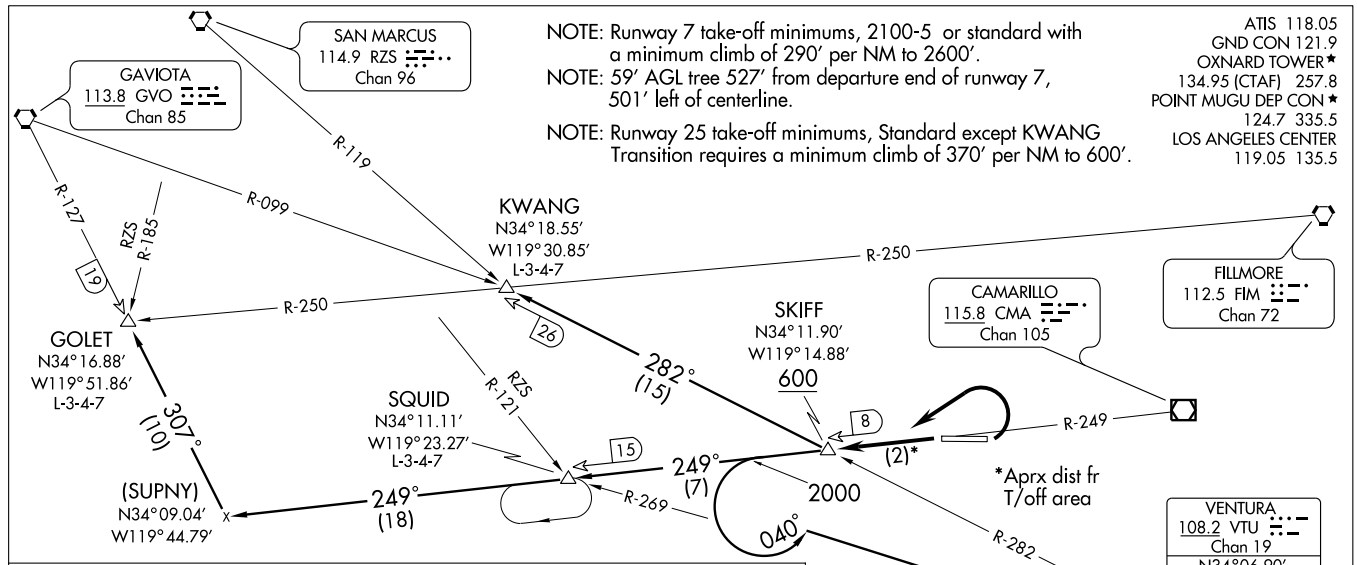


CATEGORY	A	B	C	D
LPV DA	412-1½ 371 (400-1½)			
LNAV/VNAV DA	452-1½ 411 (500-1½)			
LNAV MDA	460-1 419 (500-1)		460-1¼ 419 (500-1¼)	
CIRCLING	500-1 455 (500-1)		500-1½ 455 (500-1½)	700-2 655 (700-2)

MIRL Rwy 7-25 L

SW-3, 22 OCT 2009 to 19 NOV 2009

SKIFF FIVE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Turn left, intercept and climb to 6000 (or assigned altitude) westbound via CMA R-249 to SKIFF INT. . . .

TAKE-OFF RUNWAY 25: Climb to 6000 (or assigned altitude) via CMA R-249 to cross SKIFF INT at or above 600′ MSL. . . . .

. . . . thence via (transition) or (assigned route).

GOLET TRANSITION (SKIFF5.GOLET): From over SKIFF INT via CMA R-249 and GVO R-127 to GOLET INT.

KWANG TRANSITION (SKIFF5.KWANG): From over SKIFF INT via VTU R-282 to KWANG INT.

SQUID TRANSITION (SKIFF5.SQUID): From over SKIFF INT via CMA R-249 to SQUID INT.

VENTURA TRANSITION (SKIFF5.VTU): From over SKIFF INT continue climb via CMA R-249 to 2000, then turn left heading 040° to intercept VTU R-270 to VTU VOR/DME.

VOR/DME CMA	APP CRS	Rwy Idg	4576
115.8	247°	TDZE	40
Chan 105		Apt Elev	43

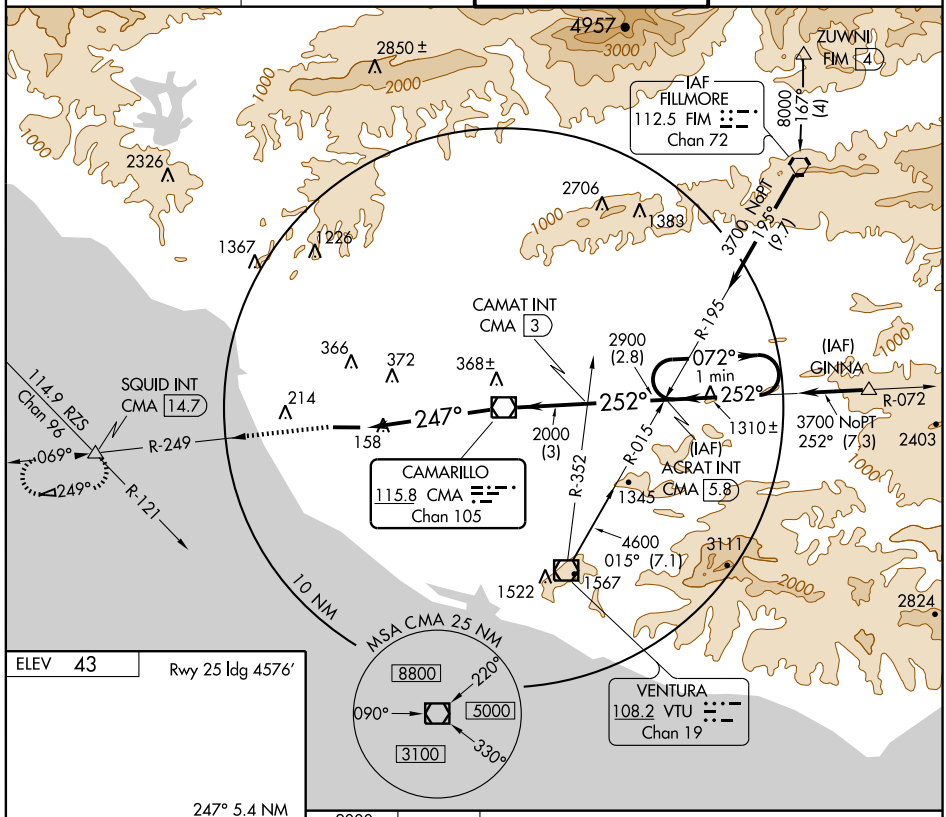
VOR RWY 25
OXNARD (OXR)

Inoperative table does not apply.

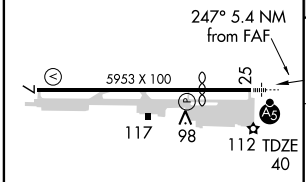
MALSR

MISSED APPROACH: Climb to 2000 via CMA R-249 to SQUID Int/CMA 14.7 DME and hold.

ATIS	POINT MUGU APP CON★	OXNARD TOWER★	GND CON
118.05	124.7 335.5	134.95 (CTAF) L 257.8	121.9



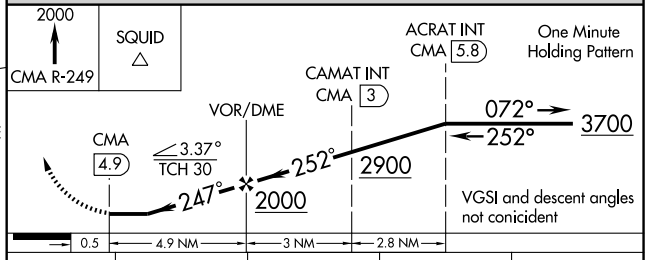
ELEV 43 Rwy 25 ldg 4576'



MIRL Rwy 7-25 L

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



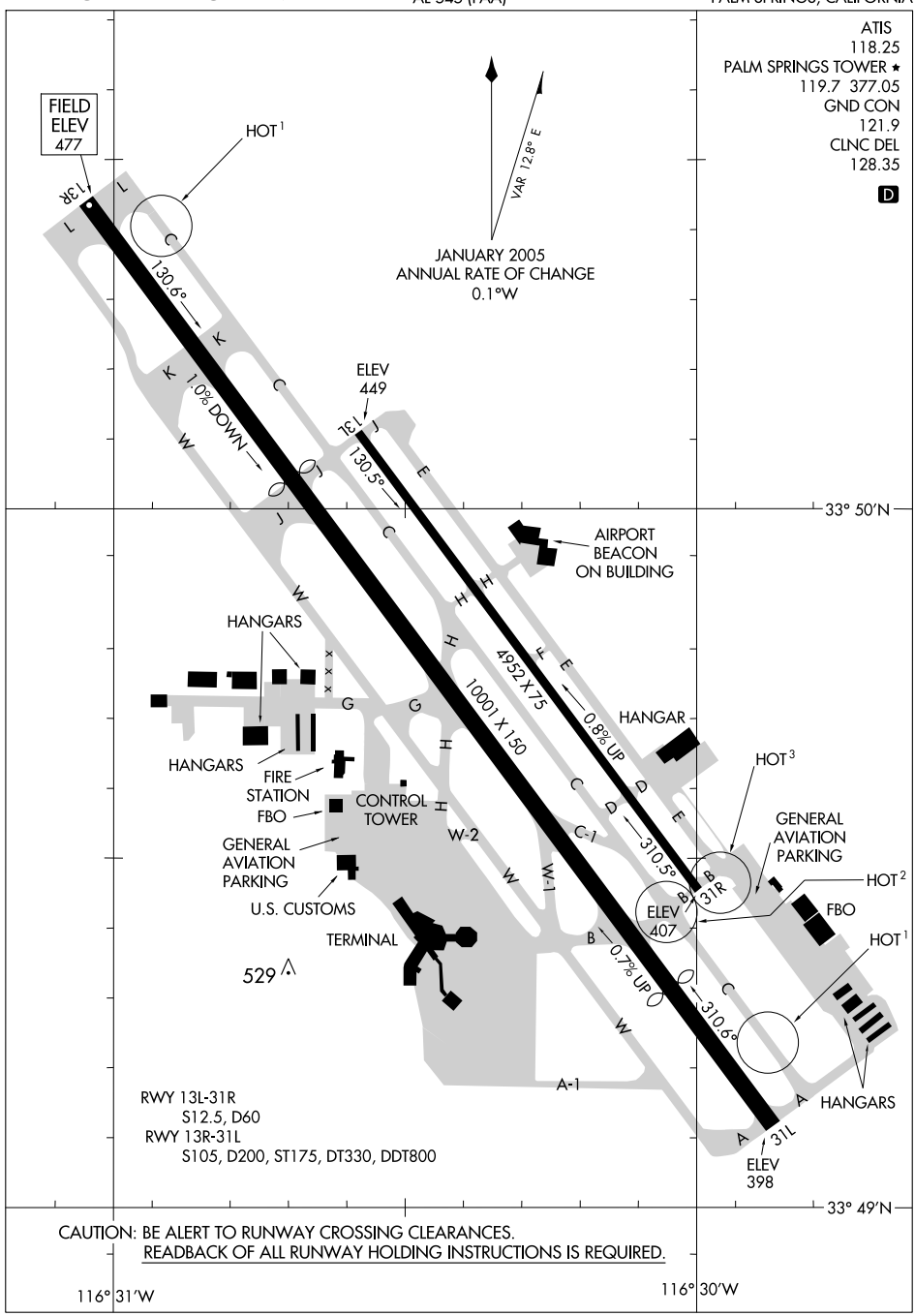
CATEGORY	A	B	C	D
S-25	480-1 440 (500-1)		480-1¼ 440 (500-1¼)	480-1½ 440 (500-1½)
CIRCLING	500-1 457 (500-1)		500-1½ 457 (500-1½)	700-2 657 (700-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-545 (FAA)

PALM SPRINGS INTL (PSP)
PALM SPRINGS, CALIFORNIA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS 118.25
GND CON 121.9
SOCAL DEP CON
126.7 370.95 (W-N)
135.275 251.1 (NE-SW)
PSP ATCT
119.7 377.05

N

MINIMUM CROSSING ALTITUDES
FOR PSP VORTAC
V16-370-372: 11600 W
V370: 6200 NE
V386: 7600 NW
V388: 6300 W
V137: 11200 NW

DAGGETT
113.2 DAG
Chan 79
N34°57.75' - W116°34.69'
L-7, H-4

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13L/R: Climbing left turn heading 100° to cross PSP VORTAC R-176, then turn left heading 040° to intercept PSP R-104, thence . . .

TAKE-OFF RUNWAYS 31L/R: Climb heading 310° to cross PSP VORTAC R-268, then turn right direct PSP VORTAC, thence . . . . . climb via PSP R-104 to EMRUD INT/PSP 10 DME, then turn right direct PSP VORTAC. If not at MEA/MCA at PSP VORTAC, climb in PSP VORTAC holding pattern until reaching MEA/MCA for assigned route of flight.

R-081
V386
SOGGI
N34°30.18'
W116°40.70'
PALMDALE
114.5 PMD
Chan 92
N34°37.88' - W118°03.83'
L-3-4-7, H-4
YUCCA
N34°06.21'
W116°31.26'
R-254
R-231
PARADISE
112.2 PDZ
Chan 59
N33°55.10' - W117°31.80'
L-3-4, H-4
DEWAY
N33°56.92'
W116°44.40'
R-329
V386
PALM SPRINGS
115.5 PSP
Chan 102
N33°52.20'
W116°25.79'
R-053
TWENTYNINE PALMS
114.2 TNP
Chan 89
N34°06.73' - W115°46.19'
L-4, H-4
V388
R-072
R-078
V388
R-268
R-274
R-260
V370
V16-370
V16-370-372
HOMELAND
113.4 HDF
N33°46.58'
W117°11.12'
L-4
R-051
V372
R-054
R-021
BANDS
N33°53.38'
W116°50.97'
OCEANSIDE
115.3 OCN
Chan 100
310°
100°
040°
304°
124°
104°
(10)
R-176
R-124
R-088
V16-372
R-268
EMRUD
N33°47.65'
W116°15.09'
BLYTHE
117.4 BLH
Chan 121
N33°35.76' - W114°45.67'
L-4-5, H-4
THERMAL
116.2 TRM
Chan 109
V137
R-322

TAKE-OFF OBSTACLE NOTES

Rwy 13L: Trees beginning 299' from DER, 530' left of centerline, up to 66' AGL/465' MSL. Hangar 935' from DER, 552' left of centerline, 31' AGL/440' MSL

Rwy 13R: Trees beginning 1170' from DER, 239' right of centerline, up to 100' AGL/599' MSL. Poles beginning 815' from DER, 209' right of centerline, up to 44' AGL/433' MSL. LT 843' from DER, 441' right of centerline, 38' AGL/427' MSL. Antenna 1642' from DER, 26' right of centerline, 53' AGL/442' MSL..

Rwy 31L: Poles beginning 1641' from DER, 125' right of centerline, up to 31' AGL/560' MSL. Towers beginning 2418' from DER, 402' left of centerline, up to 59' AGL/560' MSL. Tree 3016' from DER, 66' right of centerline, 43' AGL/562' MSL.

Rwy 31R: Multiple trees and bushes beginning 305' from DER, 233' right of centerline, up to 48' AGL/507' MSL. Vent on bldg 919' from DER, 399' right of centerline, 15' AGL/474' MSL.

TAKE-OFF MINIMUMS

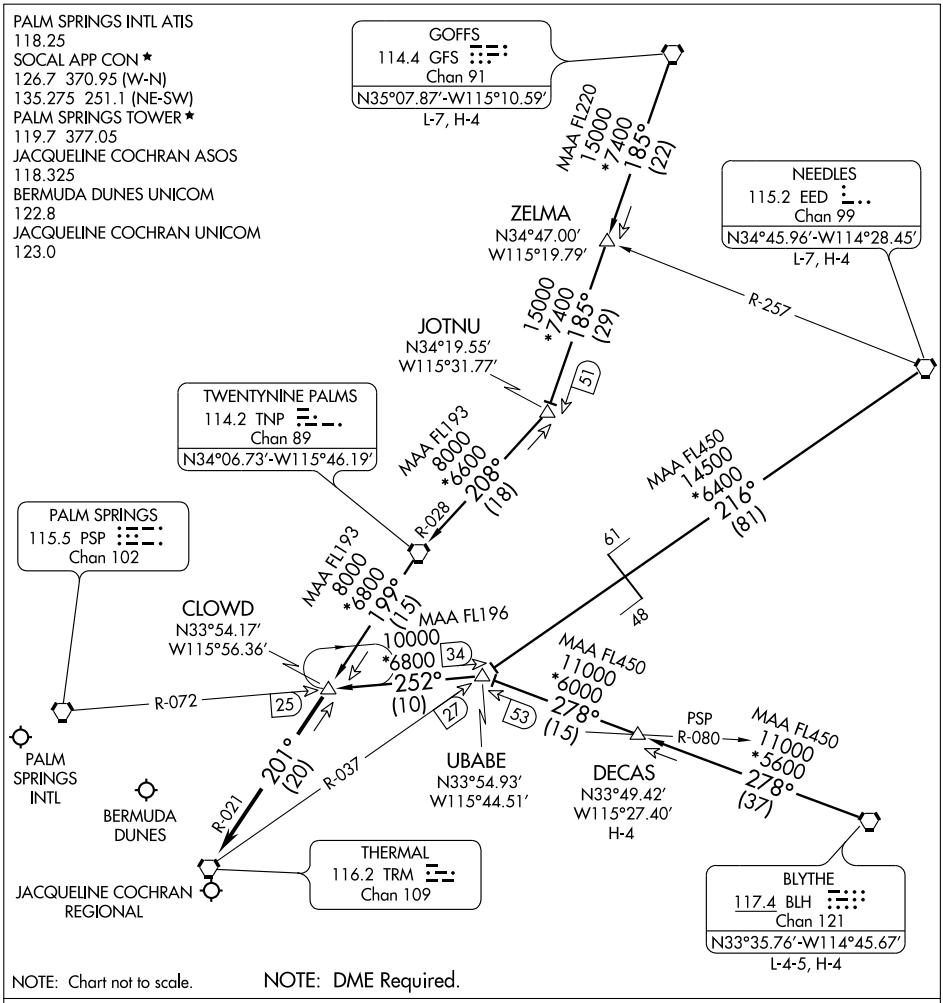
Rwy 13L, Standard with minimum climb of 440' per NM to 2300.
Rwy 13R, Standard with minimum climb of 422' per NM to 2300.
Rwy 31R, Standard with minimum climb of 405' per NM to 2700.
Rwy 31L, Standard with minimum climb of 386' per NM to 2700.

NOTE: Chart not to scale.

CLOWD ONE ARRIVAL

ST-545 (FAA)

PALM SPRINGS, CALIFORNIA



BLYTHE TRANSITION (BLH.CLOWD1): From over BLH VORTAC via BLH R-278 and PSP R-072 to CLOWD DME. Thence....

DECAS TRANSITION (DECAS.CLOWD1): From over DECAS INT via BLH R-278 and PSP R-072 to CLOWD DME. Thence....

GOFFS TRANSITION (GFS.CLOWD1): From over GFS VORTAC via GFS R-185 and TNP R-028 to TNP VORTAC, then via TNP R-199 to CLOWD DME. Thence....

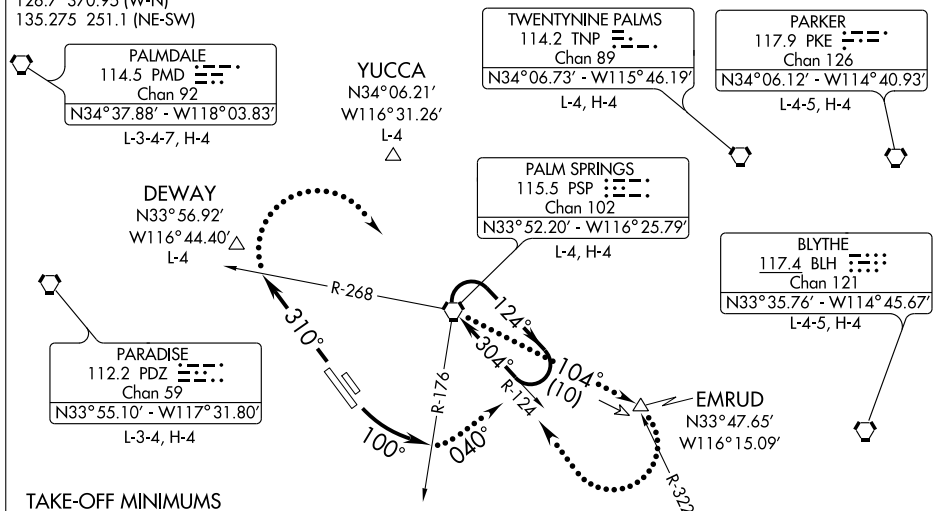
NEEDLES TRANSITION (EED.CLOWD1): From over EED VORTAC via EED R-216 and TRM R-037 to UBABE DME, then via PSP R-072 to CLOWD DME. Thence....

....From over CLOWD DME via TRM R-021 to TRM VORTAC. Expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

PALM SPRINGS FIVE DEPARTURE

ATIS 118.25
GND CON
121.9
SOCAL DEP CON
126.7 370.95 (W-N)
135.275 251.1 (NE-SW)



TAKE-OFF MINIMUMS

Rwy 13R, 13L, 31R, 31L: Minimum climb of 450' per NM to 8000.

TAKE-OFF OBSTACLE NOTES

Rwy 13L: Trees beginning 299' from DER, 530' left of centerline, up to 66' AGL/465' MSL.
Hangar 935' from DER, 552' left of centerline, 31' AGL/440' MSL
Rwy 13R: Trees beginning 1170' from DER, 239' right of centerline, up to 100' AGL/599' MSL.
Poles beginning 815' from DER, 209' right of centerline, up to 44' AGL/433' MSL.
LT 843' from DER, 441' right of centerline, 38' AGL/427' MSL.
Antenna 1642' from DER, 26' right of centerline, 53' AGL/442' MSL..
Rwy 31L: Poles beginning 1641' from DER, 125' right of centerline, up to 31' AGL/550' MSL.
Towers beginning 2418' from DER, 402' left of centerline, up to 59' AGL/560' MSL.
Tree 3016' from DER, 66' right of centerline, 43' AGL/562' MSL.
Rwy 31R: Trees beginning 787' from DER, 326' right of centerline, up to 48' AGL/507' MSL.
Multiple bushes beginning 305' from DER, 233' right of centerline, up to 3' AGL/462' MSL.
Vent on bldg 919' from DER, 399' right of centerline, 15' AGL/474' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13L/R: Turn left heading 100°. Thence. . . .
TAKE-OFF RUNWAYS 31L/R: Climb heading 310°. Thence. . . .

. . . . Maintain assigned altitude, expect vectors to appropriate route/fix, expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:

RUNWAYS 13L/R: If no contact with ATC passing PSP R-176, climbing left turn heading 040° to intercept the PSP R-104. Thence. . . .
RUNWAYS 31L/R: If no contact with ATC passing PSP R-268; climbing right turn direct PSP VORTAC. Thence. . . .
. . .Climb via PSP R-104 to EMRUD, then turn right direct PSP VORTAC. Then via assigned route.

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6857
130°	TDZE	451
	Apt Elev	477

RNAV (RNP) Y RWY 13R

PALM SPRINGS INTL (PSP)

RF and GPS required. Procedure NA when control tower closed. For uncompensated Baro-VNAV systems, procedure NA below 2°C (35°F) or above 48°C (119°F).

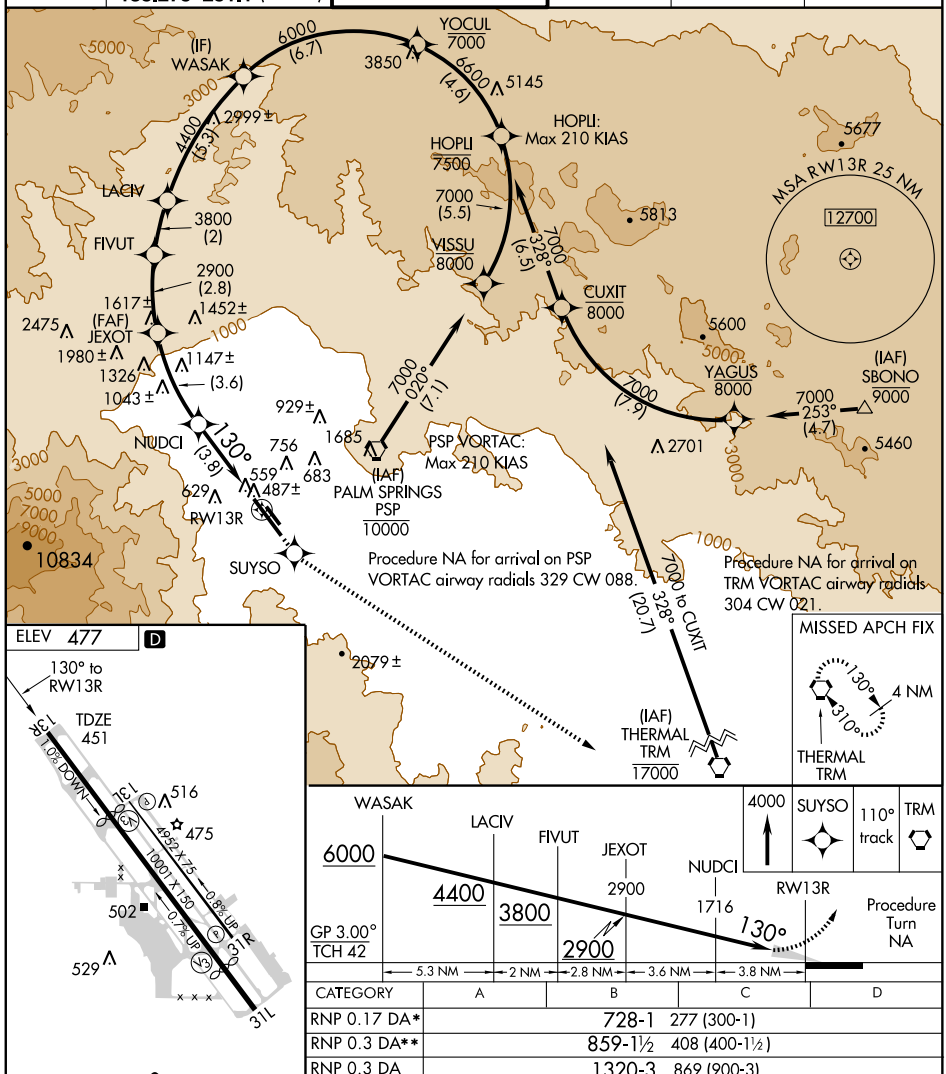
NA

*Missed approach requires minimum climb of 285 feet per NM to 2400.

**Missed approach requires minimum climb of 310 feet per NM to 2900.

MISSED APPROACH: Climb to 4000 direct SUYSO and 110° track to TRM VORTAC and hold.

ATIS	SOCAL APP CON ★	PALM SPRINGS TOWER ★	GND CON	CLNC DEL	UNICOM
118.25	126.7 370.95 (W-N) 135.275 251.1 (NE-SW)	119.7 (CTAF) Ⓛ 377.05	121.9	128.35	122.95



CATEGORY	A	B	C	D
RNP 0.17 DA*		728-1	277 (300-1)	
RNP 0.3 DA**		859-1½	408 (400-1½)	
RNP 0.3 DA		1320-3	869 (900-3)	

HIRL Rwy 13R-31L Ⓛ
MIRL Rwy 13L-31R
REIL Rwys 13L, 13R, 31L, and 31R

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8500
309°	TDZE	430
	Apt Elev	477

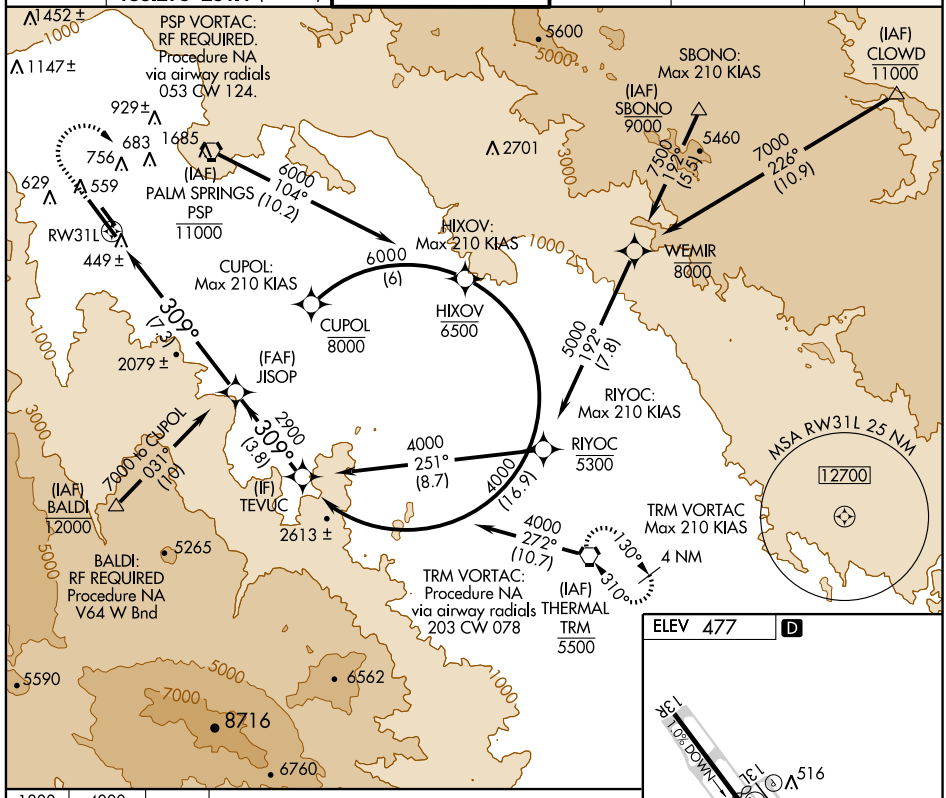
RNAV (RNP) Y RWY 31L

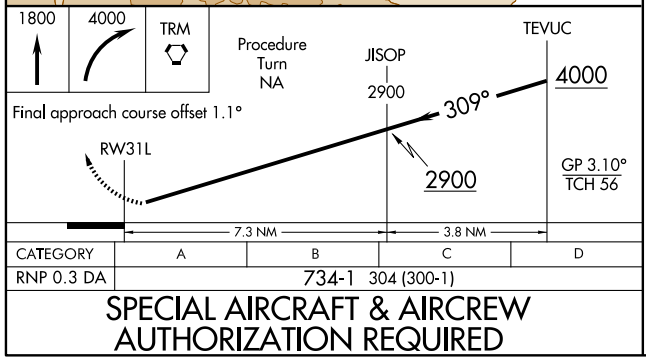
PALM SPRINGS INTL (PSP)

GPS required. Procedure NA when control tower closed.
NA For uncompensated Baro-VNAV systems, procedure NA below 2°C (35°F) or above 38°C (102°F).
Missed approach requires minimum climb of 340' per NM to 3000.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 1800, then climbing right turn to 4000 direct TRM VORTAC and hold.

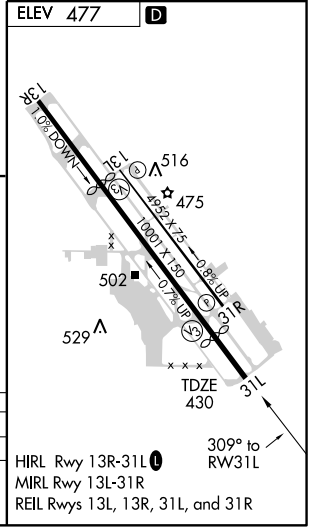
ATIS	SOCAL APP CON ★	PALM SPRINGS TOWER ★	GND CON	CLNC DEL	UNICOM
118.25	126.7 370.95 (W-N) 135.275 251.1 (NE-SW)	119.7 (CTAF) L 377.05	121.9	128.35	122.95





CATEGORY	A	B	C	D
RNP 0.3 DA	734-1 304 (300-1)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



HIRL Rwy 13R-31L L
MIRL Rwy 13L-31R
REIL Rwys 13L, 13R, 31L, and 31R

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6857
130°	TDZE	451
	Apt Elev	477

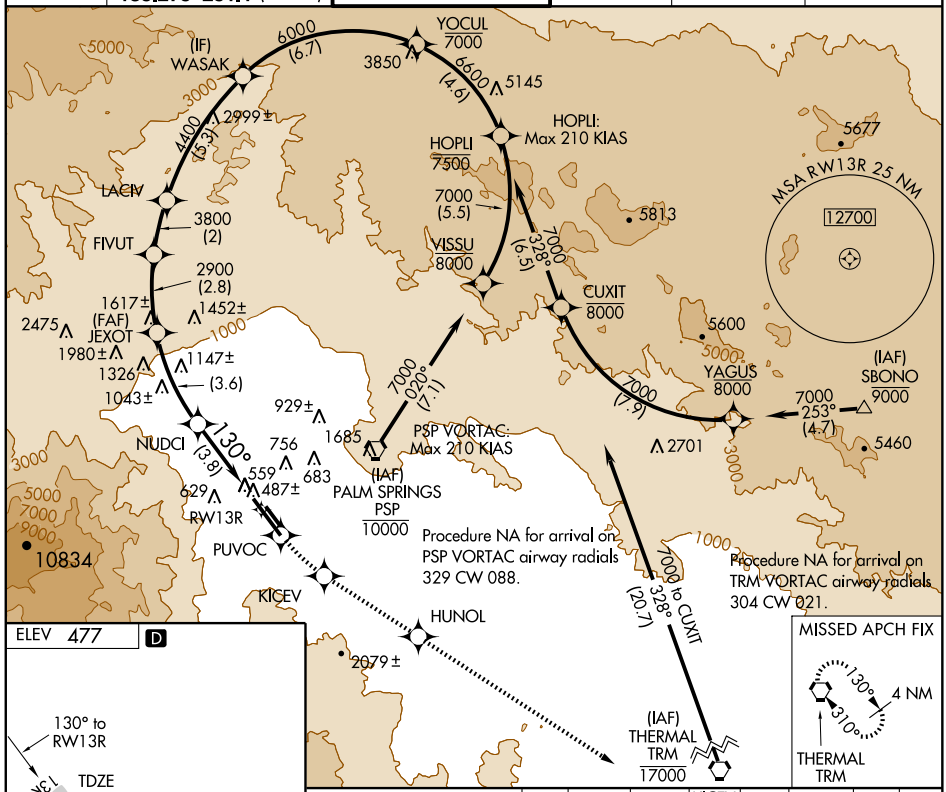
RNAV (RNP) Z RWY 13R

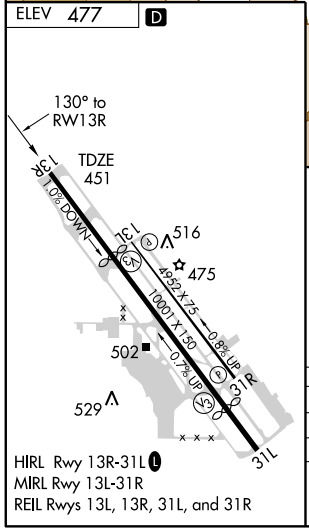
PALM SPRINGS INTL (PSP)

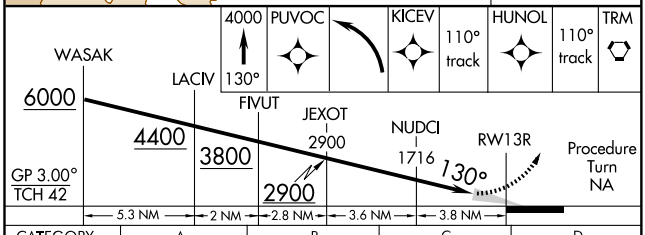
RF and GPS required. Procedure NA when control tower closed. For uncompensated Baro-VNAV systems, procedure NA below 2°C (35°F) or above 48°C (119°F). Missed approach requires RNP less than 1.0.

MISSED APPROACH: Climb to 4000 via 130° track to PUVOC, left radius turn to KICEV, 110° track to HUNOL, 110° track to TRM VORTAC and hold.

ATIS	SOCAL APP CON ★	PALM SPRINGS TOWER ★	GND CON	CLNC DEL	UNICOM
118.25	126.7 370.95 (W-N) 135.275 251.1 (NE-SW)	119.7 (CTAF) L 377.05	121.9	128.35	122.95







CATEGORY	A	B	C	D
RNP 0.17 DA		728-1	277 (300-1)	
RNP 0.3 DA		859-1½	408 (400-1½)	

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

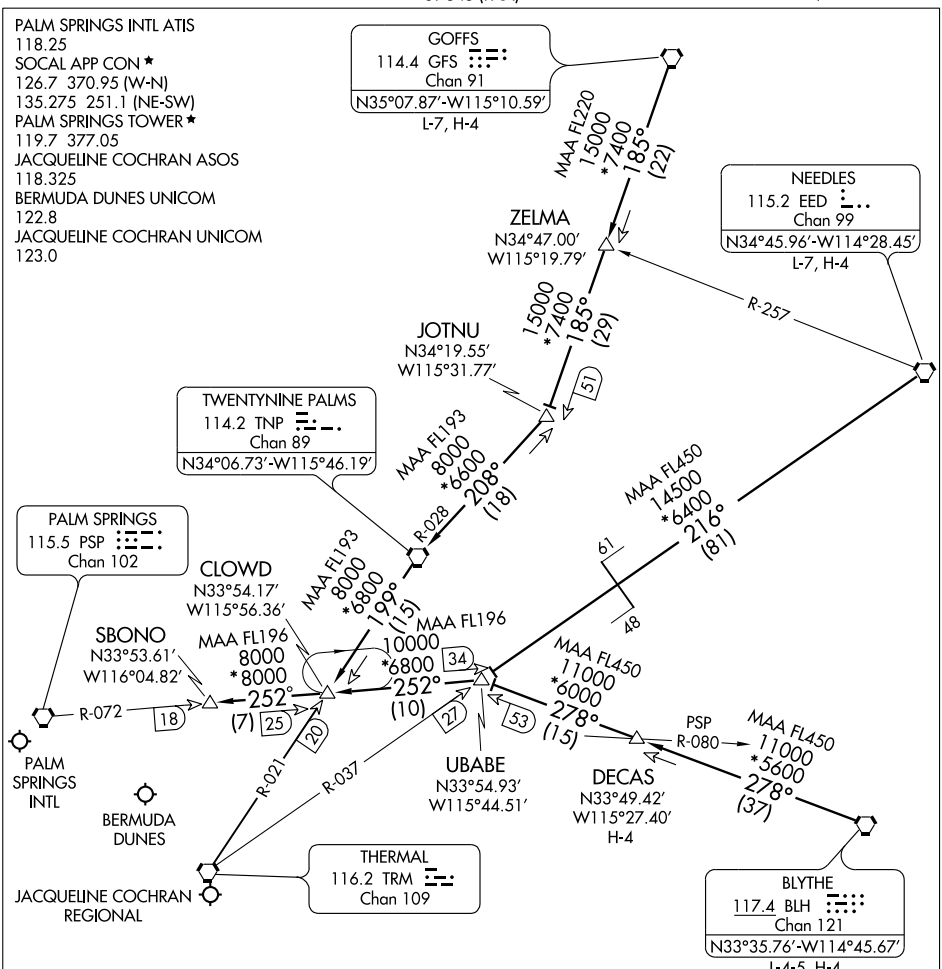
HIRL Rwy 13R-31L L
MIRL Rwy 13L-31R
REIL Rwys 13L, 13R, 31L, and 31R

SW-3, 22 OCT 2009 to 19 NOV 2009

(SBONO.SBONO1) 07298
SBONO ONE ARRIVAL

ST-545 (FAA)

PALM SPRINGS, CALIFORNIA



NOTE: Chart not to scale.

NOTE: DME Required.

BLYTHE TRANSITION (BLH.SBONO1): From over BLH VORTAC via BLH R-278 and PSP R-072 to SBONO DME. Thence....

DECAS TRANSITION (DECAS.SBONO1): From over DECAS INT via BLH R-278 and PSP R-072 to SBONO DME. Thence....

GOFFS TRANSITION (GFS.SBONO1): From over GFS VORTAC via GFS R-185 and TNP R-028 to TNP VORTAC, then via TNP R-199 and PSP R-072 to SBONO DME. Thence....

NEEDLES TRANSITION (EED.SBONO1): From over EED VORTAC via EED R-216 and TRM R-037 to UBABE DME, then via PSP R-072 to SBONO DME. Thence....

....From over SBONO DME expect radar vectors to final approach course.

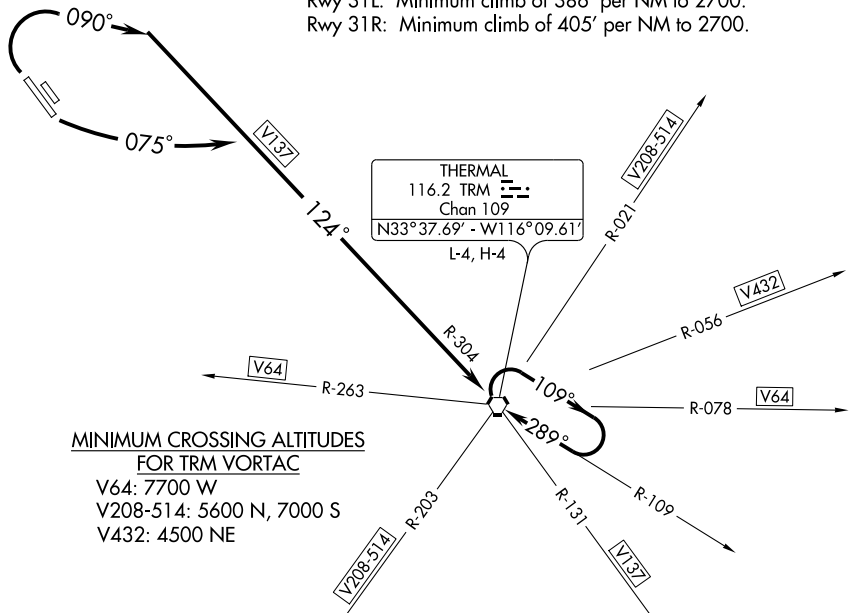
SW-3, 22 OCT 2009 to 19 NOV 2009

THERMAL SIX DEPARTURE

ATIS 118.25
GND CON
121.9
SOCAL DEP CON
126.7 370.95 (W-N)
135.275 251.1 (NE-SW)

TAKE-OFF MINIMUMS

Rwy 13L: Minimum climb of 440′ per NM to 2300.
Rwy 13R: Minimum climb of 422′ per NM to 2300.
Rwy 31L: Minimum climb of 386′ per NM to 2700.
Rwy 31R: Minimum climb of 405′ per NM to 2700.



MINIMUM CROSSING ALTITUDES FOR TRM VORTAC

V64: 7700 W
V208-514: 5600 N, 7000 S
V432: 4500 NE

TAKE-OFF OBSTACLE NOTES

Rwy 13L: Trees beginning 299′ from DER, 530′ left of centerline, up to 66′ AGL/465′ MSL.
Hangar 935′ from DER, 552′ left of centerline, 31′ AGL/440′ MSL
Rwy 13R: Trees beginning 1170′ from DER, 239′ right of centerline, up to 100′ AGL/599′ MSL.
Poles beginning 815′ from DER, 209′ right of centerline, up to 44′ AGL/433′ MSL.
LT 843′ from DER, 441′ right of centerline, 38′ AGL/427′ MSL.
Antenna 1642′ from DER, 26′ right of centerline, 53′ AGL/442′ MSL..
Rwy 31L: Poles beginning 1641′ from DER, 125′ right of centerline, up to 31′ AGL/550′ MSL.
Towers beginning 2418′ from DER, 402′ left of centerline, up to 59′ AGL/560′ MSL.
Tree 3016′ from DER, 66′ right of centerline, 43′ AGL/562′ MSL.
Rwy 31R: Trees beginning 787′ from DER, 326′ right of centerline, up to 48′ AGL/507′ MSL.
Multiple bushes beginning 305′ from DER, 233′ right of centerline, up to 3′ AGL/462′ MSL.
Vent on bldg 919′ from DER, 399′ right of centerline, 15′ AGL/474′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13L/R: Climbing left turn heading 075° to intercept TRM R-304 to TRM VORTAC. Thence . . . .

TAKE-OFF RUNWAYS 31L/R: Climb heading 090° to intercept TRM R-304 to TRM VORTAC. Thence . . . .

. . . .If not at MEA/MCA at TRM VORTAC, climb in TRM holding pattern until reaching the MEA/MCA for assigned route of flight.

PALM SPRINGS, CALIFORNIA

AL-545 (FAA)

VOR or GPS-B

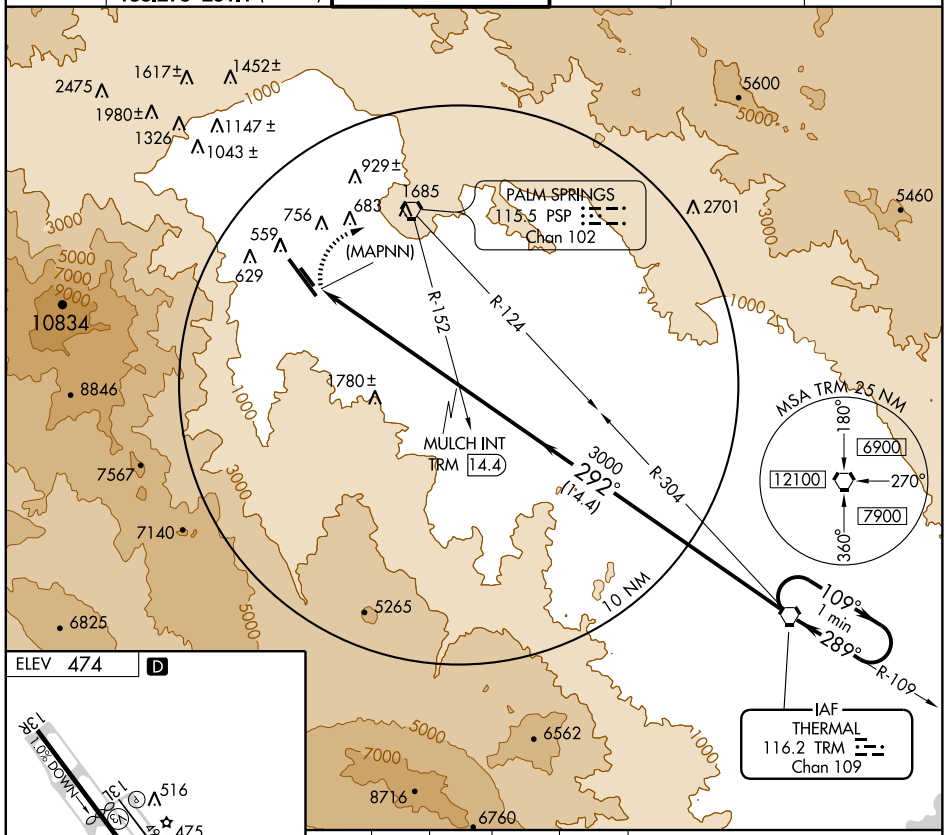
PALM SPRINGS INTL (PSP)

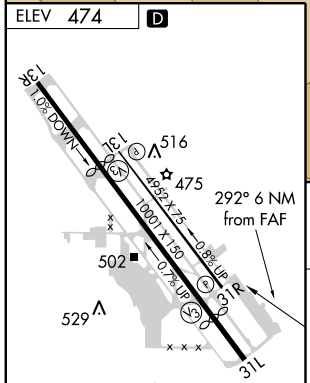
VORTAC TRM	APP CRS	Rwy Idg	N/A
116.2	292°	TDZE	N/A
Chan 109		Apt Elev	474

Circling not authorized southwest of Rwy 13R-31L.

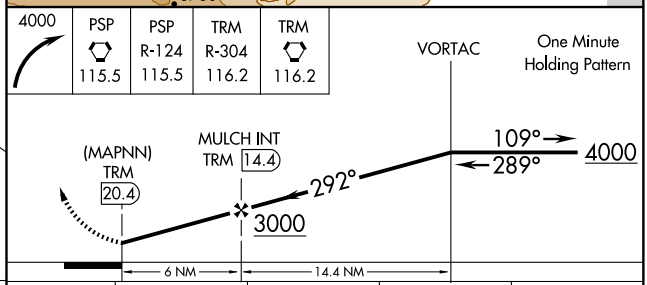
MISSED APPROACH: Climbing right turn to 4000 direct PSP VORTAC then via PSP R-124 and TRM R-304 to TRM VORTAC and hold.

ATIS	SOCAL APP CON ★	PALM SPRINGS TOWER ★	GND CON	CLNC DEL	UNICOM
118.25	126.7 370.95 (W-N) 135.275 251.1 (NE-SW)	119.7 (CTAF) L 377.05	121.9	128.35	122.95





HIRL Rwy 13R-31L L
MIRL Rwy 13L-31R
REIL Rwys 13L, 13R, 31L, and 31R



FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

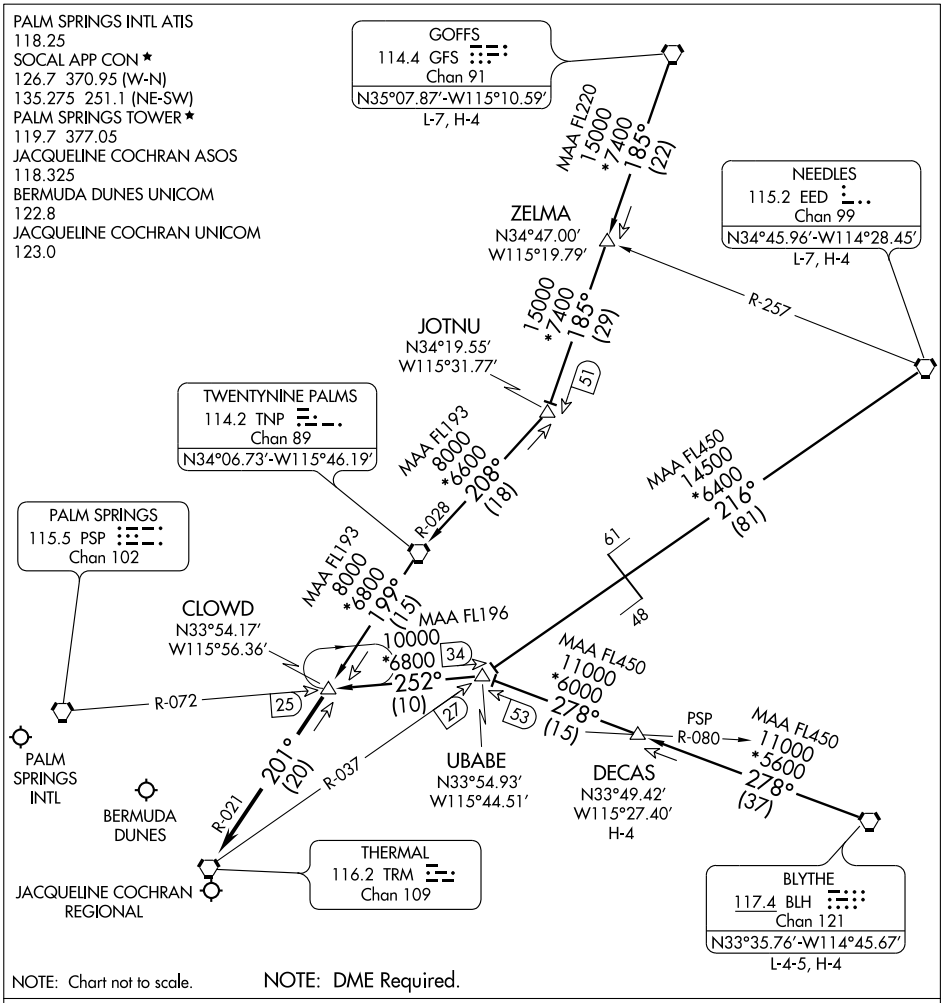
CATEGORY	A	B	C	D
CIRCLING	2300-1¼ 1826 (1900-1¼)	2300-1½ 1826 (1900-1½)	2300-3	1826 (1900-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

CLOWD ONE ARRIVAL

ST-545 (FAA)

PALM SPRINGS, CALIFORNIA



BLYTHE TRANSITION (BLH.CLOWD1): From over BLH VORTAC via BLH R-278 and PSP R-072 to CLOWD DME. Thence....

DECAS TRANSITION (DECAS.CLOWD1): From over DECAS INT via BLH R-278 and PSP R-072 to CLOWD DME. Thence....

GOFFS TRANSITION (GFS.CLOWD1): From over GFS VORTAC via GFS R-185 and TNP R-028 to TNP VORTAC, then via TNP R-199 to CLOWD DME. Thence....

NEEDLES TRANSITION (EED.CLOWD1): From over EED VORTAC via EED R-216 and TRM R-037 to UBABE DME, then via PSP R-072 to CLOWD DME. Thence....

....From over CLOWD DME via TRM R-021 to TRM VORTAC. Expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

PALM SPRINGS, CALIFORNIA AL-529 (FAA)

APP CRS	Rwy Idg	4995
302°	TDZE	-121
	Apt Elev	-114

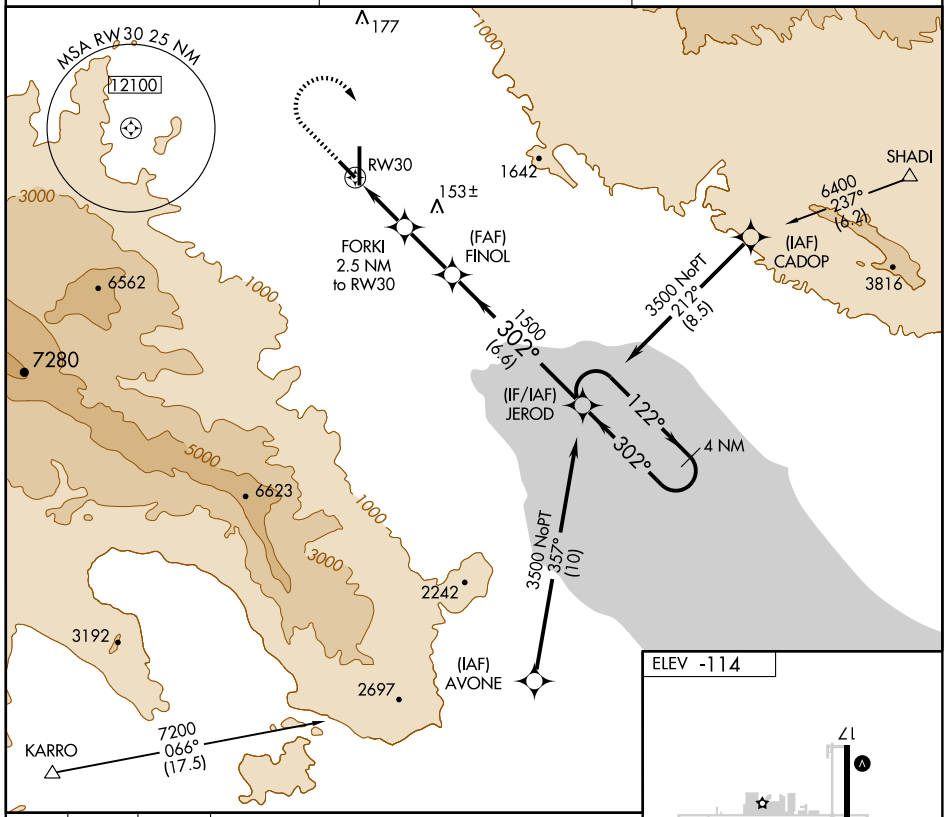
RNAV (GPS) RWY 30

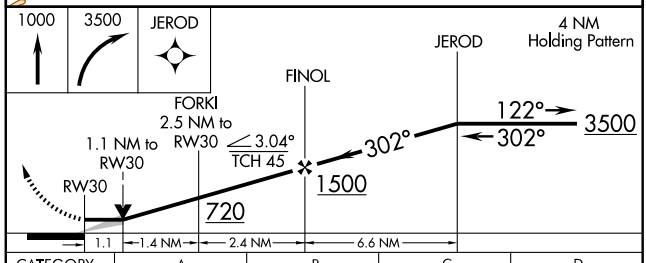
PALM SPRINGS/ JACQUELINE COCHRAN RGNL (TRM)

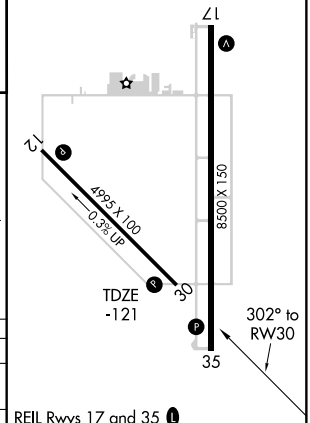
T
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3500 direct JEROD WP and hold.

ASOS	SOCAL APP CON ★	UNICOM
118.325	135.275 251.1	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	260-1 374 (400-1)			260-1¼ 374 (400-1¼)
CIRCLING	320-1 434 (500-1)	340-1 454 (500-1)	340-1½ 454 (500-1½)	500-2 614 (700-2)

REIL Rwys 17 and 35 L
MIRL Rwys 12-30 and 17-35 L

SW-3, 22 OCT 2009 to 19 NOV 2009

PALM SPRINGS, CALIFORNIA

AL-529 (FAA)

APP CRS	Rwy Idg	8500
336°	TDZE	-124
	Apt Elev	-114

RNAV (GPS) RWY 35

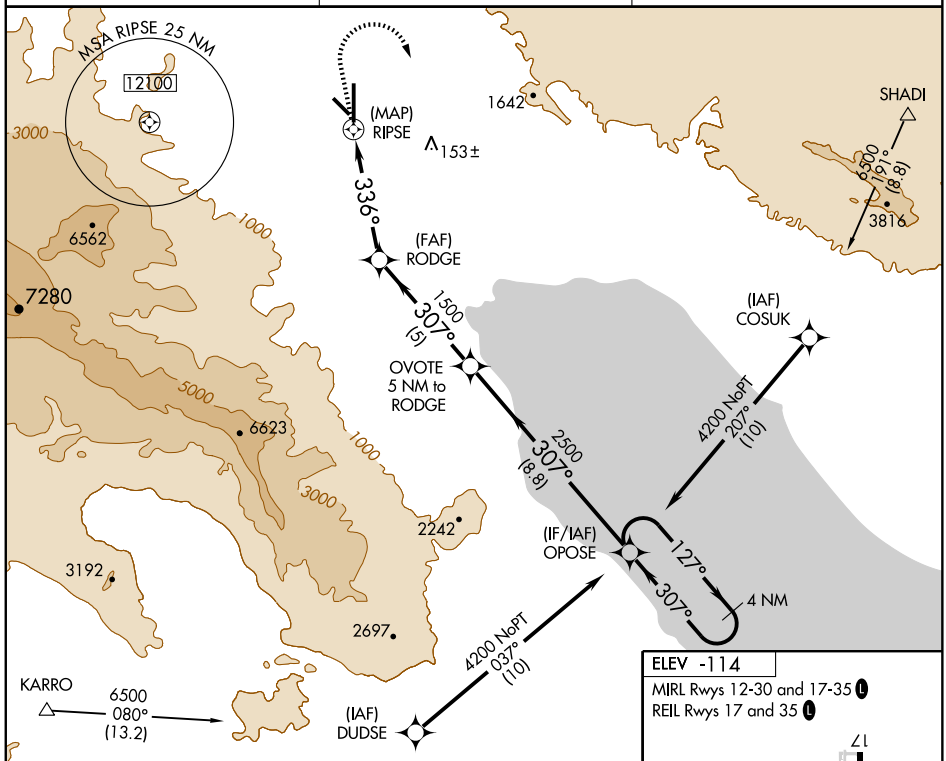
PALM SPRINGS/ JACQUELINE COCHRAN RGNL (TRM)

T
A NA

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 1350 then climbing right turn to 4200 direct OPOSE WP and hold.

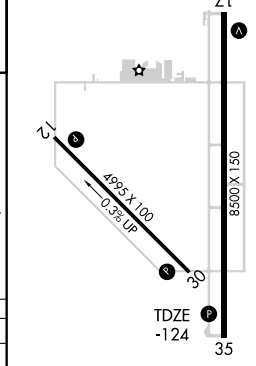
ASOS	SOCAL APP CON ★	UNICOM
118.325	135.275 251.1	123.0 (CTAF) L



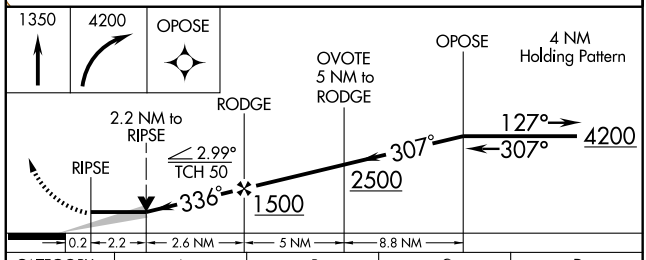
ELEV -114

MIRL Rwys 12-30 and 17-35 L

REIL Rwys 17 and 35 L



336° to RIPSE



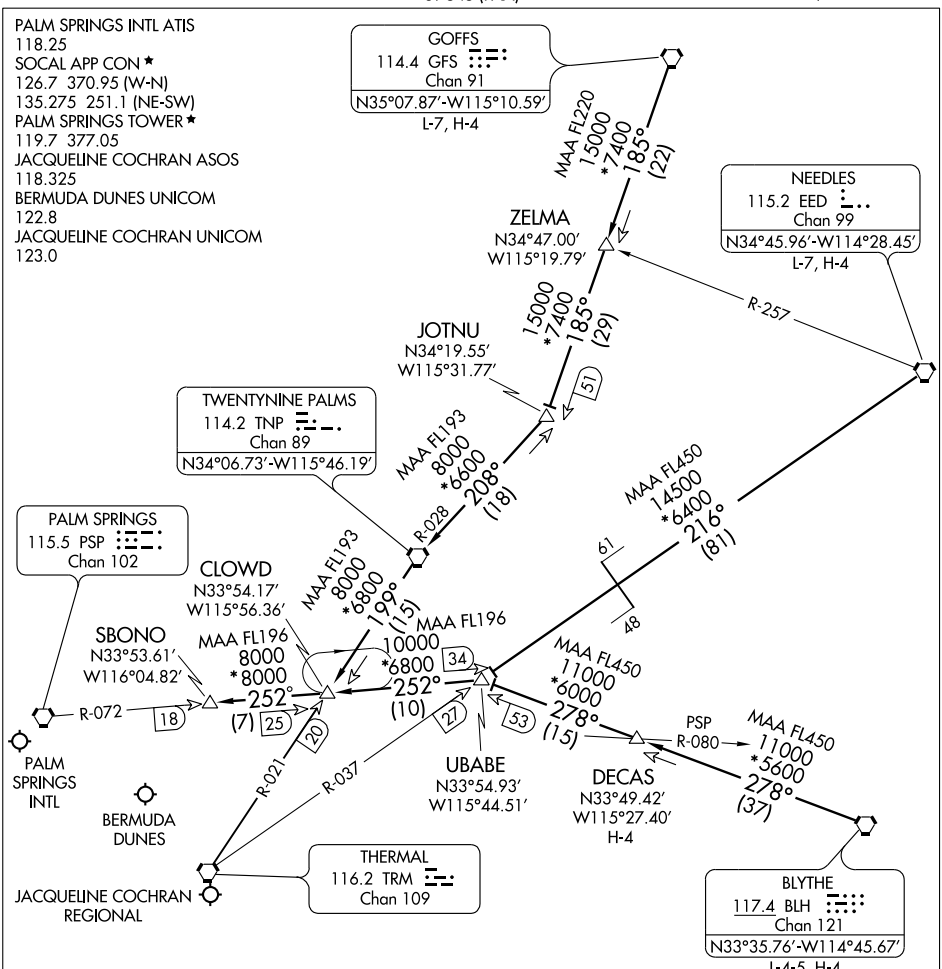
CATEGORY	A	B	C	D
LNAV MDA	700-1 824 (900-1)	700-1¼ 824 (900-1¼)	700-2½ 824 (900-2½)	700-2¾ 824 (900-2¾)
CIRCLING	700-1 814 (900-1)	700-1¼ 814 (900-1¼)	700-2½ 814 (900-2½)	700-2¾ 814 (900-2¾)

SW-3, 22 OCT 2009 to 19 NOV 2009

(SBONO.SBONO1) 07298
SBONO ONE ARRIVAL

ST-545 (FAA)

PALM SPRINGS, CALIFORNIA



NOTE: Chart not to scale.

NOTE: DME Required.

BLYTHE TRANSITION (BLH.SBONO1): From over BLH VORTAC via BLH R-278 and PSP R-072 to SBONO DME. Thence....

DECAS TRANSITION (DECAS.SBONO1): From over DECAS INT via BLH R-278 and PSP R-072 to SBONO DME. Thence....

GOFFS TRANSITION (GFS.SBONO1): From over GFS VORTAC via GFS R-185 and TNP R-028 to TNP VORTAC, then via TNP R-199 and PSP R-072 to SBONO DME. Thence....

NEEDLES TRANSITION (EED.SBONO1): From over EED VORTAC via EED R-216 and TRM R-037 to UBABE DME, then via PSP R-072 to SBONO DME. Thence....

....From over SBONO DME expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

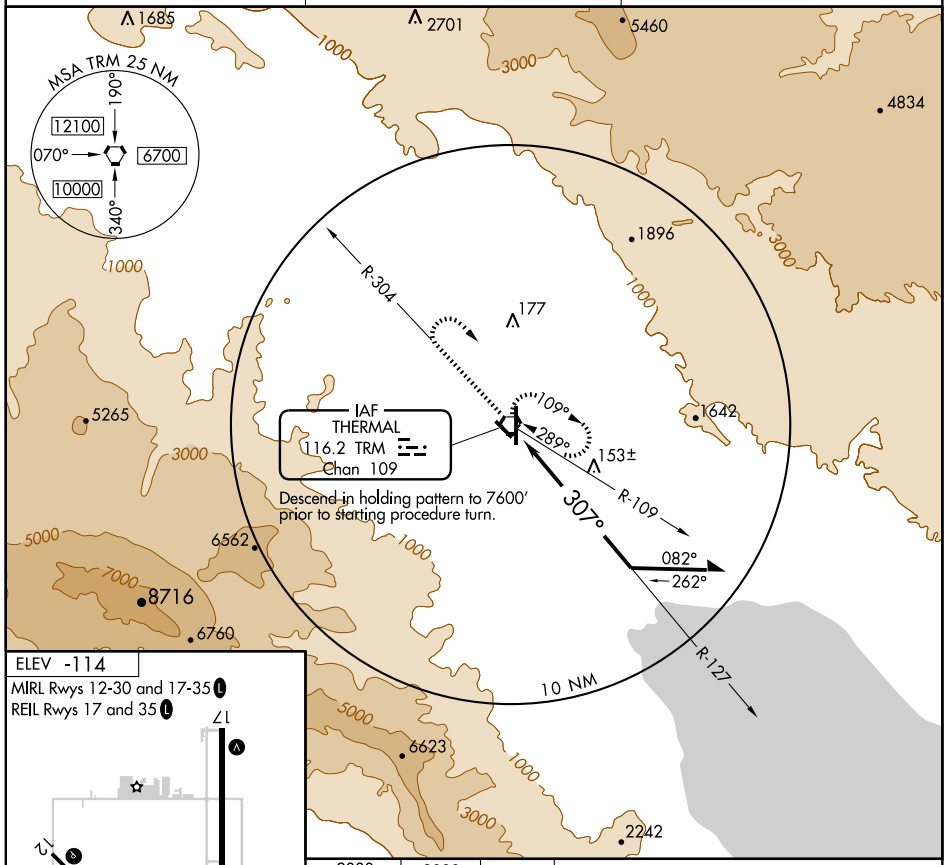
VORTAC TRM	APP CRS	Rwy Idg	N/A
116.2	307°	TDZE	N/A
Chan 109		Apt Elev	-114

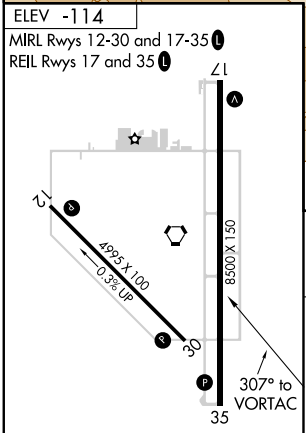
VOR-A

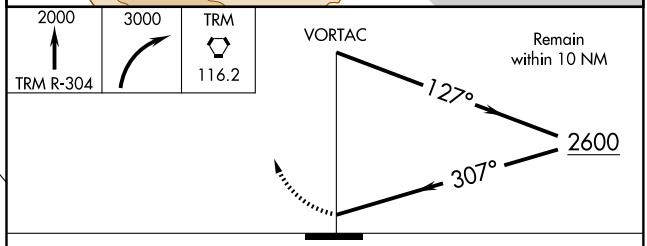
PALM SPRINGS/ JACQUELINE COCHRAN RGNL (TRM)

MISSED APPROACH: Climb to 2000 via TRM R-304 then climbing right turn to 3000 direct TRM VORTAC and hold.

ASOS	SOCAL APP CON ★	UNICOM
118.325	135.275 251.1	123.0 (CTAF) L







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	1100-1¼ 1214 (1300-1¼)	1100-1½ 1214 (1300-1½)	1100-3 1214 (1300-3)	

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC TRM	APP CRS	Rwy Idg	4995
116.2	316°	TDZE	-121
Chan 109		Apt Elev	-114

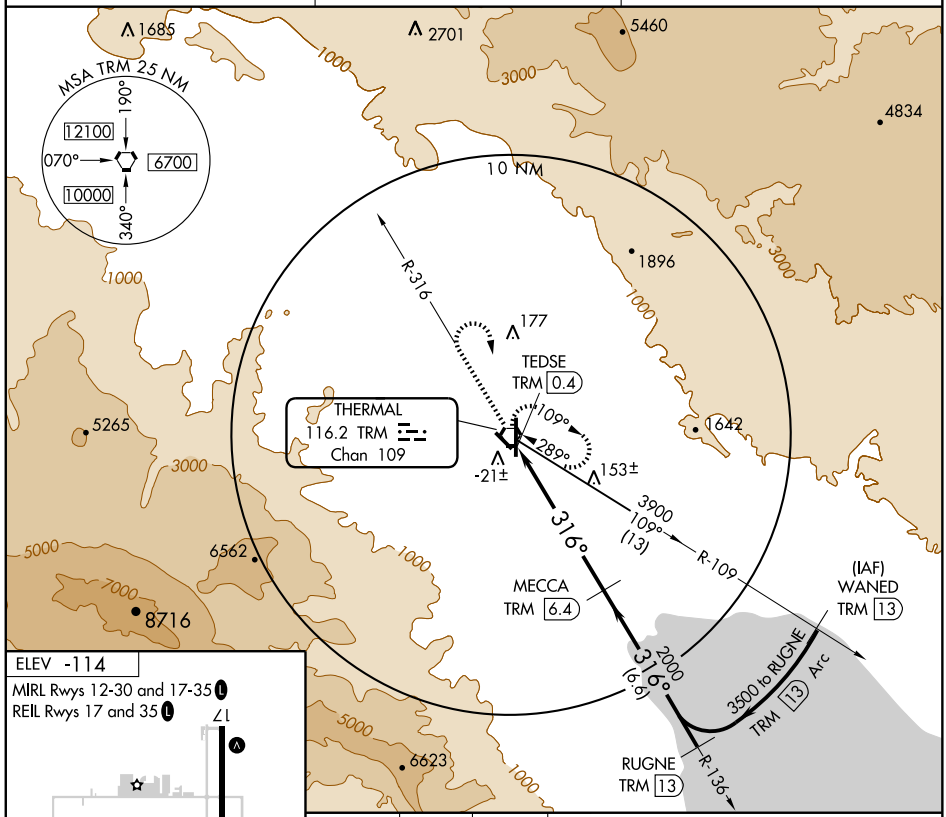
VOR/DME RWY 30

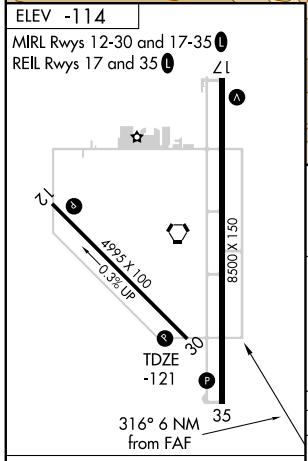
PALM SPRINGS/ JACQUELINE COCHRAN RGNL (TRM)

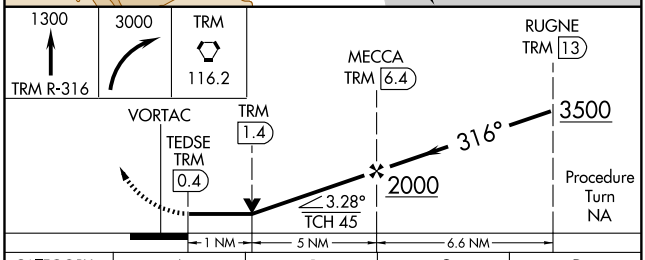
NA

MISSED APPROACH: Climb to 1300 via TRM R-316 then climbing right turn to 3000 direct TRM VORTAC and hold.

ASOS	SOCAL APP CON★	UNICOM
118.325	135.275 251.1	123.0 (CTAF) L







Knots	60	90	120	150	180
Min:Sec					

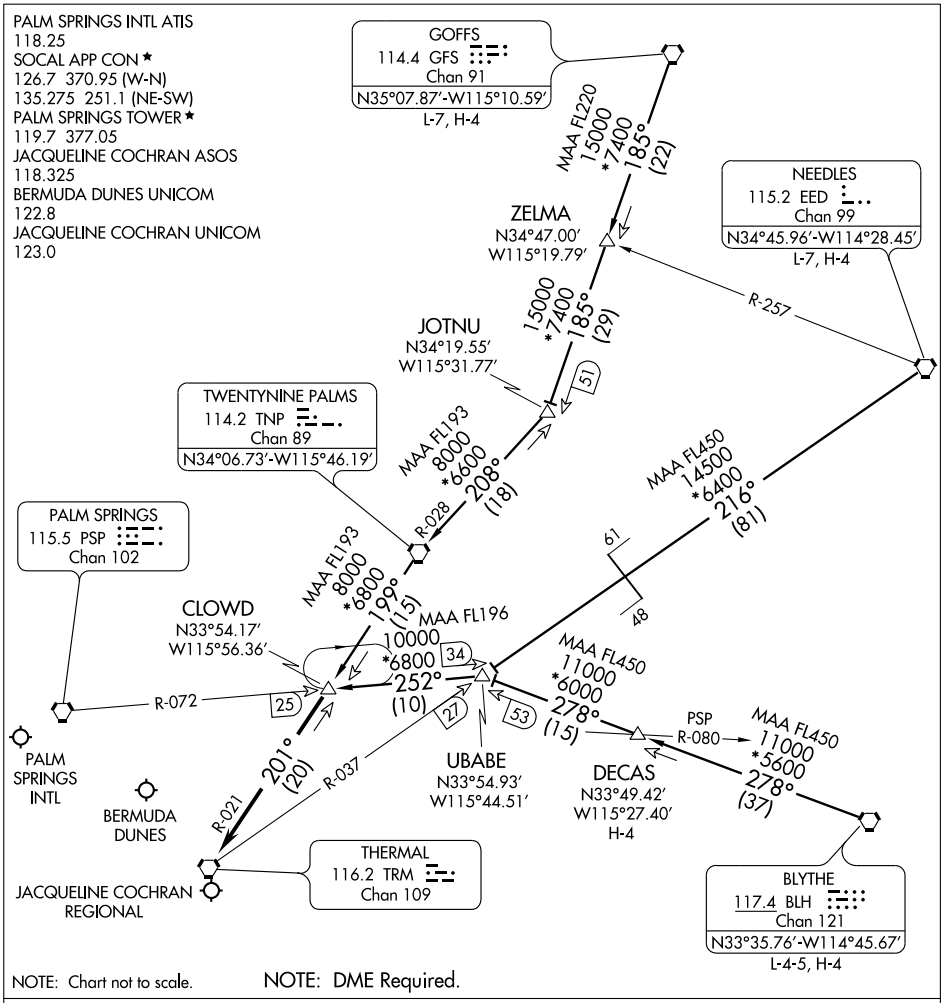
CATEGORY	A	B	C	D
S-30	240-1 361 (400-1)			240-1¼ 361 (400-1¼)
CIRCLING	340-1 454 (500-1)		340-1½ 454 (500-1½)	500-2 614 (700-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

CLOWD ONE ARRIVAL

ST-545 (FAA)

PALM SPRINGS, CALIFORNIA



BLYTHE TRANSITION (BLH.CLOWD1): From over BLH VORTAC via BLH R-278 and PSP R-072 to CLOWD DME. Thence....

DECAS TRANSITION (DECAS.CLOWD1): From over DECAS INT via BLH R-278 and PSP R-072 to CLOWD DME. Thence....

GOFFS TRANSITION (GFS.CLOWD1): From over GFS VORTAC via GFS R-185 and TNP R-028 to TNP VORTAC, then via TNP R-199 to CLOWD DME. Thence....

NEEDLES TRANSITION (EED.CLOWD1): From over EED VORTAC via EED R-216 and TRM R-037 to UBABE DME, then via PSP R-072 to CLOWD DME. Thence....

....From over CLOWD DME via TRM R-021 to TRM VORTAC. Expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

PALM SPRINGS, CALIFORNIA

AL-5848 (FAA)

APP CRS	Rwy Idg	5002
102°	TDZE	73
	Apt Elev	73

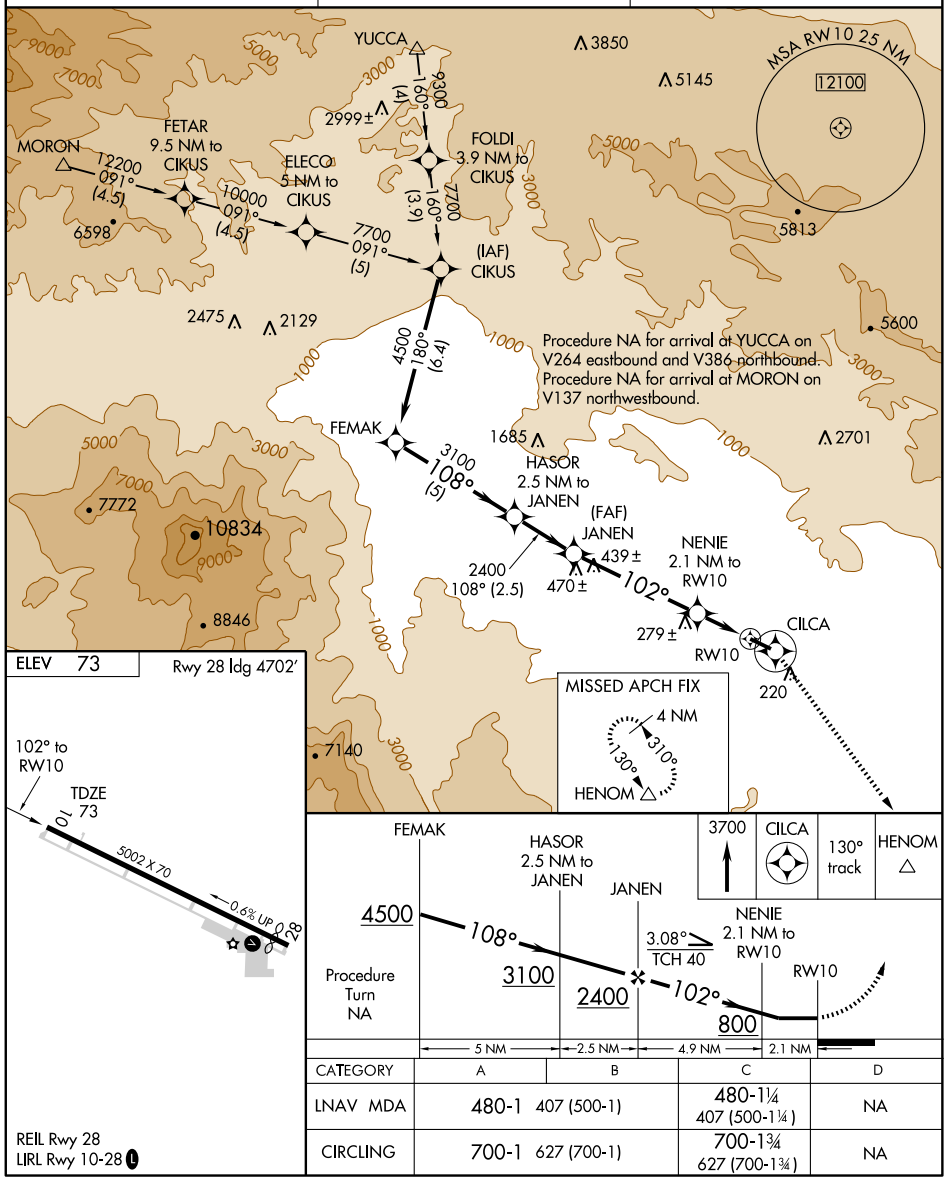
RNAV (GPS) RWY 10

PALM SPRINGS/ BERMUDA DUNES (UDD)

NA — GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Use Jacqueline Cochran Rgnl altimeter setting.

MISSED APPROACH: Climb to 3700 direct CILCA and via 130° track to HENOM and hold.

JACQUELINE COCHRAN REGIONAL ASOS	SOCAL APP CON *	UNICOM
118.325	135.275 251.1	122.8 (CTAF) L



REIL Rwy 28
LIRL Rwy 10-28 L

CATEGORY	A	B	C	D
LNAV MDA	480-1 407 (500-1)		480-1¼ 407 (500-1¼)	NA
CIRCLING	700-1 627 (700-1)		700-1¾ 627 (700-1¾)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009

PALM SPRINGS, CALIFORNIA AL-5848 (FAA)

APP CRS	Rwy Idg	4702
296°	TDZE	66
	Apt Elev	73

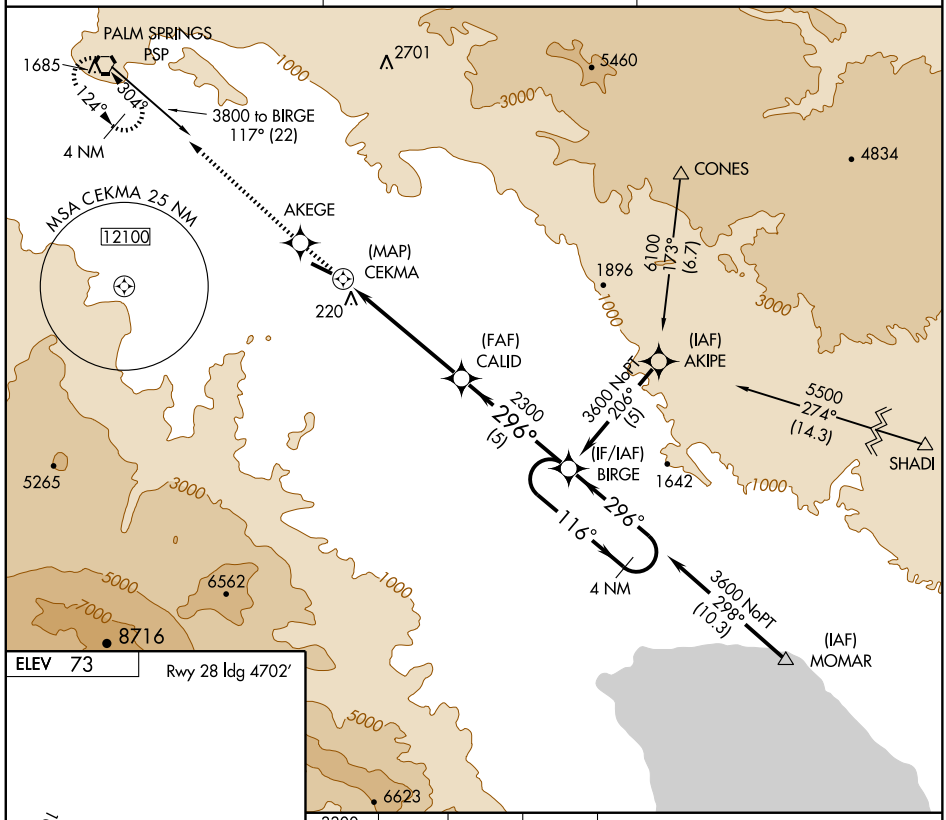
RNAV (GPS) RWY 28

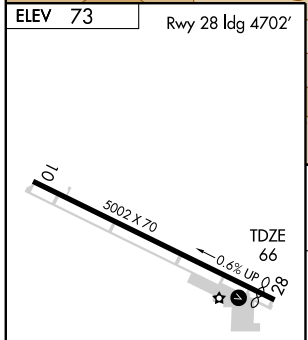
PALM SPRINGS/BERMUDA DUNES (UDD)

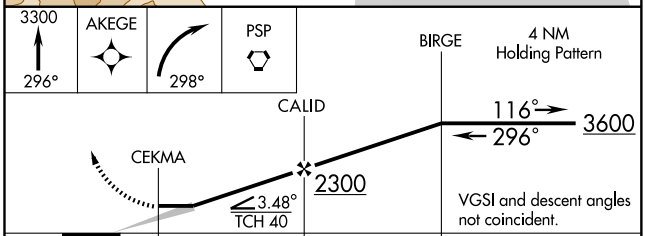
T NA — GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Use Jacqueline Cochran Rgnl altimeter setting.

MISSED APPROACH: Climb to 3300 via course 296° to AKEGE WP then right turn via course 298° to PSP VORTAC and hold.

JACQUELINE COCHRAN REGIONAL ASOS	SOCAL APP CON ★	UNICOM
118.325	135.275 251.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1020-1¼ 954 (1000-1¼)	1020-1½ 954 (1000-1½)	1020-3 954 (1000-3)	NA
CIRCLING	1020-1¼ 947 (1000-1¼)	1020-1½ 947 (1000-1½)	1020-3 947 (1000-3)	NA

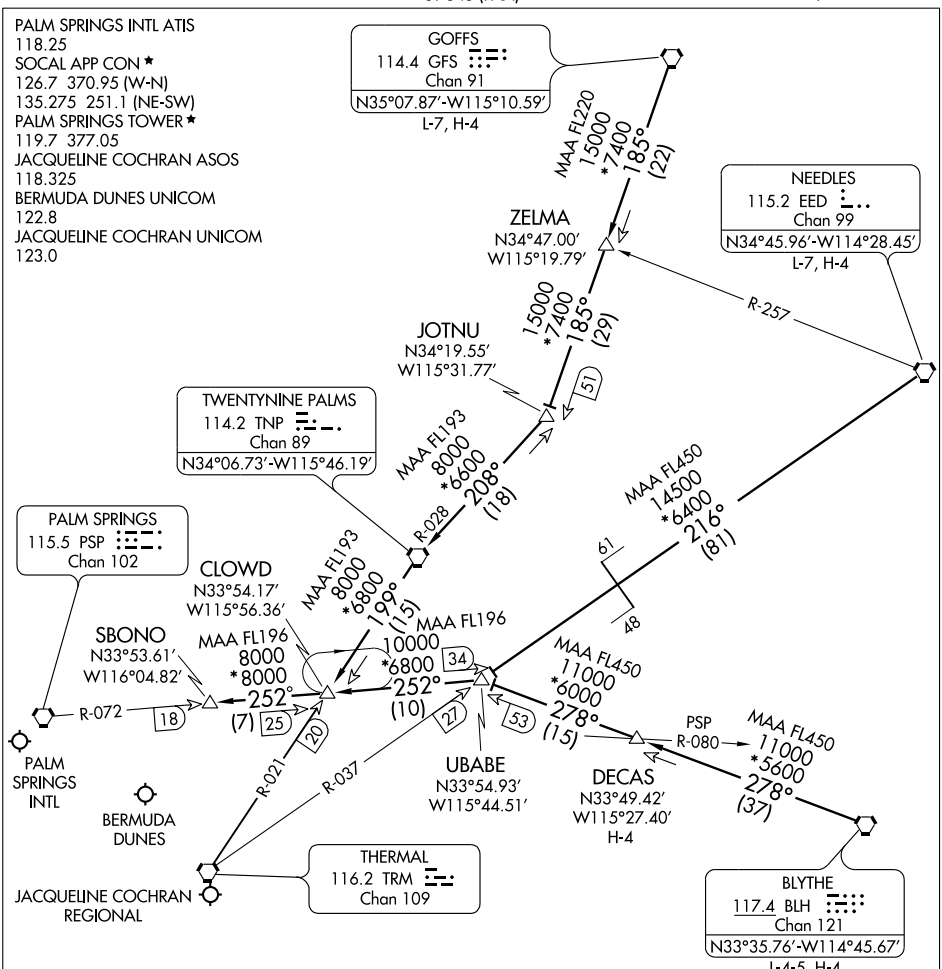
REIL Rwy 28
LIRL Rwy 10-28 L

SW-3, 22 OCT 2009 to 19 NOV 2009

(SBONO.SBONO1) 07298
SBONO ONE ARRIVAL

ST-545 (FAA)

PALM SPRINGS, CALIFORNIA



NOTE: Chart not to scale.

NOTE: DME Required.

BLYTHE TRANSITION (BLH.SBONO1): From over BLH VORTAC via BLH R-278 and PSP R-072 to SBONO DME. Thence....

DECAS TRANSITION (DECAS.SBONO1): From over DECAS INT via BLH R-278 and PSP R-072 to SBONO DME. Thence....

GOFFS TRANSITION (GFS.SBONO1): From over GFS VORTAC via GFS R-185 and TNP R-028 to TNP VORTAC, then via TNP R-199 and PSP R-072 to SBONO DME. Thence....

NEEDLES TRANSITION (EED.SBONO1): From over EED VORTAC via EED R-216 and TRM R-037 to UBABE DME, then via PSP R-072 to SBONO DME. Thence....

....From over SBONO DME expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

PALM SPRINGS, CALIFORNIA AL-5848 (FAA)

VORTAC TRM	APP CRS	Rwy Idg	N/A
116.2	310°	TDZE	N/A
Chan 109		Apt Elev	73

VOR-C

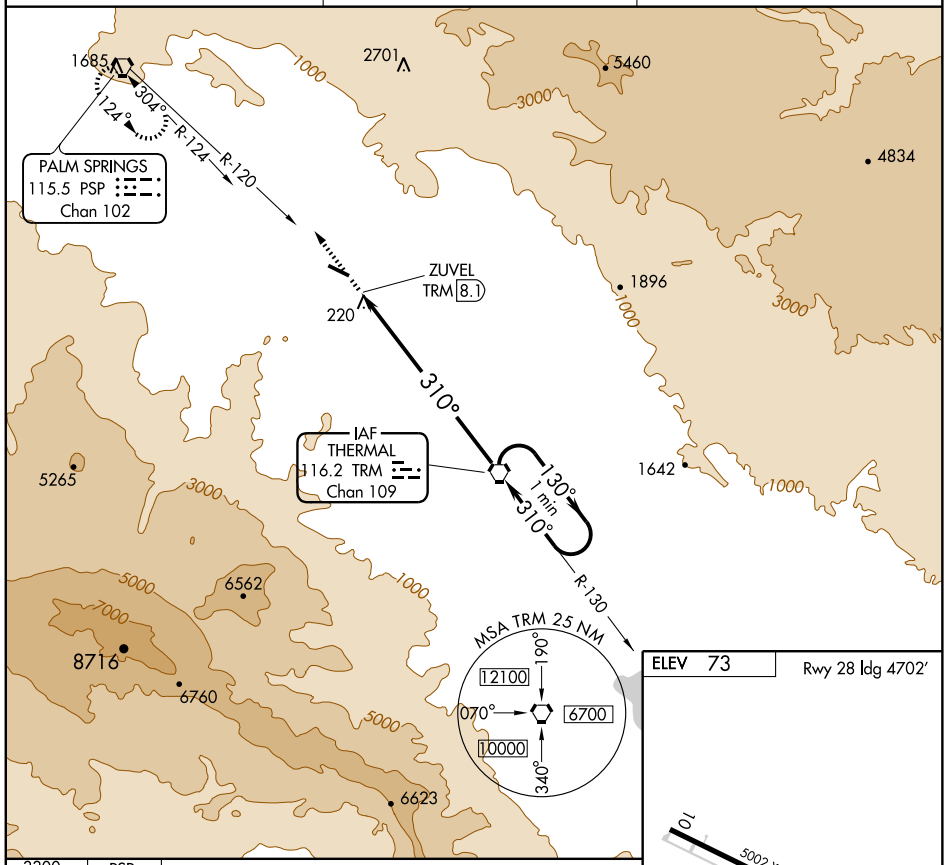
PALM SPRINGS/BERMUDA DUNES (UDD)

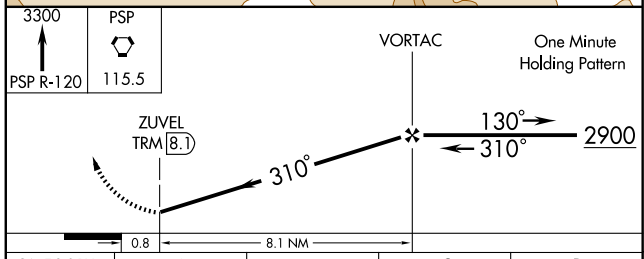
NA

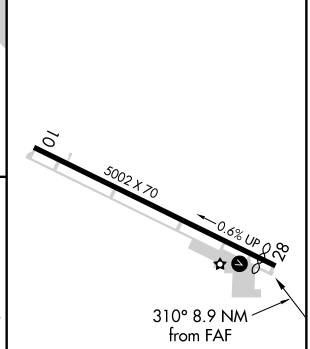
Use Jacqueline Cochran Rgnl altimeter setting.

MISSED APPROACH: Climb to 3300 via PSP R-120 to PSP VORTAC and hold.

JACQUELINE COCHRAN REGIONAL ASOS	SOCAL APP CON ★	UNICOM
118.325	135.275 251.1	122.8 (CTAF) L







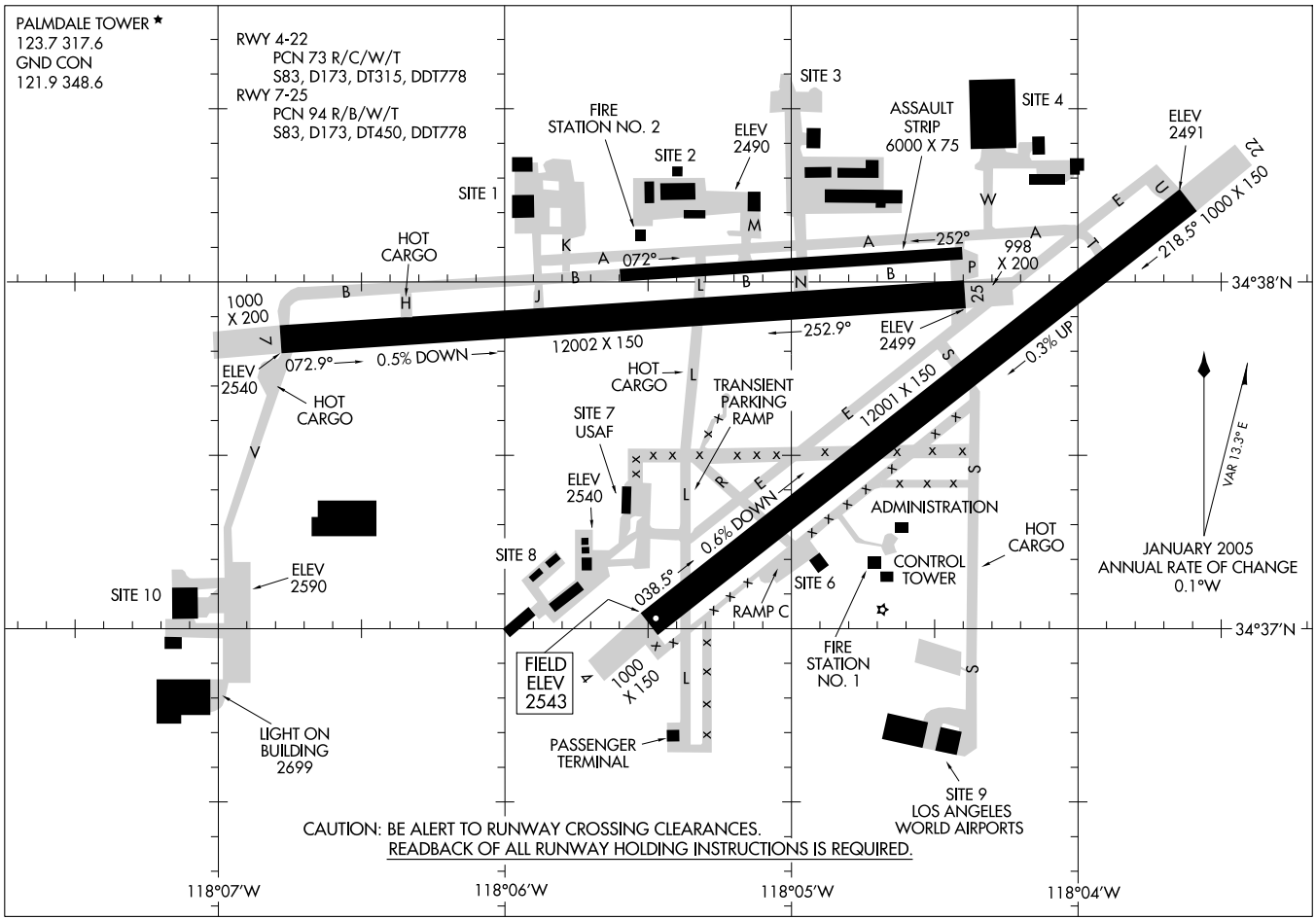
REIL Rwy 28
LIRL Rwy 10-28 L

CATEGORY	A	B	C	D
CIRCLING	920-1 847 (900-1)	920-1¼ 847 (900-1¼)	920-2½ 847 (900-2½)	NA

FAF to MAP 8.1 NM

Knots	60	90	120	150	180
Min:Sec	8:06	5:24	4:03	3:14	2:42

SW-3, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-310 (FAA)

PALMDALE RGNL/USAF PLANT 42 (PMD)
PALMDALE, CALIFORNIA

HI-ILS/DME RWY 25

PALMDALE REGIONAL/USAF PLANT 42 (KPMD)

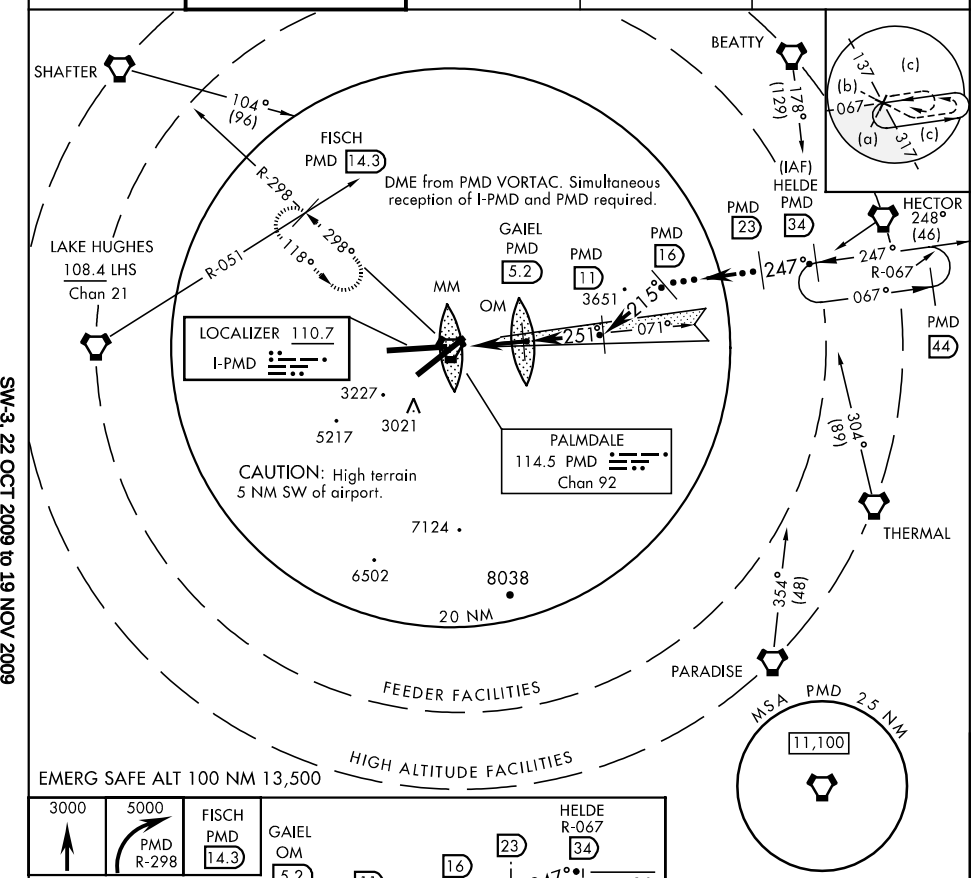
LOCALIZER I-PMD	APCH CRS	Rwy ldg / TDZE / Arpt Elev
110.7	251°	12,002 / 2503 / 2543

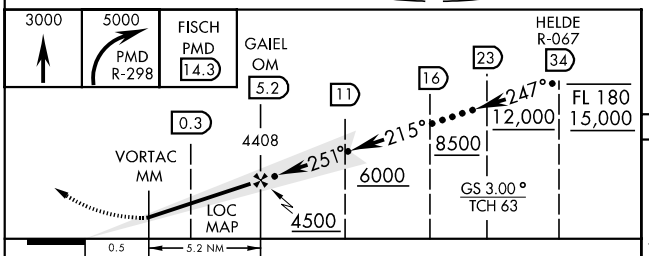
JAL-310 [USAF]

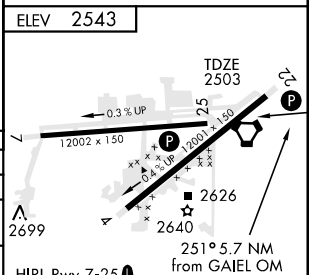
▼ * Circling S of Rwy 7-25 not authorized for CAT E aircraft.

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 via PMD R-298 to FISCH INT and hold.

JOSHUA APP CON	PALMDALE TOWER ★	GND CON	CTAF	RADAR VECTORING ASOS
124.55 363.0	123.7 317.6	121.9 348.6	123.7	118.275







CATEGORY	C	D	E
S-ILS 25	2703- ¾ 200 (200-¾)		
S-LOC 25	2900-1 397 (400-1)	2900-1¼ 397 (400-1¼)	2900-1½ 397 (400-1½)
CIRCLING *	3000-1½ 457 (500-1½)	3100-2 557 (600-2)	

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 25

PALMDALE REGIONAL USAF PLANT 42 (KPMD)

TACAN	APCH CRS	Rwy ldg / TDZE / Arpt Elev
PMD Chan 92	247°	12,002 / 2503 / 2543

JAL-310 [USAF]

▼ * Circling S of Rwy 7-25 not authorized for CAT E aircraft.

MISSED APPROACH: Climbing right turn to 5000 via PMD R-298 to FISCH INT and hold.

JOSHUA APP CON	PALMDALE TOWER ★	GND CON	CTAF	RADAR VECTORING ASOS
124.55 363.0	123.7 317.6	121.9 348.6	123.7	118.275

SHAFTER
104° (96)
FISCH PMD 14.3
R-298
298°
118°
R-051
LAKE HUGHES 108.4 LHS Chan 21
BEATTY
178° (179)
137° (c)
(b) 067°
(a) 317° (c)
(IAF) HELDE PMD 34
HECTOR
248° (46)
PMD 23
PMD 5.2
PMD 11
3651
247°
247°
R-067
067°
PMD 44
3227
3021
5217
CAUTION: High terrain 5 NM SW of airport.
PALMDALE 114.5 PMD Chan 92
7124
6502
8038
20 NM
304° (89)
THERMAL
354° (48)
PARADISE
FEEDER FACILITIES
HIGH ALTITUDE FACILITIES
MSA PMD 25 NM
11,100

EMERG SAFE ALT 100 NM 13,500

5000
FISCH PMD 14.3
PMD R-298
HELDE R-067
11
23
34
247°
FL 180
12,000
15,000
VORTAC
5.2
0.3
247°
6000
4500
0.8
4.9 NM

ELEV 2543
TDZE 2503
0.3 % UP
12002 x 150
12001 x 150
0.4 % UP
2626
2640
2699
HIRL Rwy 7-25 L
247° 5.7 NM from FAF

CATEGORY	C	D	E
S-25	2900-1 397 (400-1)	2900-1¼ 397 (400-1¼)	2900-1½ 397 (400-1½)
CIRCLING *	3000-1½ 457 (500-1½)	3100-2 557 (600-2)	

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-PMD	APP CRS	Rwy Idg	12002
110.7	251°	TDZE	2503
		Apt Elev	2543

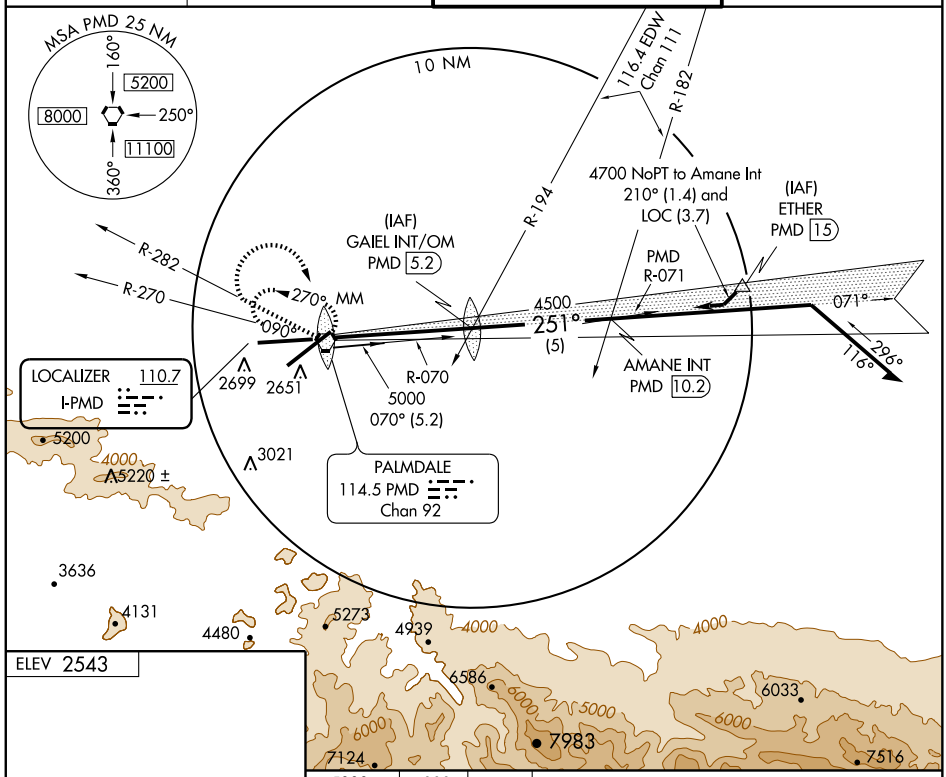
ILS or LOC RWY 25

PALMDALE RGNL/USAF PLANT 42 (PMD)

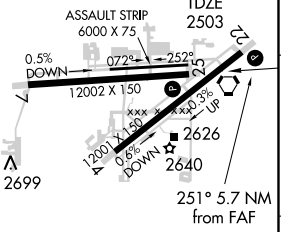
Circling NA south of Rwy 7-25 for Cat. E.
Circling to Rwy 7 NA at night.

MISSED APPROACH: Climb to 5000 via PMD R-282, then climbing right turn to 7000 direct PMD VORTAC and hold.

ASOS	JOSHUA APP CON	PALMDALE TOWER ★	GND CON
118.275	124.55 363.0	123.7 (CTAF) L 317.6	121.9 348.6

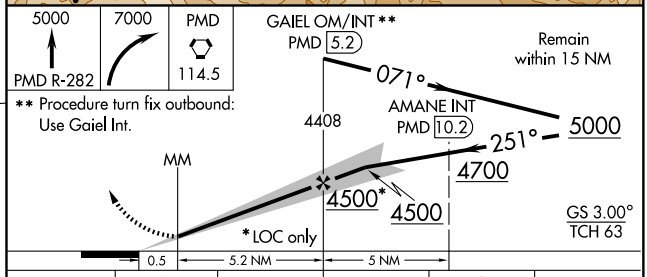


ELEV 2543



HIRL Rwy 4-22 and 7-25 L

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54



** Procedure turn fix outbound: Use Gaiel Int.

CATEGORY	A	B	C	D	E
S-ILS 25	2703-1 200 (200-1)				
S-LOC 25	2900-1 397 (400-1)			2900-1¼ 397 (400-1¼)	2900-1½ 397 (400-1½)
CIRCLING	3000-1 457 (500-1)		3000-1½ 457 (500-1½)	3100-2 557 (600-2)	

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12002
251°	TDZE	2503
	Apt Elev	2543

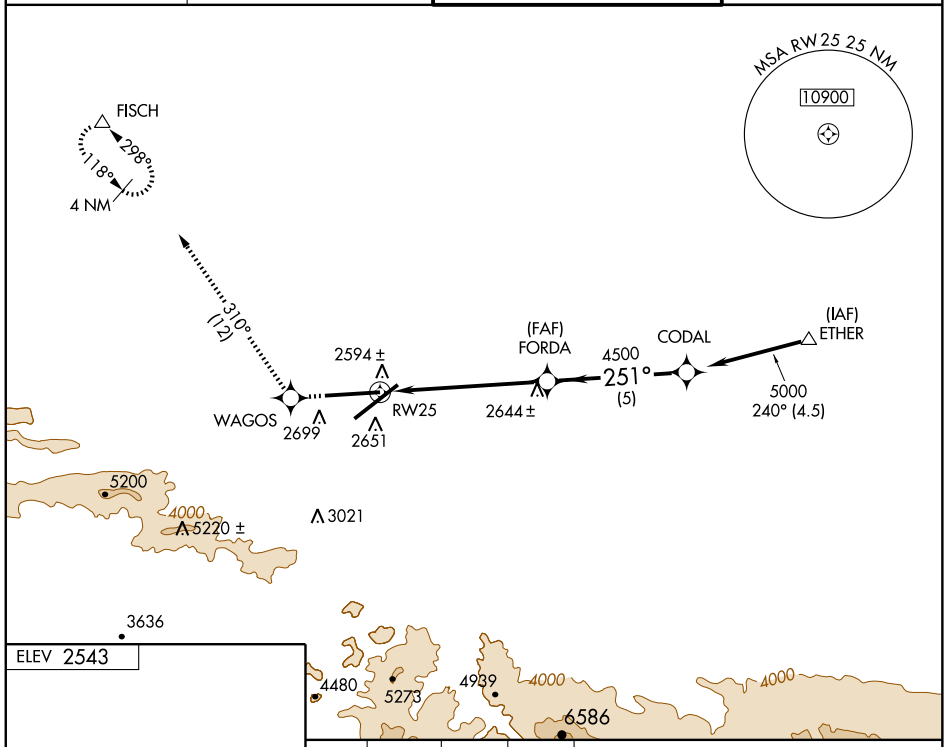
RNAV (GPS) RWY 25

PALMDALE RGNL/USAF PLANT 42 (PMD)

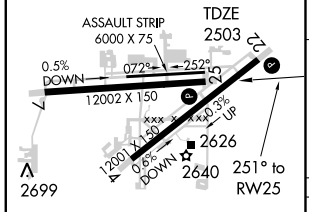
Circling to Rwy 7 NA at night. DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 44° C (111°F) .

MISSED APPROACH: Climb to 5000 direct WAGOS WP then via 310° track to FISCH WP and hold.

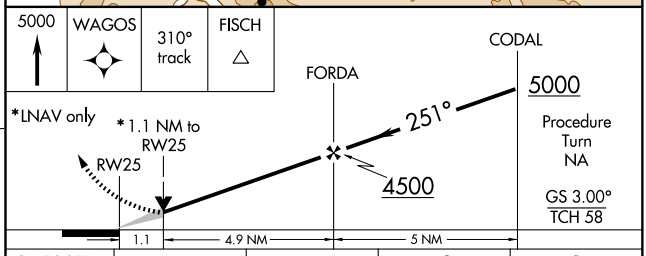
ASOS	JOSHUA APP CON	PALMDALE TOWER ★	GND CON
118.275	124.55 363.0	123.7 (CTAF) L 317.6	121.9 348.6



ELEV 2543



HIRL Rwy 4-22 and 7-25 L



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	2840-1¼ 337 (300-1¼)			
LNAV MDA	2900-1 397 (400-1)			2900-1¼ 397 (400-1¼)
CIRCLING	3000-1 457 (500-1)		3000-1½ 457 (500-1½)	3100-2 557 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

PALMDALE, CALIFORNIA

AL-310 (FAA)

VORTAC PMD	APP CRS	Rwy Idg	12002
114.5	265°	TDZE	2503
Chan 92		Apt Elev	2543

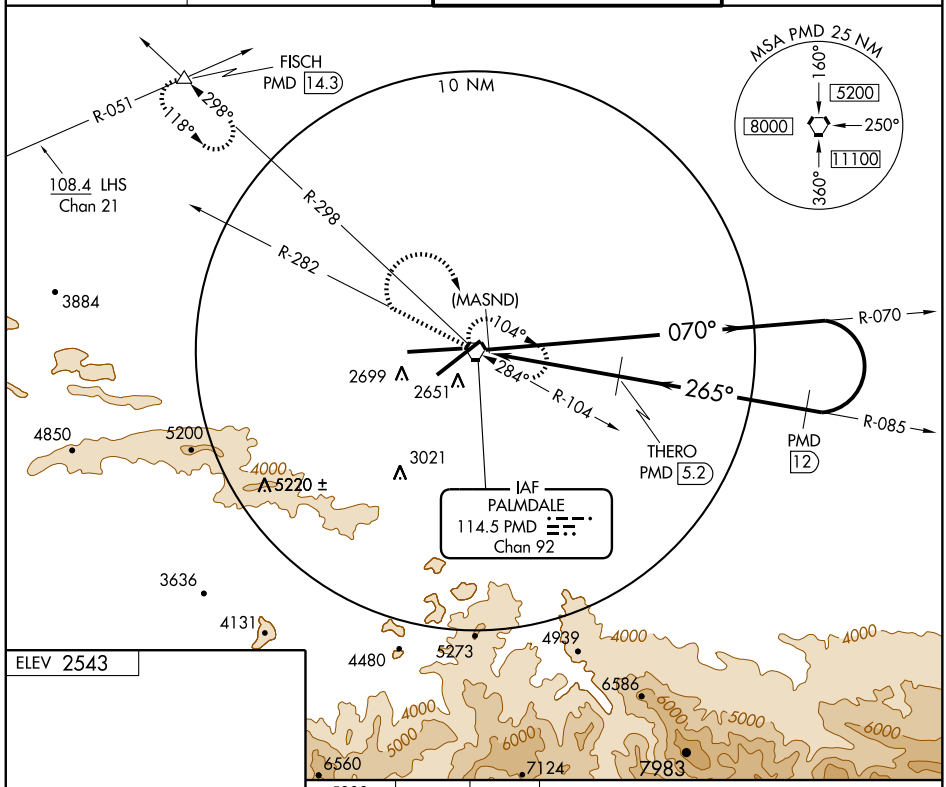
VOR/DME or TACAN RWY 25

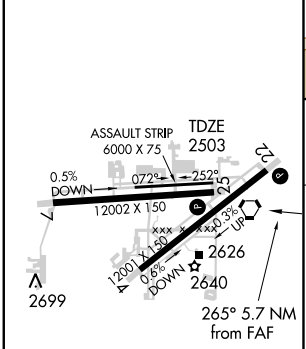
PALMDALE RGNL/USAF PLANT 42 (PMD)

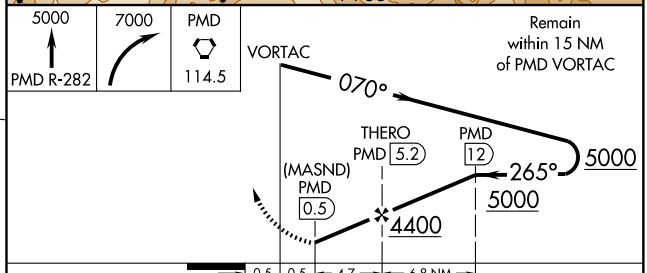
Circling NA South of Rwy 7-25 for Cat. E.
Circling to Rwy 7 NA at night.

MISSED APPROACH: Climb to 5000 via PMD R-282 then climbing right turn to 7000 direct PMD VORTAC and hold. (TACAN aircraft climbing right turn to 5000 via R-298 to FISCH Int/14.3 DME and hold SE left turn 298° inbound.)

ASOS	JOSHUA APP CON	PALMDALE TOWER ★	GND CON
118.275	124.55 363.0	123.7 (CTAF) L 317.6	121.9 348.6







CATEGORY	A	B	C	D	E
S-25	2900-1¼ 397 (400-1¼)				2900-1½ 397 (400-1½)
CIRCLING	3000-1¼ 457 (500-1¼)		3000-1½ 457 (500-1½)	3100-2 557 (600-2)	

HIRL Rwy 4-22 and 7-25 L

SW-3, 22 OCT 2009 to 19 NOV 2009

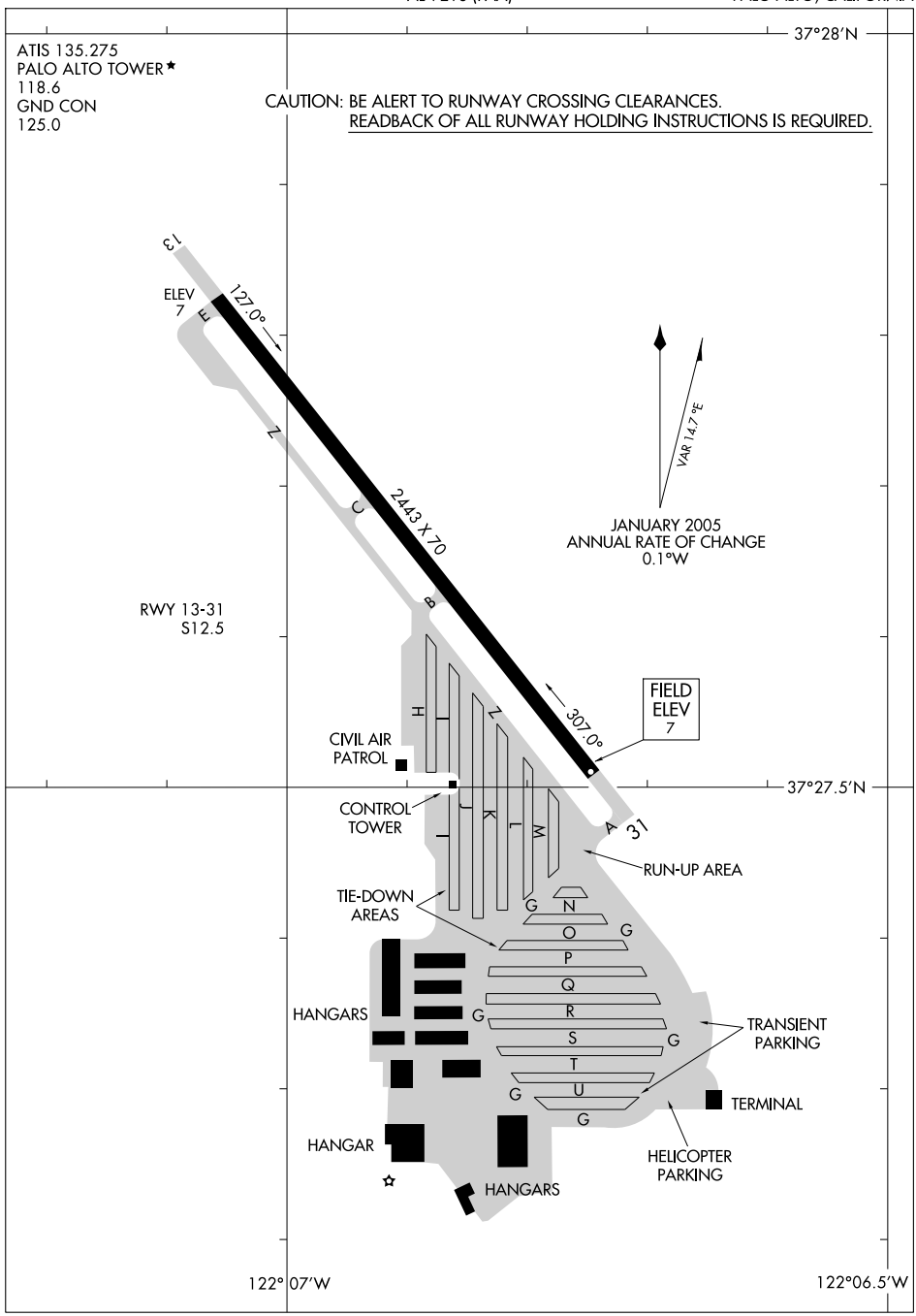
08213

AIRPORT DIAGRAM

PALO ALTO AIRPORT OF SANTA CLARA COUNTY (PAO)

AL-9216 (FAA)

PALO ALTO, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	2443
322°	TDZE	3
	Apt Elev	3

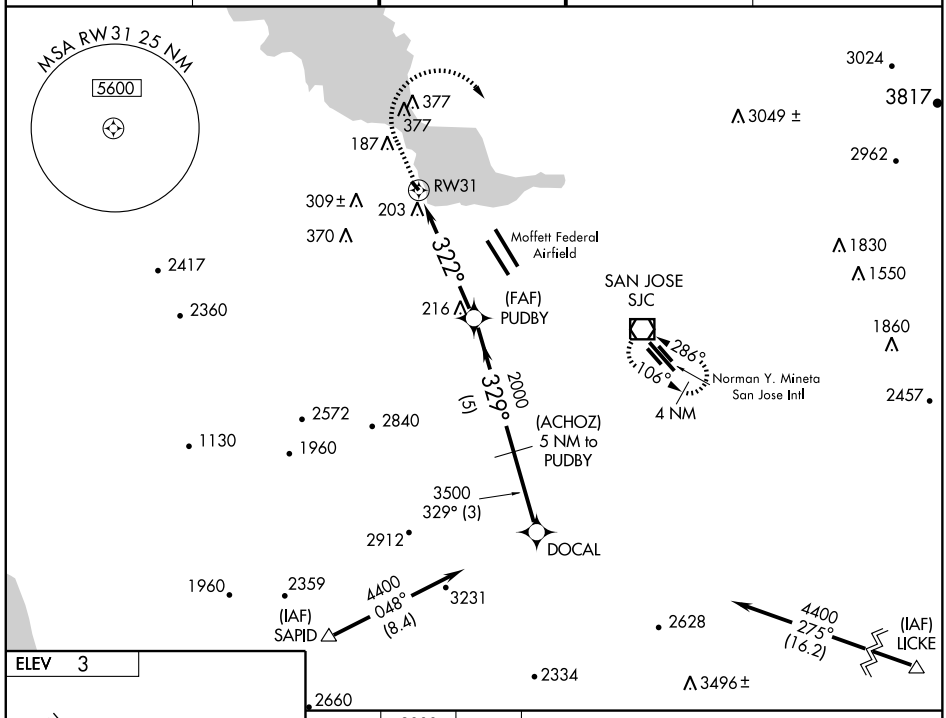
GPS RWY 31

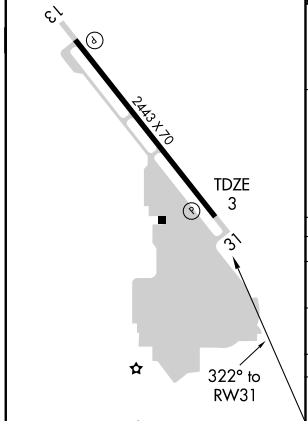
PALO ALTO ARPT OF SANTA CLARA COUNTY (PAO)

When control tower closed, use Norman Y. Mineta San Jose Intl altimeter setting.
Circling not authorized southwest of Rwy 13-31.

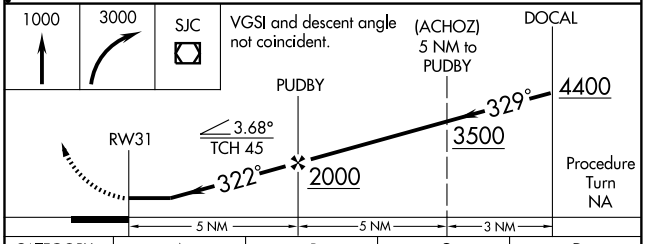
MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct SJC VOR/DME and hold.

ATIS	NORCAL APP CON	PALO ALTO TOWER★	GND CON	UNICOM
135.275	121.3 270.35	118.6 (CTAF)	125.0	122.95





REIL Rwys 13 and 31
MIRL Rwy 13-31



CATEGORY	A	B	C	D
S-31	460-1 457 (500-1)		NA	
CIRCLING	460-1 457 (500-1)	500-1 497 (500-1)	NA	
NORMAN Y. MINETA SAN JOSE INTL ALTIMETER SETTING MINIMUMS				
S-31	500-1 497 (500-1)		NA	
CIRCLING	500-1 497 (500-1)	520-1 517 (600-1)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

POINT REYES ONE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA

NORCAL APP CON
133.95 317.6
SAN FRANCISCO TOWER
120.5 269.1
SAN FRANCISCO INTL ATIS
113.7 118.85
SAN CARLOS TOWER★
119.0 326.2
SAN CARLOS ATIS
125.9
PALO ALTO TOWER★
118.6
PALO ALTO ATIS
135.275
MOFFETT FEDERAL AFLD TOWER★
119.55 346.25
MOFFETT FEDERAL AFLD ATIS
124.175 283.0
SAN JOSE TOWER★
124.0 257.6
NORMAN Y. MINETA
SAN JOSE INTL ATIS
126.95
REID-HILLVIEW TOWER★
119.8 RWY 13L/31R
126.1 RWY 13R/31L
REID-HILLVIEW ATIS
125.2

MAXWELL
110.0 MXW
Chan 37
N39°19.06′-W122°13.29′
L-2

MENDOCINO
112.3 ENI
Chan 70
N39°03.19′-W123°16.45′
L-2, H-3

SANTA ROSA
113.0 STS
Chan 77

SACRAMENTO
115.2 SAC
Chan 99
N38°26.62′-W121°33.10′
L-2-3, H-3

POPES
N38°29.16′
W122°20.75′

SCAGGS ISLAND
112.1 SGD
Chan 58

POINT REYES
113.7 PYE
Chan 84
N38°04.79′-W122°52.07′

SAUSALITO
116.2 SAU
Chan 109

SAN FRANCISCO
115.8 SFO
Chan 105

OAKLAND
116.8 OAK
Chan 115

STINS
N37°49.42′
W122°45.40′

SAN FRANCISCO INTL

PALO ALTO AIRPORT OF SANTA CLARA COUNTY

SAN CARLOS

MOFFETT FEDERAL AFLD

NORMAN Y. MINETA SAN JOSE INTL

REID-HILLVIEW OF SANTA CLARA COUNTY

HADLY
N37°24.14′
W122°34.54′

WOODSIDE
113.9 OSI
Chan 86
N37°23.55′-W122°16.88′

6500 184° (80)
6000 146° (61)
5000 208° (35)
5000 257° (38)
V494
R-077
22
R-347
R-005
R-028
R-325
144° (16)
R-243
V27
R-287
144° (27)
43
R-204
076° (14)
R-256

NOTE: SACRAMENTO Transition to be used only when assigned by ATC.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

MAXWELL TRANSITION (MXW.PYE1): From over MXW VORTAC via MXW R-184 and PYE R-005 to PYE VORTAC. Thence....

MENDOCINO TRANSITION (ENI.PYE1): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

SACRAMENTO TRANSITION (SAC. PYE1): From over SAC VORTAC via SAC R-257 and PYE R-028 to PYE VORTAC. Thence....

....From over PYE VORTAC via PYE R-144 to HADLY INT, then via OSI R-256 to OSI VORTAC. Expect radar vectors to final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME SJC	APP CRS	Rwy Idg	2443
114.1	286°	TDZE	3
Chan 88		Apt Elev	3

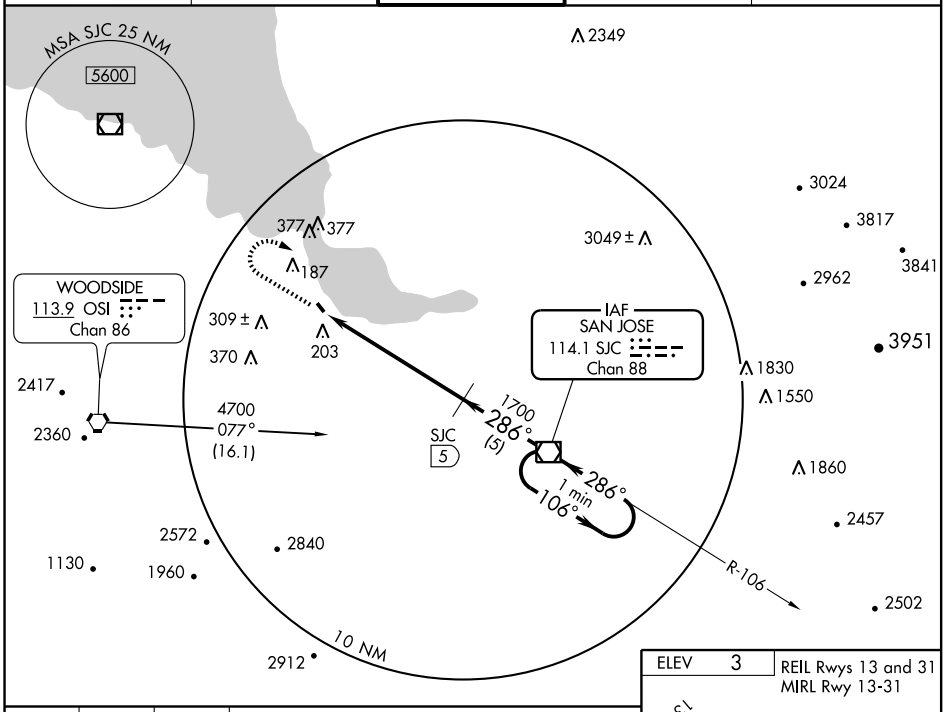
VOR/DME RWY 31

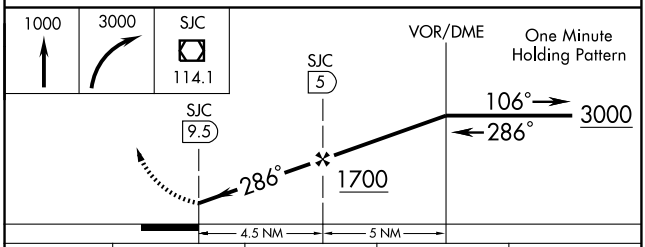
PALO ALTO ARPT OF SANTA CLARA COUNTY (PAO)

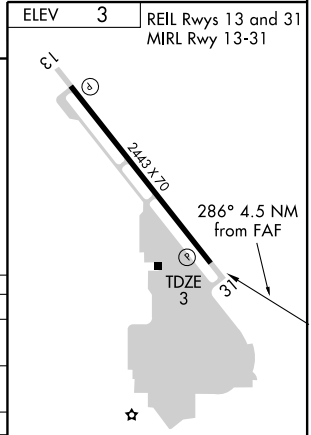
When control tower closed, use Norman Y. Mineta San Jose Intl altimeter setting.
Circling not authorized SW of Rwy 13-31.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct SJC VOR/DME and hold.

ATIS	NORCAL APP CON	PALO ALTO TOWER*	GND CON	UNICOM
135.275	121.3 270.35	118.6 (CTAF)	125.0	122.95







CATEGORY	A	B	C	D
S-31	460-1 457 (500-1)		NA	
CIRCLING	460-1 457 (500-1)	540-1 537 (600-1)	NA	
NORMAN Y. MINETA SAN JOSE INTL ALTIMETER SETTING MINIMUMS				
S-31	500-1 497 (500-1)		NA	
CIRCLING	500-1 497 (500-1)	580-1 577 (600-1)	NA	

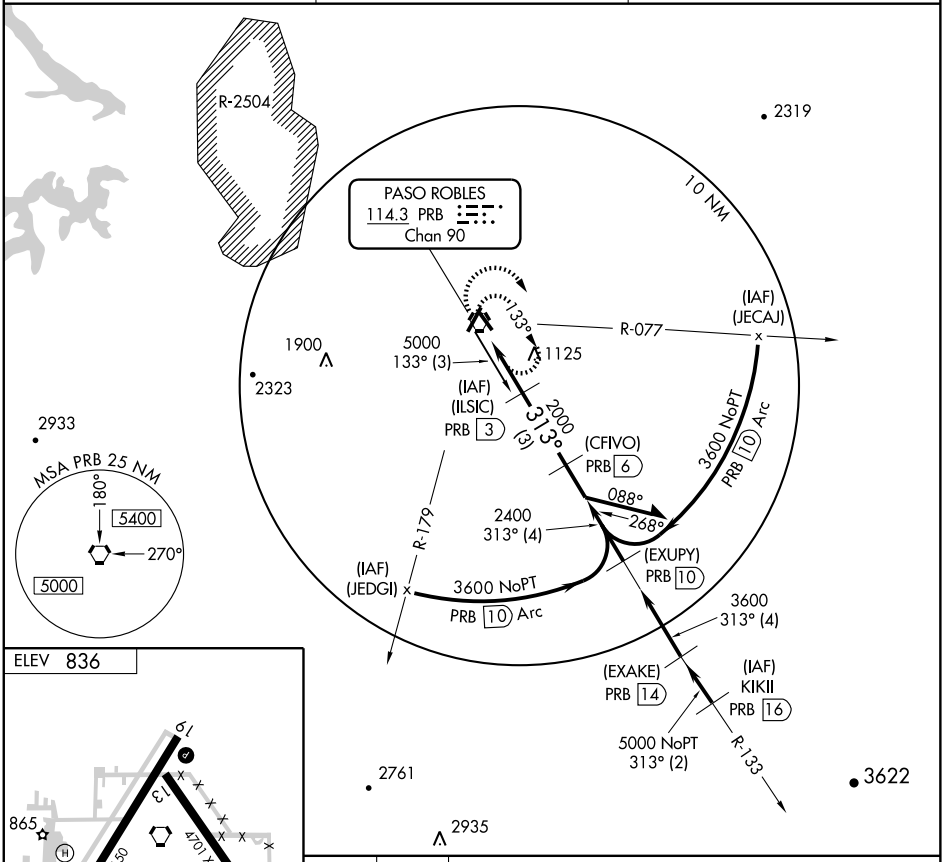
SW-2, 22 OCT 2009 to 19 NOV 2009

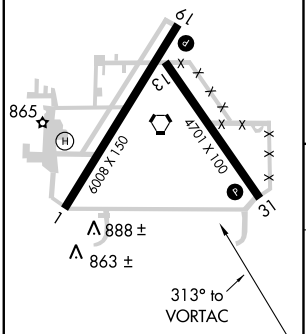
VORTAC PRB 114.3 Chan 90	APP CRS 313°	Rwy Idg N/A TDZE N/A Apt Elev 836

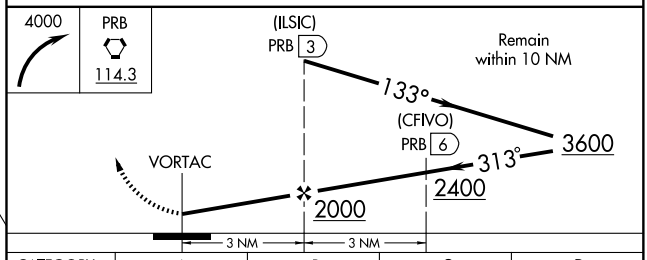
VOR/DME or GPS-B
PASO ROBLES MUNI (PRB)

MISSED APPROACH: Climbing right turn to 4000 in PRB VORTAC holding pattern.

ASOS	OAKLAND CENTER	UNICOM
120.125	128.7 307.0	123.0 (CTAF) L







REIL Rwy 19
MIRL Rwy 13-31 L
HIRL Rwy 1-19 L

CATEGORY	A	B	C	D
CIRCLING	1440-1 604 (700-1)		1440-1¾ 604 (700-1¾)	1440-2 604 (700-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

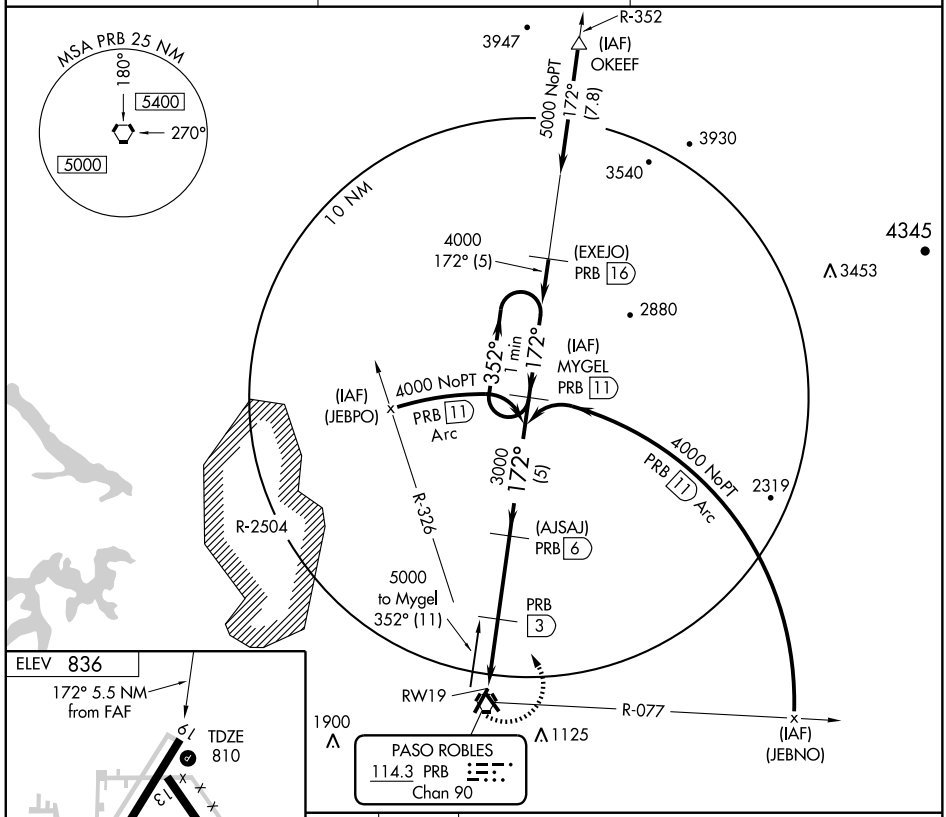
VORTAC PRB	APP CRS	Rwy Idg	6009
114.3	172°	TDZE	810
Chan 90		Apt Elev	836

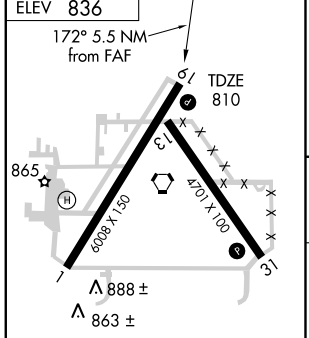
VOR/DME or GPS RWY 19

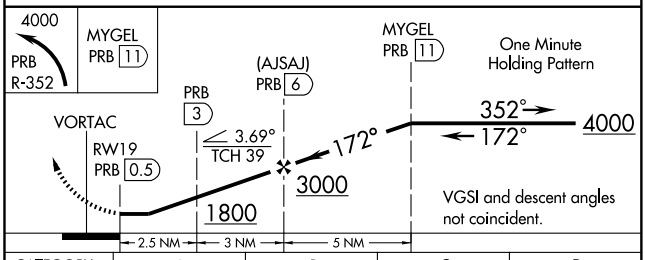
PASO ROBLES MUNI (PRB)

MISSED APPROACH: Climbing left turn to 4000 via PRB R-352 to MYGEL/11 DME and hold.

ASOS	OAKLAND CENTER	UNICOM
120.125	128.7 307.0	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-19	1200-1 390 (400-1)			1200-1¼ 390 (400-1¼)
CIRCLING	1300-1 464 (500-1)		1340-1½ 504 (600-1½)	1440-2 604 (700-2)

REIL Rwy 19
MIRL Rwy 13-31 L
HIRL Rwy 1-19 L

SW-3, 22 OCT 2009 to 19 NOV 2009

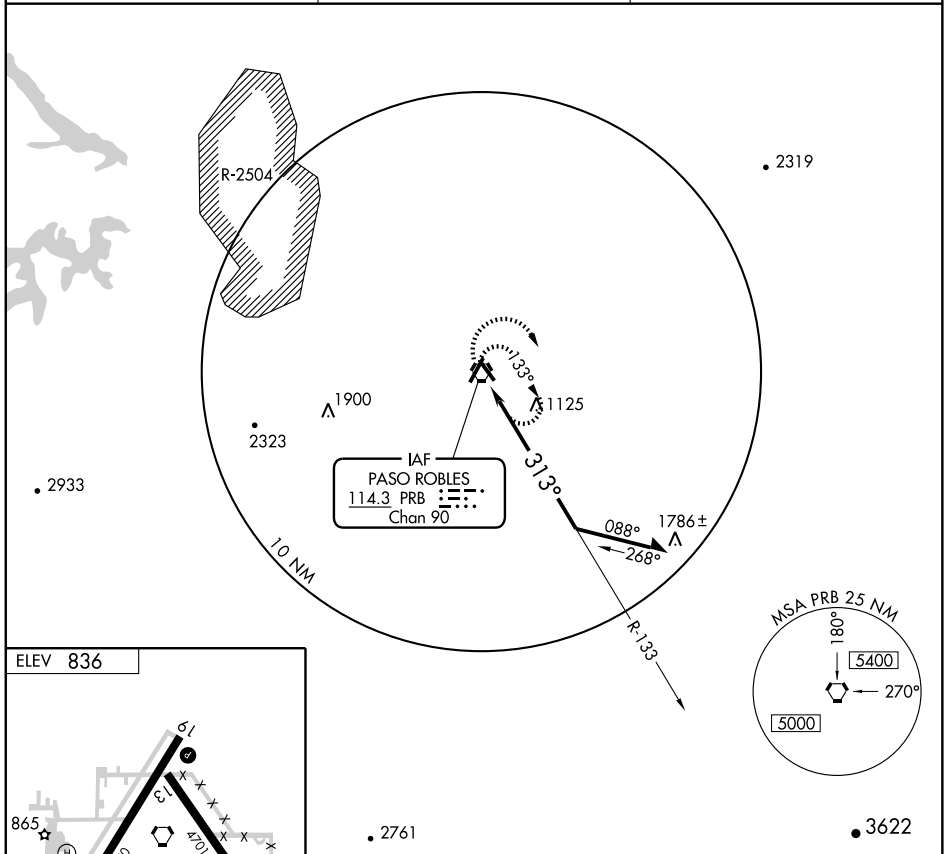
VORTAC PRB 114.3 Chan 90	APP CRS 313°	Rwy Idg N/A TDZE N/A Apt Elev 836

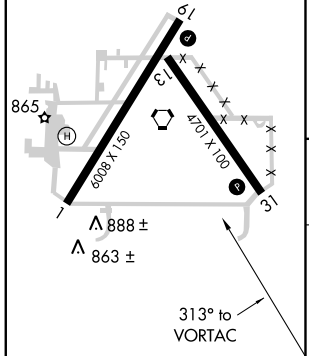
VOR or GPS-A

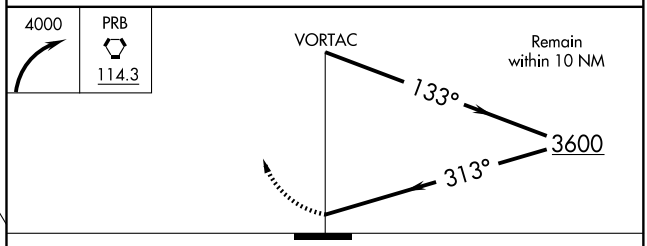
PASO ROBLES MUNI (PRB)

MISSED APPROACH: Climbing right turn to 4000 in PRB VORTAC holding pattern.

ASOS	OAKLAND CENTER	UNICOM
120.125	128.7 307.0	123.0 (CTAF) L







REIL Rwy 19
MIRL Rwy 13-31 L
HIRL Rwy 1-19 L

CATEGORY	A	B	C	D
CIRCLING	2100-1¼ 1264 (1300-1¼)	2100-1½ 1264 (1300-1½)	2100-3	1264 (1300-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

PETALUMA, CALIFORNIA

AL-6838 (FAA)

APP CRS	Rwy Idg	3601
290°	TDZE	87
	Apt Elev	87

GPS RWY 29

PETALUMA MUNI (O69)

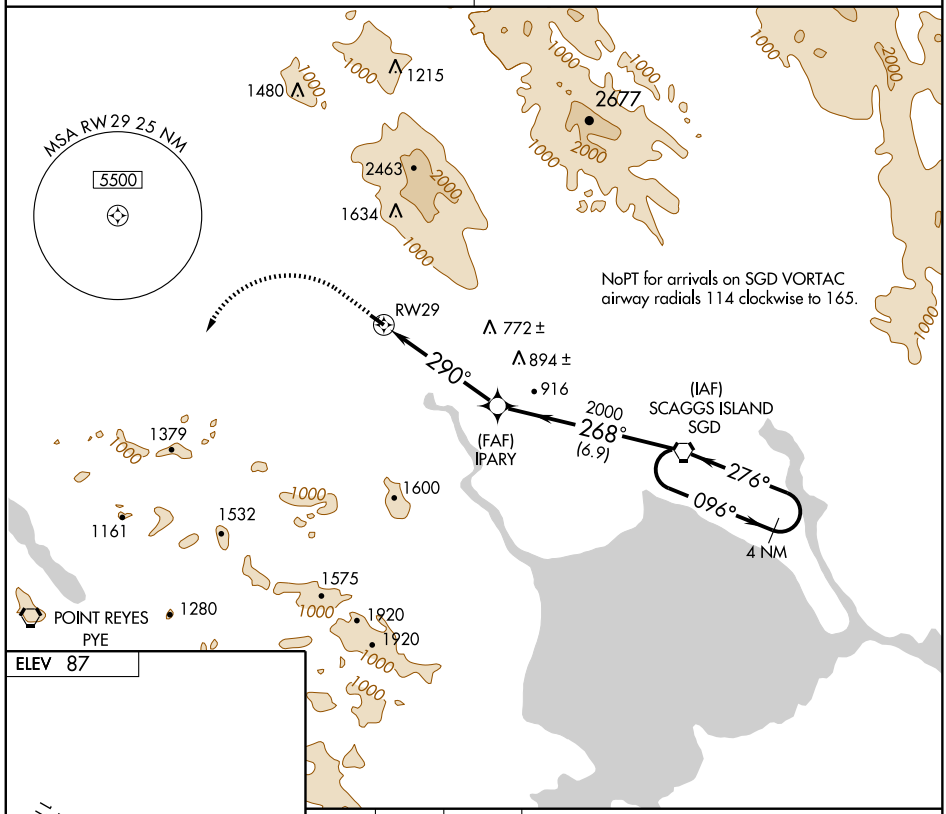
T
NA

Use Santa Rosa altimeter setting; when not received procedure not authorized.

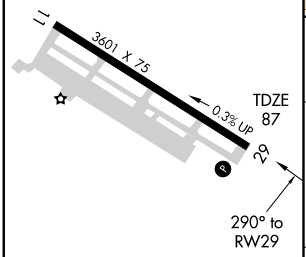
MISSED APPROACH: Climb to 2000, then climbing left turn to 3500 direct to PYE VORTAC.

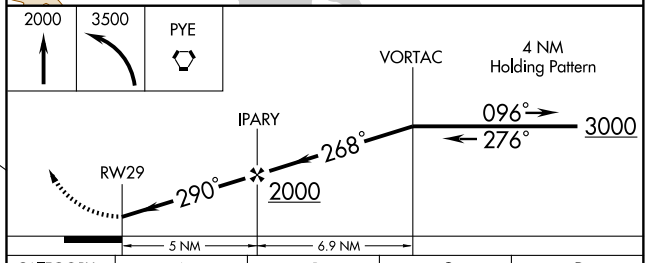
OAKLAND CENTER
127.8 353.5

UNICOM
122.7 (CTAF) L



ELEV 87





CATEGORY	A	B	C	D
S-29	900-1 813 (900-1)	900-1 ¼ 813 (900-1 ¼)	NA	
CIRCLING	900-1 813 (900-1)	900-1¼ 813 (900-1 ¼)	NA	

MIRL Rwy 11-29

SW-2, 22 OCT 2009 to 19 NOV 2009

PETALUMA, CALIFORNIA AL-6838 (FAA)

VORTAC SGD 112.1 Chan 58	APP CRS 276°	Rwy Idg 3601 TDZE 87 Apt Elev 87

VOR RWY 29

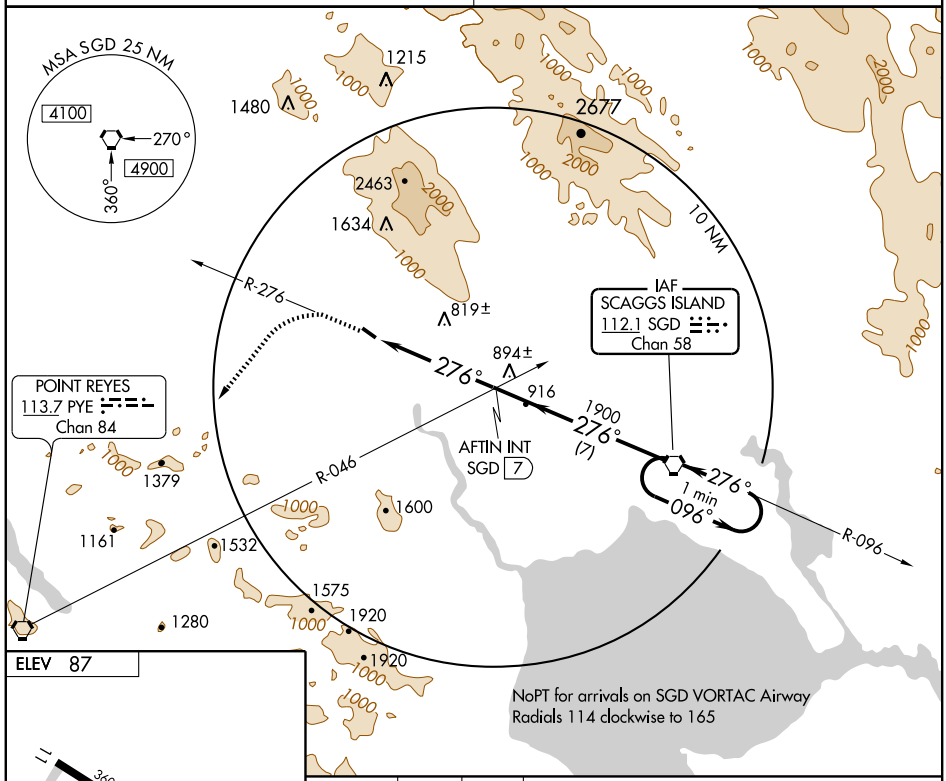
PETALUMA MUNI (O69)

NA Use Santa Rosa altimeter setting; when not received, procedure not authorized.

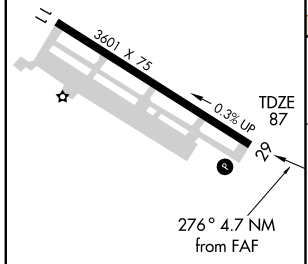
MISSED APPROACH: Climb to 2000 via SGD R-276 then climbing left turn to 3500 direct PYE VORTAC.

OAKLAND CENTER 127.8 353.5

UNICOM 122.7 (CTAF)

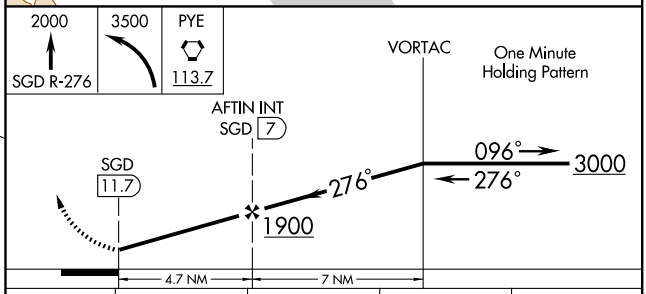


ELEV 87



MIRL Rwy 11-29

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34



CATEGORY	A	B	C	D
S-29	1260-1¼ 1173 (1200-1¼)	1260-1½ 1173 (1200-1½)	NA	
CIRCLING	1260-1¼ 1173 (1200-1¼)	1260-1½ 1173 (1200-1½)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4201
046°	TDZE	2585
	Apt Elev	2585

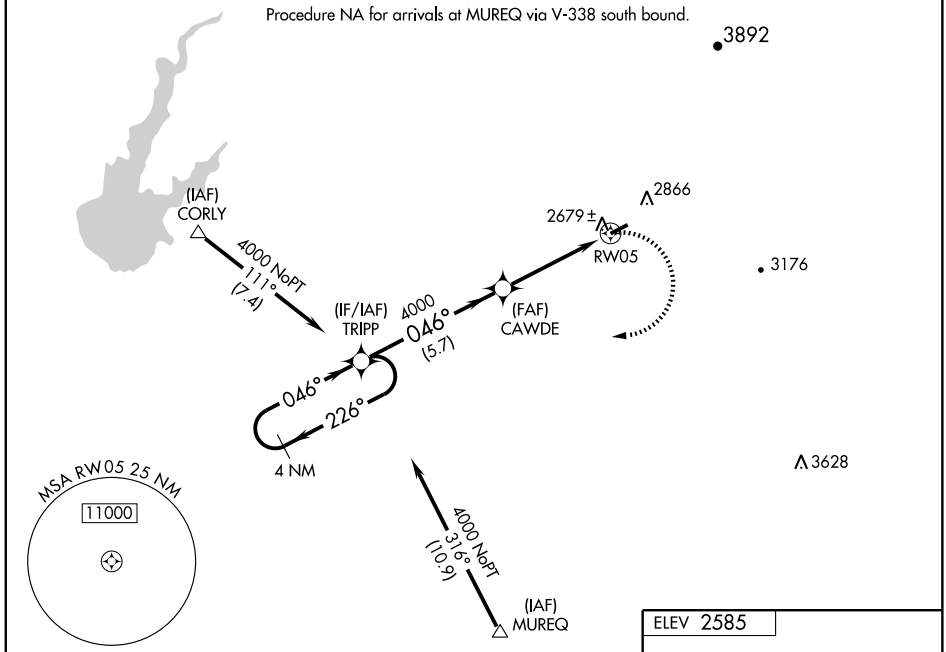
RNAV (GPS) RWY 5
PLACERVILLE (PVF)

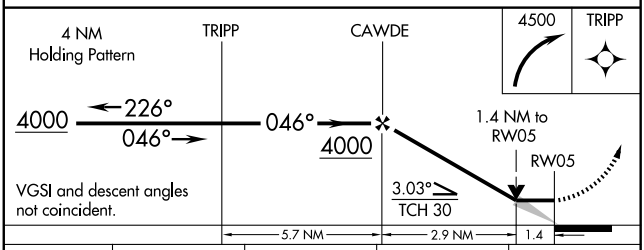
Circling NA northwest of Rwy 5-23.
DME/DME RNP- 0.3 NA.
NA Obtain local altimeter setting on CTAF, when not received use Sacramento Mather altimeter setting.
VDP NA with Sacramento Mather altimeter setting.

MISSED APPROACH: Climbing right turn to 4500 direct TRIPP and hold.

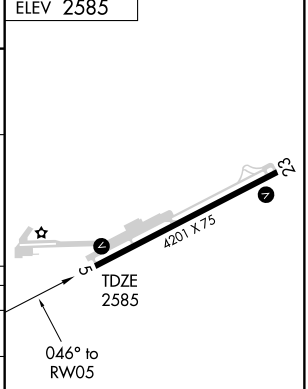
AW0S-3	NORCAL APP CON	UNICOM
128.125	127.4 317.5	122.8 (CTAF) L

Procedure NA for arrivals at MUREQ via V-338 south bound.





CATEGORY	A	B	C	D
LNAV MDA	3040-1 455 (500-1)		NA	
CIRCLING	3040-1 455 (500-1)	3280-1 695 (700-1)	NA	
SACRAMENTO MATHER ALTIMETER SETTING MINIMUMS				
LNAV MDA	3440-1 855 (900-1)	3440-1¼ 855 (900-1¼)	NA	
CIRCLING	3460-1 875 (900-1)	3700-1½ 1115 (1200-1½)	NA	



MIRL Rwy 5-23 L

SW-2, 22 OCT 2009 to 19 NOV 2009

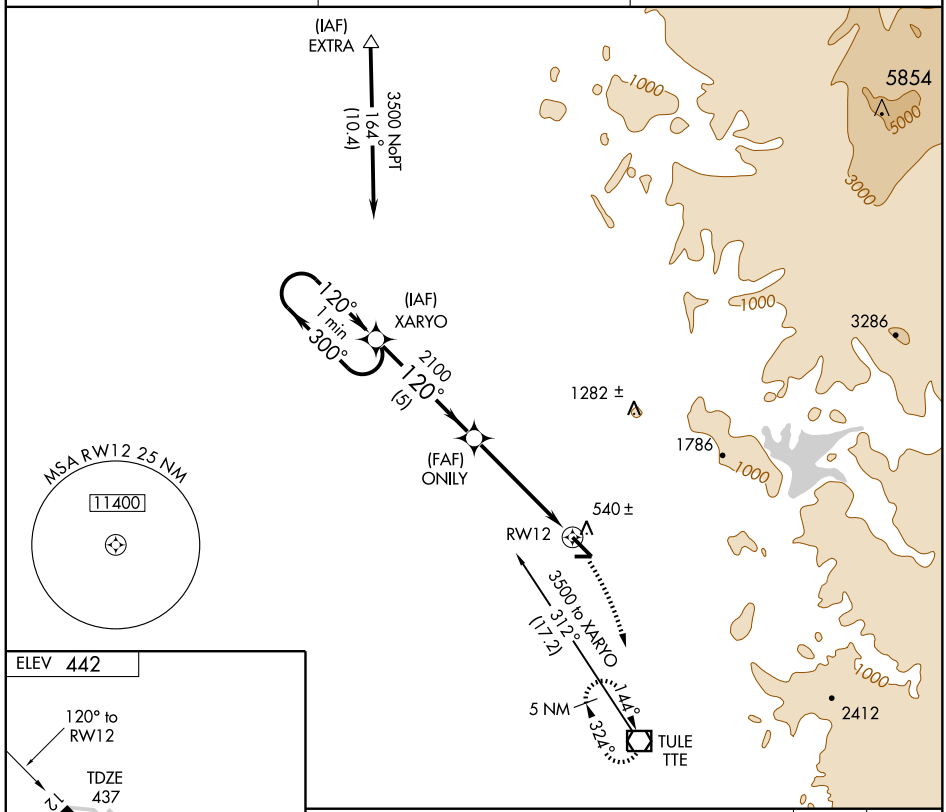
APP CRS	Rwy Idg	5908
120°	TDZE	437
	Apt Elev	442

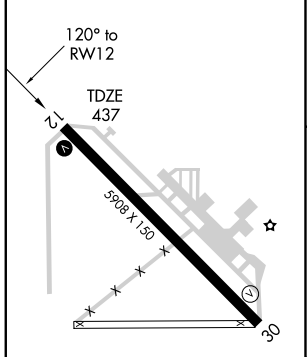
GPS RWY 12
PORTERVILLE MUNI (PTV)

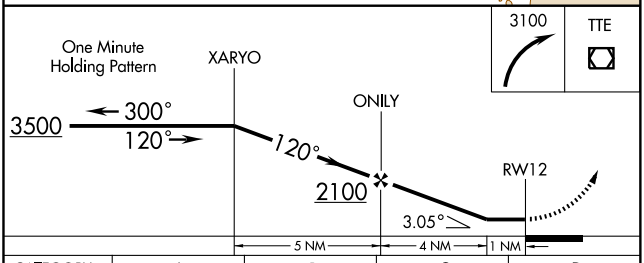
T
NA

MISSED APPROACH: Climbing right turn to 3100 direct TTE VOR/DME and hold.

AWOS-3	BAKERSFIELD APP CON ★	UNICOM
134.625	120.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-12	800-1 363 (400-1)			800-1¼ 363 (400-1¼)
CIRCLING	880-1 438 (500-1)	900-1 458 (500-1)	900-1½ 458 (500-1½)	1000-2 558 (600-2)

REIL Rwy 30
HIRL Rwy 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

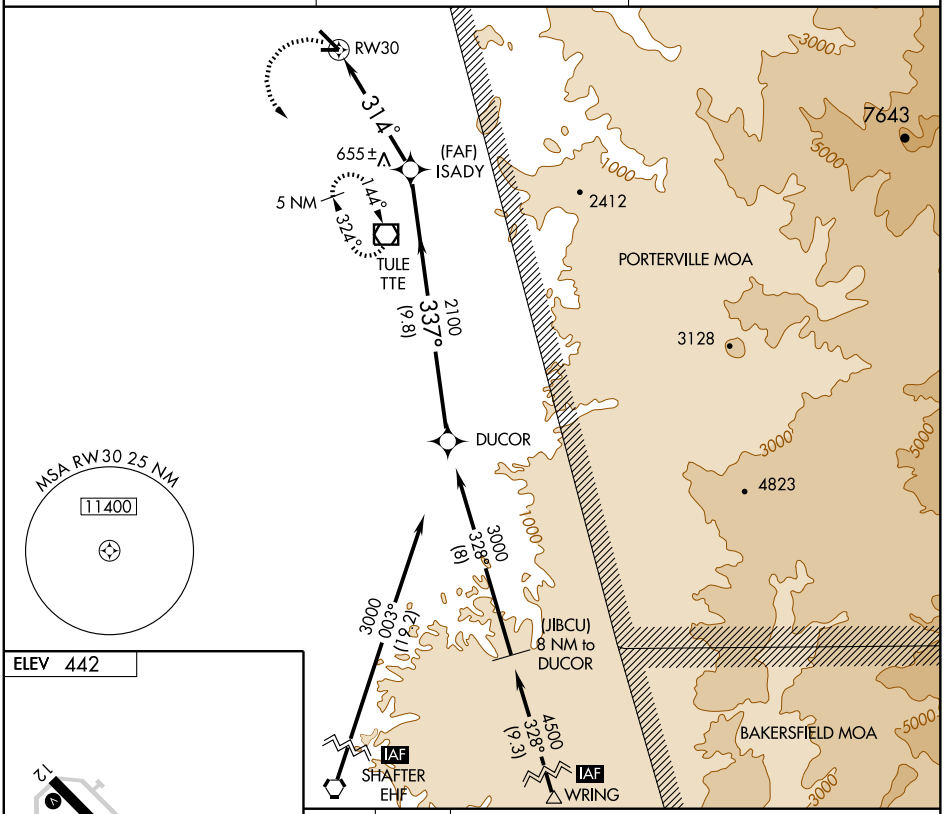
APP CRS	Rwy Idg	5908
314°	TDZE	442
	Apt Elev	442

GPS RWY 30
PORTERVILLE MUNI (PTV)

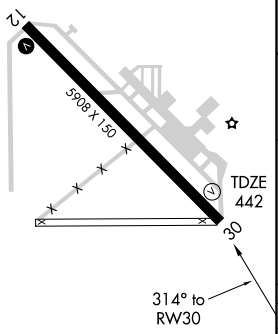
T NA — IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climbing left turn to 3100 direct TTE VOR/DME and hold.

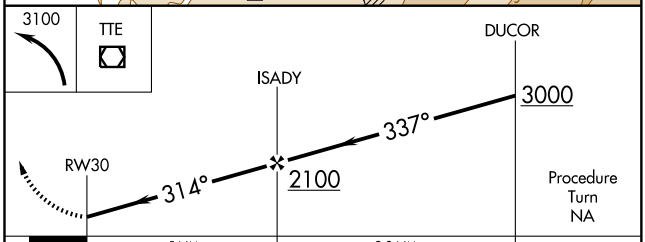
AWOS-3	BAKERFIELD APP CON★	UNICOM
134.625	120.5	122.8 (CTAF) L



ELEV 442



REIL Rwy 30
HIRL Rwy 12-30 L



CATEGORY	A	B	C	D
S-30	900-1 458 (500-1)		900-1¼ 458 (500-1¼)	900-1½ 458 (500-1½)
CIRCLING	900-1 458 (500-1)		900-1½ 458 (500-1½)	1000-2 558 (600-2)

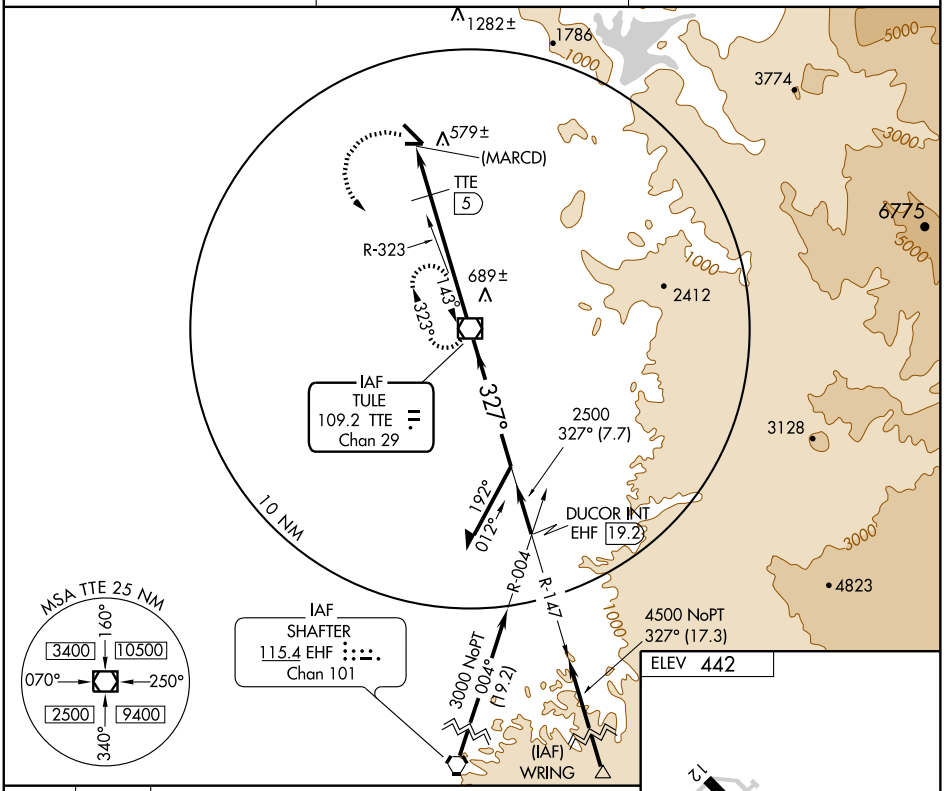
SW-2, 22 OCT 2009 to 19 NOV 2009

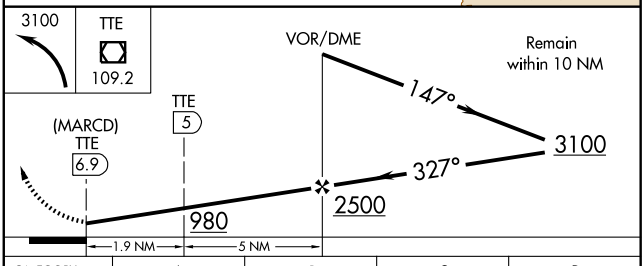
VOR/DME TTE	APP CRS	Rwy Idg	N/A
109.2	327°	TDZE	N/A
Chan 29		Apt Elev	442

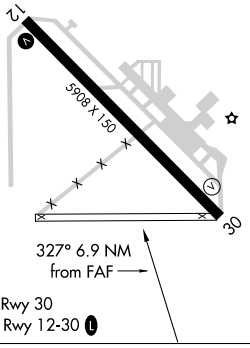
VOR or GPS-A
PORTERVILLE MUNI (PTV)

MISSED APPROACH: Climbing left turn to 3100 direct TTE VOR/DME and hold.

AWOS-3	BAKERFIELD APP CON★	UNICOM
134.625	120.5	122.8 (CTAF) L







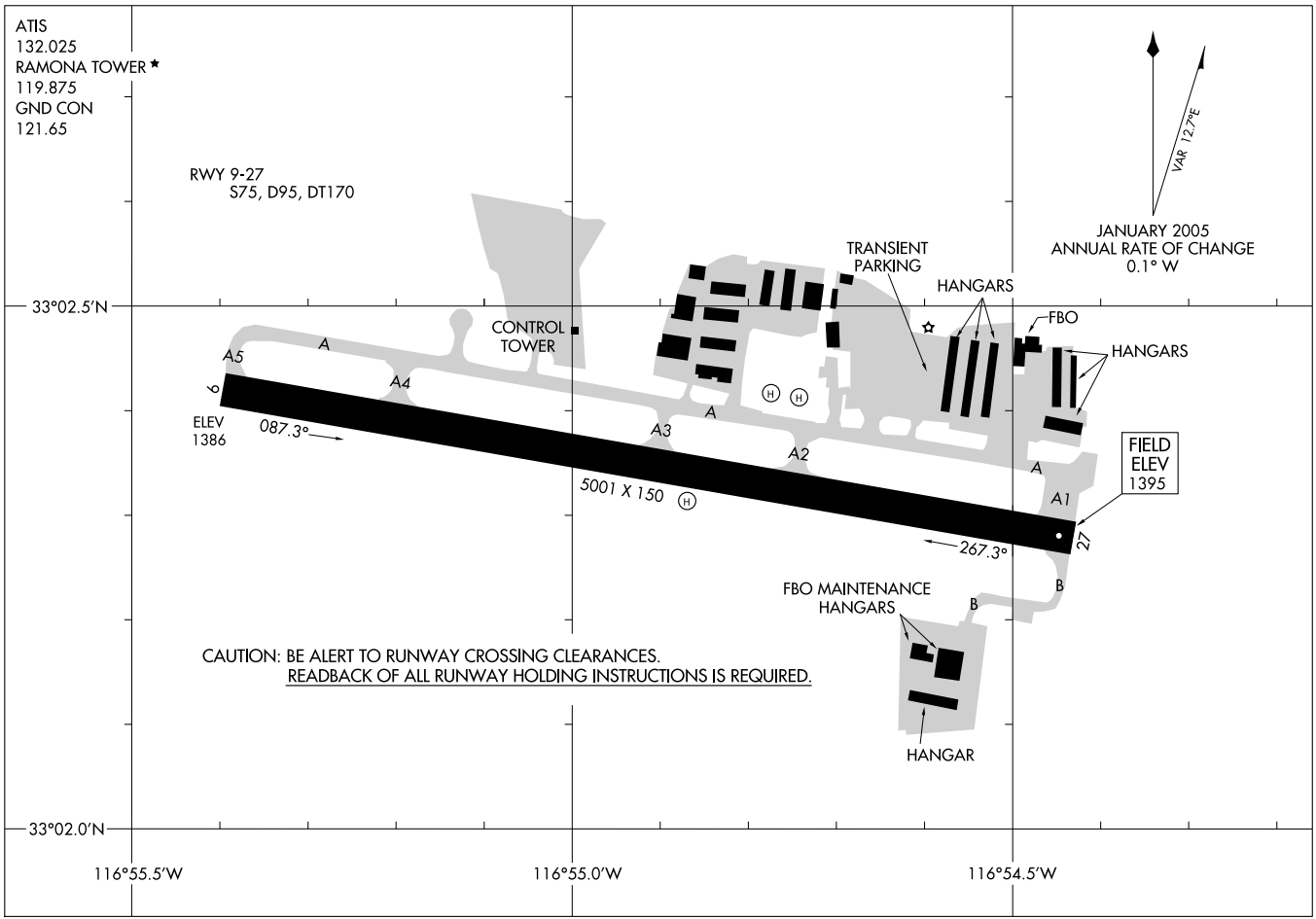
CATEGORY	A	B	C	D
CIRCLING	980-1 538 (600-1)		980-1½ 538 (600-1½)	1000-2 558 (600-2)
DME MINIMA				
CIRCLING	880-1 438 (500-1)	900-1 458 (500-1)	900-1½ 458 (500-1½)	1000-2 558 (600-2)

REIL Rwy 30
HIRL Rwy 12-30 L

FAF to MAP 6.9 NM

Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18

SW-2, 22 OCT 2009 to 19 NOV 2009


ATIS
132.025
RAMONA TOWER ★
119.875
GND CON
121.65
RWY 9-27
S75, D95, DT170
VAR 12.7°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W
TRANSIENT
PARKING
HANGARS
FBO
HANGARS
CONTROL
TOWER
33°02.5'N
A5
A
A4
9
ELEV
1386
087.3°
A3
A
A2
A
A1
5001 X 150
FIELD
ELEV
1395
27
267.3°
B
B
FBO MAINTENANCE
HANGARS
HANGAR
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
33°02.0'N
116°55.5'W
116°55.0'W
116°54.5'W

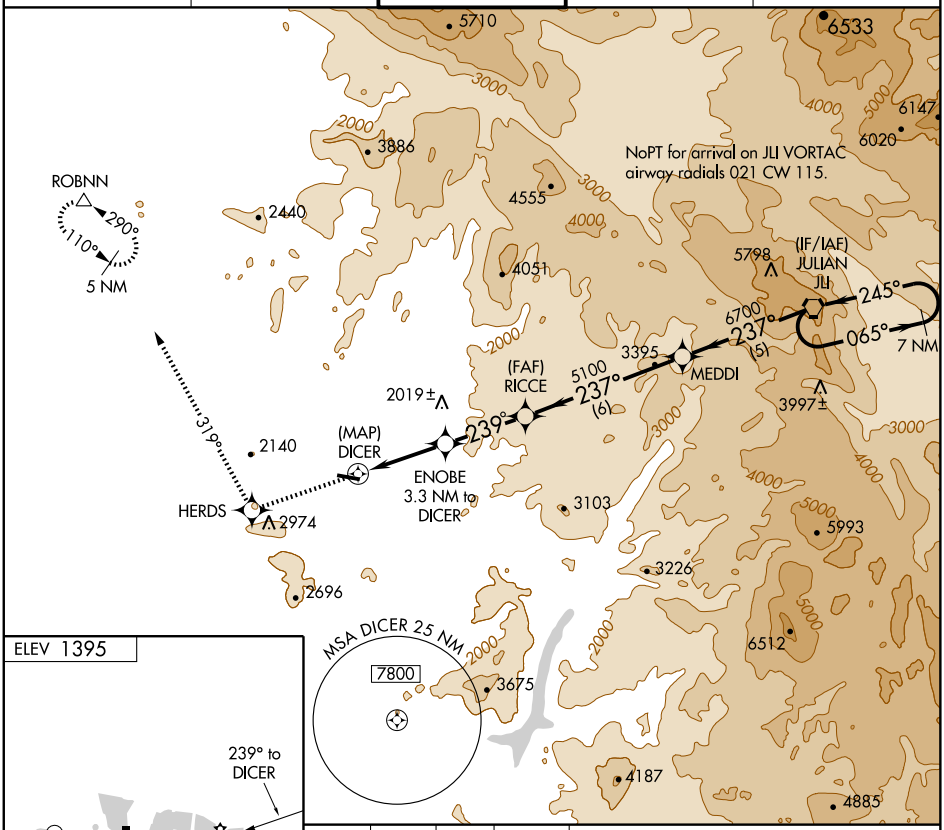
APP CRS	Rwy Idg	N/A
239°	TDZE	N/A
	Apt Elev	1395

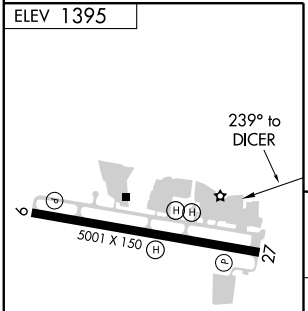
RNAV (GPS)-B
RAMONA (RNM)

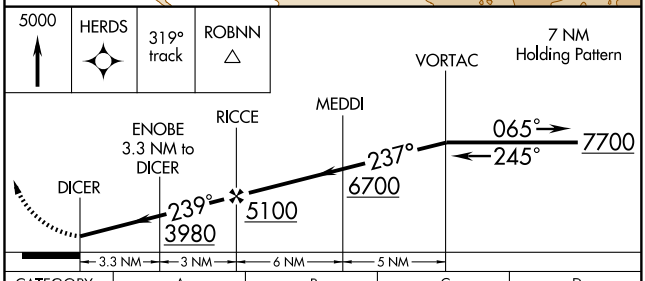
DME/DME RNP- 0.3 NA.
Circling NA north of Rwy 9-27.
When local altimeter setting not received, use Gillespie Field altimeter setting and increase all MDA 180 feet.

MISSED APPROACH: Climb to 5000 direct HERDS and via track 319° to ROBNN and hold.

ATIS	SOCAL APP CON	RAMONA TOWER★	GND CON	UNICOM
132.025	132.2 269.1	119.875 (CTAF) L	121.65	122.95







CATEGORY	A	B	C	D
CIRCLING	2780-1¼ 1385 (1400-1¼)	2780-1½ 1385 (1400-1½)	2780-3 1385 (1400-3)	NA

REIL Rwy 27 L
MIRL Rwy 9-27 L

SW-3, 22 OCT 2009 to 19 NOV 2009

RAMONA, CALIFORNIA AL-6667 (FAA)

APP CRS	Rwy Idg	5001
088°	TDZE	1389
	Apt Elev	1395

RNAV (GPS) RWY 9

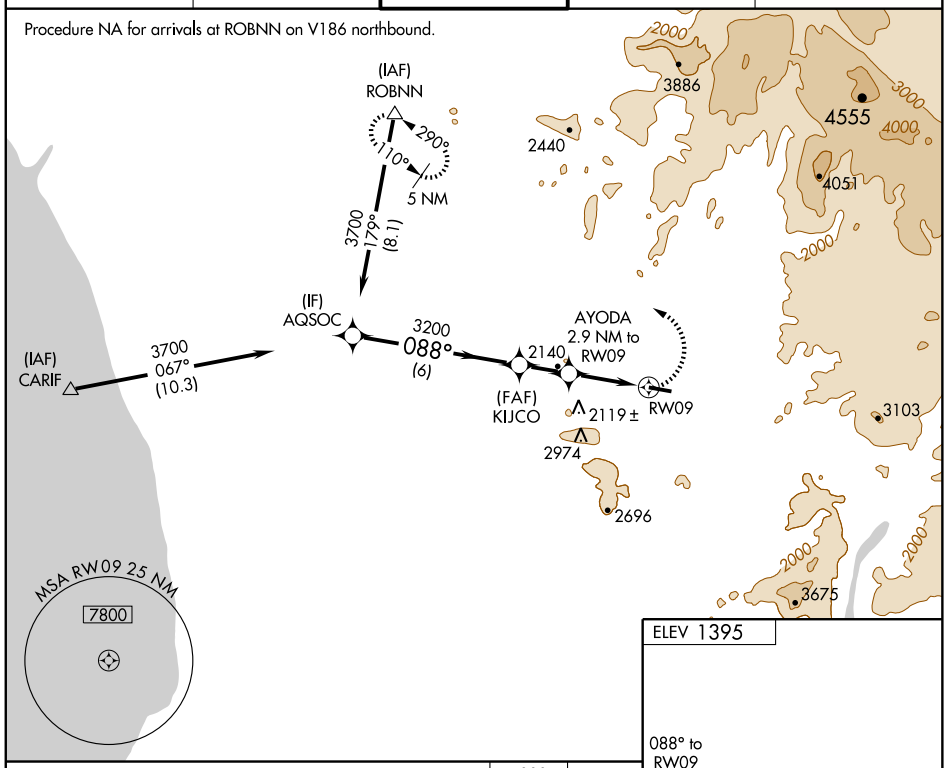
RAMONA (RNM)

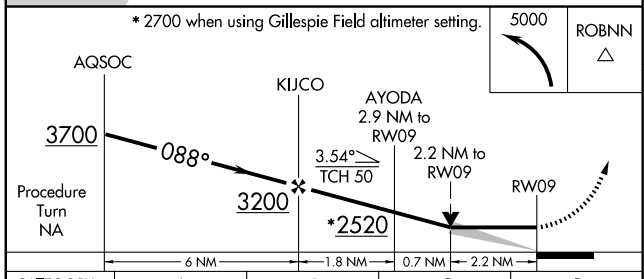
Circling NA north of Rwy 9-27. DME/DME RNP -0.3 NA.
LNAV minima NA when using Gillespie Field altimeter setting.
When local altimeter setting not received, use Gillespie Field altimeter setting and increase all circling MDA 180 feet and increase circling visibility Cats A and B ¼ mile and Cat C ½ mile.

MISSED APPROACH: Climbing left turn to 5000 direct ROBNN and hold.

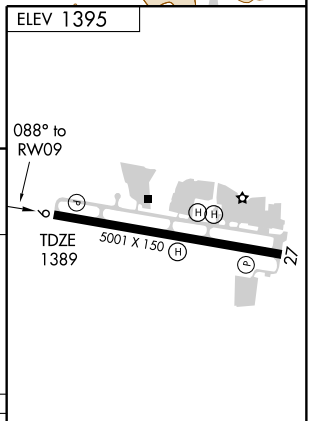
ATIS	SOCAL APP CON	RAMONA TOWER★	GND CON	UNICOM
132.025	132.2 269.1	119.875 (CTAF) L	121.65	122.95

Procedure NA for arrivals at ROBNN on V186 northbound.





CATEGORY	A	B	C	D
LNAV MDA	2240-1 851 (900-1)	2240-1¼ 851 (900-1¼)	2240-2½ 851 (900-2½)	NA
CIRCLING	2240-1 845 (900-1)	2240-1¼ 845 (900-1¼)	2240-2½ 845 (900-2½)	NA



REIL Rwy 27 L
MIRL Rwy 9-27 L

SW-3, 22 OCT 2009 to 19 NOV 2009

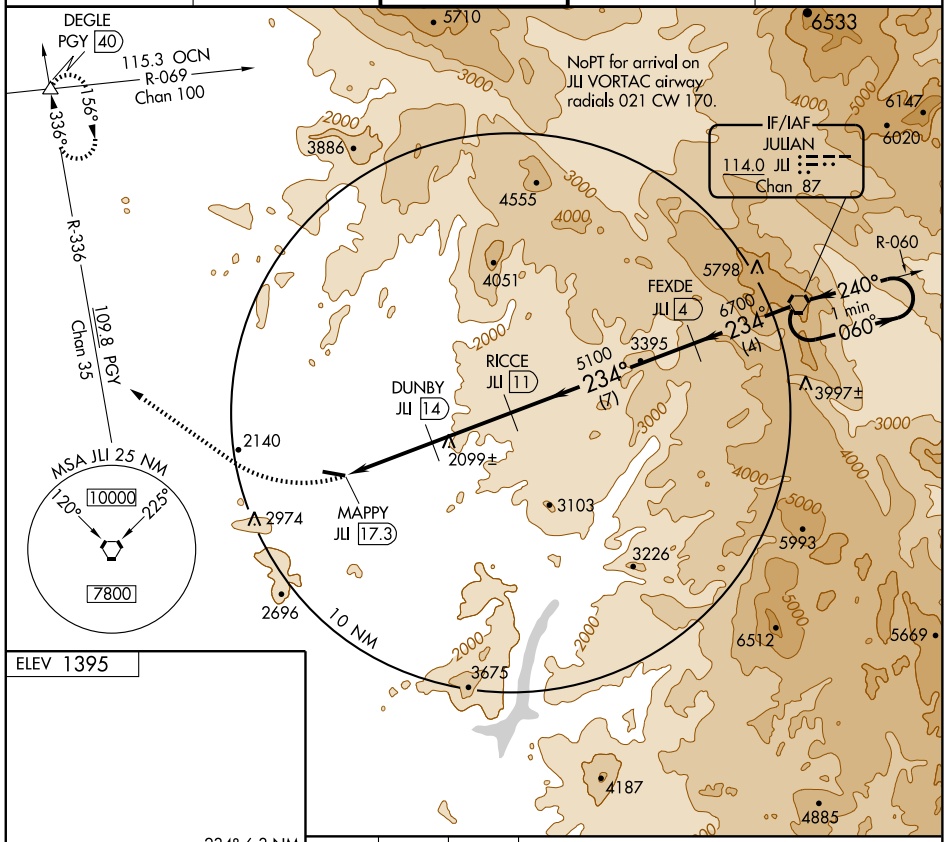
VORTAC JLI	APP CRS	Rwy Idg	N/A
114.0	234°	TDZE	N/A
Chan 87		Apt Elev	1395

VOR/DME-A
RAMONA (RNM)

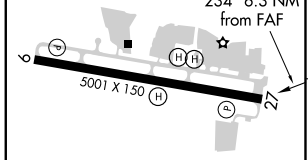
Circling NA north of Rwy 9-27.
When local altimeter setting not received, use Gillespie Field altimeter setting and increase all MDA 180 feet.

MISSED APPROACH: Climbing right turn to 5000 via heading 290° and PGY VORTAC R-336 to DEGLE/PGY 40 DME and hold.

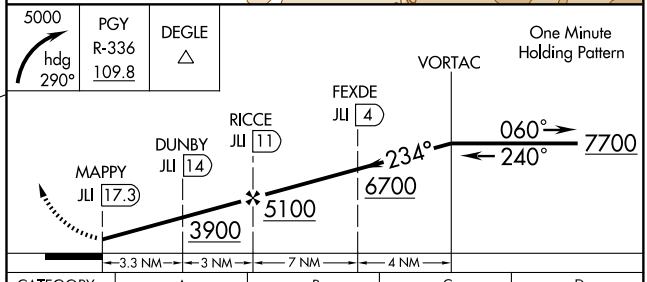
ATIS	SOCAL APP CON	RAMONA TOWER★	GND CON	UNICOM
132.025	132.2 269.1	119.875 (CTAF) L	121.65	122.95



ELEV 1395



5000	PGY	DEGLE
hdg 290°	R-336	△
	109.8	



CATEGORY	A	B	C	D
CIRCLING	2580-1¼ 1185 (1200-1¼)	2580-1½ 1185 (1200-1½)	2580-3 1185 (1200-3)	NA

REIL Rwy 27 L
MIRL Rwy 9-27 L

SW-3, 22 OCT 2009 to 19 NOV 2009

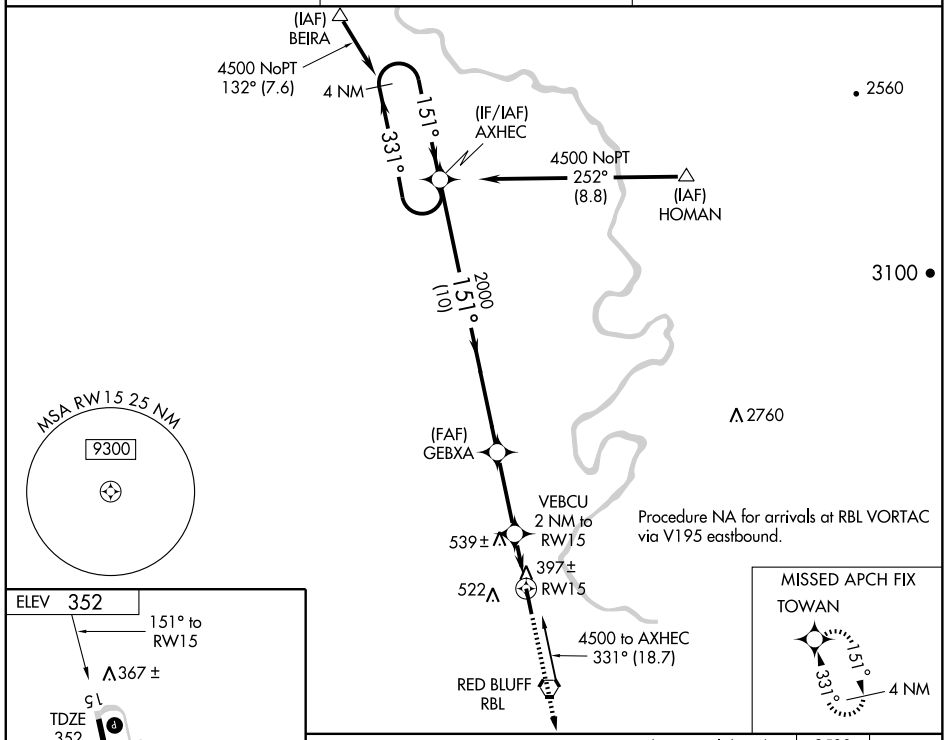
WAAS CH 73008 W15A	APP CRS 151°	Rwy Idg 5700 TDZE 352 Apt Elev 352

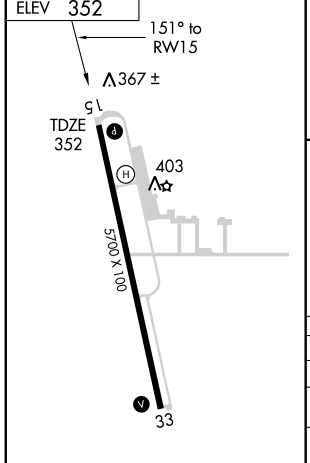
RNAV (GPS) RWY 15
RED BLUFF MUNI (RBL)

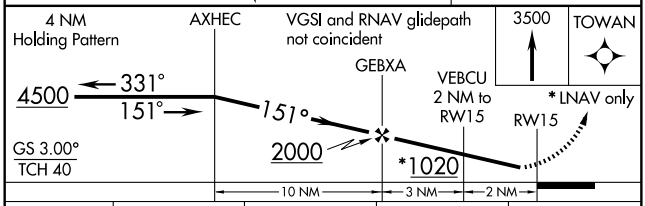
Baro-VNAV NA when using Redding altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received; use Redding altimeter setting and increase all DA/MDA 80 feet and increase LPV visibility ¼ mile all Cats, LNAV/ VNAV visibility ¼ mile all Cats, LNAV visibility ¼ mile Cat C and D.

MISSED APPROACH: Climb to 3500 direct TOWAN and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	132.2 350.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	602-1 250 (300-1)			
LNAV/ VNAV DA	789-1½ 437 (500-1½)			
LNAV MDA	820-1 468 (500-1)		820-1¼ 468 (500-1¼)	820-1½ 468 (500-1½)
CIRCLING	840-1 488 (500-1)		840-1½ 488 (500-1½)	920-2 568 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH **42609** **W33A**	APP CRS **331°**	Rwy Idg **5700** TDZE **352** Apt Elev **352**

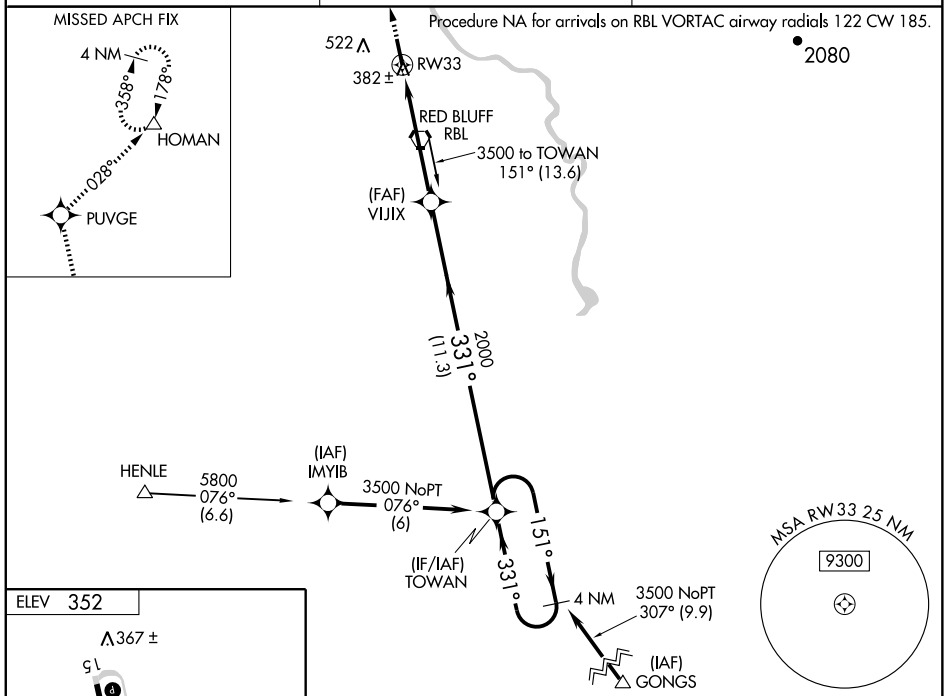
RNAV (GPS) RWY 33

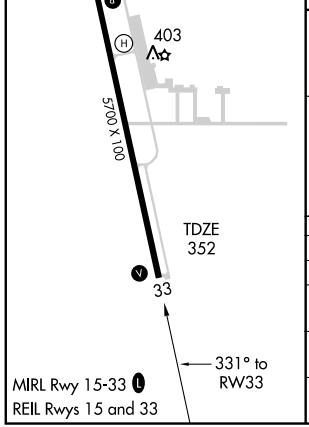
RED BLUFF MUNI (RBL)

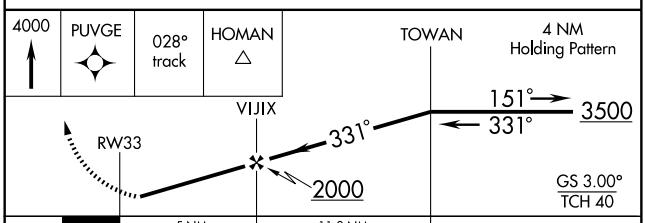
Baro-VNAV NA when using Redding altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Redding altimeter setting and increase all DA/MDA 80 feet and increase visibilities LPV ¼ mile all Cats, LNAV/VNAV ¼ mile all Cats, and LNAV Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 4000 direct PUVGE and via 028° track to HOMAN and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	**132.2 350.3**	**123.0** (CTAF)







CATEGORY	A	B	C	D
LPV DA	602-1 250 (300-1)			
LNAV/VNAV DA	718-1¼ 366 (400-1¼)			
LNAV MDA	780-1 428 (500-1)		780-1¼ 428 (500-1¼)	780-1½ 428 (500-1½)
CIRCLING	840-1 488 (500-1)		840-1½ 488 (500-1½)	920-2 568 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC RBL	APP CRS	Rwy Idg	5700
115.7	149°	TDZE	352
Chan 104		Apt Elev	352

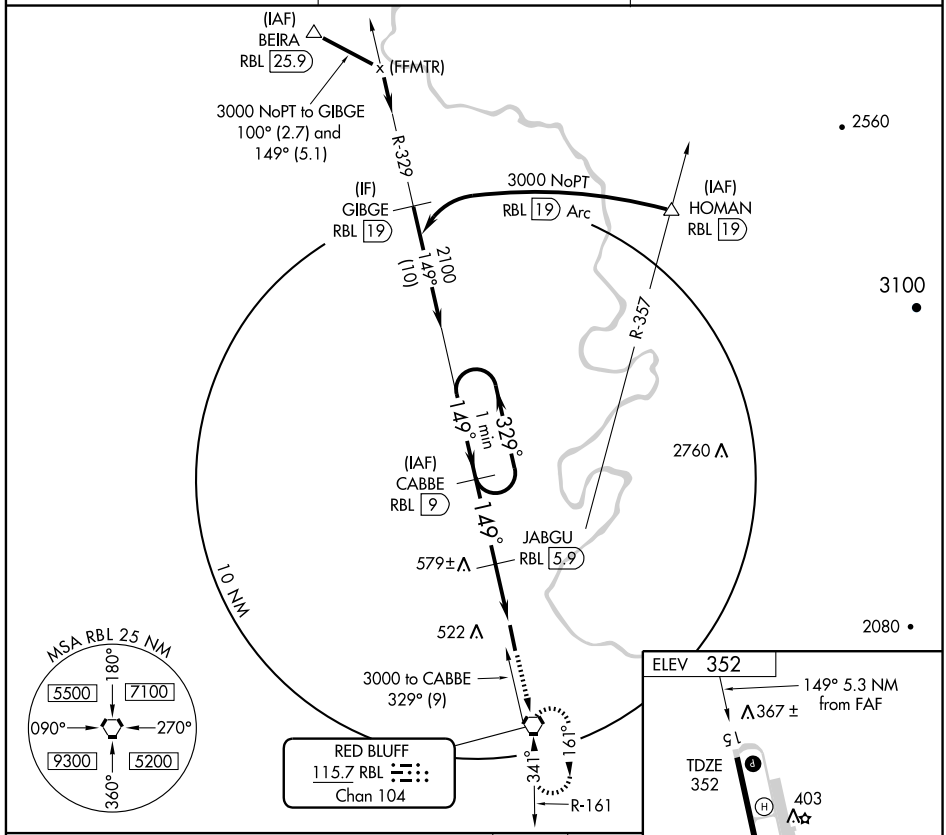
VOR/DME RWY 15

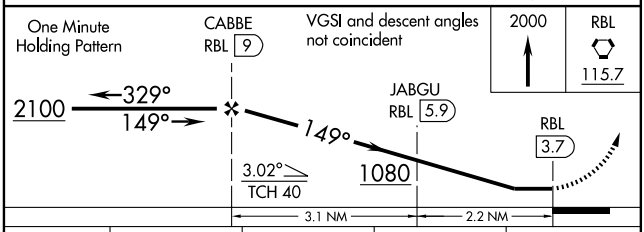
RED BLUFF MUNI (RBL)

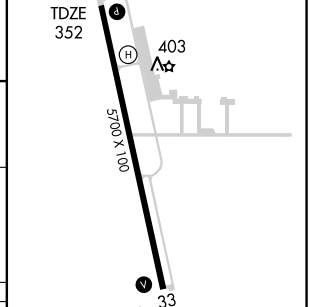
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Redding altimeter setting and increase all MDA 80 feet, and increase visibilities S-15 Cat C and D ¼ mile.

MISSED APPROACH: Climb to 2000 direct RBL VORTAC and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	132.2 350.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-15	840-1 488 (500-1)		840-1¼ 488 (500-1¼)	840-1½ 488 (500-1½)
CIRCLING	840-1 488 (500-1)		840-1½ 488 (500-1½)	920-2 568 (600-2)

Knots	60	90	120	150	180
Min:Sec					

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC RBL 115.7 Chan 104	APP CRS 328°	Rwy Idg 5700 TDZE 352 Apt Elev 352

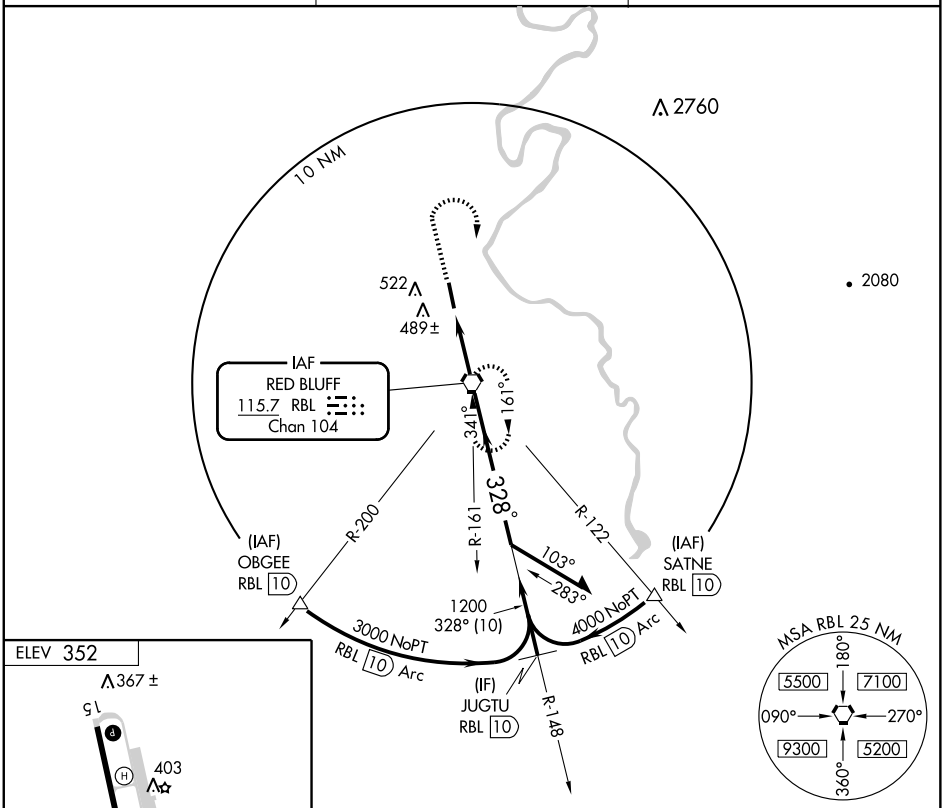
VOR RWY 33

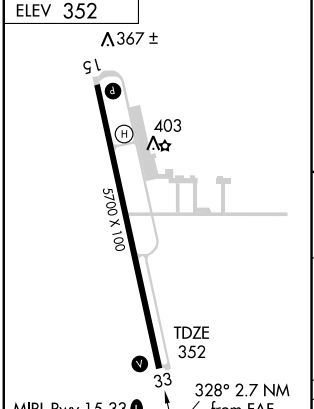
RED BLUFF MUNI (RBL)

Visibility reduction by helicopters NA.
When local altimeter setting not received, use Redding altimeter setting and increase all MDA 80 feet, and increase visibilities S-33 Cat C and D ¼ mile.

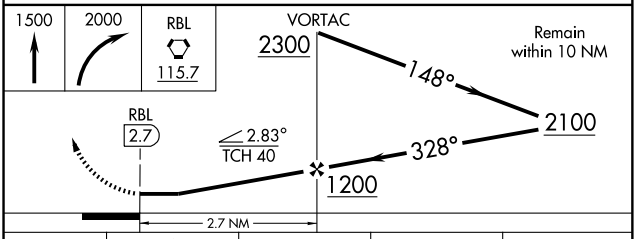
MISSED APPROACH: Climb to 1500, then climbing right turn to 2000 direct RBL VORTAC and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	132.2 350.3	123.0 (CTAF) L





Knots	60	90	120	150	180
Min:Sec	2:42	1:48	1:21	1:05	0:54



CATEGORY	A	B	C	D
S-33	740-1 388 (400-1)			740-1¼ 388 (400-1¼)
CIRCLING	840-1 488 (500-1)		840-1½ 488 (500-1½)	920-2 568 (600-2)

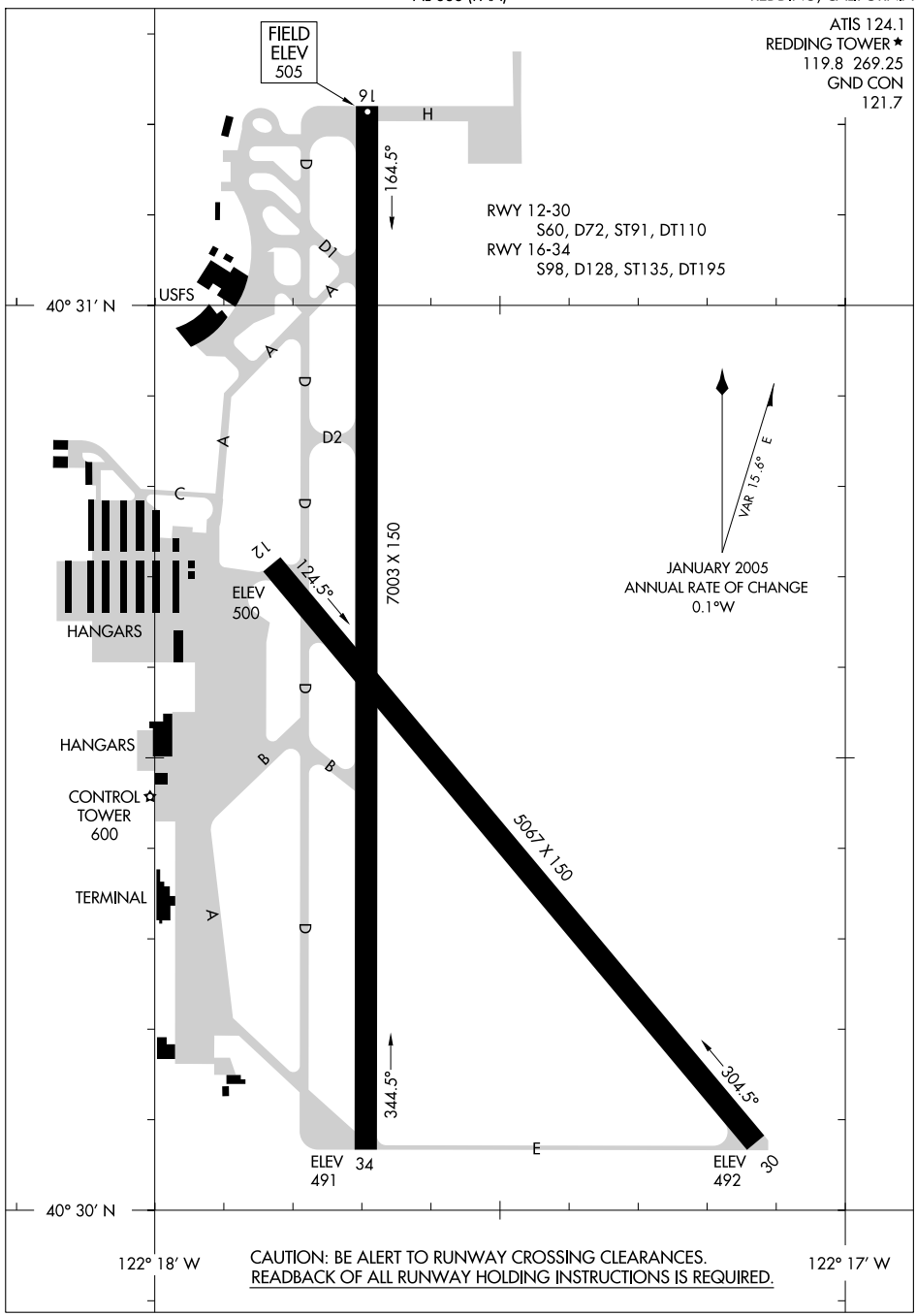
SW-2, 22 OCT 2009 to 19 NOV 2009

08325

AIRPORT DIAGRAM

AL-688 (FAA)

REDDING MUNI (RDD)
REDDING, CALIFORNIA



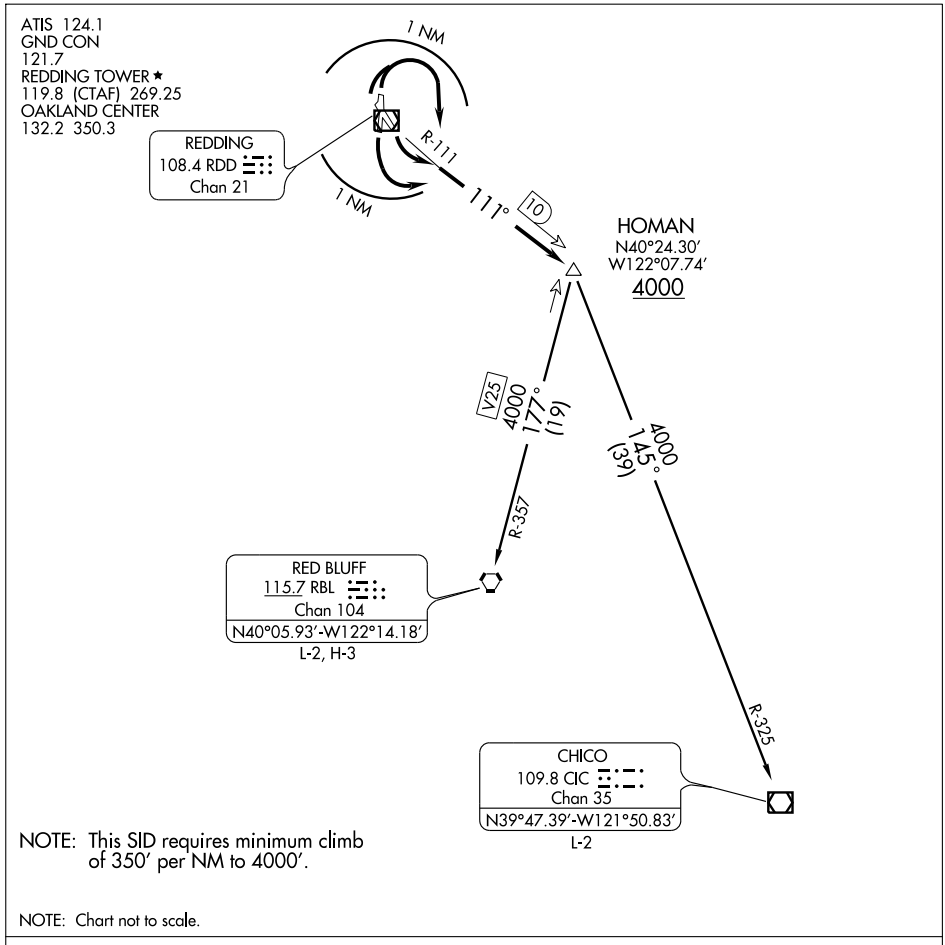
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-2, 22 OCT 2009 to 19 NOV 2009

HOMAN TWO DEPARTURE

SL-688 (FAA)

REDDING MUNI (RDD)
REDDING, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 12, 16: Turn left within 1 NM, thence....
TAKE-OFF RUNWAYS 30,34: Turn right within 1 NM, thence....

....Intercept the RDD R-111, direct HOMAN INT, cross HOMAN INT at or above 4000'; then via (transition) or (assigned route). Expect clearance to filed altitude 10 minutes after departure.

CHICO TRANSITION (HOMAN2.CIC): From over HOMAN INT via CIC R-325 to CIC VOR/DME.
RED BLUFF TRANSITION (HOMAN2.RBL): From over HOMAN INT via RBL R-357 to RBL VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-RDD	APP CRS	Rwy Idg 7003
108.7	342°	TDZE 499
Chan 24		Apt Elev 505

ILS or LOC/DME RWY 34

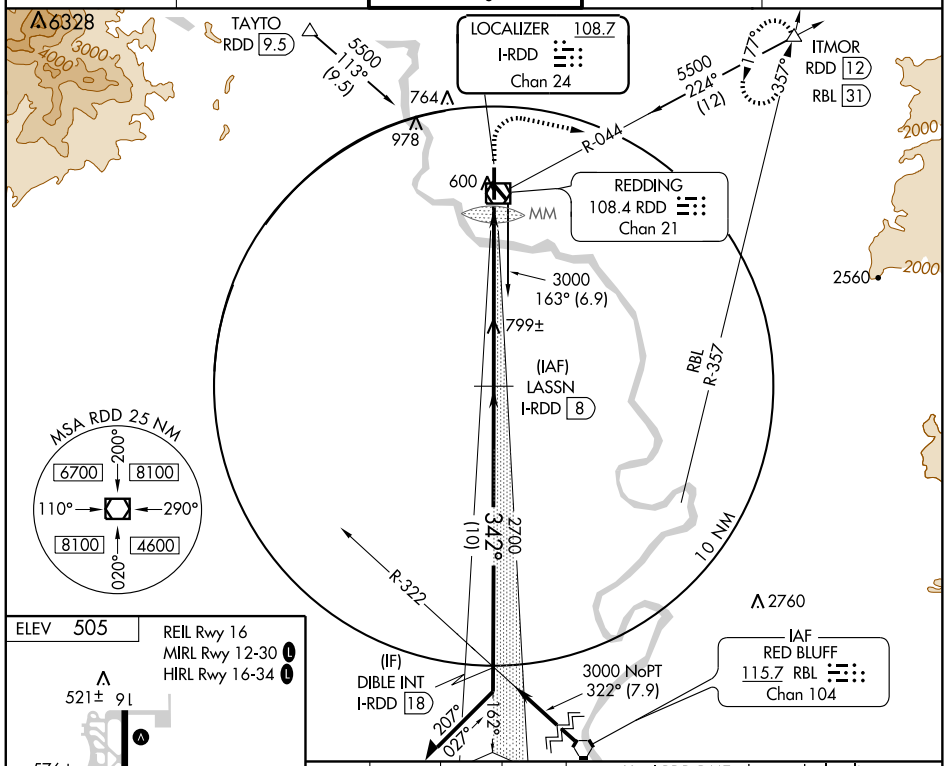
REDDING MUNI (RDD)

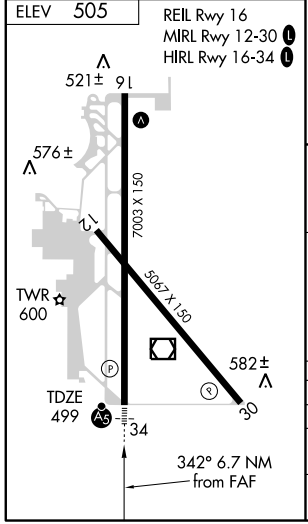
When local altimeter setting not received, use Red Bluff altimeter setting and increase all DAs/MDAs 80 feet, S-LOC 34 Cats. C, D, and E visibility ¼ mile, and Circling Cat. C and D visibility ¼ mile. VDP NA when using Red Bluff altimeter setting. For inoperative MALSR, increase S-ILS 34 Cat. E visibility to ¾ mile, S-LOC 34 Cat. E visibility to 2¼ mile. When using Red Bluff altimeter setting increase S-ILS 34 all Cats. visibility to 1 mile, and S-LOC 34 Cat. E visibility to 2½ mile.

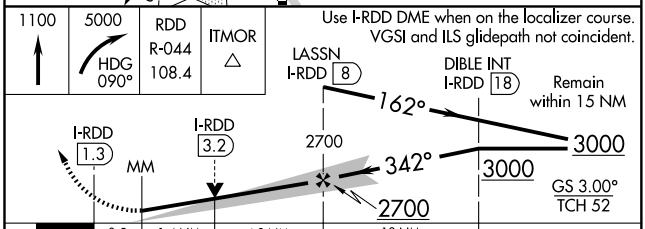
MALSR

MISSED APPROACH: Climb to 1100 then climbing right turn to 5000 via heading 090° and RDD R-044 to ITMOR INT/RDD 12 DME and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95







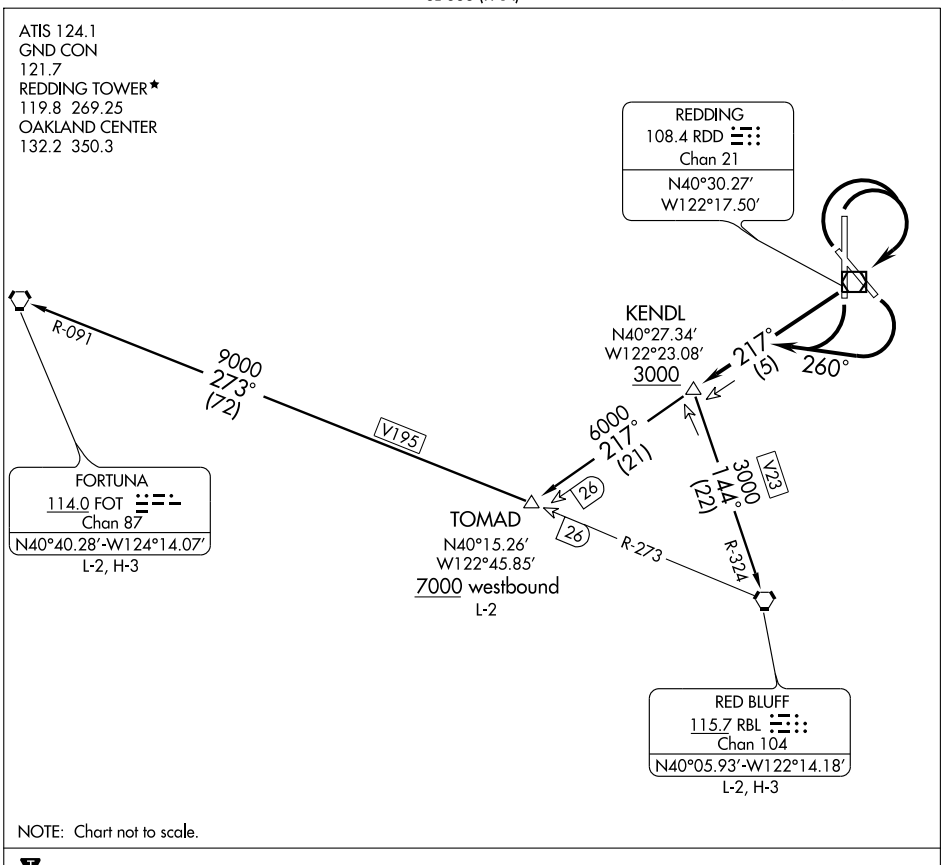
CATEGORY	A	B	C	D	E
S-ILS 34	699-½ 200 (200-½)				
S-LOC 34	1140-½ 641 (700-½)		1140-1¼ 641 (700-1¼)	1140-1½ 641 (700-1½)	1140-1¾ 641 (700-1¾)
CIRCLING	1140-1 635 (700-1)		1140-1¾ 635 (700-1¾)	1140-2 635 (700-2)	1340-3 835 (900-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

KENDL ONE DEPARTURE

SL-688 (FAA)

REDDING MUNI (RDD)
REDDING, CALIFORNIA



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 12 and 16: Cats. A and B: turn right heading 260° to intercept and proceed via the RDD R-217 to KENDL INT. Cross KENDL INT at or above 3000, thence via (transition) or (assigned route). Cats. C and D: not authorized.

TAKE-OFF RUNWAYS 30 and 34: Turn right to cross RDD VOR/DME and proceed via the RDD R-217 to KENDL INT. Cross KENDL INT at or above 3000 thence via (transition) or (assigned route).

FORTUNA TRANSITION (KENDL1.FOT): From over KENDL INT via RDD R-217 to TOMAD INT, thence via RBL R-273 and FOT R-091 to FOT VORTAC.

RED BLUFF TRANSITION (KENDL1.RBL): From over KENDL INT via RBL R-324 to RBL VORTAC.

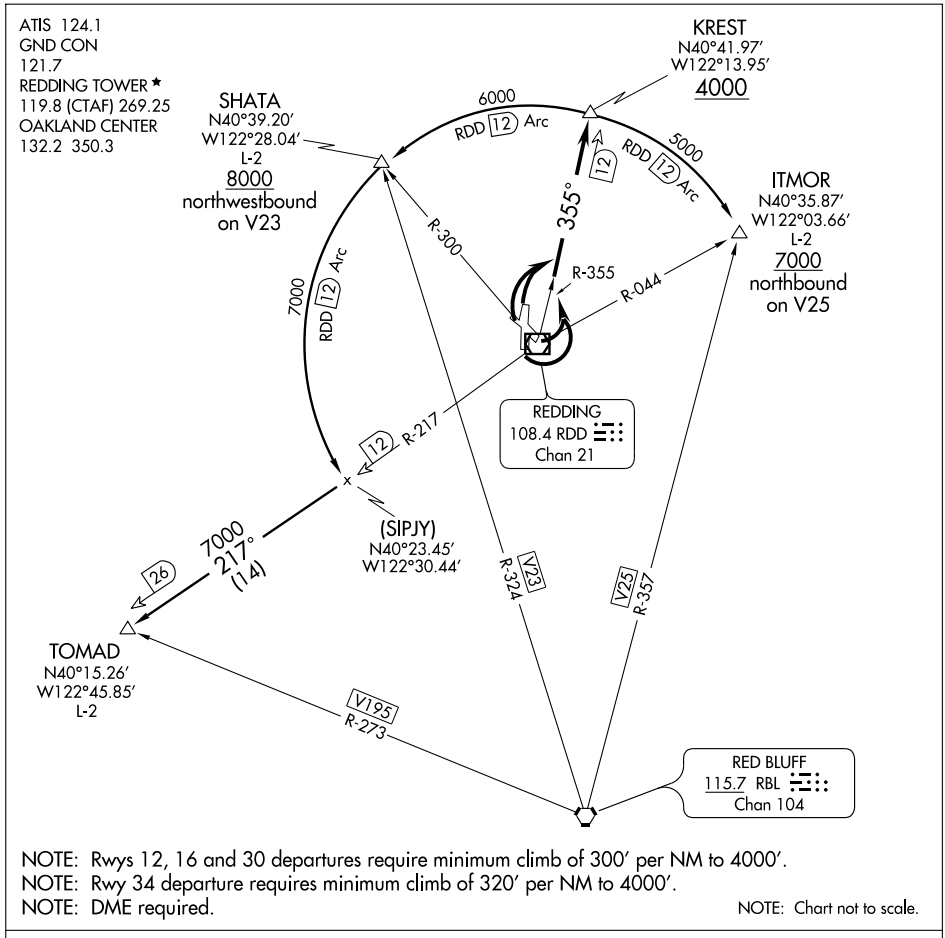
TOMAD TRANSITION (KENDL1.TOMAD): From over KENDL INT via RDD R-217 to TOMAD INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

KREST THREE DEPARTURE

SL-688 (FAA)

REDDING MUNI (RDD)
REDDING, CALIFORNIA



NOTE: Rwys 12, 16 and 30 departures require minimum climb of 300′ per NM to 4000′.
NOTE: Rwy 34 departure requires minimum climb of 320′ per NM to 4000′.
NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 12 and 16: Turn left immediately after departure to intercept and proceed via the RDD R-355 to KREST DME Fix. Cross KREST DME Fix at or above 4000, thence via (transition) or (assigned route).
TAKE-OFF RUNWAYS 30 and 34: Turn right immediately after departure to intercept and proceed via RDD R-355 to KREST DME Fix. Cross KREST DME Fix at or above 4000, thence via (transition) or (assigned route).

ITMOR TRANSITION (KREST3.ITMOR): From over KREST DME Fix via RDD 12 DME Arc clockwise to ITMOR INT.
SHATA TRANSITION (KREST3.SHATA): From over KREST DME Fix via RDD 12 DME Arc counterclockwise to SHATA INT.
TOMAD TRANSITION (KREST3.TOMAD): From over KREST DME Fix via RDD 12 DME Arc counterclockwise to RDD R-217, thence via RDD R-217 to TOMAD INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-RDD	APP CRS	Rwy Idg	7003
108.7	162°	TDZE	505
Chan 24		Apt Elev	505

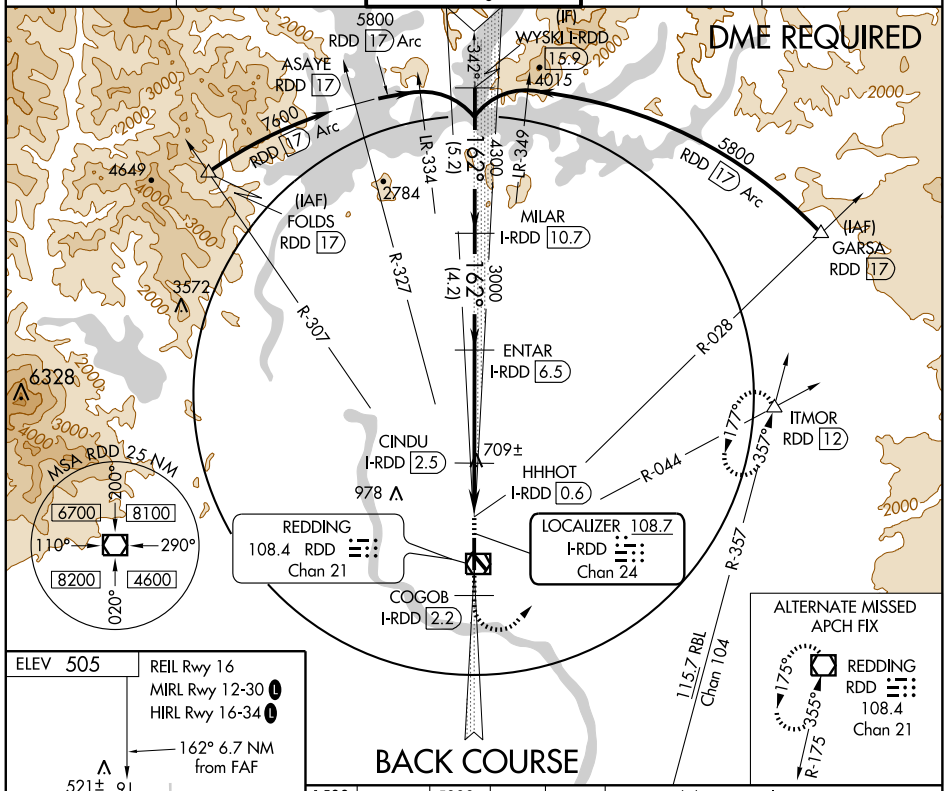
LOC/DME BC RWY 16

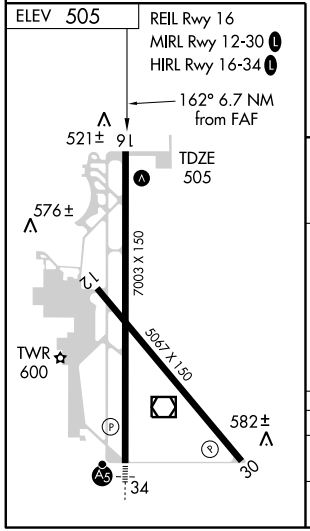
REDDING MUNI (RDD)

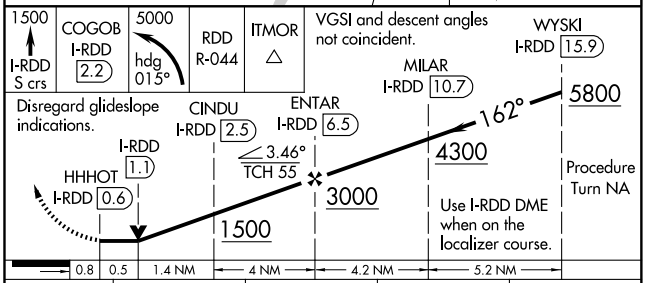
Visibility reduction by helicopters NA. When local altimeter setting not received, use Red Bluff altimeter setting and increase all MDA 80 feet and S-16 Cats. C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 1500 via I-RDD S course to COGOB/I-RDD 2.2 DME then climbing left turn to 5000 via heading 015° and RDD R-044 to ITMOR INT/RDD 12 DME and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) 269.25	121.7	122.95







CATEGORY	A	B	C	D
S-16	940-1 435 (500-1)		940-1¼ 435 (500-1¼)	940-1½ 435 (500-1½)
CIRCLING	960-1 455 (500-1)		980-1½ 475 (500-1½)	1060-2 555 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 56402 W34A	APP CRS 342°	Rwy Idg 7003 TDZE 499 Apt Elev 505

RNAV (GPS) RWY 34

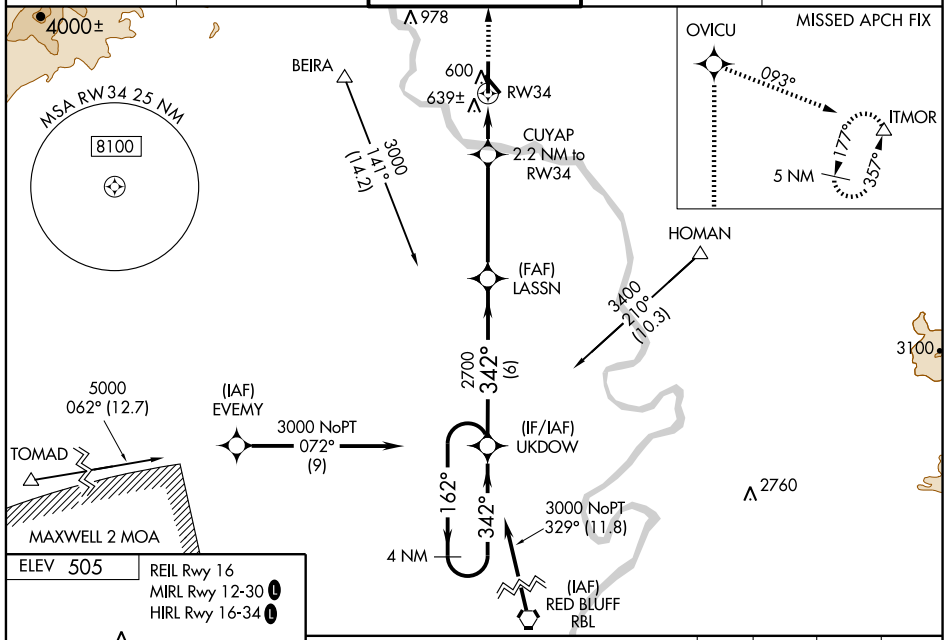
REDDING MUNI (RDD)

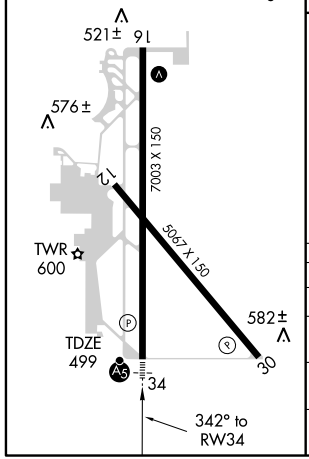
DME/DME RNP-0.3 NA. Circling to Rwy 12 NA at night. For inoperative MALSR, increase LPV all Cats. visibility to 1 mile. When using Red Bluff altimeter setting increase LPV all Cats. visibility to 1¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C(4°F) or above 48°C (118°F). VDP and Baro-VNAV NA when using Red Bluff altimeter setting. When local altimeter setting not received, use Red Bluff altimeter setting and increase all DAs/MDAs 80 feet, and increase LPV visibility ¼ mile all Cats., LNAV/VNAV visibility ¼ mile all Cats., and LNAV visibility Cat. C/D ¼ mile.

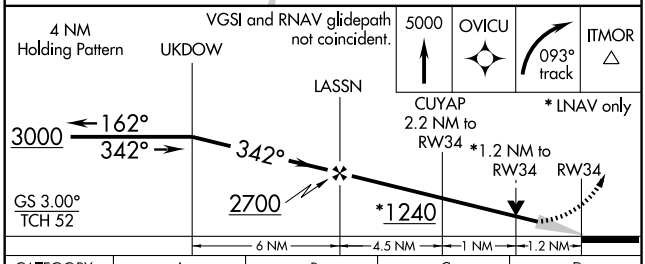
MALSR

MISSED APPROACH: Climb to 5000 direct OVICU and right turn via 093° track to ITMOR and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95







CATEGORY	A	B	C	D
LPV DA	790-½ 291 (300-½)			
LNAV/VNAV DA	944-1 445 (500-1)			
LNAV MDA	940-½ 441 (500-½)		940-¾ 441 (500-¾)	940-1 441 (500-1)
CIRCLING	1000-1 495 (500-1)		1000-1½ 495 (500-1½)	1060-2 555 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME RDD	APP CRS	Rwy Idg	7003
108.4	355°	TDZE	496
Chan 21		Apt Elev	502

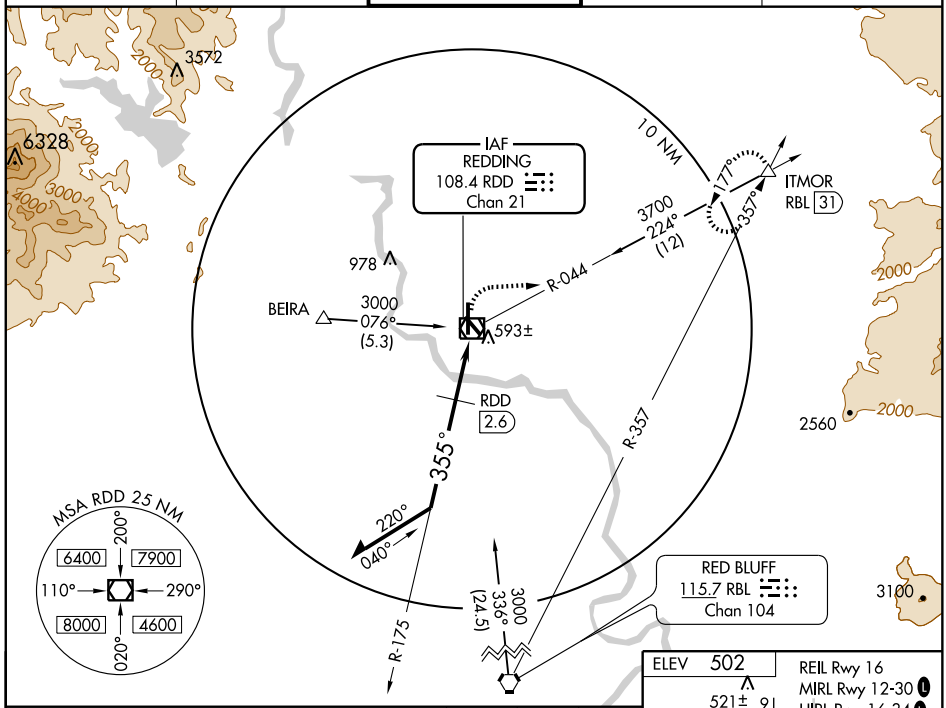
VOR RWY 34
REDDING MUNI (RDD)

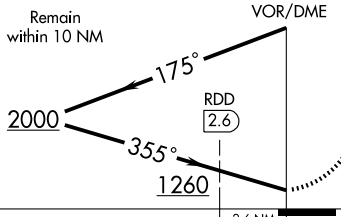
Cat. D S-34 DME minimums visibility increased ¼ mile for inoperative MALSR.

MALSR

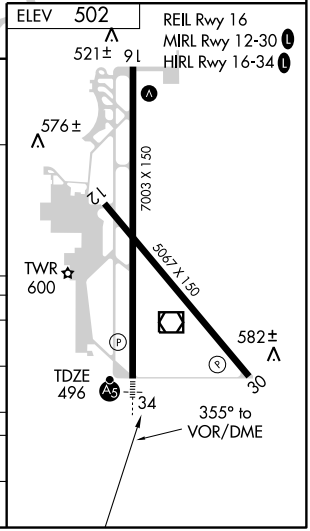
MISSED APPROACH: Climbing right turn to 5300 via heading 090° and RDD R-044 to ITMOR INT and hold.

ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95





5300	RDD	ITMOR
090°	R-044	△
	108.4	



CATEGORY	A	B	C	D
S-34	1260-½ 764 (800-½)	1260-¾ 764 (800-¾)	1260-1¾ 764 (800-1¾)	1260-2 764 (800-2)
CIRCLING	1260-1 758 (800-1)	1260-1¼ 758 (800-1¼)	1260-2¼ 758 (800-2¼)	1260-2½ 758 (800-2½)
DME MINIMUMS				
S-34	860-½ 364 (400-½)			860-1 364 (400-1)
CIRCLING	920-1 418 (500-1)	960-1 458 (500-1)	960-1½ 458 (500-1½)	1060-2 558 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

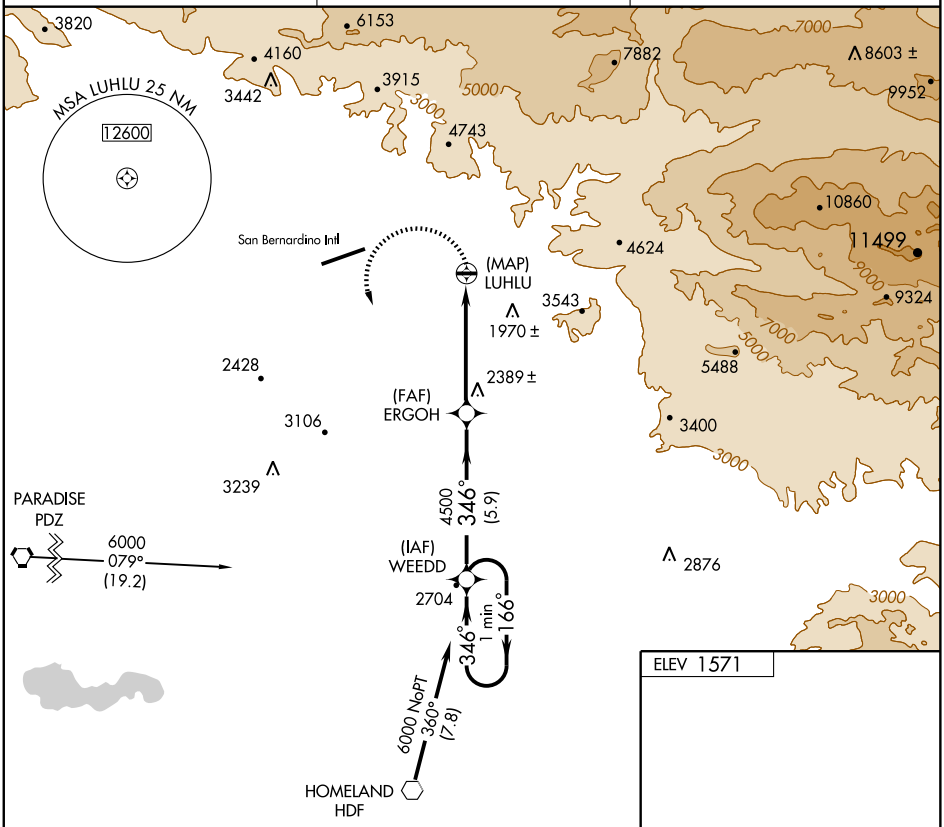
APP CRS	Rwy Idg	N/A
346°	TDZE	N/A
	Apt Elev	1571

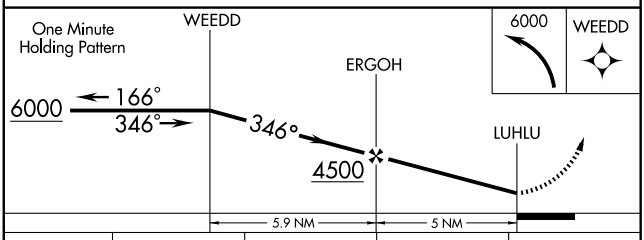
GPS-A
REDLANDS MUNI (REI)

Use San Bernardino Intl altimeter setting; when not received, use Ontario Intl altimeter setting and increase all MDAs 160 feet. Procedure not authorized at night.

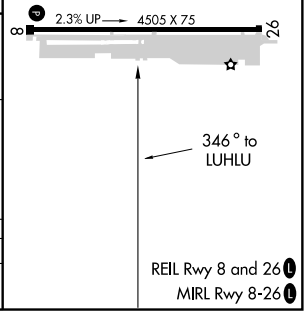
MISSED APPROACH: Climbing left turn to 6000 direct WEEDD WP and hold.

AWOS-3	SOCAL APP CON	UNICOM
123.050	127.25 318.2	123.05 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	2640-1¼ 1069 (1100-1¼)	2640-1½ 1069 (1100-1½)	2640-3 1069 (1100-3)	NA



SW-3, 22 OCT 2009 to 19 NOV 2009

NDB SB	APP CRS	Rwy Idg	N/A
397	323°	TDZE	N/A
		Apt Elev	1455

NDB or GPS-A

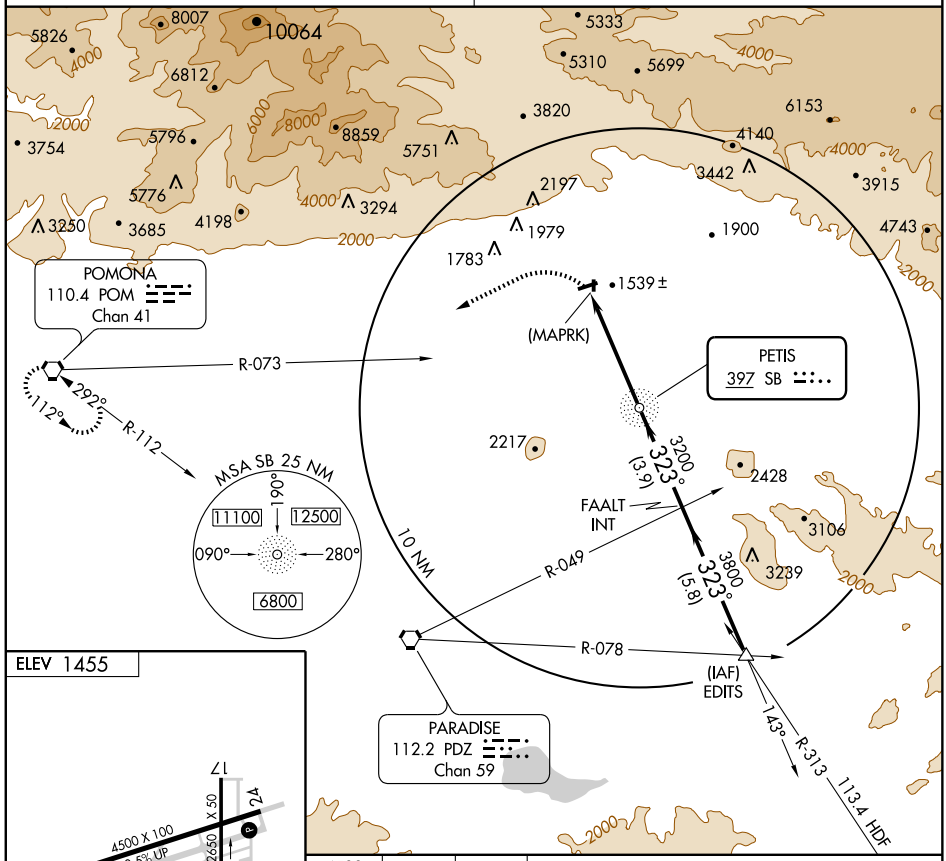
RIALTO MUNI (MIRO FIELD) (L67)

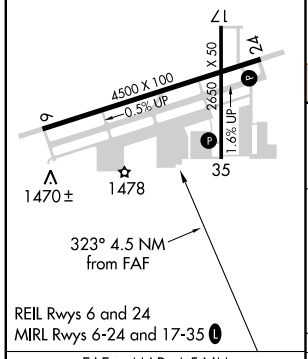
T
NA

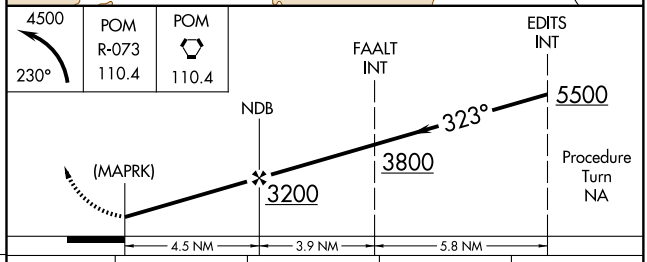
Use Ontario Intl altimeter setting.

MISSED APPROACH: Climbing left turn to 4500 via heading 230° and POM R-073 to POM VORTAC and hold.

SOCAL APP CON	UNICOM
127.25 318.2	122.8 (CTAF) L



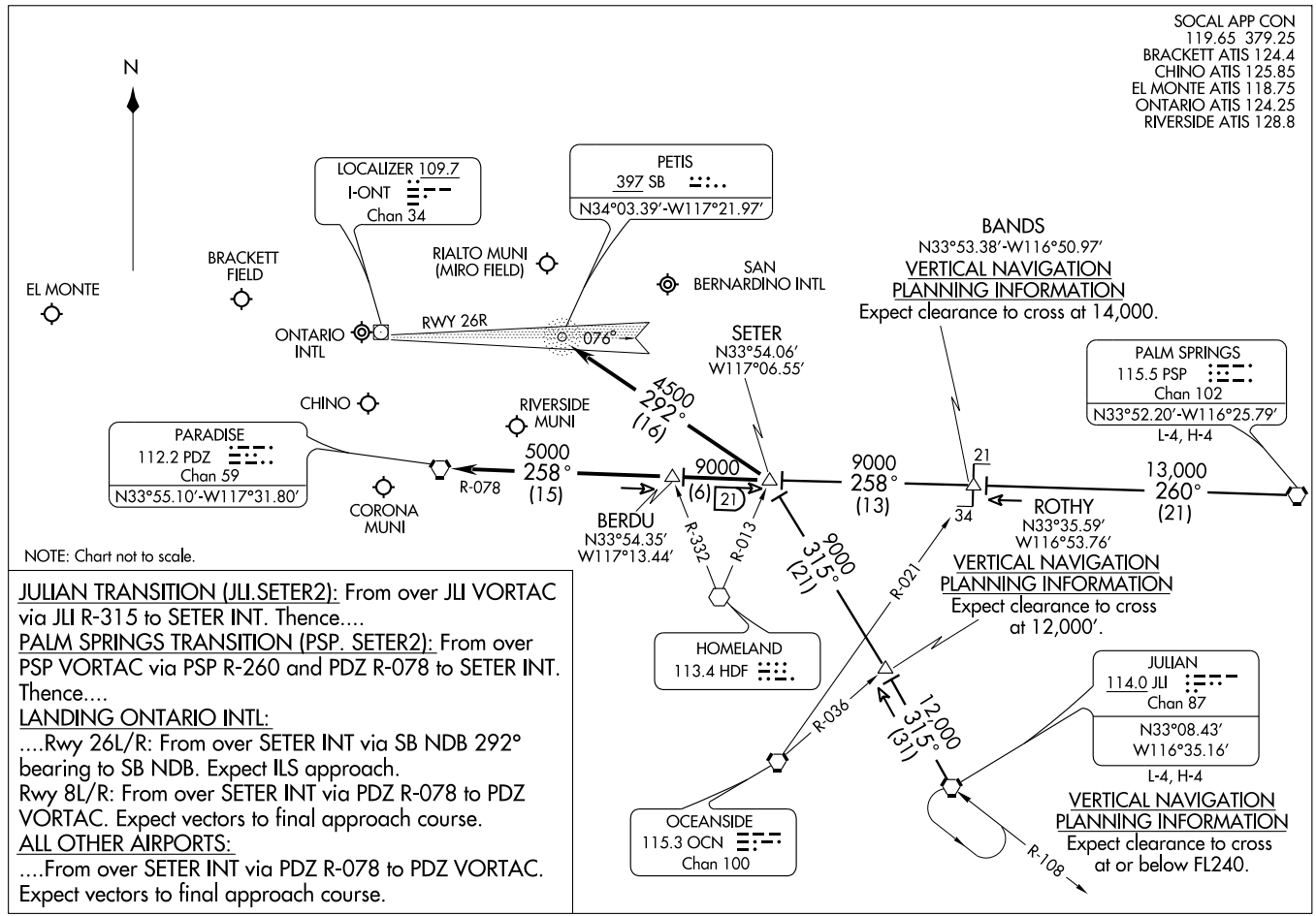




FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

CATEGORY	A	B	C	D
CIRCLING	2080-1 625 (700-1)	2120-1 665 (700-1)	2160-2 705 (800-2)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

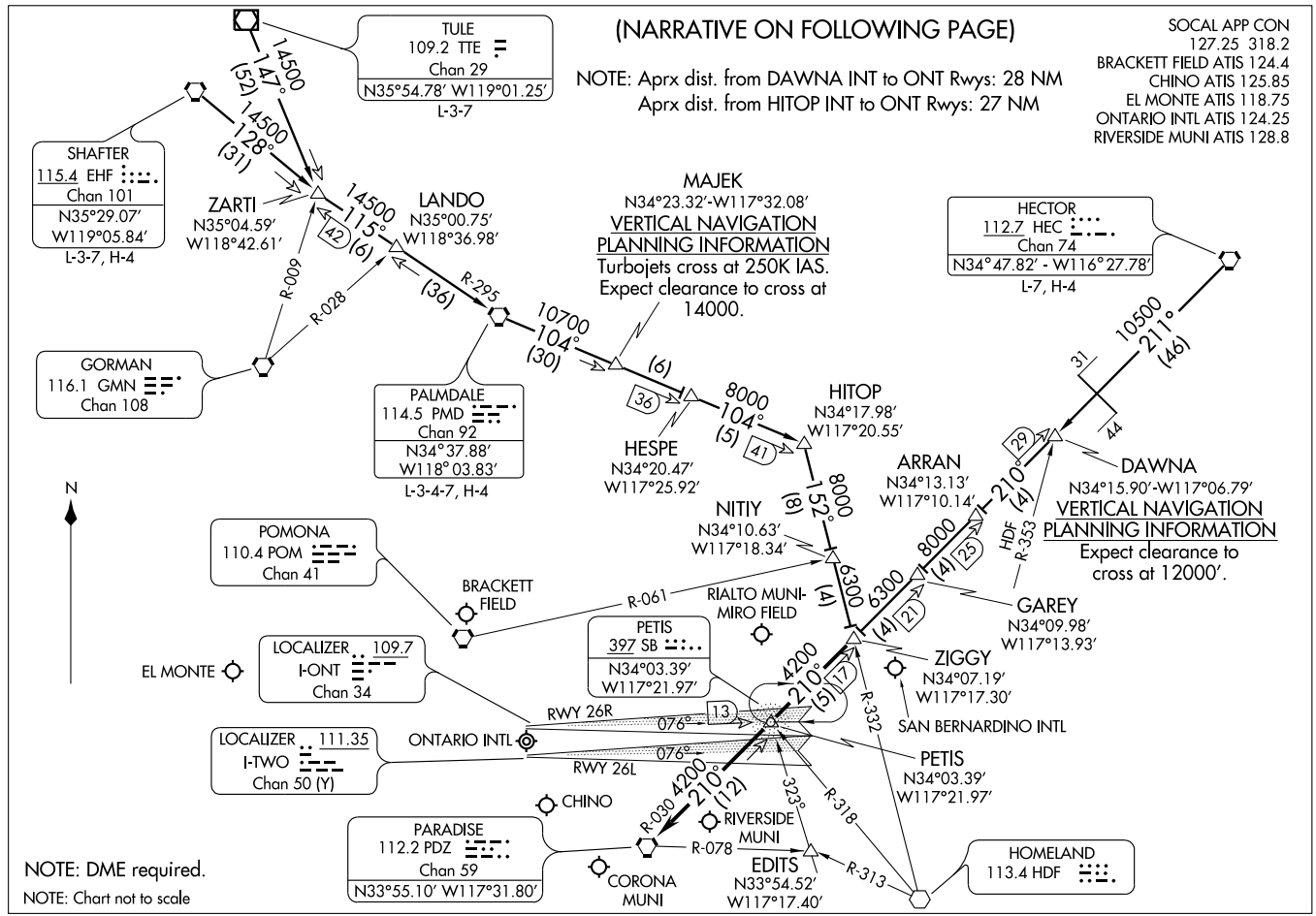
LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

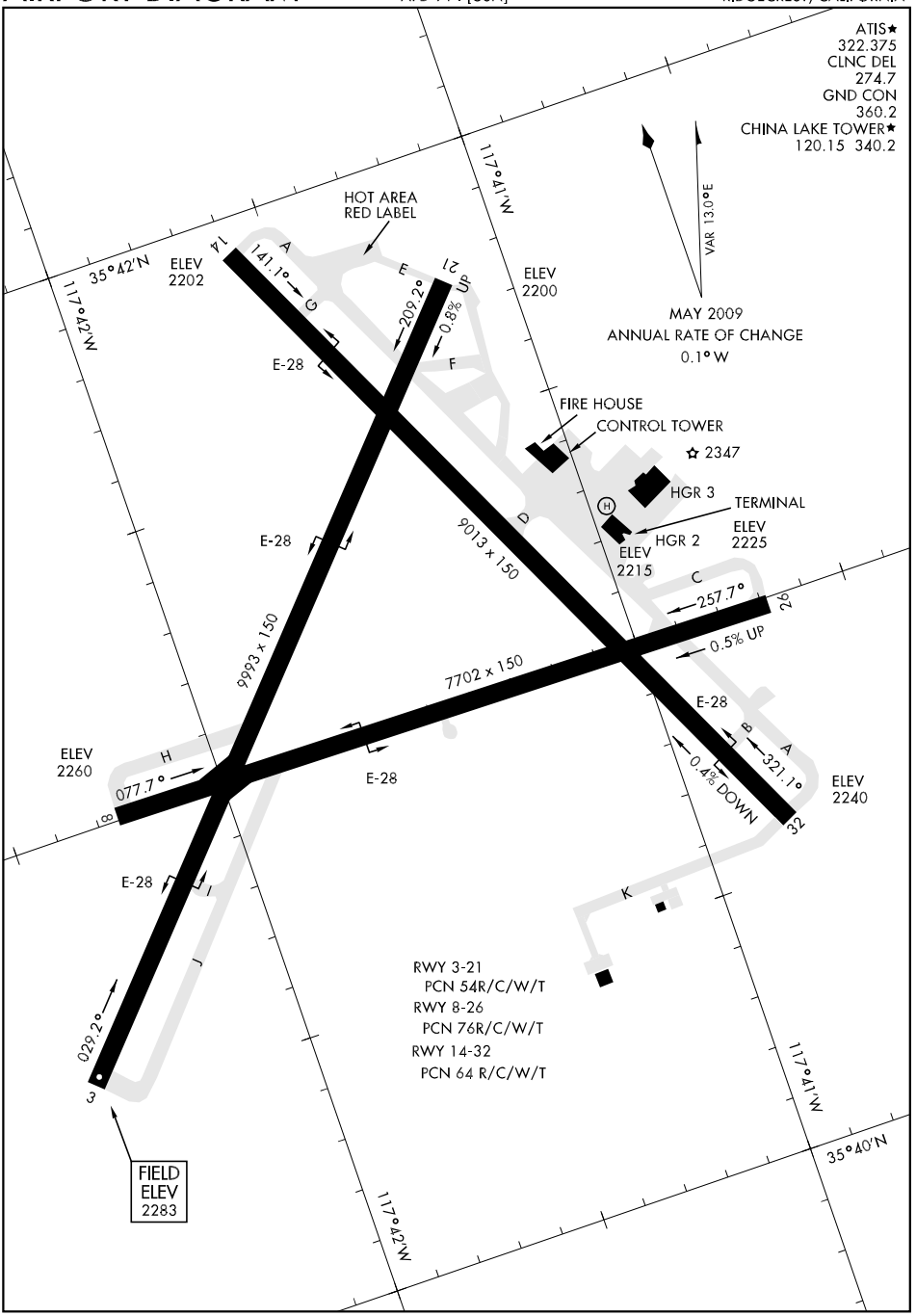
. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

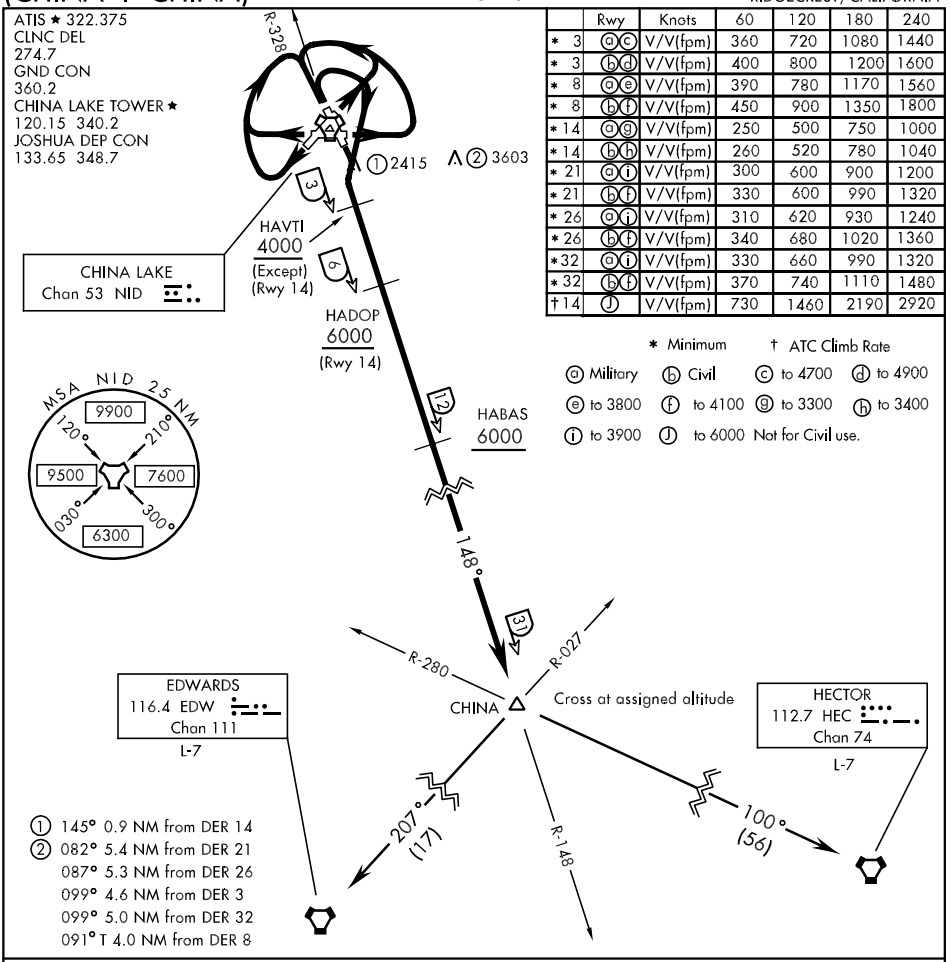
. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009



	Rwy	Knots	60	120	180	240
*	3 (a)(c)	V/V(fpm)	360	720	1080	1440
*	3 (b)(d)	V/V(fpm)	400	800	1200	1600
*	8 (a)(e)	V/V(fpm)	390	780	1170	1560
*	8 (b)(f)	V/V(fpm)	450	900	1350	1800
*	14 (a)(g)	V/V(fpm)	250	500	750	1000
*	14 (b)(h)	V/V(fpm)	260	520	780	1040
*	21 (a)(i)	V/V(fpm)	300	600	900	1200
*	21 (b)(f)	V/V(fpm)	330	600	990	1320
*	26 (a)(i)	V/V(fpm)	310	620	930	1240
*	26 (b)(f)	V/V(fpm)	340	680	1020	1360
*	32 (a)(i)	V/V(fpm)	330	660	990	1320
*	32 (b)(f)	V/V(fpm)	370	740	1110	1480
†	14 (J)	V/V(fpm)	730	1460	2190	2920

* Minimum † ATC Climb Rate
(a) Military (b) Civil (c) to 4700 (d) to 4900
(e) to 3800 (f) to 4100 (g) to 3300 (h) to 3400
(i) to 3900 (J) to 6000 Not for Civil use.

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climb to 2700 via heading 029°, then climbing left turn within 4 DME to intercept R-328 direct NID TACAN and proceed via R-148 to CHINA. Thence.....

TAKE-OFF RWY 8: Climb to 2700 via heading 077°, then climbing left turn within 4 DME to intercept R-328 direct NID TACAN and proceed via R-148 to CHINA. Thence .....

TAKE-OFF RWY 21: Climb to 2700 via heading 209°, then climbing right turn within 4 DME to intercept R-328 direct NID TACAN and proceed via R-148 to CHINA. Thence .....

TAKE-OFF RWY 26: Climb to 2700 via heading 257°, then climbing right turn within 4 DME to intercept R-328 direct NID TACAN and proceed via R-148 to CHINA. Thence.....

TAKE-OFF RWY 32: Climb to 2700 via heading 321°, then climbing right turn within 3 DME to intercept R-148 to CHINA. Thence.....

(CONTINUED ON NEXT PAGE)

(CONTINUED FROM PRECEDING PAGE)

DEPARTURE ROUTE DESCRIPTION

Cross HAVTI at or above 4000. Cross HABAS at or above 6000. Cross CHINA at assigned altitude.

TAKE OFF RWY 14: Climbing righ turn to intercept NID R-148 to CHINA. Cross HADOP at or above 6000. Cross CHINA at assigned altitude.

ALL RWYS: Max departure speed 250 KIAS until established on R-148. From CHINA, proceed via assigned transition or expect radar vectors to join assigned route.

EDWARDS TRANSITION (CHINA4•EDW): Via EDW R-027 to EDW. Expect radar vectors to join assigned route.

HECTOR TRANSITION (CHINA4•HEC): Via HEC R-280 to HEC.

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 32

TACAN NID Chan 53	APCH CRS 314°	Rwy Idg 9013 TDZE 2240 Arpt Elev 2283

JAL-914 [USN] CHINA LAKE NAWS (ARMITAGE FIELD) (KNID)

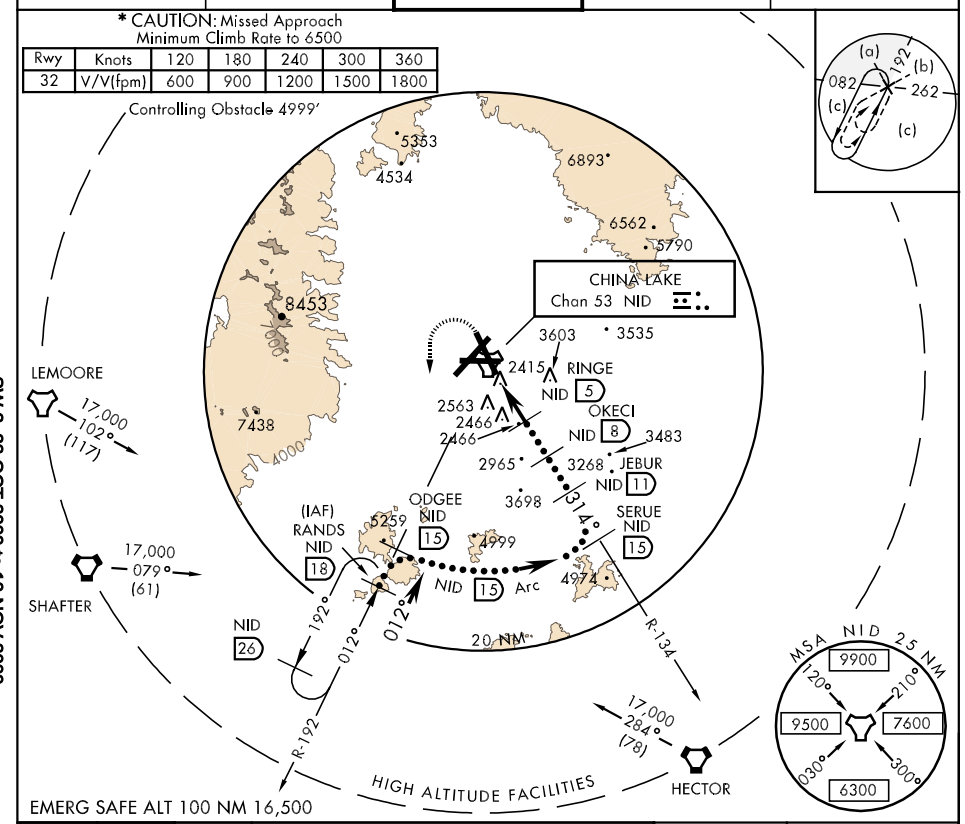
▼
** CAT E circling not authorized E of Rwy 14-32.

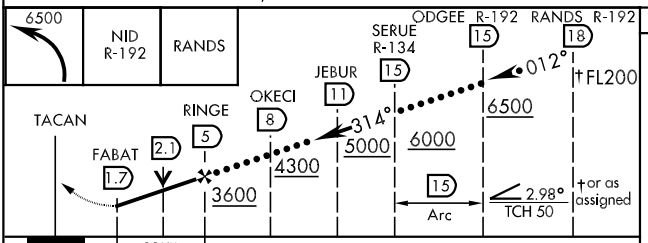
* MISSED APPROACH: Climbing left turn to 6500, intercept NID R-192 to RANDS and hold.

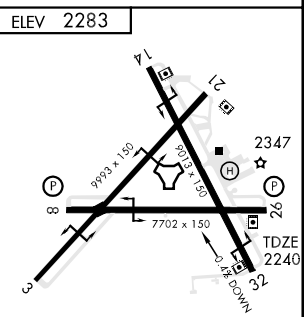
ATIS *	JOSHUA APP CON	CHINA LAKE TOWER *	GND CON	CLNC DEL
322.375	133.65 348.7	120.15 340.2	360.2	274.7

* CAUTION: Missed Approach Minimum Climb Rate to 6500

Rwy	Knots	120	180	240	300	360
32	V/V(fpm)	600	900	1200	1500	1800







CATEGORY	C	D	E
S-32	2680-1¼ 440 (400-1¼)	2680-1½ 440 (400-1½)	
CIRCLING**	2740-1½ 457 (500-1½)	2840-2 557 (600-2)	2880-2 597 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 32

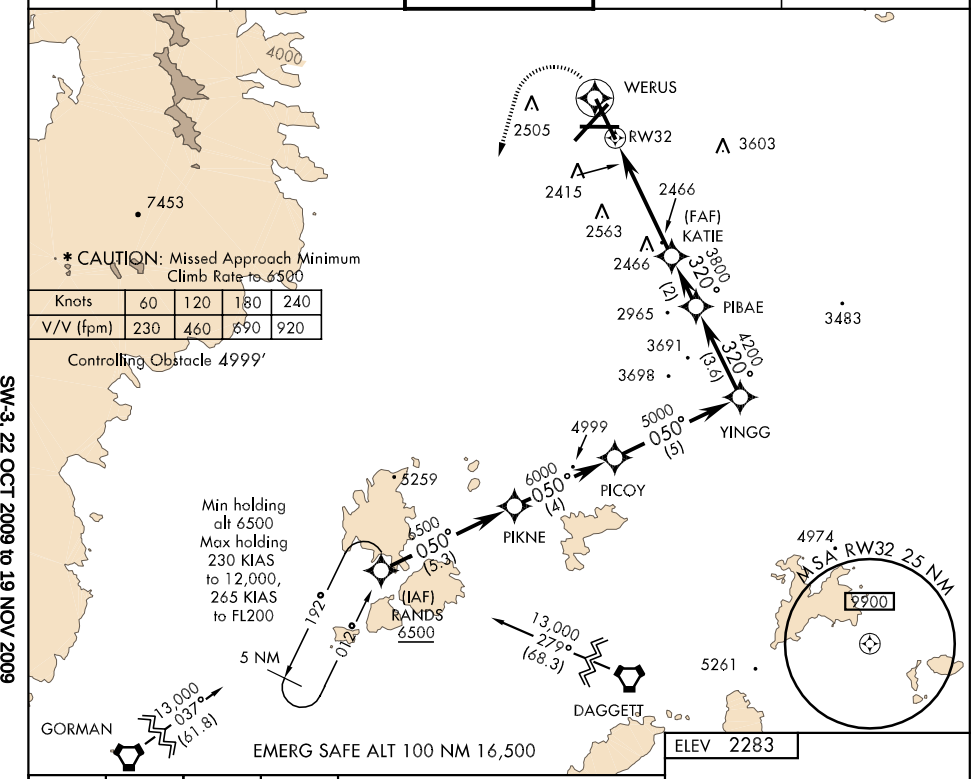
APCH CRS	Rwy ldg	9013
320°	TDZE	2240
	Arpt Elev	2283

AL-914 [USN] CHINA LAKE NAWS (ARMITAGE FIELD) (KNID)

▼ RNP-0.3 or GPS required
DME/DME RNP-0.3 NA.
Baro VNAV NA below -19.57°C (-3.22°F).

* MISSED APPROACH: Climb to 6500 direct WERUS, then climbing left turn direct RANDS and hold.

ATIS ★	JOSHUA APP CON	CHINA LAKE TOWER ★	GND CON	CLNC DEL
322.375	133.65 348.7	120.15 340.2	360.2	274.7

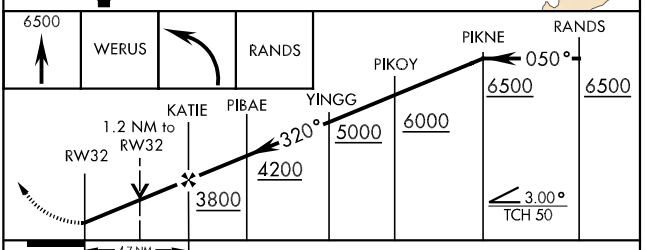


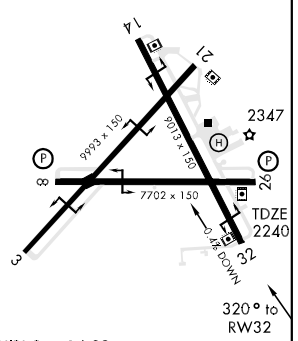
* CAUTION: Missed Approach Minimum Climb Rate to 6500

Knots	60	120	180	240
V/V (fpm)	230	460	690	920

Controlling Obstacle 4999'

ELEV 2283





CATEGORY	A	B	C	D
LNAV MDA	2680-1 440 (400-1)		2680-1¼ 440 (400-1¼)	2680-1½ 440 (400-1½)
LNAV/VNAV DA	2720-1 480 (500-1)		2720-1¼ 480 (500-1¼)	2720-1½ 480 (500-1½)
CIRCLING	2720-1 437 (500-1)	2740-1 457 (500-1)	2740-1½ 457 (500-1½)	2840-2 557 (600-2)

HIRL Rwy 14-32
MIRL Rwys 3-21 and 8-26

SW-3, 22 OCT 2009 to 19 NOV 2009

SALTD-THREE HI DEPARTURE (SALTD 3•SALTD)

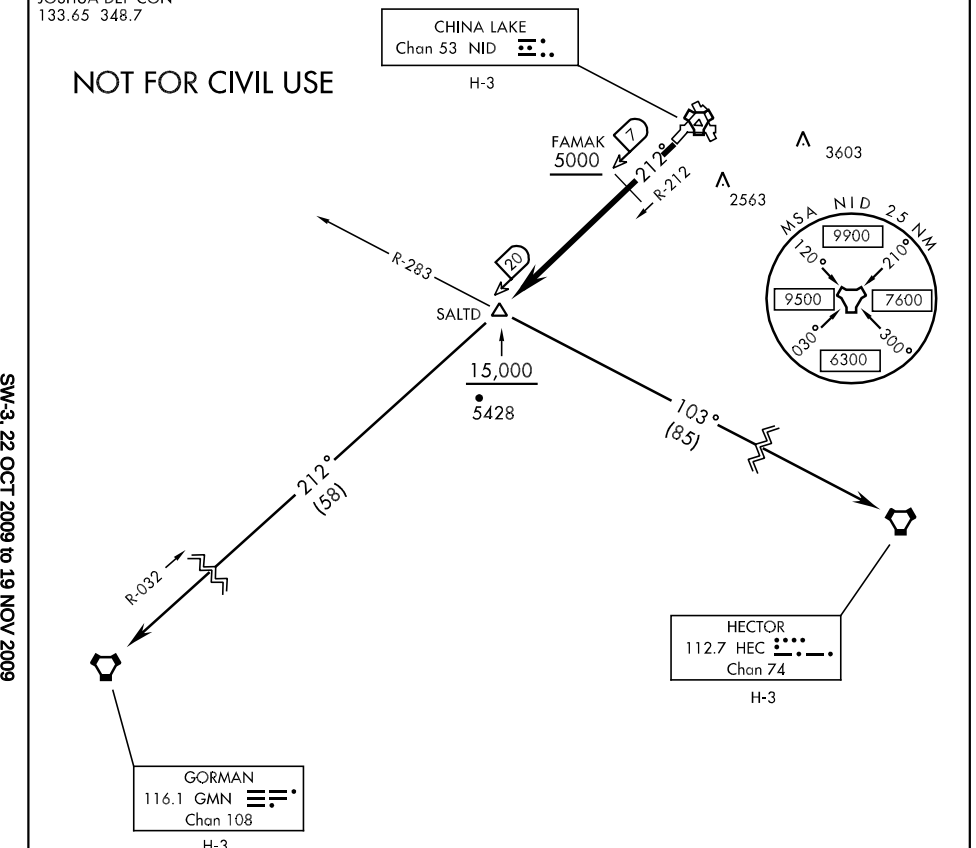
RIDGECREST, CALIFORNIA

ATIS ★322.375
CLNC DEL
274.7
GND CON
360.2
CHINA LAKE TOWER★
120.15 340.2
JOSHUA DEP CON
133.65 348.7

SH-914 [USN]

Rwy	Knots	120	180	240	300	360
†21 ⓓ	V/V(fpm)	1360	2040	2720	3400	4080

† ATC Climb Rate
ⓓ to 15,000



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 21: Climb via NID R-212 to SALTD. From SALTD, proceed via assigned transition or expect radar vectors to join assigned route. Cross FAMAK at or above 5000. Cross SALTD at or above 15,000.

GORMAN TRANSITION (SALTD 3•GMN): Via GMN R-032 to GMN.

HECTOR TRANSITION (SALTD 3•HEC): Via HEC R-283 to HEC.

SALTD-THREE HI DEPARTURE (SALTD 3•SALTD)

RIDGECREST, CALIFORNIA

TACAN RWY 32

TACAN NID Chan 53	APCH CRS 314°	Rwy ldg 9013 TDZE 2240 Arpt Elev 2283

AL-914 [USN] CHINA LAKE NAWS (ARMITAGE FIELD) (KNID)

* MISSED APPROACH: Climbing left turn to 6500, intercept NID R-192 to RANDS and hold.

ATIS *	JOSHUA APP CON	CHINA LAKE TOWER *	GND CON	CLNC DEL
322.375	133.65 348.7	120.15 340.2	360.2	274.7

8453

* CAUTION: Missed Approach Minimum Climb Rate to 6500

Rwy	Knots	60	120	180	240
32	V/V (fpm)	300	600	900	1200

Controling Obstacle 4999'

CHINA LAKE Chan 53 NID

3535

3603

2415

2563

2466

RINGE NID 5

2466

OKECI NID 8

3483

2965

3268

3698

10 NM

JEBUR NID 11

314°

SERUE NID 15

ODGEE NID 15

5259

4999

Min holding alt 6500
Max holding 230 KIAS to 12,000, 265 KIAS to FL200

NID 15 Arc

R-134

4974

MSA NID 25 NM
120° 210° 300° 030°
9900
9500 7600
6300

192°

012°

(IAF) RANDS NID 18

NID 23

13,000 037° (61.8)

13,000 279° (68.3)

5261

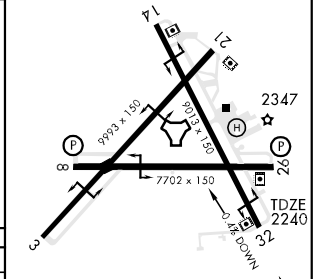
DAGGETT

R-192

GORMAN

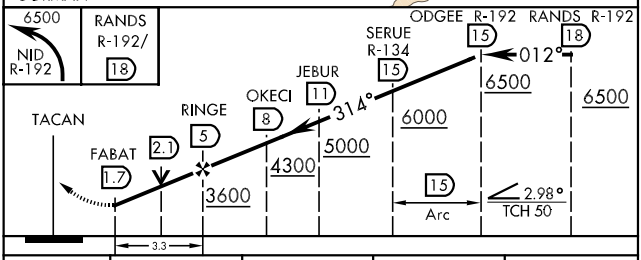
EMERG SAFE ALT 100 NM 16,500

ELEV 2283



314° to TACAN

HIRL Rwy 14-32
MIRL Rwys 3-21 and 8-26



CATEGORY	A	B	C	D
S-32	2680-1 440 (400-1)		2680-1¼ 440 (400-1¼)	2680-1½ 440 (400-1½)
CIRCLING	2720-1 437 (500-1)	2740-1 457 (500-1)	2740-1½ 457 (500-1½)	2840-2 557 (600-2)

35°41'N-117°41'W CHINA LAKE NAWS (ARMITAGE FIELD)(KNID)

TACAN RWY 32

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS		
265°	Rwy Idg	4200
	TDZE	23
	Apt Elev	23

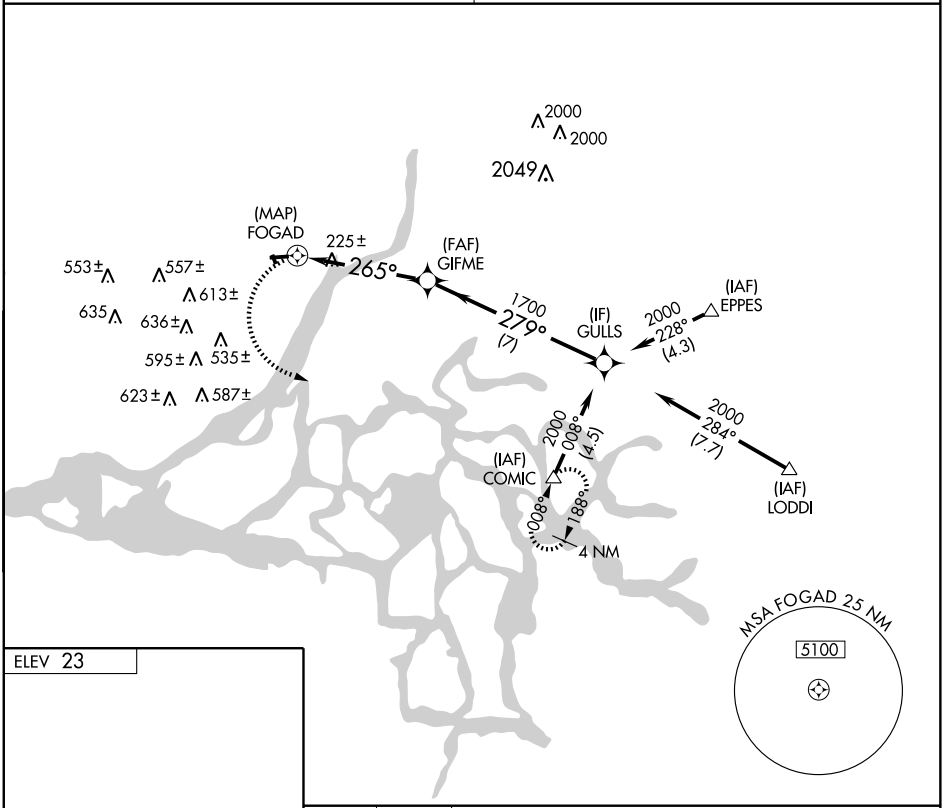
RNAV (GPS) RWY 25

RIO VISTA MUNI (088)

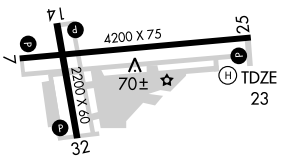
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
Use Travis AFB altimeter setting.

MISSED APPROACH: Climbing left turn to 2000 direct COMIC and hold.

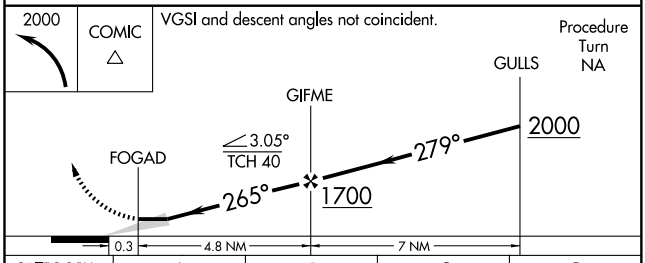
NORCAL APP CON	UNICOM
125.25 257.9	122.725 (CTAF) L



ELEV 23



MIRL Rwys 7-25 and 14-32 L



CATEGORY	A	B	C	D
LNAV MDA	560-1 537 (600-1)		560-1½ 537 (600-1½)	NA
CIRCLING	560-1 537 (600-1)	580-1 557 (600-1)	620-1½ 597 (600-1½)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC SAC	APP CRS	Rwy Idg	N/A
115.2	189°	TDZE	N/A
Chan 99		Apt Elev	23

VOR/DME-A

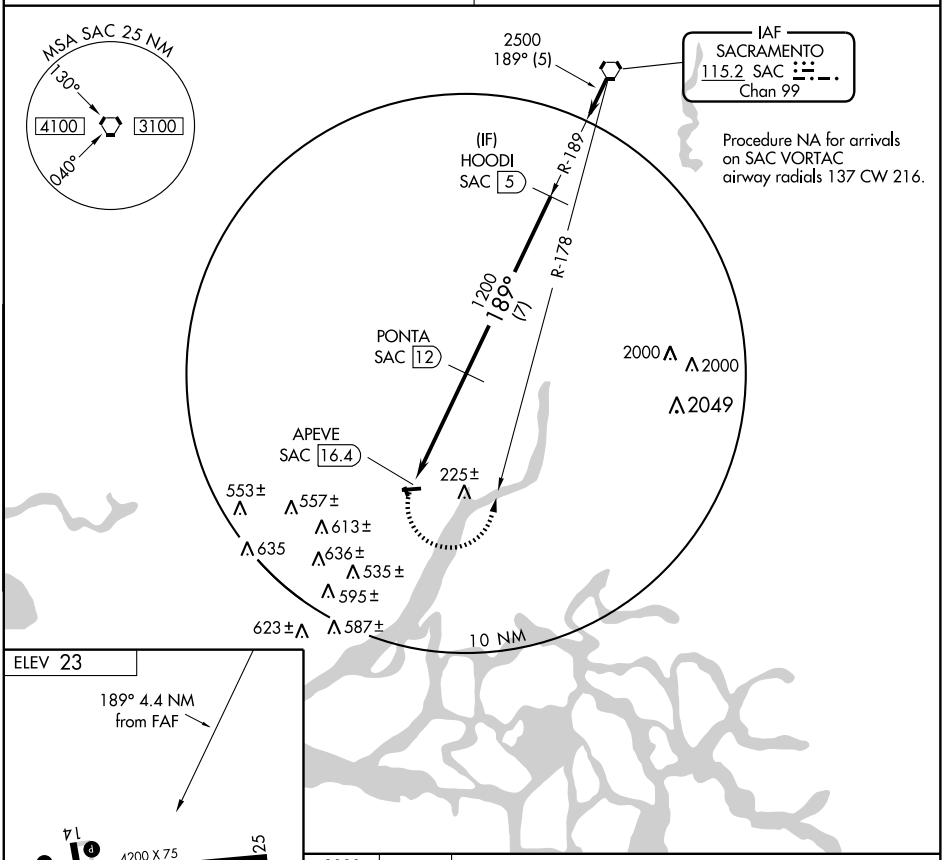
RIO VISTA MUNI (088)

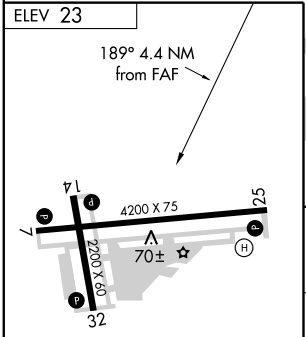
NA

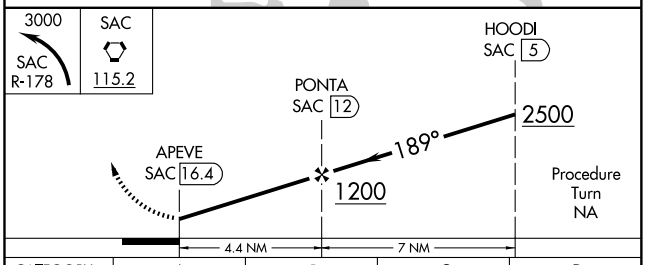
Use Travis AFB altimeter setting.

MISSED APPROACH: Climbing left turn to 3000 via SAC VORTAC R-178 to SAC VORTAC.

NORCAL APP CON	UNICOM
125.25 257.9	122.725 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	560-1 537 (600-1)	580-1 557 (600-1)	620-1½ 597 (600-1½)	NA

MIRL Rwys 7-25 and 14-32 L

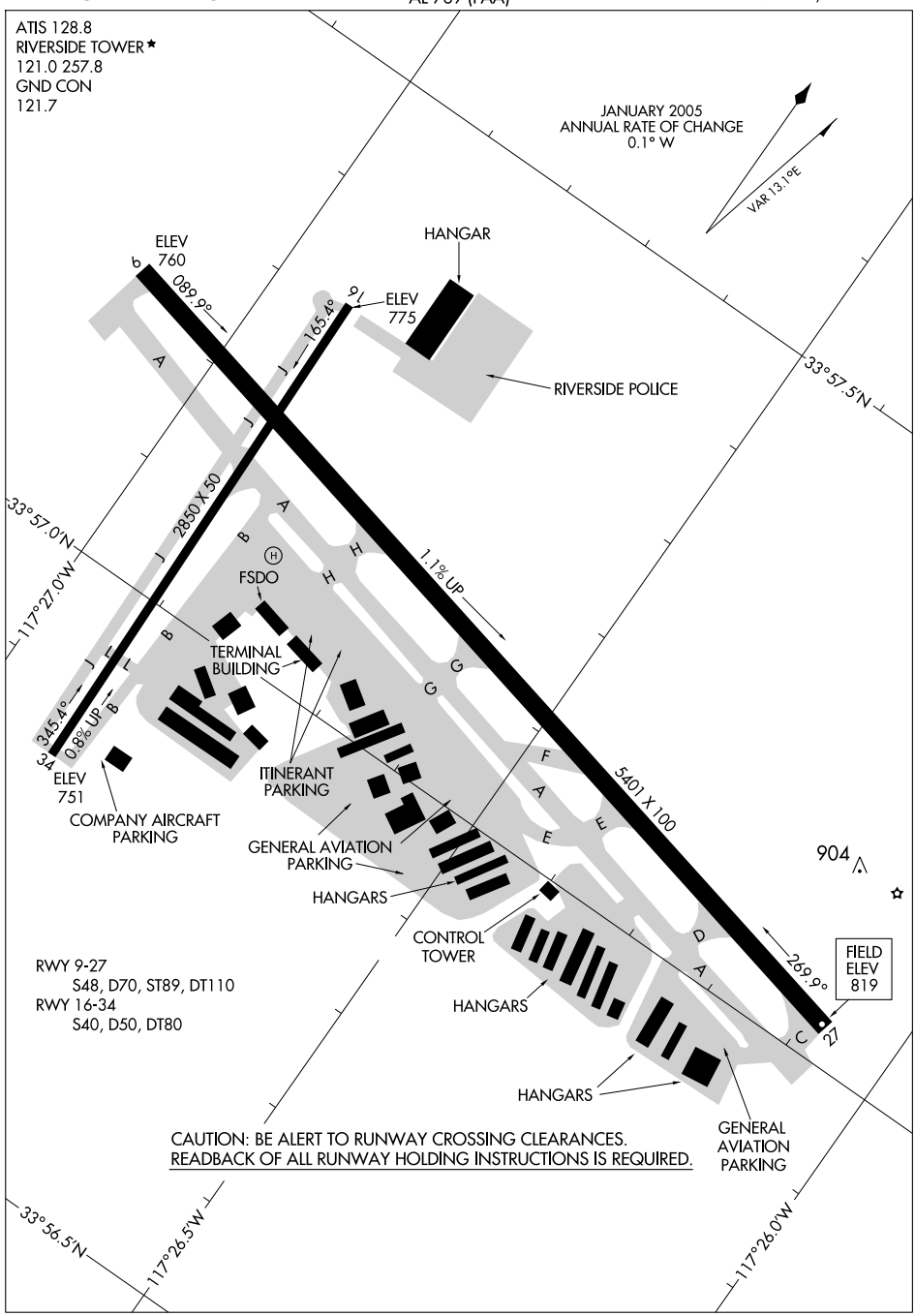
SW-2, 22 OCT 2009 to 19 NOV 2009

07354

AIRPORT DIAGRAM

AL-769 (FAA)

RIVERSIDE MUNI (RAL)
RIVERSIDE, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-RAL	APP CRS	Rwy Idg	5401
110.9	089°	TDZE	794
		Apt Elev	818

ILS or LOC RWY 9

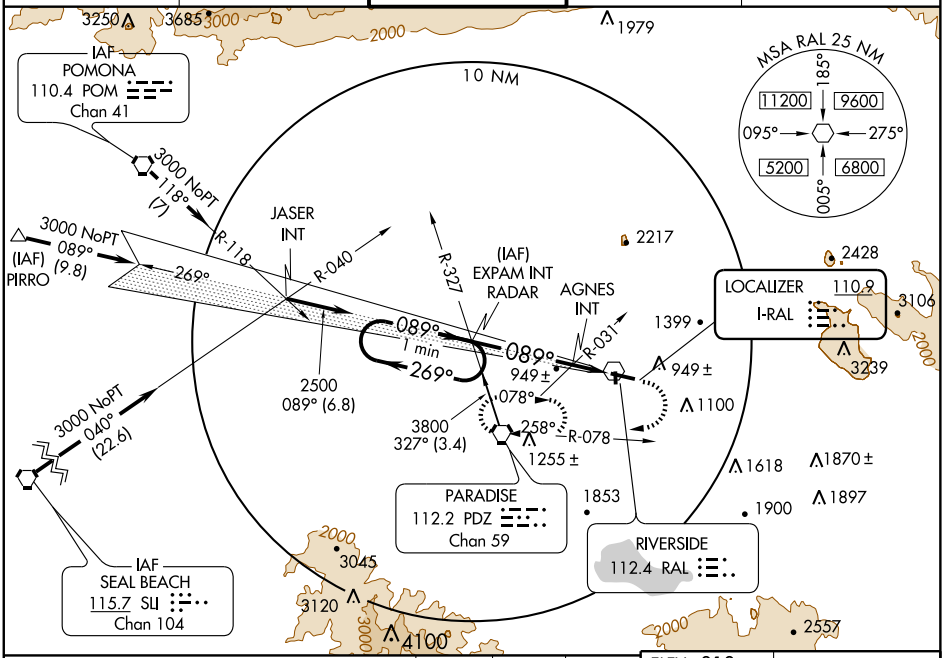
RIVERSIDE MUNI (RAL)

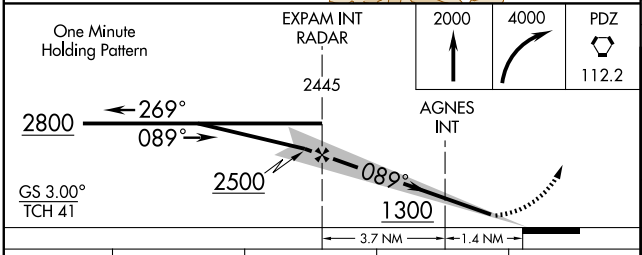
For inoperative MALSR increase AGNES FIX MINIMUMS S-LOC Cat D visibility to 1¼ . Autopilot coupled approach NA below 1440. Circling NA north of Rwy 9-27 for Cat D.

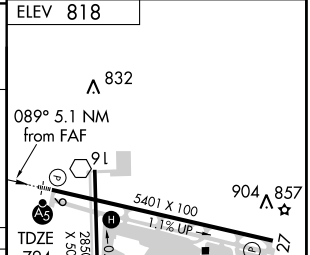
MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 4000 direct PDZ VORTAC and hold.

ATIS	SOCAL APP CON	RIVERSIDE TOWER ★	GND CON	UNICOM
128.8	135.4 377.125	121.0 (CTAF) L 257.8	121.7	122.95







CATEGORY	A	B	C	D
S-ILS 9	994-½ 200 (200-½)			994-¾ 200 (200-¾)
S-LOC 9	1300-½ 506 (500-½)		1300-1 506 (500-1)	
CIRCLING	1300-1 482 (500-1)	1360-1 542 (600-1)	1620-2¼ 802 (900-2¼)	1620-2½ 802 (900-2½)
AGNES FIX MINIMUMS				
S-LOC 9	1200-½ 406 (400-½)		1200-¾ 406 (400-¾)	1200-1 406 (400-1)
CIRCLING	1260-1 442 (500-1)	1360-1 542 (600-1)	1620-2¼ 802 (900-2¼)	1620-2½ 802 (900-2½)

REIL Rwy 27
MIRL Rwys 9-27 and 16-34 L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS CH 50203 W09A	APP CRS 089°	Rwy Idg 5401 TDZE 795 Apt Elev 819

RNAV (GPS) RWY 9

RIVERSIDE MUNI (RAL)

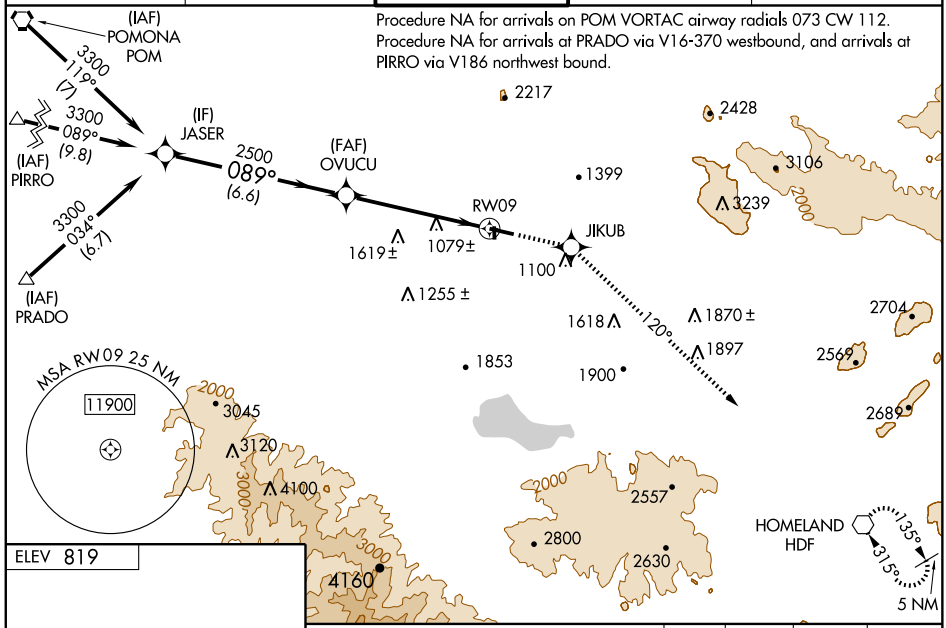
Circling NA for Cat D north of Rwy 9-27.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F).
When local altimeter setting not received, use Chino altimeter setting and increase all DAs/MDAs 60 feet, and LPV and LNAV/VNAV all visibilities ¼ mile.
VDP and Baro-VNAV NA when using Chino altimeter setting.
When VGSI inoperative, circling to Rwy 34 NA at night.
For inoperative MALSR, increase LPV all Cats visibility to 1¼. When using Chino altimeter setting increase LPV all Cats visibility to 1½.

MALSR

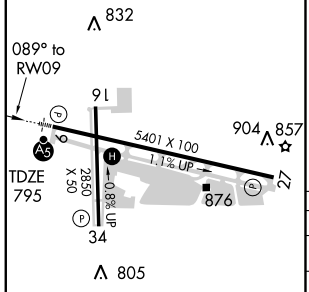
MISSED APPROACH: Climb to 6000 direct JIKUB and via 120° track to HDF VOR and hold, continue climb-in-hold 6000.

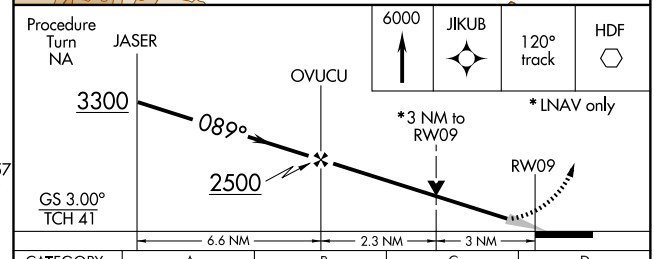
ATIS	SOCAL APP CON	RIVERSIDE TOWER ★	GND CON	UNICOM
128.8	135.4 377.125	121.0 (CTAF) (L) 257.8	121.7	122.95

Procedure NA for arrivals on POM VORTAC airway radials 073 CW 112.
Procedure NA for arrivals at PRADO via V16-370 westbound, and arrivals at PIRRO via V186 northwest bound.



ELEV 819





CATEGORY	A	B	C	D
LPV DA	1120-¾ 325 (400-¾)			
LNAV/VNAV DA	1473-2 678 (700-2)			
LNAV MDA	1760-¾ 965 (1000-¾)	1760-1 965 (1000-1)	1760-2½ 965 (1000-2½)	
CIRCLING	1760-1¼ 941 (1000-1¼)	1760-1½ 941 (1000-1½)	1760-3 941 (1000-3)	

REIL Rwy 27
MIRL Rwys 9-27 and 16-34 (L)

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS		
CH **82201**	**269°**	Rwy Idg	**5401**
W27A		TDZE	**818**
		Apt Elev	**818**

RNAV (GPS) RWY 27
RIVERSIDE MUNI (RAL)

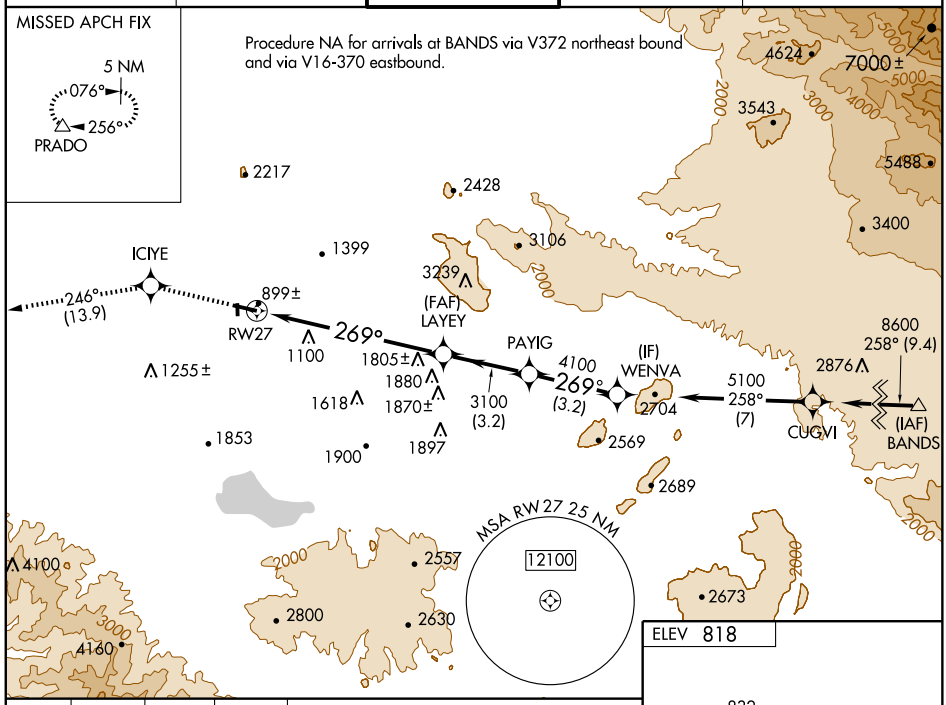
DME/DME RNP -0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (116°F).
Circling NA for Cat D north of Rwy 9-27.
Visibility reduction by helicopters NA.

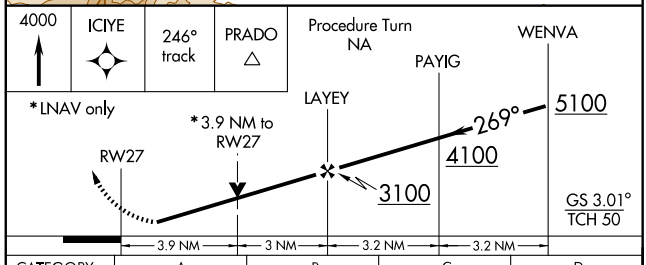
MISSED APPROACH: Climb to 4000 direct ICIYE and via 246° track to PRADO and hold.

ATIS	SOCAL APP CON	RIVERSIDE TOWER ★	GND CON	UNICOM
128.8	**135.4 377.125**	**121.0** (CTAF) L **257.8**	**121.7**	**122.95**

MISSED APCH FIX

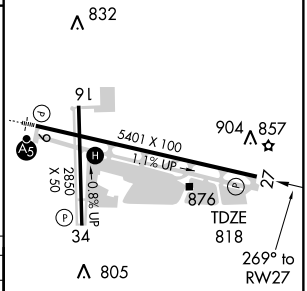
Procedure NA for arrivals at BANDS via V372 northeast bound and via V16-370 eastbound.





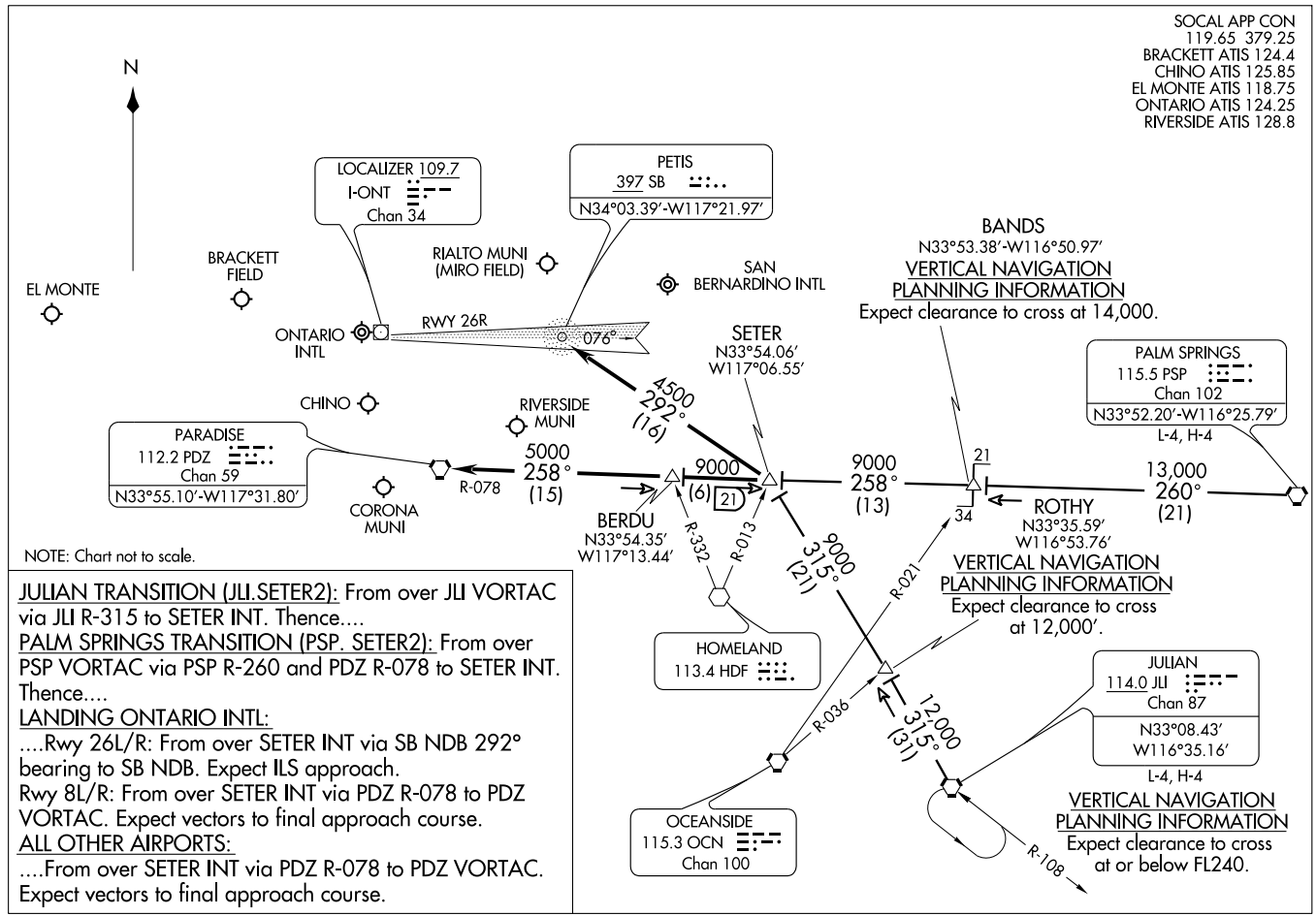
CATEGORY	A	B	C	D
LPV DA	1236-1½ 418 (500-1½)			
LNAV/VNAV DA	1368-2 550 (600-2)			
LNAV MDA	2100-1¼ 1282 (1300-1¼)	2100-1½ 1282 (1300-1½)	2100-3 1282 (1300-3)	
CIRCLING	2100-2 1282 (1300-2)		2100-3 1282 (1300-3)	

ELEV 818



REIL Rwy 27
MIRL Rwys 9-27 and 16-34 L

SW-3, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

VOR RAL 112.4	APP CRS 270°	Rwy Idg N/A TDZE N/A Apt Elev 819

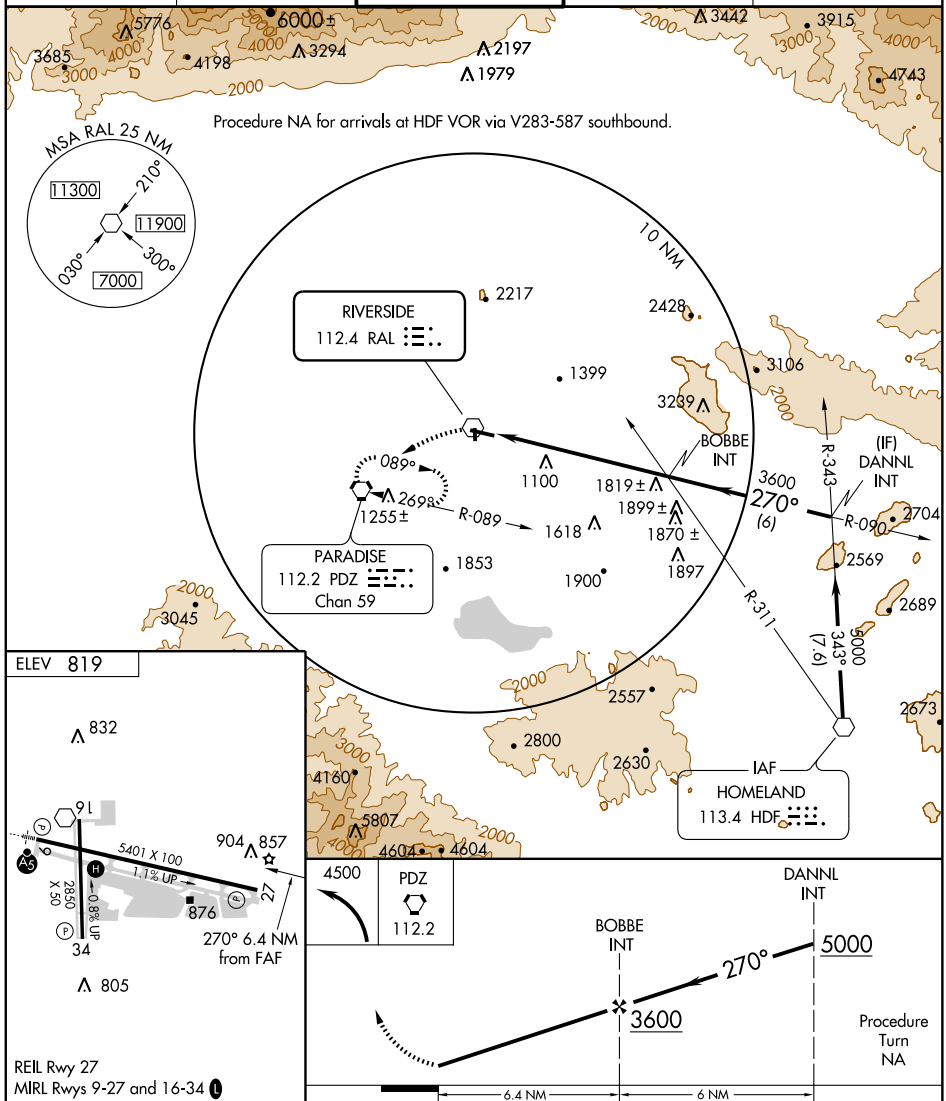
VOR-A

RIVERSIDE MUNI (RAL)

When VGSI inoperative, circling Rwy 34 NA at night.
When local altimeter setting not received, use Chino altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climbing left turn to 4500 direct PDZ VORTAC and hold, continue climb-in-hold to 4500.

ATIS	SOCAL APP CON	RIVERSIDE TOWER ★	GND CON	UNICOM
128.8	135.4 377.125	121.0 (CTAF) Ⓛ 257.8	121.7	122.95



FAF to MAP 6.4 NM					
Knots	60	90	120	150	180
Min:Sec	6:24	4:16	3:12	2:34	2:08

CATEGORY	A	B	C	D
CIRCLING	2300-1¼ 1481 (1500-1¼)	2300-1½ 1481 (1500-1½)	2300-3 1481 (1500-3)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009

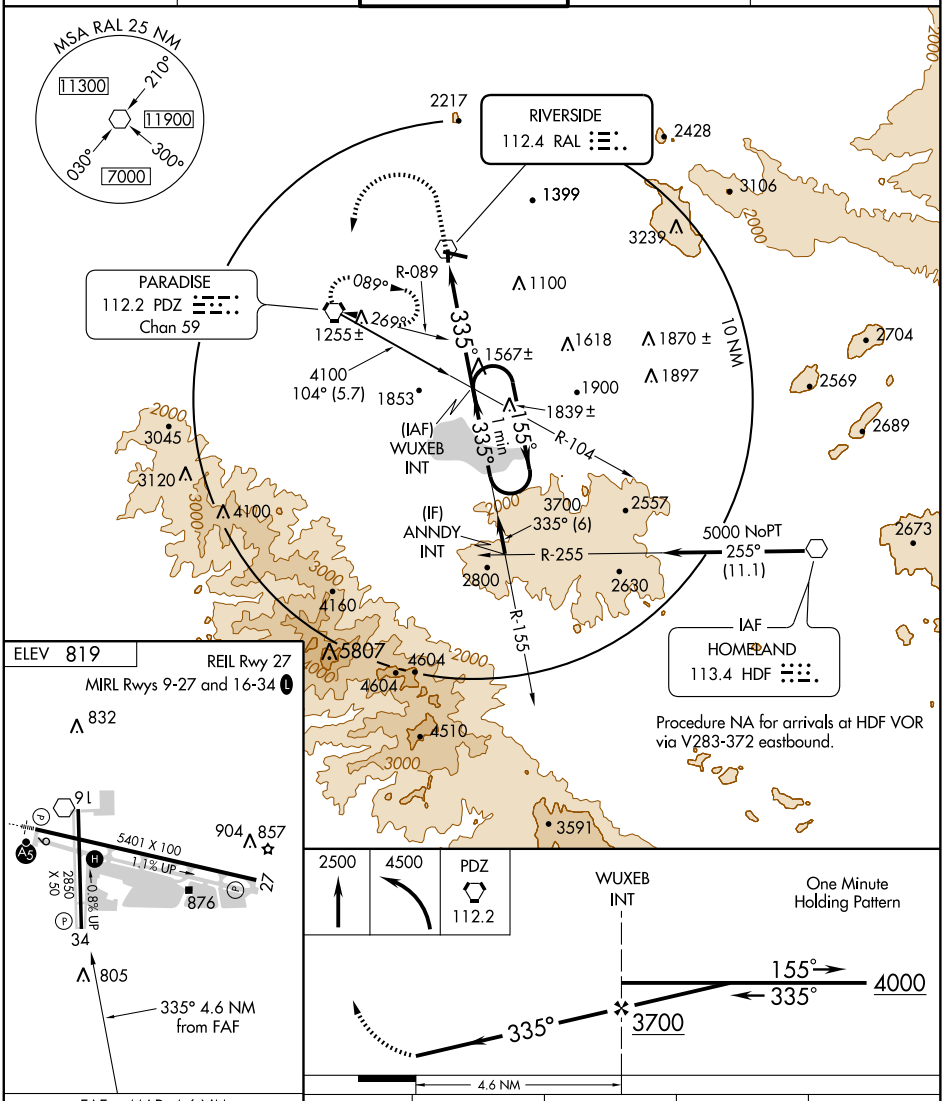
VOR RAL 112.4	APP CRS 335°	Rwy Idg N/A TDZE N/A Apt Elev 819

VOR-B
RIVERSIDE MUNI (RAL)

When VGSI inoperative, circling Rwy 34 NA at night.
Circling NA for Cat D north of Rwy 9-27.
When local altimeter setting not received, use Chino altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 2500 then climbing left turn to 4500 direct PDZ VORTAC and hold, continue climb-in-hold to 4500.

ATIS	SOCAL APP CON	RIVERSIDE TOWER ★	GND CON	UNICOM
128.8	135.4 377.125	121.0 (CTAF) L 257.8	121.7	122.95



FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

CATEGORY	A	B	C	D
CIRCLING	2000-1¼ 1181 (1200-1¼)	2000-1½ 1181 (1200-1½)	2000-3 1181 (1200-3)	

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR RAL 112.4	APP CRS 079°	Rwy Idg 5401 TDZE 795 Apt Elev 819

VOR RWY 9

RIVERSIDE MUNI (RAL)

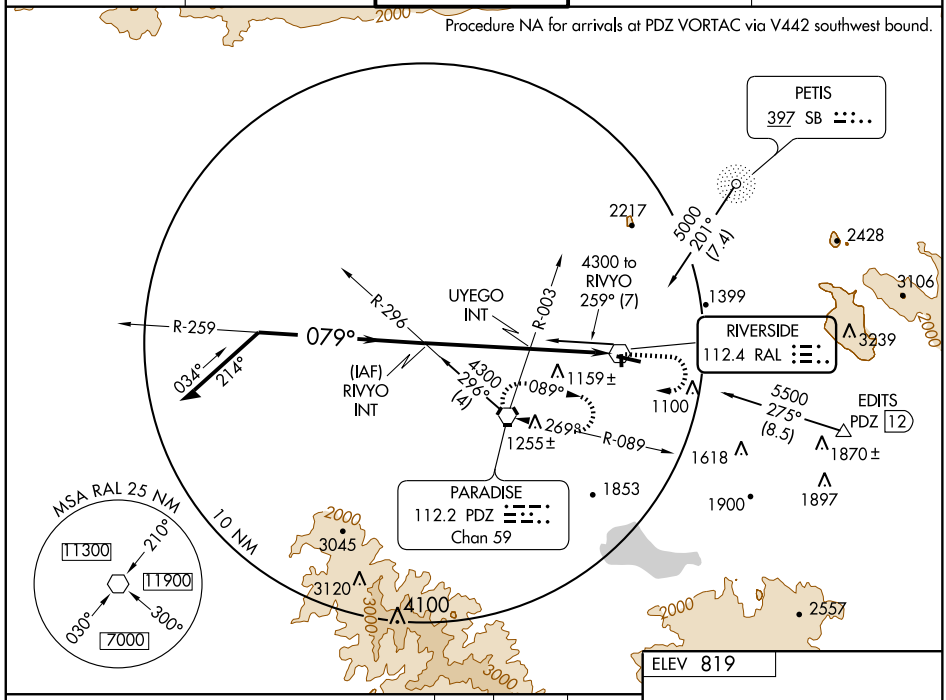
When VGSI inoperative, circling Rwy 34 NA at night. When local altimeter setting not received, use Chino altimeter setting and increase all MDAs 60 feet.

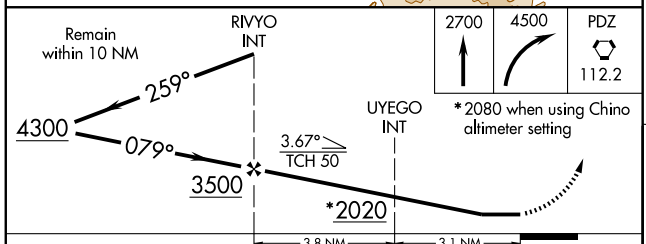
MALSR

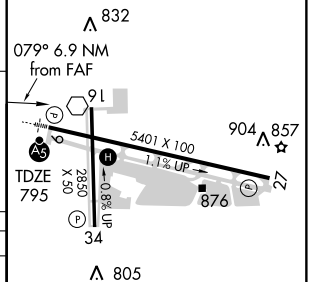
MISSED APPROACH: Climb to 2700 then climbing right turn to 4500 direct PDZ VORTAC and hold, continue climb-in-hold to 4500.

ATIS	SOCAL APP CON	RIVERSIDE TOWER ★	GND CON	UNICOM
128.8	135.4 377.125	121.0 (CTAF) L 257.8	121.7	122.95

Procedure NA for arrivals at PDZ VORTAC via V442 southwest bound.







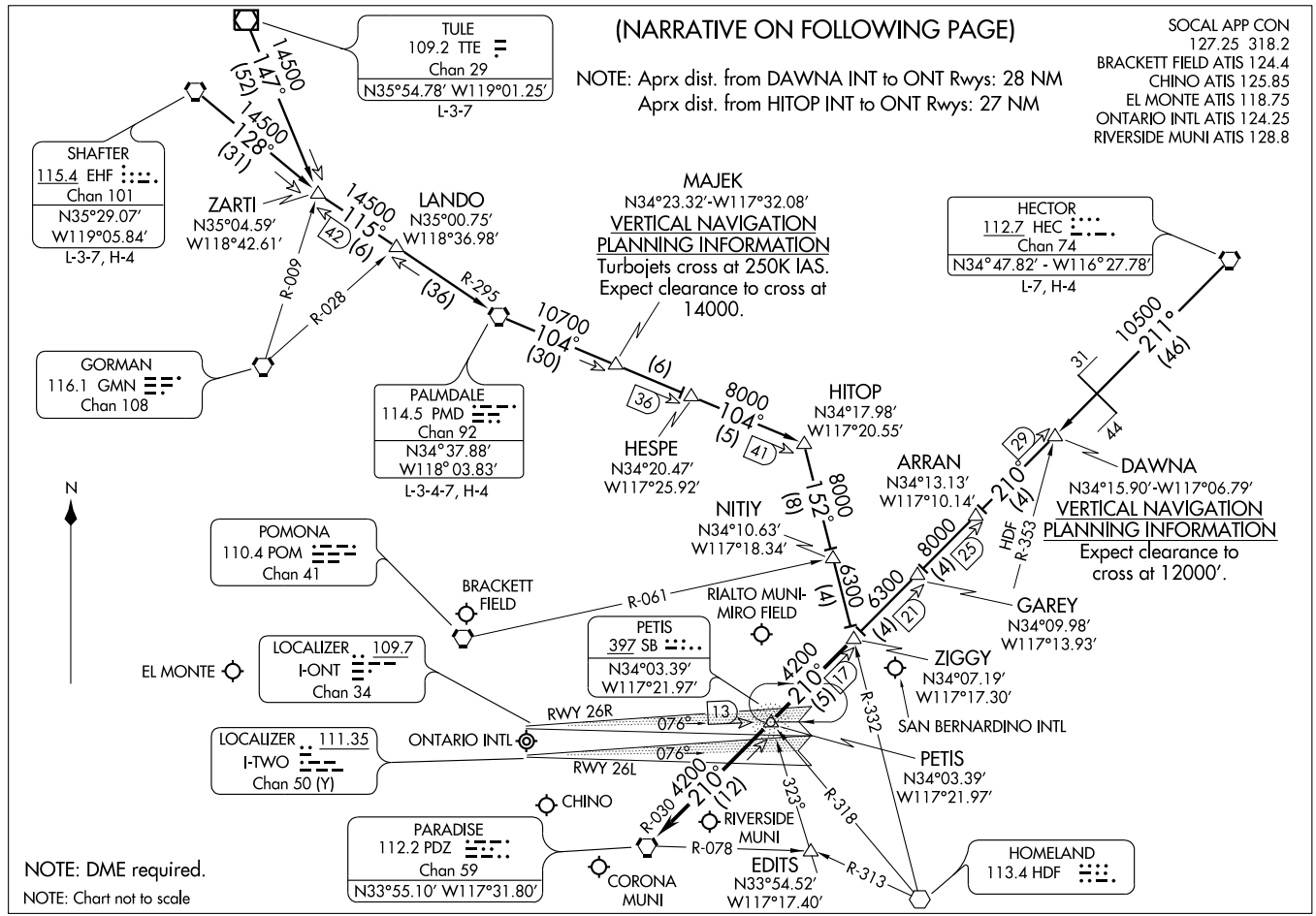
CATEGORY	A	B	C	D
S-9	2020-¾ 1225 (1300-¾)	2020-1 1225 (1300-1)	2020-2½ 1225 (1300-2½)	NA
CIRCLING	2020-1¼ 1201 (1300-1¼)	2020-1½ 1201 (1300-1½)	2020-3 1201 (1300-3)	NA
UYEGO FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)				
S-9	1740-¾ 945 (1000-¾)		1740-2¼ 945 (1000-2¼)	NA
CIRCLING	1740-1¼ 921 (1000-1¼)		1740-2¾ 921 (1000-2¾)	NA

REIL Rwy 27
MIRL Rwys 9-27 and 16-34 L

FAF to MAP 6.9 NM

Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18

SW-3, 22 OCT 2009 to 19 NOV 2009



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

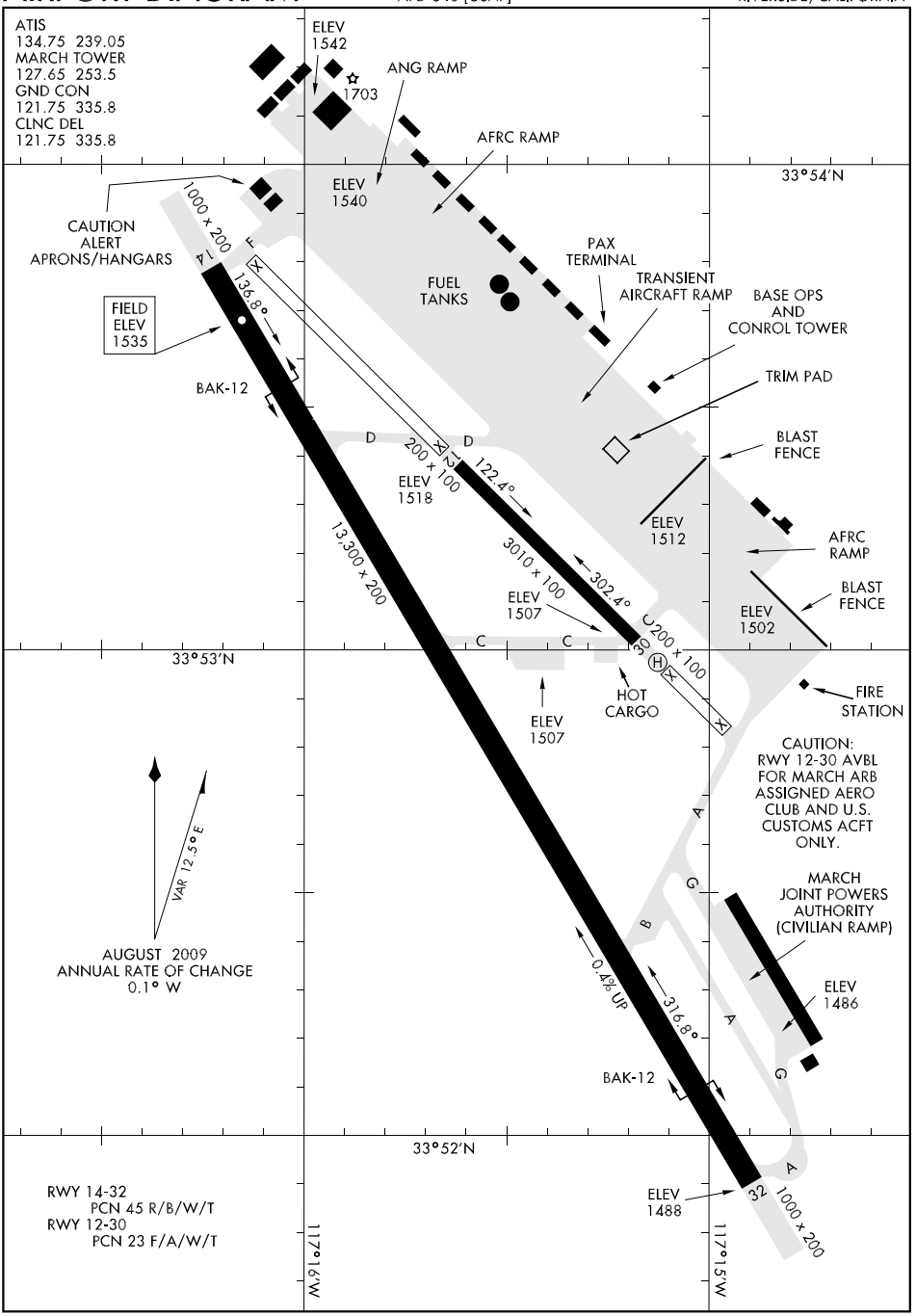
. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009


ATIS
134.75 239.05
MARCH TOWER
127.65 253.5
GND CON
121.75 335.8
CLNC DEL
121.75 335.8
ELEV 1542
1703
ANG RAMP
AFRC RAMP
ELEV 1540
33°54'N
CAUTION
ALERT
APRONS/HANGARS
1000 x 200
PAX TERMINAL
FUEL TANKS
TRANSIENT AIRCRAFT RAMP
BASE OPS AND CONROL TOWER
FIELD ELEV 1535
136.8°
BAK-12
TRIM PAD
BLAST FENCE
200 x 100
ELEV 1518
122.4°
ELEV 1512
AFRC RAMP
13,300 x 200
3010 x 100
302.4°
ELEV 1507
ELEV 1502
BLAST FENCE
33°53'N
HOT CARGO
FIRE STATION
ELEV 1507
CAUTION:
RWY 12-30 AVBL FOR MARCH ARB ASSIGNED AERO CLUB AND U.S. CUSTOMS ACFT ONLY.
VAR 12.5° E
AUGUST 2009
ANNUAL RATE OF CHANGE
0.1° W
MARCH JOINT POWERS AUTHORITY (CIVILIAN RAMP)
ELEV 1486
0.4% UP
316.8°
BAK-12
33°52'N
RWY 14-32
PCN 45 R/B/W/T
RWY 12-30
PCN 23 F/A/W/T
ELEV 1488
1000 x 200
117°16'W
117°15'W

HI-ILS or LOC/DME RWY 32

LOC I-RIV	APCH CRS	Rwy ldg 13,300 / TDZE 1498 / Arpt Elev 1535
110.1	315°	

JAL-348 [USAF]

MARCH ARB (KRIV)

T * When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT CD RVR to 60 and vis to 1¼ mile, CAT E vis to 1½.

ALSF-1 (A1)

MISSED APPROACH: Climb direct RIV TACAN. Then turn left to intercept RIV R-138 direct BOGLE, continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

*** Circling not authorized NE of Rwy 14-32. Rapid rising terrain.

CAUTION: Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

CAUTION: Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

LOCALIZER 110.1 I-RIV

MARCH Chan 77 RIV

PARADISE 112.2 PDZ Chan 59

DEGNE RIV /RADAR 9.2

PERRIS VALLEY ARPT

HEMET-RYAN ARPT

BOGLE RIV 11

RIV 18

CEMBO RIV 19

BEMLE RIV 28

OCEANSIDE 115.3 OCN Chan 100

(IAF) HENSA RIV 45

RIV 53

R-124 R-138 R-074 R-137

138° 318° 315° 135° 323° 317° 137°

1801 1725 1958 1482 2333 2661 3028 4567 6142 6522

Max holding alt 6000

Max holding 265 KIAS

† Dead reckoning course to intercept localizer.

20 NM

MSA RIV 2.5 NM
200°
290°
020°
10,700
12,800
6600

EMERG SAFE ALT 100 NM 13,800 FROM "RIV" TACAN

ELEV 1535

TDZL/CL Rwy 32
HIRL Rwy 14-32

1703 1576 1645

13,300 × 200
3010 × 100
0.4% up

TDZE 1498

315°6.4 NM from FAF

1534 1538

FAF to MAP 5.9 NM

Knots	120	140	160	180	200
Min:Sec	2:57	2:32	2:13	1:58	1:46

5000 RIV

RIV R-138

BOGLE RIV 11

DEGNE RIV /RADAR 9.2

Intcp Lczr CEMBO RIV 19

BEMLE RIV 28

HENSA RIV/ 45

FL240

317°

323°†

12,000

315°

6000

3600

RIV TACAN

RIV 3.9

KIMDE RIV 3.3

3600

GS 3.00°
TCH 59

.5 5.9 NM

CATEGORY	C	D	E
S-ILS 32 *	1698/24 200 (200-½)		
S-LOC 32 **	1920/40 422 (400-¾)		1920/50 422 (400-1)
CIRCLING***	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265 (1300-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 14

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
RIV Chan 77	106°	13,300	1535	1535

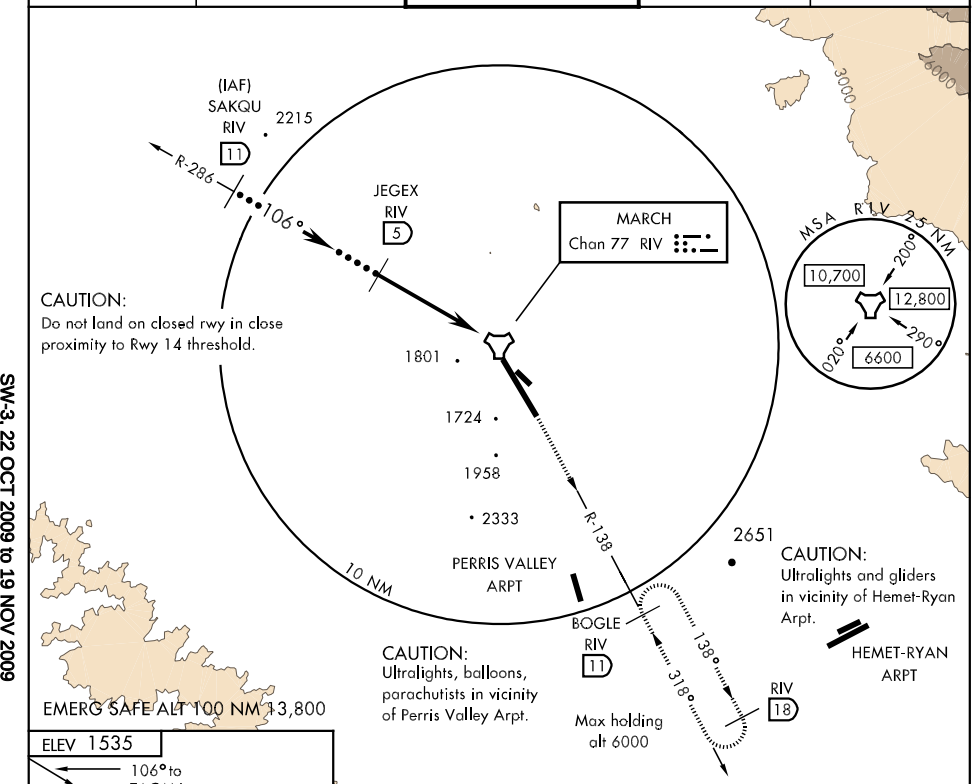
AL-348 [USAF]

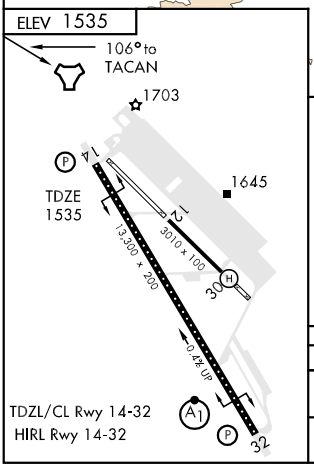
MARCH ARB (KRIV)

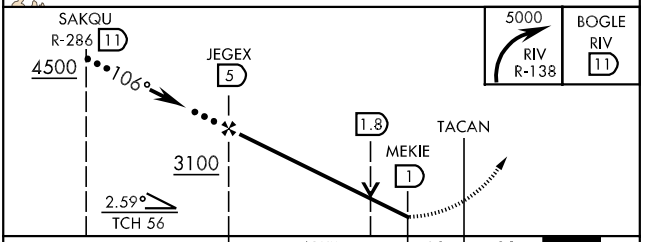
▼ * Circling not authorized NE of Rwy 14-32. Rapid rising terrain.

MISSED APPROACH: Climb out RIV TACAN R-138 direct BOGLE continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8







CATEGORY	C	D	E
S-14	2200-2 665 (700-2)		2200-2¼ 665 (700-2¼)
CIRCLING *	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265 (1300-3)

HI-TACAN RWY 32

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
RIV Chan 77	318°	13,300	1498	1535

JAL-348 [USAF]

MARCH ARB (KRIV)

▼ * When ALS inop, increase CAT C vis to 1½ miles CAT D vis to 1¾ miles and CAT E vis to 2.

ALSF-1 (A1)

MISSED APPROACH: Climb on RIV TACAN R-138 to 5000. At .6 DME South of RIV, turn left to intercept RIV R-138 direct BOGLE continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

** Circling not authorized NE of Rwy 14-32.
Rapid rising terrain.

PARADISE
112.2 PDZ
Chan 59

MARCH
Chan 77 RIV

MSA RIV 25 NM
200°
10,700
12,800
290°
020°
6600

R-125

1801
1724
1958
2536
2333
2533
1640
2661
OSTOR
RIV
9
Max holding
alt 6000

HEMET-RYAN ARPT

CAUTION:
Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

PERRIS VALLEY ARPT

BOGLE
RIV
11

138°
318°

RIV
18

2661
4567
2953

ZALUR
RIV
19

CAUTION:
Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

HUGDI
RIV
28

20 NM

OCEANSIDE
115.3 OCN
Chan 100

5932
Max holding
265 KIAS
5699
RIV
53
6522

R-075

(IAF)
ANOTE
RIV
45

R-138

EMERG SAFE ALT 100 NM 13,800
FROM "RIV" TACAN

ELEV 1535
TDZL/CL Rwy 32
HIRL Rwy 14-32

1703
1576
1645
13,300 × 200
3010 × 100
0.4% UP
TDZE
1498
318° to TACAN

5000	0.6	BOGLE
RIV R-138	S of RIV	RIV 11

ANOTE 45
HUGDI 28
318°
FL240
ZALUR 19
OSTOR 9
12,000
6000
3600
TACAN
CULAX
4.3
3.3
3.11°
TCH 73
.5
5.7 NM

CATEGORY	C	D	E
S-32 *	2040/50 542 (600-1)	2040/60 542 (600-1¼)	2040-1½ 542 (600-1½)
CIRCLING **	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265 (1300-3)

HI-VOR RWY 32

MARCH ARB (KRIV)

VOR HDF	APCH CRS	Rwy Idg / TDZE / Arpt Elev
113.4	315°	13,300 / 1498 / 1535

JAL-348 [USAF]

* When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles and CAT E vis to 2 miles.
** Circling not authorized NE of Rwy 14-32. Rapid rising terrain.

ALSF-1

MISSED APPROACH: Climb on HDF VOR R-315 to 5000. Crossing the PDZ VORTAC R-080 turn left direct HDF, continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

PARADISE
112.2 PDZ
Chan 59

HOMELAND
113.4 HDF

OCEANSIDE
115.3 OCN
Chan 100

JULIAN
114.0 JLI
Chan 87

R-315 2501
R-080 1801 1958 2536 2333 2671
Max holding alt 6000
135°
315°
R-303
R-020
R-034
R-135
R-076
303°
123°
20 NM

CAUTION: Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

PERRIS VALLEY ARPT

COMGA/ RADAR Fix

HEMET-RYAN ARPT

CAUTION: Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

2661 4528 3028 6142 6522 5798

WAYLE/ RADAR

WAREK/ RADAR

Max holding 265 KIAS
Max holding alt FL240

IAF

(a) 122 (b) 052 232 (c) (c)

MSA HDF 25 NM
9200 12,800 7100 8900
090° 180° 270° 360°

EMERG SAFE ALT 100 NM
13,800 FROM "HDF" VOR

ELEV 1535
TDZL/CL Rwy 32
HIRL Rwy 14-32

1703 1576 1645
13,300 × 200
3010 × 100
0.4% UP
TDZE 1498
315°6.2 NM from FAF

FAF to MAP 5.2 NM					
Knots	120	140	160	180	200
Min:Sec	2:36	2:14	1:57	1:44	1:34

5000
HDF R-315
PDZ R-080
HDF

COMGA INT /RADAR
WAYLE INT /RADAR
JLI R-303 OCN R-076 /RADAR
WAREK INT /RADAR
JLI VORTAC
/RADAR HDF VOR
3600 6000 12,000 FL240
315° 303°
3.11° TCH 73
1.0 NM 5.2 NM

CATEGORY	C	D	E
S-32 *	2040/50 542 (600-1)	2040/60 542 (600-1¼)	2040-1½ 542 (600-1½)
CIRCLING **	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265 (1300-3)

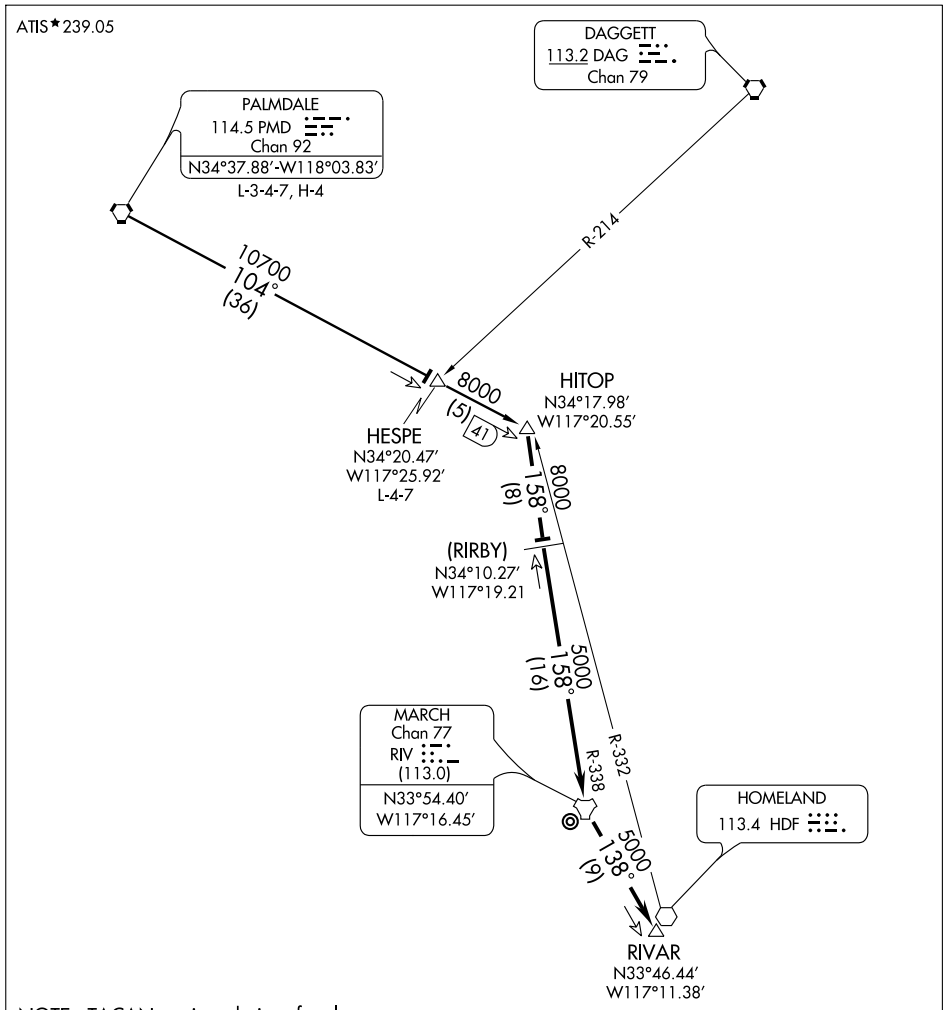
SW-3, 22 OCT 2009 to 19 NOV 2009

(HITOP.HITOP1) 08269

HITOP ONE ARRIVAL

ST-348 (FAA)

MARCH ARB
RIVERSIDE, CALIFORNIA



NOTE: TACAN equipped aircraft only.

NOTE: Chart not to scale.

HESPE TRANSITION (HESPE.HITOP1): From over HESPE INT via PMD R-104 to HITOP INT. Thence . . . .

PALMDALE TRANSITION (PMD.HITOP1): From over PMD VORTAC via PMD R-104 to HITOP INT. Thence . . . .

. . . . From over HITOP INT via RIV R-338 to RIV TACAN. Thence via RIV R-138 to RIVAR DME. Expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

ILS Y or LOC RWY 32

LOC I-RIV	APCH CRS	Rwy ldg 13,300 / TDZE 1498 / Arpt Elev 1535
110.1	315°	

AL-348 [USAF]

MARCH ARB (KRIV)

▼* When ALS inop, increase CAT A-E RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT A-B RVR to 50 and vis to 1, CAT C-D RVR to 60 and vis is to 1¼, CAT E vis to 1½.
*** Circling not authorized NE of Rwy 14-32. Rapid rising terrain.

ALSF-1 (A1)

MISSED APPROACH: Climb on HDF VOR R-315 to 5000. Crossing PDZ VORTAC R-078 turn left direct HDF continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

RIV DME paired VHF freq 113.0

PARADISE
112.2 PDZ
Chan 59

MARCH
Chan 77 RIV
N33°54.39' W117°16.50'

LOCALIZER 110.1
I-RIV

R-078

1801
1529
1482
1724
1958
2553
2657
2671
2333

CAUTION:
Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

PERRIS VALLEY ARPT

10 NM

MSA HDF 25 NM
180°
9200
090°
12,800
7100
270°
8900
360°

CAUTION:
Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

HEMET-RYAN ARPT

135°
315°
Max holding alt 6000
2546

HOMELAND
113.4 HDF

DEGNE
RIV 9.2
/RADAR

MIRLE

2661

Max holding alt 8300

R-014
R-021
IAF
ARKOE

OCEANSIDE
115.3 OCN
Chan 100

HDF R-135

EMERG SAFE ALT 100 NM 13,800 FROM HDF VOR

3000

ELEV 1535

TDZL/CL Rwy 32
HIRL Rwy 14-32

1703
1645
13,500 × 200
3010 × 100
0.48% up
TDZE 1498
315°6.4 NM from FAF
1534
1538

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

5000
HDF R-315
PDZ R-078
HDF
DEGNE RIV 9.2 /RADAR
MIRLE OCN R-014
ARKOE OCN R-021
7300
RIV 3.9
TACAN
KIMDE RIV 3.3
3600
315°
5400
3600
GS 3.00°
TCH 59
0.5
5.9 NM

CATEGORY	A	B	C	D	E
S-ILS 32 *	1698/18 200 (200-½)		1698/24 200 (200-½)		
S-LOC 32 **	1920/24 422 (400-½)		1920/40 422 (400-¾)		1920/50 422 (400-1)
CIRCLING ***	2180-1 645 (700-1)	2220-1 685 (700-1)	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265(1300-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

ILS Y RWY 32 (CAT II)

MARCH ARB (KRIV)

LOC I-RIV	APCH CRS	Rwy ldg / TDZE / Arpt Elev
110.1	315°	13,300 / 1498 / 1535

AL-348 [USAF]

ALSF-1

MISSED APPROACH: Climb on HDF VOR R-315 to 5000. Crossing PDZ VORTAC R-078 turn left direct HDF continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

RIV DME paired VHF freq 113.0

PARADISE
112.2 PDZ
Chan 59

MARCH
Chan 77 RIV
N33°54.39' W117°16.50'

3250

LOCALIZER 110.1
I-RIV

R-078

1951

2704

2569

IM

1606

CAUTION:
Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

MSA HDF 25 NM
180°
9200
090°
12,800
270°
7100
8900
360°

DEGNE
RIV 9.2
/RADAR

2557

PERRIS VALLEY ARPT

2673

2800

2696

135°

315°

10 NM

HEMET-RYAN ARPT

HOMELAND
113.4 HDF

Max holding alt 6000

CAUTION:
Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

3000

5036

4804

MIRLE

2811

EMERG SAFE ALT 100 NM 13,800 FROM HDF VOR

R-014

R-021

Max holding alt 8300

3725

IAF
ARKOE

OCEANSIDE
115.3 OCN
Chan 100

ELEV 1535

TDZL/CL Rwy 32
HIRL Rwy 14-32

1703

1645

13,300 x 200

3010 x 100

30

0.4% UP

TDZE
1498

32

1538

1514

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

5000
HDF
R-315

PDZ
R-078

HDF

DEGNE
RIV 9.2
/RADAR

MIRLE
OCN R-014

ARKOE
OCN R-021

3600

7300

TACAN

DH
(RA 119)

IM

315°

5400

1490 MSL
1488 MSL

3600

GS 3.00°
TCH 59

1119'
1030'
359'
6.2 NM

CATEGORY	A	B	C	D	E
S-ILS 32	1598/12		100		(RA 119)

SW-3, 22 OCT 2009 to 19 NOV 2009

ILS Z or LOC/DME RWY 32

LOC I-RIV	APCH CRS	Rwy ldg 13,300 / TDZE 1498 / Arpt Elev 1535
110.1	315°	

AL-348 [USAF]

MARCH ARB (KRIV)

▼ * When ALS inop, increase CAT A-E RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD RVR to 60 and vis to 1¼ mile, CAT E vis to 1½ mile.

ALSF-1 (A1)

MISSED APPROACH: Climb direct RIV TACAN, then turn left to intercept RIV R-138 direct BOGLE, continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

*** Circling not authorized NE of RWY 14-32. Rapidly rising terrain.

MARCH Chan 77 RIV

LOCALIZER 110.1 I-RIV

1801 1529 IM 1724 1958 1482 2333

MSA R-1V 25 NM
200° 10,700 12,800 290° 020° 6600

DEGNE RIV /RADAR 9.2

2661

PERRIS VALLEY ARPT

10 NM

2546

HEMET-RYAN ARPT

CAUTION: Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

BOGLE RIV 11

DEHAM RIV 15.2

CAUTION: Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

138° 315° 318° 135°

Max holding alt 6000

RIV 18

2661

Max holding alt 8300

EMERG SAFE ALT 100 NM 13,800 FROM "RIV" TACAN

(IAF) CEMBO RIV 19

R-138 315° R-135

RIV 26

ELEV 1535 TDZL/CL Rwy 32 HIRL Rwy 14-32

1703 1645 1534 1538

13,300 × 200 3010 × 100

0.4% UP

TDZE 1498

315° 6.4 NM from FAF

FAF to MAP 5.9 NM

Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

5000 RIV | RIV R-138 | BOGLE RIV 11

DEGNE 9.2 /RADAR 3600 DEHAM 15.2 RIV R-135 CEMBO 19

TACAN KIMDE 3.9 3.3 315° 3600 315° 7300 5500

GS 3.00° TCH 59

0.5 5.9 NM

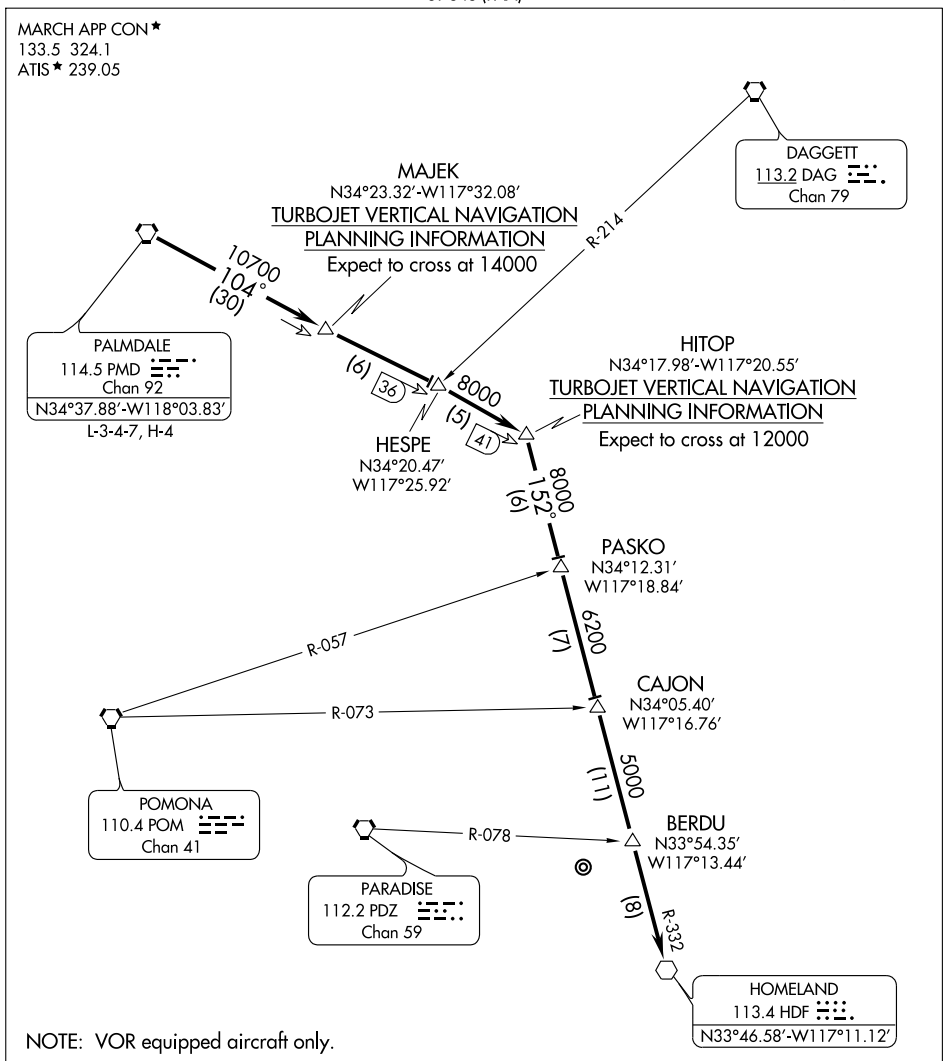
CATEGORY	A	B	C	D	E
S-ILS 32 *	1698/18 200 (200-½)		1698/24 200 (200-½)		
S-LOC 32 **	1920/24 422 (400-½)		1920/40 422 (400-¾)		1920/50 422 (400-1)
CIRCLING ***	2180-1 645 (700-1)	2220-1 685 (700-1)	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265(1300-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

MARCH FOUR ARRIVAL

ST-348 (FAA)

MARCH ARB
RIVERSIDE, CALIFORNIA

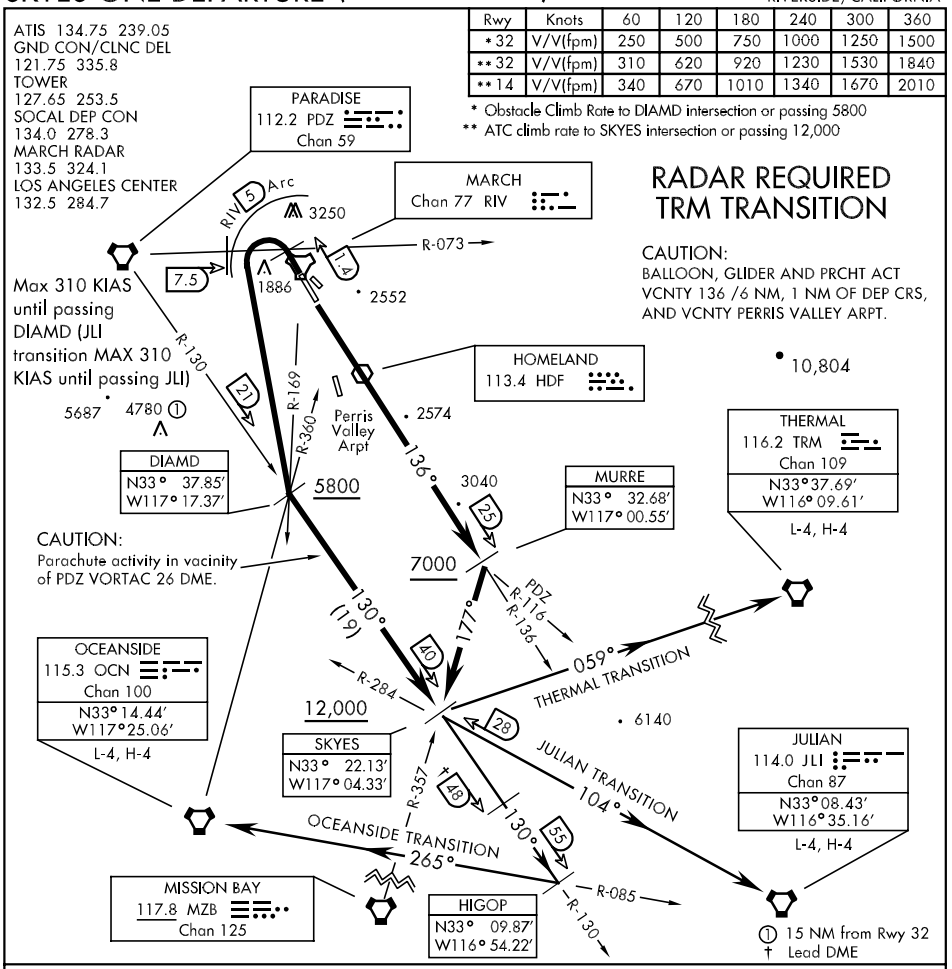


NOTE: VOR equipped aircraft only.

NOTE: Chart not to scale.

From over PMD VORTAC via PMD R-104 to HITOP INT. Thence via HDF R-332 to HDF VOR. Expect VOR approach or vector to intercept ILS Rwy 32.

SW-3, 22 OCT 2009 to 19 NOV 2009



Rwy	Knots	60	120	180	240	300	360
*32	V/V(fpm)	250	500	750	1000	1250	1500
**32	V/V(fpm)	310	620	920	1230	1530	1840
**14	V/V(fpm)	340	670	1010	1340	1670	2010

* Obstacle Climb Rate to DIAMD intersection or passing 5800
** ATC climb rate to SKYES intersection or passing 12,000

RADAR REQUIRED TRM TRANSITION

CAUTION:
BALLOON, GLIDER AND PRCHT ACT VCNTY 136 /6 NM, 1 NM OF DEP CRS, AND VCNTY PERRIS VALLEY ARPT.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 14: Climb via RIV TACAN R-136 or climb direct HDF VOR, then via HDF R-136 to MURRE, intercept MZB VORTAC R-357 to SKYES, Cross MURRE at or above 7000, and SKYES at or above 12,000. Thence via transition or assigned route.

TAKE-OFF RWY 32: Climb on track 315°, then turn left crossing PDZ VORTAC R-073/RIV TACAN 1.4 DME direct DIAMD, proceed no closer than 7.5 DME PDZ. Remain within 5 DME RIV. Cross DIAMD at or above 5800. Intercept PDZ R-130 to SKYES, cross SKYES at or above 12,000. Thence via transition or assigned route.

JULIAN TRANSITION (SKYES 1 • JLI): JLI VORTAC R-284 direct JLI. MAX 310 KIAS until passing JULIAN VORTAC

OCEANSIDE TRANSITION (SKYES 1 • OCN): Via SKYES direct HIGOP intercept OCN VORTAC R-085 to OCN.

THERMAL TRANSITION (SKYES 1 • TRM): TRM VORTAC bearing 059° to TRM (Radar required)

TACAN RWY 14

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
RIV Chan 77	106°	13,300	1535	1535

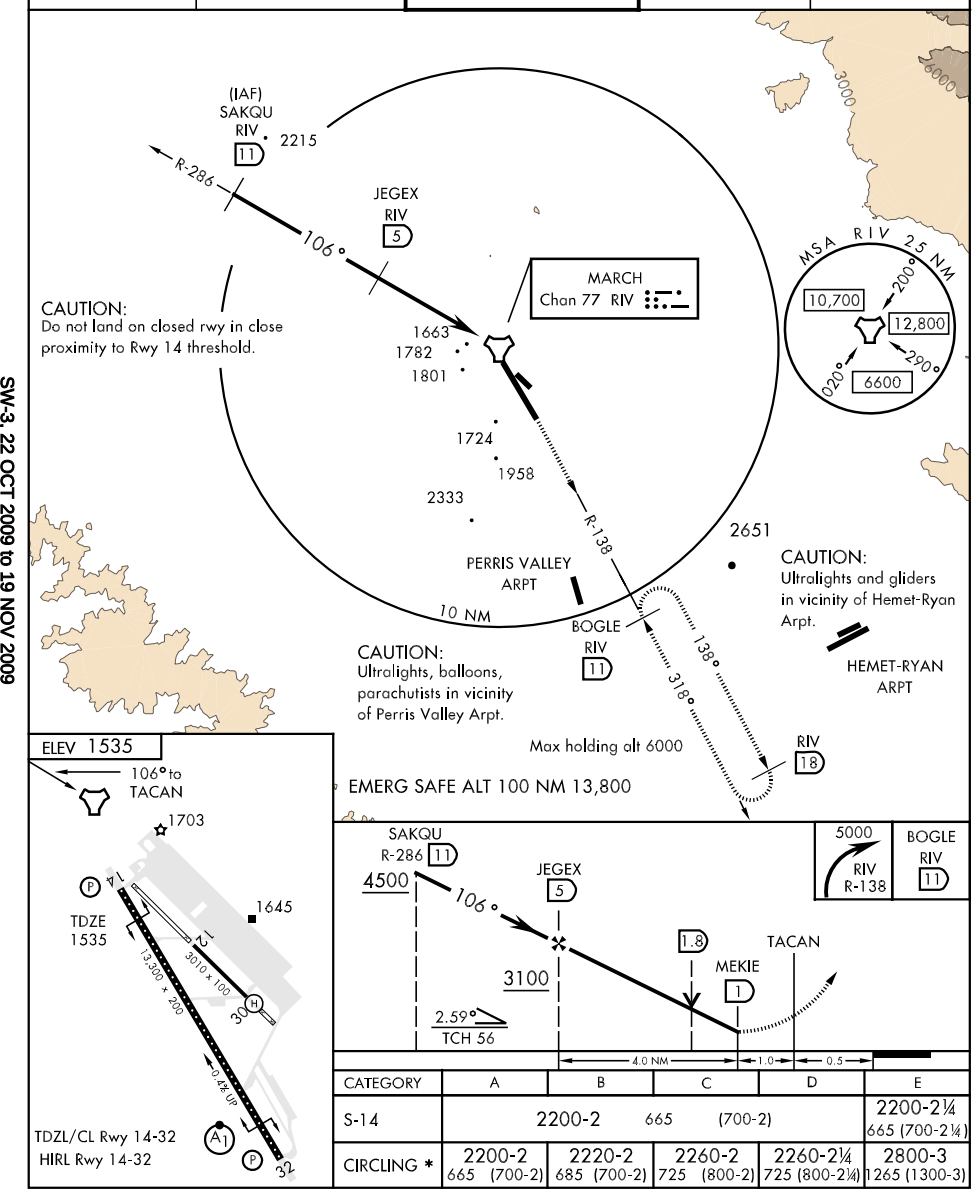
AL-348 [USAF]

MARCH ARB (KRIV)

* Circling not authorized NE of Rwy 14-32. Rapid rising terrain.

MISSED APPROACH: Climb out RIV TACAN R-138 direct BOGLE, continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8



CATEGORY	A	B	C	D	E
S-14	2200-2 665 (700-2)				2200-2¼ 665 (700-2¼)
CIRCLING *	2200-2 665 (700-2)	2220-2 685 (700-2)	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265 (1300-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 32

TACAN	APCH CRS	Rwy ldg	13,300
RIV	318°	TDZE	1498
Chan 77		Arpt Elev	1535

AL-348 [USAF]

MARCH ARB (KRIV)

*When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ and CAT E vis to 2.
** Circling not authorized NE of Rwy 14-32.
Rapid rising terrain.

ALSF-1

MISSED APPROACH: Climb on RIV TACAN R-138 to 5000. At 0.6 DME South of RIV, turn left to intercept RIV R-138 direct BOGLE. Continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

MARCH
Chan 77 RIV

MSA RIV 25 NM
200°
10,700
12,800
290°
020°
6600

1801
1724
1958
2333
2686
1640
2661
2546
2653

OSTOR
RIV
9

PERRIS VALLEY
ARPT

10 NM

BOGLE
RIV
11

AKOME
RIV
15

RIV
18

(IAF)
ZALUR
RIV
19

RIV
26

138°
318°
Max holding
alt 6000
Max holding
alt 8300
R-138

CAUTION:
Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

HEMET-RYAN
ARPT

CAUTION:
Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

3000

EMERG SAFE ALT 100 NM 13,800

ELEV 1535
TDZL/CL Rwy 32
HIRL Rwy 14-32

1703
1645
13,300 x 200
3010 x 100
0.48% up
TDZE
1498
318° to
TACAN

5000
RIV
R-138

0.6
S of RIV

BOGLE
RIV
11

ZALUR
19
7300

AKOME
15

OSTOR
9

318°

TACAN

CULAX
3.3

4.3

5400

3600

3.11°
TCH 73

.5
5.7 NM

CATEGORY	A	B	C	D	E
S-32 *	2040/24 542 (600-½)		2040/50 542 (600-1)	2040/60 542 (600-1¼)	2040-1½ 542 (600-1½)
CIRCLING **	2180-1 645 (700-1)	2220-1 685 (700-1)	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265(1300-3)

33°53'N-117°16'W

TACAN RWY 32

VOR RWY 32

VOR HDF 113.4	APCH CRS 315°	Rwy ldg 13,300 TDZE 1498 Arpt Elev 1535	AL-348 [USAF]	MARCH ARB (KRIV)

▼* When ALS inop, increase CAT AB RVR to 60 and vis to 1¼ miles, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.
** Circling not authorized NE of Rwy 14-32. Rapid rising terrain.

ALSF-1 (A1)

MISSED APPROACH: Climb on HDF VOR R-315 to 5000. Crossing PDZ VORTAC R-080 turn left direct HDF continue climb in hold to 5000.

ATIS	SOCAL APP CON	MARCH TOWER	GND CON	CLNC DEL
134.75 239.05	134.0 278.3	127.65 253.5	121.75 335.8	121.75 335.8

PARADISE
112.2 PDZ
Chan 59

R-315
R-080
2501
1801
1724
1621
1958
2657
2671
2418
2536
2333
3000
4528
3028

MSA HDF 25 NM
180°
9200
12,800
090°
270°
7100
8900
360°

CAUTION:
Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.

PERRIS VALLEY ARPT

Max holding alt 6000

HEMET-RYAN ARPT

CAUTION:
Ultralights and gliders in vicinity of Hemet-Ryan Arpt.

IAF
HOMELAND
113.4 HDF

135°
315°
090°
270°
R-135

EMERG SAFE ALT 100 NM 13,800

10 NM

ELEV 1535

TDZL/CL Rwy 14-32
HIRL Rwy 14-32

1703
1645
13,300 × 200
3010 × 100
0.48% UP
1554
1493
TDZE 1498
315° 6.2 NM from FAF

VGSI and descent angles not coincident

5000 HDF R-315	Crossing PDZ R-080	HDF

HDF VOR
Remain within 15 NM
5000
135°
5000
315°
3700
3.26°
TCH 73
1.0
5.2 NM

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

CATEGORY	A	B	C	D	E
S-32*	2040/40 542 (600-¾)		2040/50 542 (600-1)	2040/60 542 (600-1¼)	2040-1½ 542 (600-1½)
CIRCLING**	2180-1¼ 645 (700-1¼)	2220-1¼ 685 (700-1¼)	2260-2 725 (800-2)	2260-2¼ 725 (800-2¼)	2800-3 1265(1300-3)

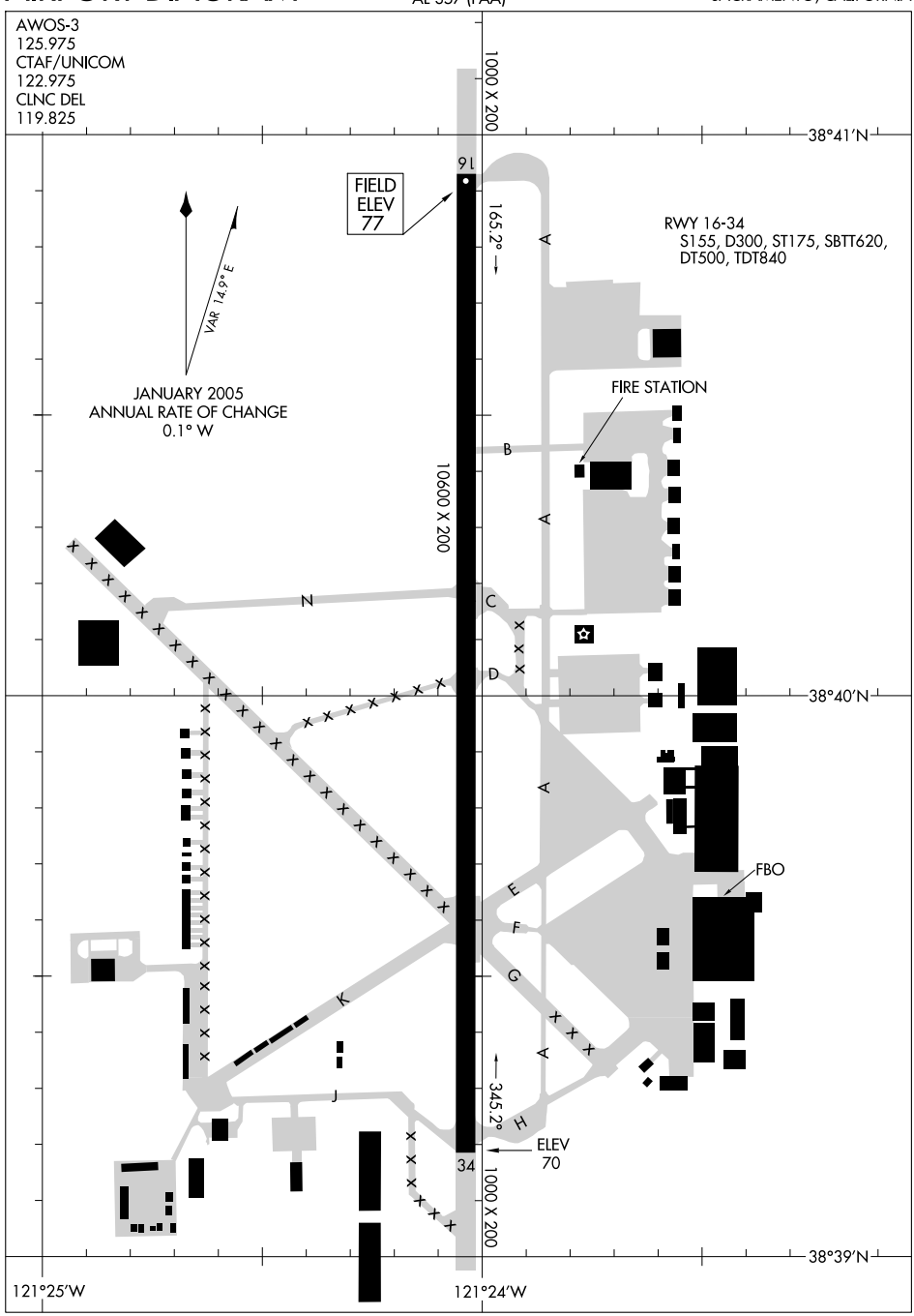
SW-3, 22 OCT 2009 to 19 NOV 2009

09239

AIRPORT DIAGRAM

AL-357 (FAA)

SACRAMENTO/ MC CLELLAN AIRFIELD (MCC)
SACRAMENTO, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-MCC	APP CRS	Rwy Idg	10600
109.7	163°	TDZE	75
		Apt Elev	75

ILS RWY 16

SACRAMENTO/ MC CLELLAN AIRFIELD (MCC)

NA If local altimeter setting not received, use Sacramento Intl altimeter setting and increase all DH/MDAs 40 feet. DME from MCC VOR/DME.

SSALR

MISSED APPROACH: Climb to 1200 then climbing right turn to 2200 via MCC VOR/DME R-344 to BONDZ/8 DME/RADAR and hold.

AWOS-3	NORCAL APP CON	CLNC DEL	UNICOM
125.975	127.4 317.5	119.825	122.975 (CTAF) L

RADAR or DME REQUIRED

MARYSVILLE 110.8 MYV Chan 45

WILLIAMS 3000 067° (21.3)

220° 34° (16)

343°

MCC R-344

ENROUTE FACILITIES

FEEDER FACILITIES

10 NM

(IAF) DASHE MCC 12 RADAR

712 ∧

208° 028°

2200 NoPT 163° (4)

164°

344°

BONDZ MCC 8 RADAR (2.9)

1500

163°

(IAF) WOODO MCC 5.2 RADAR

3000 345° (5.2)

∧543

∧411

MC CLELLAN 109.2 MCC Chan 29

∧457

∧217±

577 ∧

LOCALIZER 109.7 I-MCC

MSA MCC 25 NM

3900

3000 010° (15.1)

3000 315° (40.2)

SACRAMENTO

LINDEN

ELEV 75

163° 4.3 NM from FAF

9L

TDZE 75

10600 X 200

34

HIRL Rwy 16-34 L

Remain within 10 NM

WOODO MCC 5.2/RADAR

343°

3000

163°

1500

GS 3.00° TCH 51

1500

163°

4.3 NM

1200	2200	BONDZ MCC 8 RADAR
	MCC R-344 109.2	

CATEGORY	A	B	C	D
S-ILS 16	275/24 200 (200-½)			
S-LOC 16	460/24 385 (400-½)			460/40 385 (400-¾)
CIRCLING	NA			

FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

SW-2, 22 OCT 2009 to 19 NOV 2009

NORCAL DEP CON
127.4 317.5
CLNC DEL
119.825
UNICOM 122.975 (CTAF)

DEPARTURE ROUTE DESCRIPTION

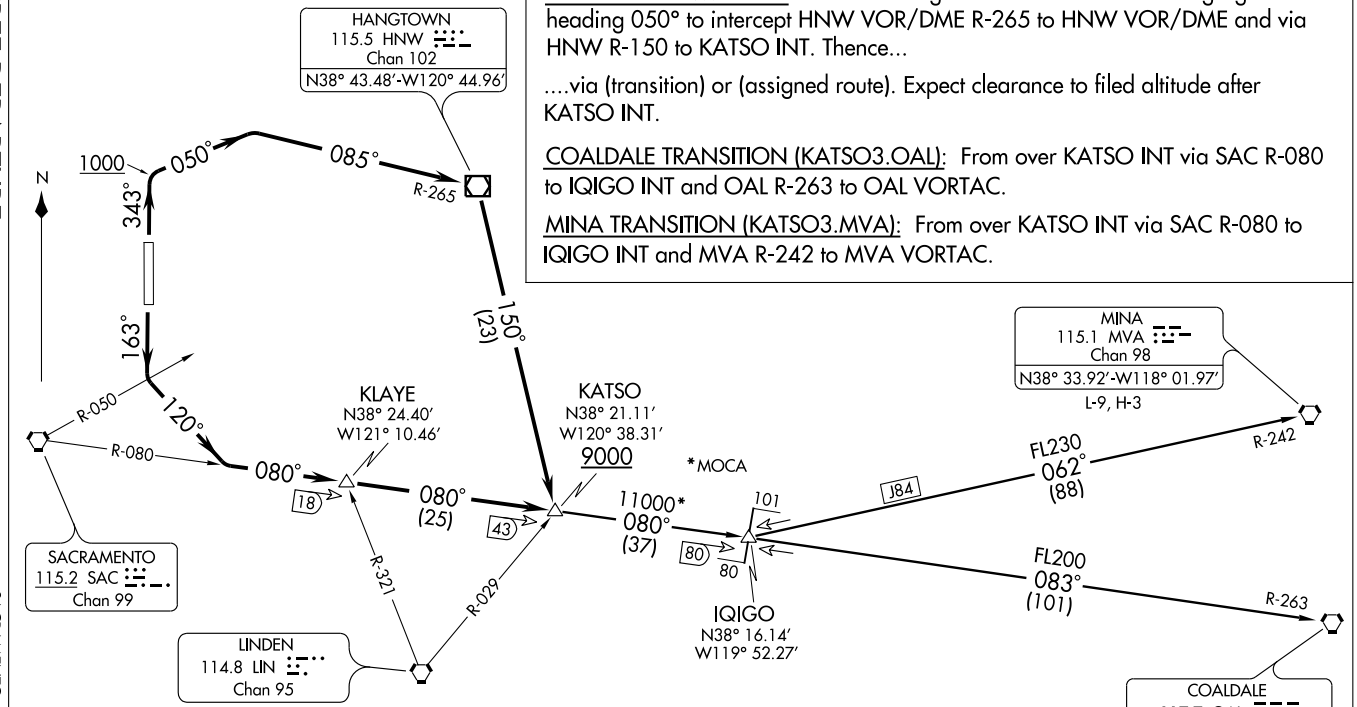
TAKE-OFF RUNWAY 16: Climb heading 163° until crossing SAC VORTAC R-050, and left turn heading 120° to intercept SAC R-080 to KATSO INT. Thence...

TAKE-OFF RUNWAY 34: Climb heading 343° to 1000 then climbing right turn heading 050° to intercept HNW VOR/DME R-265 to HNW VOR/DME and via HNW R-150 to KATSO INT. Thence...

....via (transition) or (assigned route). Expect clearance to filed altitude after KATSO INT.

COALDALE TRANSITION (KATSO3.OAL): From over KATSO INT via SAC R-080 to IQIGO INT and OAL R-263 to OAL VORTAC.

MINA TRANSITION (KATSO3.MVA): From over KATSO INT via SAC R-080 to IQIGO INT and MVA R-242 to MVA VORTAC.

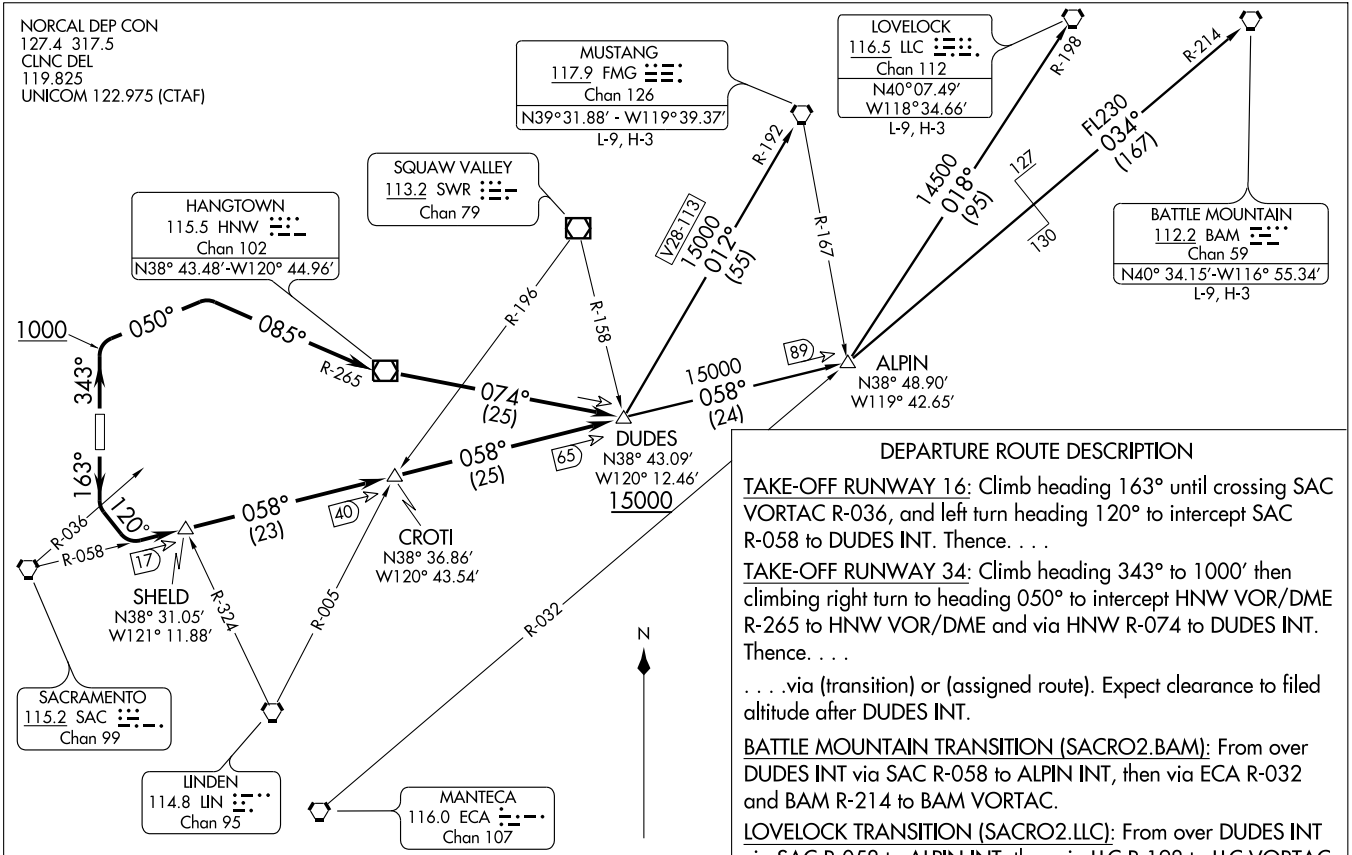


TAKE-OFF MINIMUMS

Rwy 16, 34: Standard. ATC climb of 205' per NM to 9000.

NOTE: DME required for COALDALE and MINA transitions.

NOTE: Chart not to scale.



TAKE OFF MINIMUMS

Rwy 16, 34: standard. ATC climb of 260′ per NM to 15000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb heading 163° until crossing SAC VORTAC R-036, and left turn heading 120° to intercept SAC R-058 to DUDES INT. Thence. . . .

TAKE-OFF RUNWAY 34: Climb heading 343° to 1000′ then climbing right turn to heading 050° to intercept HNW VOR/DME R-265 to HNW VOR/DME and via HNW R-074 to DUDES INT. Thence. . . .

. . . .via (transition) or (assigned route). Expect clearance to filed altitude after DUDES INT.

BATTLE MOUNTAIN TRANSITION (SACRO2.BAM): From over DUDES INT via SAC R-058 to ALPIN INT, then via ECA R-032 and BAM R-214 to BAM VORTAC.

LOVELOCK TRANSITION (SACRO2.LLC): From over DUDES INT via SAC R-058 to ALPIN INT, then via LLC R-198 to LLC VORTAC.

MUSTANG TRANSITION (SACRO2.FMG): From over DUDES INT via FMG R-192 to FMG VORTAC.

VOR/DME MCC	APP CRS	Rwy Idg	10600
109.2	167°	TDZE	75
Chan 29		Apt Elev	75

VOR/DME RWY 16

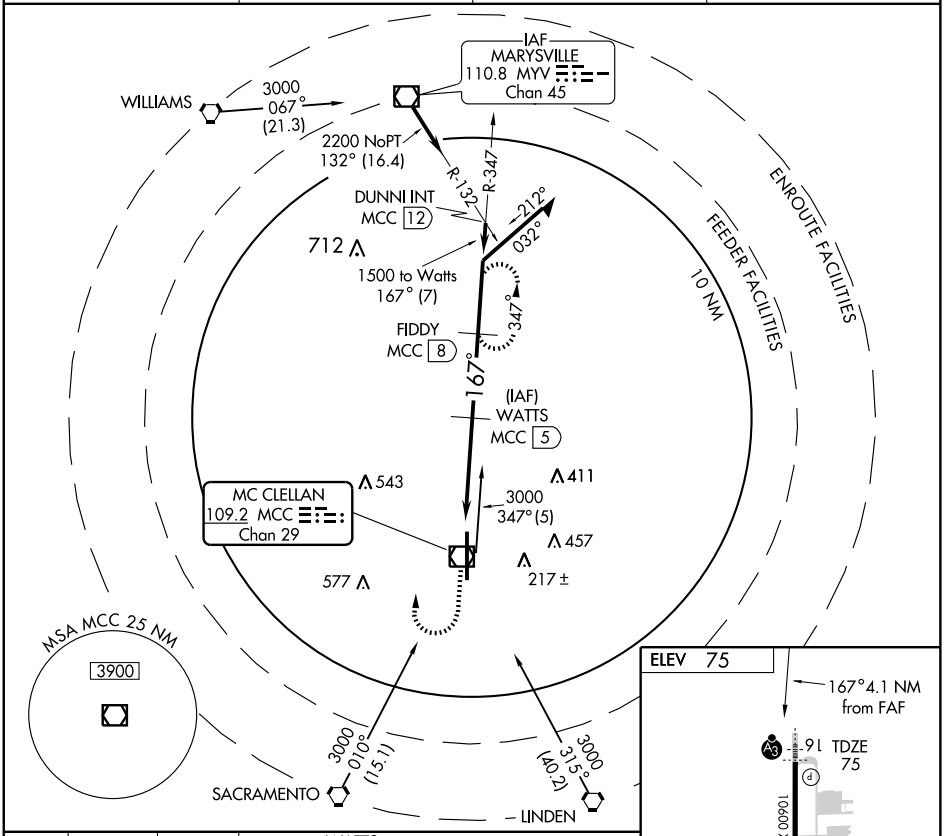
SACRAMENTO/MC CLELLAN AIRFIELD (MCC)

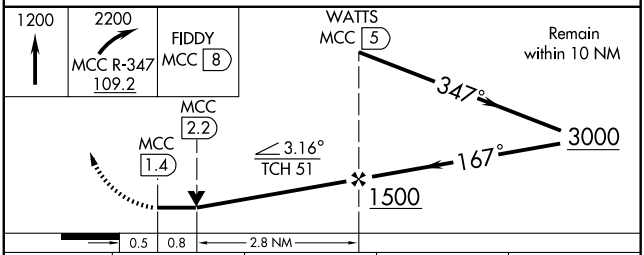
NA If local altimeter setting not received, use Sacramento Intl altimeter setting and increase all MDAs 40 feet. VDP not authorized with Sacramento Intl altimeter setting.

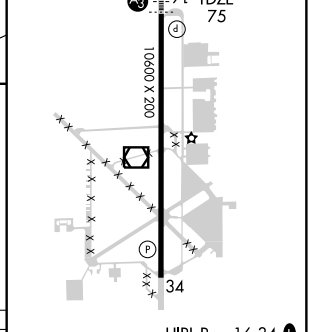
SSALR

MISSED APPROACH: Climb to 1200 then climbing right turn to 2200 via MCC R-347 to FIDDY/8 DME and hold.

AWOS-3	NORCAL APP CON	CLNC DEL	UNICOM
125.975	127.4 317.5	119.825	122.975 (CTAF) L







HIRL Rwy 16-34 L

CATEGORY	A	B	C	D
S-16	540/24 465 (500-½)		540/40 465 (500-¾)	540/50 465 (500-1)
CIRCLING	NA			

Knots	60	90	120	150	180
Min:Sec					

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME MCC	APP CRS	Rwy Idg	10600
109.2	333°	TDZE	70
Chan 29		Apt Elev	75

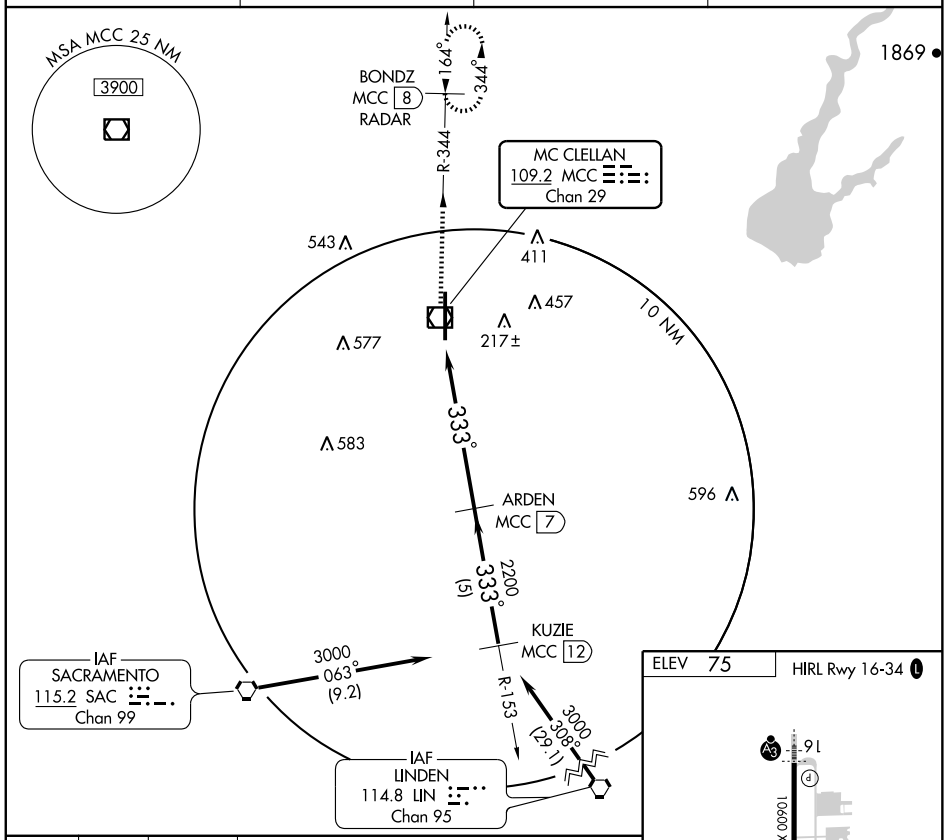
VOR/DME RWY 34

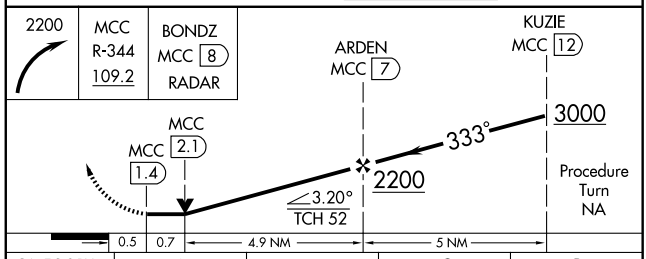
SACRAMENTO/MC CLELLAN AIRFIELD (MCC)

⚠NA If local altimeter setting not received, use Sacramento Intl altimeter setting and increase all MDAs 40 feet.
VDP not authorized with Sacramento Intl altimeter setting.

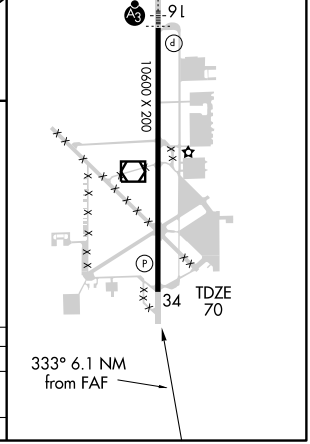
MISSED APPROACH: Climbing right turn to 2200 via MCC R-344 to BONDZ/8 DME/RADAR and hold.

AWOS-3	NORCAL APP CON	CLNC DEL	UNICOM
125.975	127.4 317.5	119.825	122.975 (CTAF) L

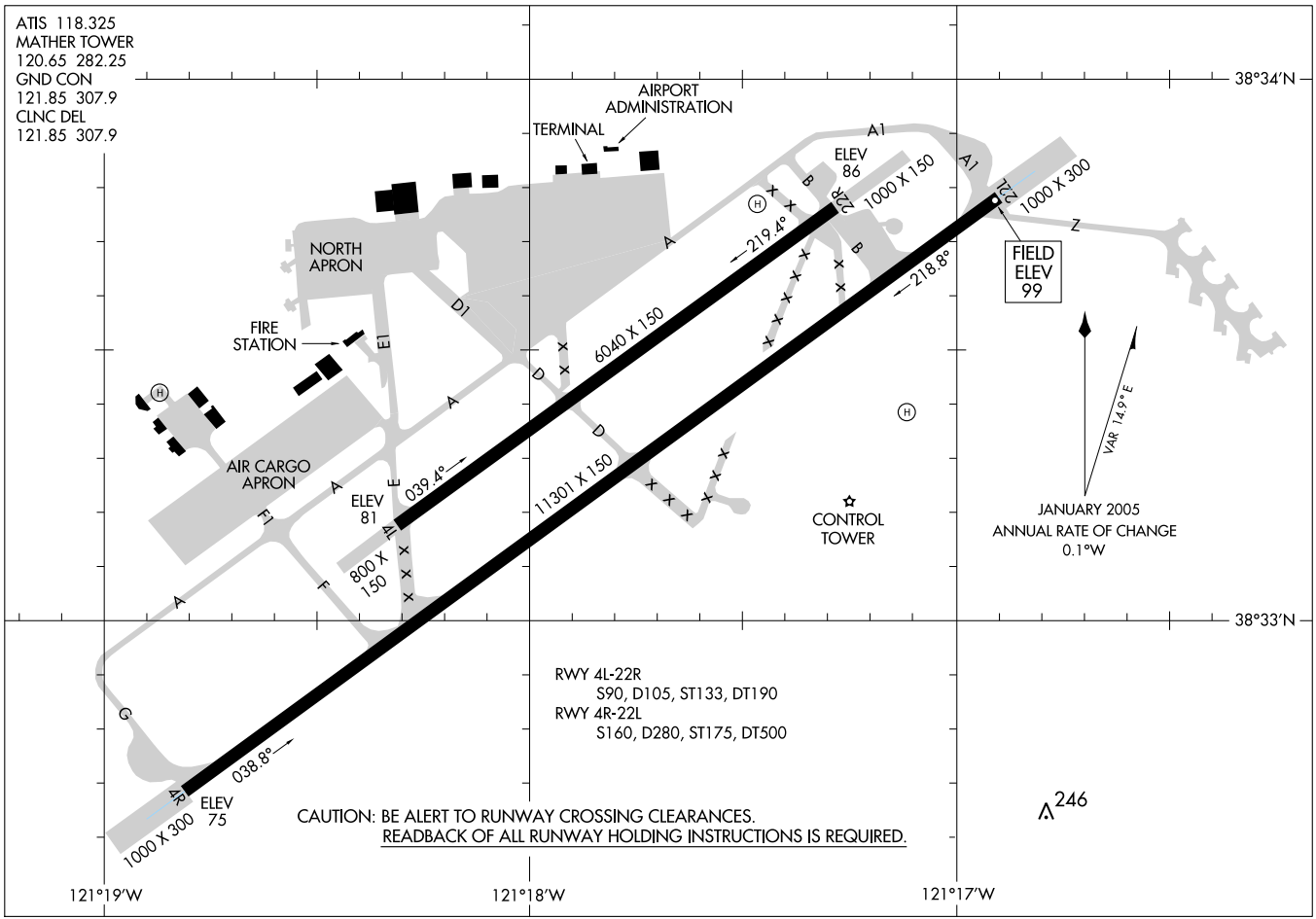




CATEGORY	A	B	C	D
S-34	500-1 430 (500-1)		500-1¼ 430 (500-1¼)	500-1½ 430 (500-1½)
CIRCLING	NA			



SW-2, 22 OCT 2009 to 19 NOV 2009



08213

AIRPORT DIAGRAM

AL-356 (FAA)

SACRAMENTO MATHER (MHR)

SACRAMENTO, CALIFORNIA

SACRAMENTO, CALIFORNIA

AL-356 (FAA)

LOC I-MHR	APP CRS	Rwy Idg	11301
110.7	217°	TDZE	96
		Apt Elev	99

ILS or LOC RWY 22L

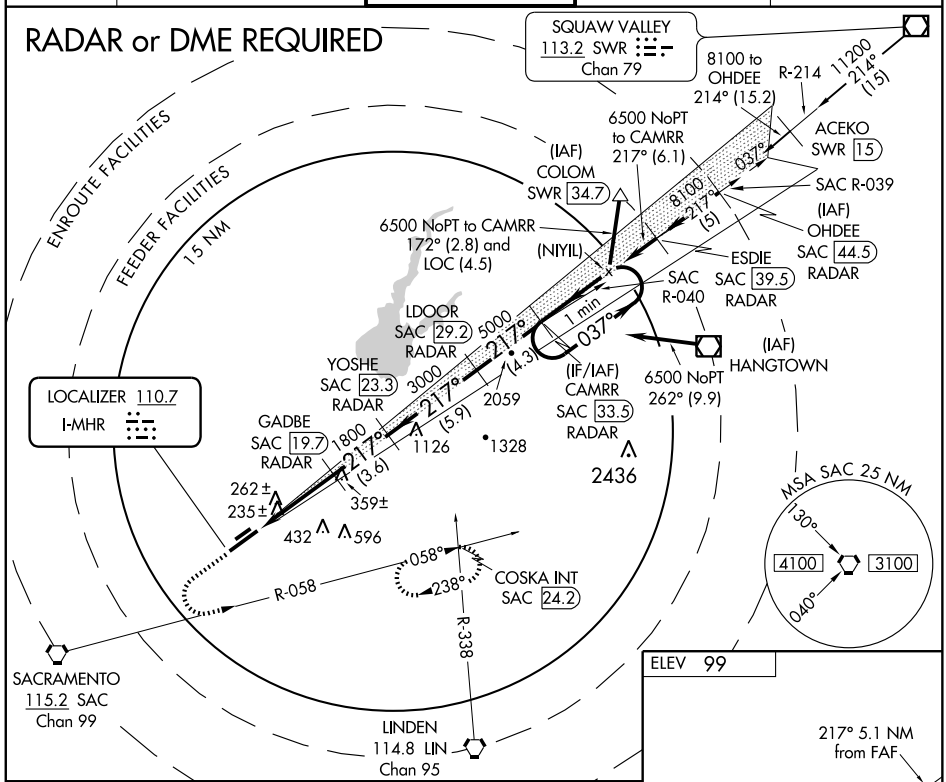
SACRAMENTO MATHER (MHR)

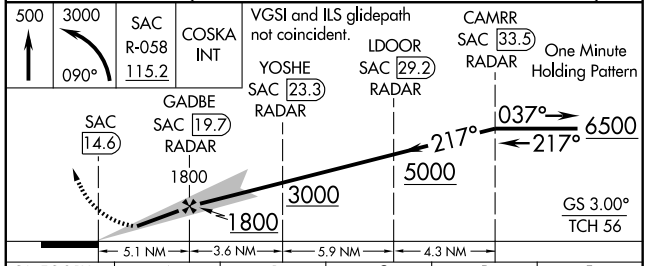
Circling NA north of Rwy 4L-22R.
When ALS inoperative, increase Cat. E ILS 1/4 mile, LOC 1/2 mile.

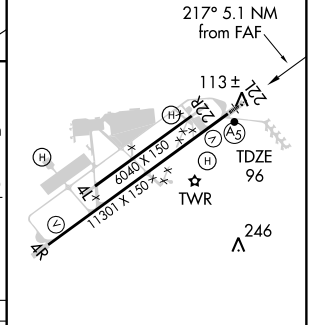
MALSR (A5)

MISSED APPROACH: Climb to 500, then climbing left turn to 3000 via heading 090° and SAC R-058 to COSKA INT/ SAC 24.2 DME and hold, continue climb-in-hold to 3000.

ATIS	NORCAL APP CON	MATHER TOWER	GND CON	CLNC DEL
118.325	127.4 317.5	120.65 282.25	121.85 307.9	121.85 307.9







CATEGORY	A	B	C	D	E
S-ILS 22L	296-½ 200 (200-½)				
S-LOC 22L	500-½ 404 (500-½)		500-¾ 404 (500-¾)		500-1 404 (500-1)
CIRCLING	560-1 461 (500-1)		560-1½ 461 (500-1½)	660-2 561 (600-2)	800-2½ 701 (800-2½)

MIRL Rwy 4L-22R
HIRL Rwy 4R-22L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	11301
CH 45601	037°	TDZE	79
W04A		Apt Elev	99

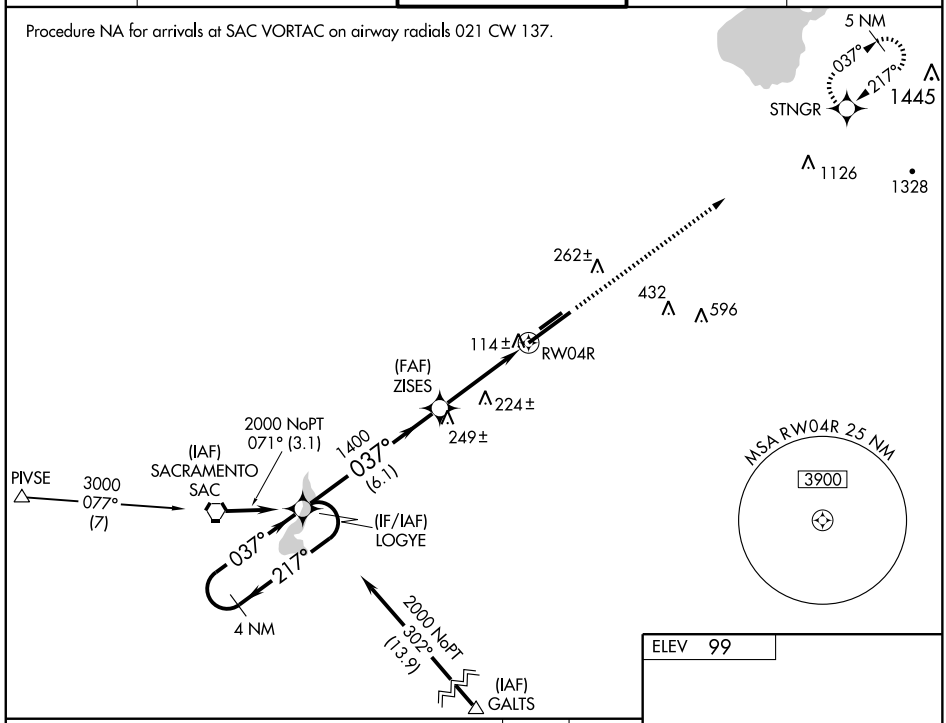
RNAV (GPS) RWY 4R
SACRAMENTO MATHER (MHR)

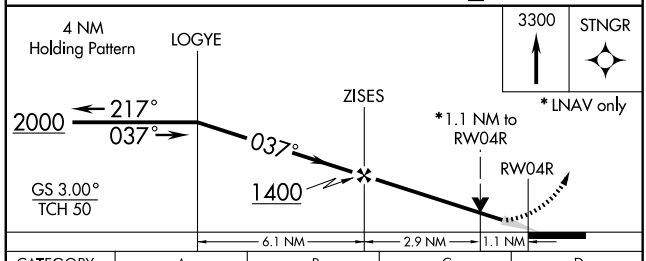
DME/DME RNP- 0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (119°F).
Circling NA north of Rwy 4L-22R.

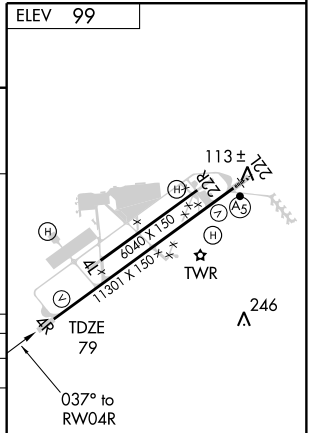
MISSED APPROACH: Climb to 3300 direct STNGR and hold.

ATIS	NORCAL APP CON	MATHER TOWER	GND CON	CLNC DEL
118.325	127.4 317.5	120.65 282.25	121.85 307.9	121.85 307.9

Procedure NA for arrivals at SAC VORTAC on airway radials 021 CW 137.







CATEGORY	A	B	C	D
LPV DA	329-¾ 250 (300-¾)			
LNAV/VNAV DA	373-1 294 (300-1)			
LNAV MDA	480-1 401 (400-1)		480-1¼ 401 (400-1¼)	
CIRCLING	560-1 461 (500-1)		560-1½ 461 (500-1½)	660-2 561 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 22L

SACRAMENTO MATHER (MHR)

APP CRS	Rwy Idg	11301
217°	TDZE	96
	Apt Elev	99

DME/DME RNP-0.3 NA.
Circling not authorized north of Rwy 4L-22R.
For inoperative MALSR increase LNAV/VNAV Cat. D visibility to 1 mile.

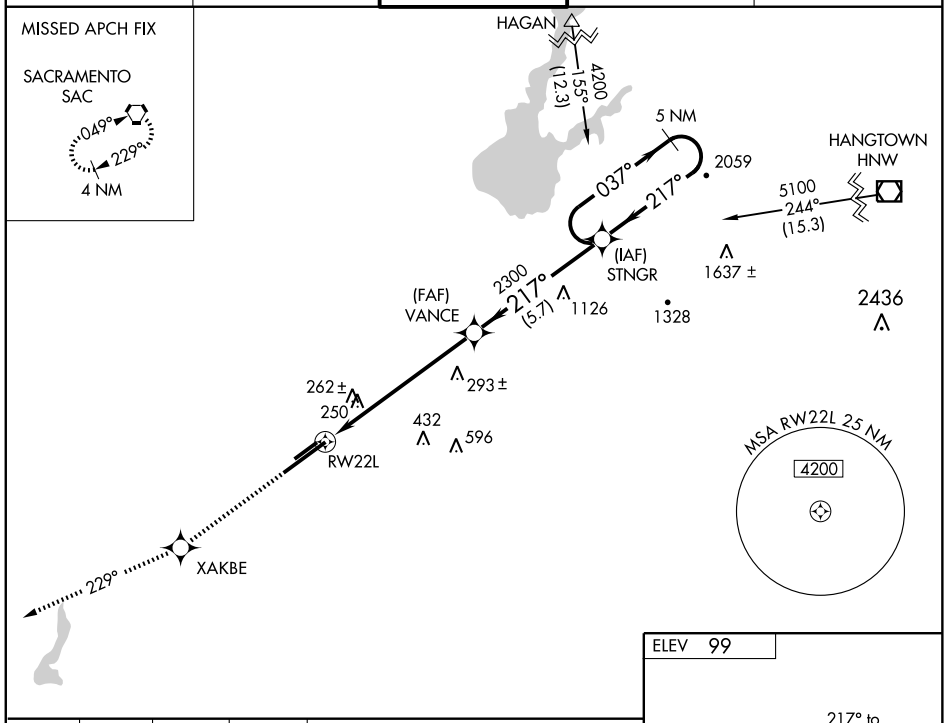
MALSR

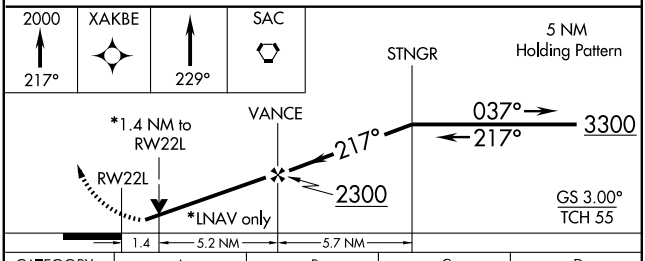
MISSED APPROACH: Climb to 2000 via 217° course to XAKBE WP then via 229° course to SAC VORTAC and hold.

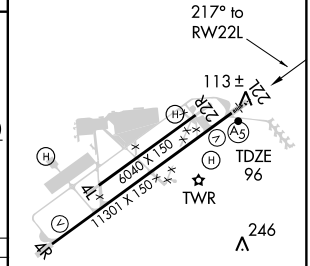
ATIS	NORCAL APP CON	MATHER TOWER	GND CON	CLNC DEL
118.325	127.4 317.5	120.65 282.25	121.85 307.9	121.85 307.9

MISSED APCH FIX

SACRAMENTO
SAC
049°
229°
4 NM







CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	380-½ 284 (300-½)			380-¾ 284 (300-¾)
LNAV MDA	580-½ 484 (500-½)		580-¾ 484 (500-¾)	580-1 484 (500-1)
CIRCLING	580-1 481 (500-1)		580-1½ 481 (500-1½)	660-2 561 (600-2)

MIRL Rwy 4L-22R
HIRL Rwy 4R-22L

SW-2, 22 OCT 2009 to 19 NOV 2009

SACRAMENTO, CALIFORNIA AL-356 (FAA)

VORTAC SAC	APP CRS	Rwy Idg	11301
115.2	224°	TDZE	96
Chan 99		Apt Elev	99

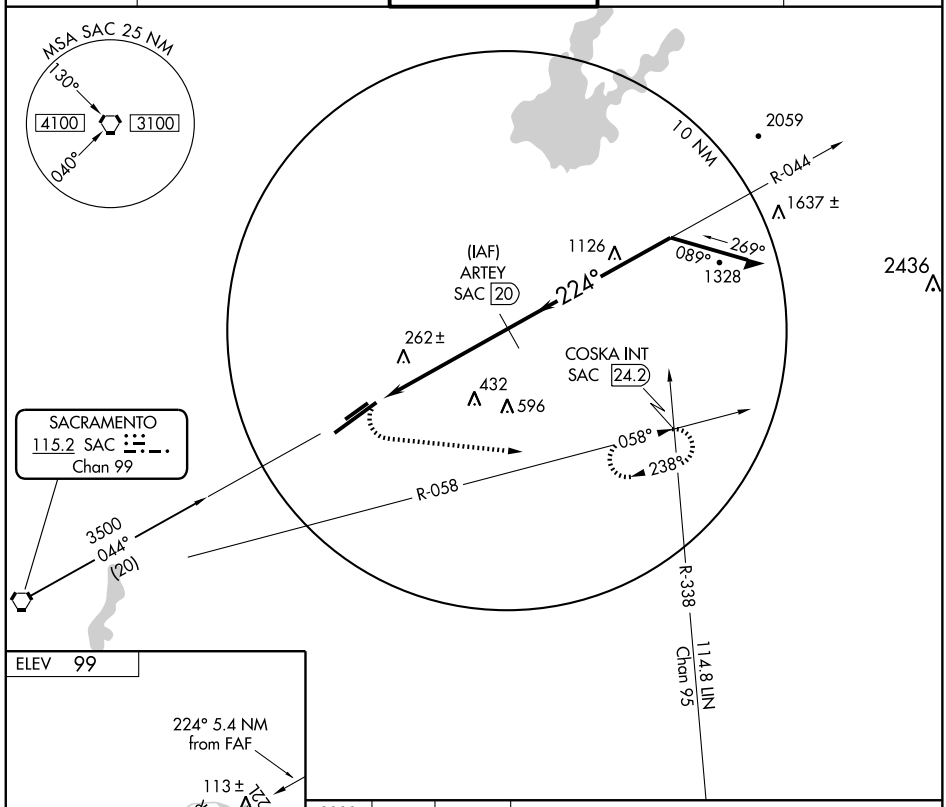
VOR/DME RWY 22L
SACRAMENTO MATHER (MHR)

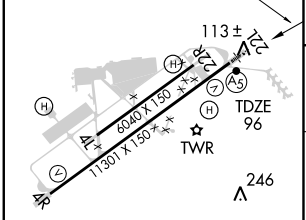
Circling not authorized north of Rwy 4L-22R.

MALSR

MISSED APPROACH: Climbing left turn to 3000 via heading 090° and SAC R-058 to COSKA Int/SAC 24.2 DME and hold.

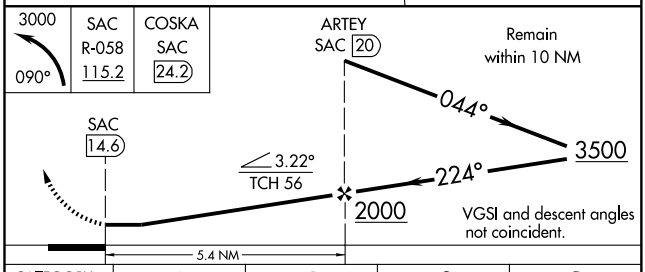
ATIS	NORCAL APP CON	MATHER TOWER	GND CON	CLNC DEL
118.325	127.4 317.5	120.65 282.25	121.85 307.9	121.85 307.9





MIRL Rwy 4L-22R
HIRL Rwy 4R-22L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-22L	740-½ 644 (700-½)		740-1¼ 644 (700-1¼)	740-1½ 644 (700-1½)
CIRCLING	740-1 641 (700-1)		740-1¾ 641 (700-1¾)	740-2 641 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC SAC 115.2 Chan 99	APP CRS 045°	Rwy Idg 11301 TDZE 79 Apt Elev 99

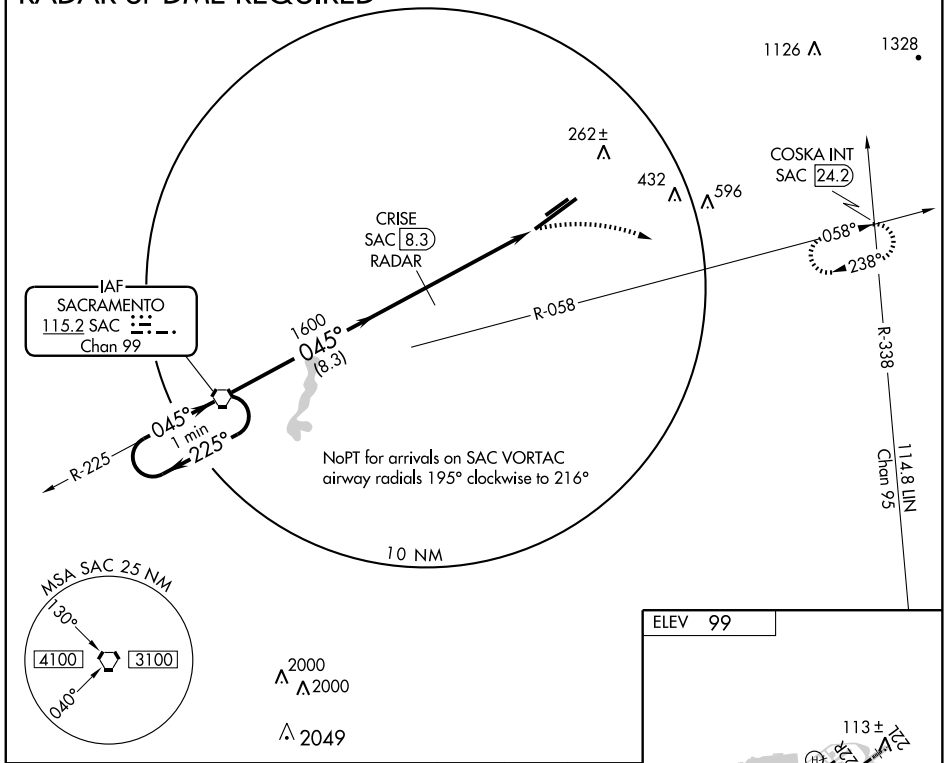
VOR RWY 4R
SACRAMENTO MATHER (MHR)

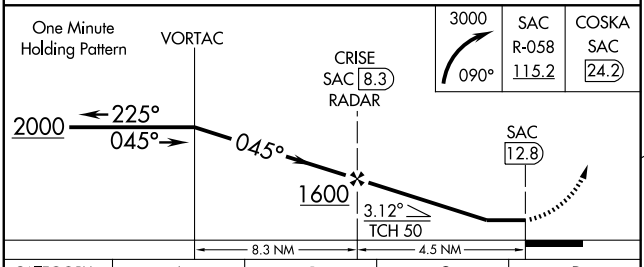
Circling not authorized north of Rwy 4L-22R.

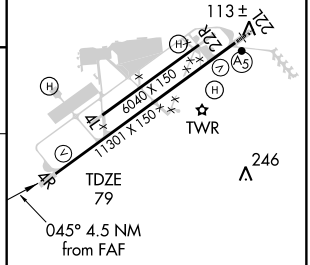
MISSED APPROACH: Climbing right turn to 3000 via heading 090° and SAC R-058 to COSKA Int/SAC 24.2 DME and hold.

ATIS	NORCAL APP CON	MATHER TOWER	GND CON	CLNC DEL
118.325	127.4 317.5	120.65 282.25	121.85 307.9	121.85 307.9

RADAR or DME REQUIRED







CATEGORY	A	B	C	D
S-4R	560-1 481 (500-1)		560-1¼ 481 (500-1¼)	560-1½ 481 (500-1½)
CIRCLING	560-1 461 (500-1)		560-1½ 461 (500-1½)	660-2 561 (600-2)

MIRL Rwy 4L-22R
HIRL Rwy 4R-22L

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

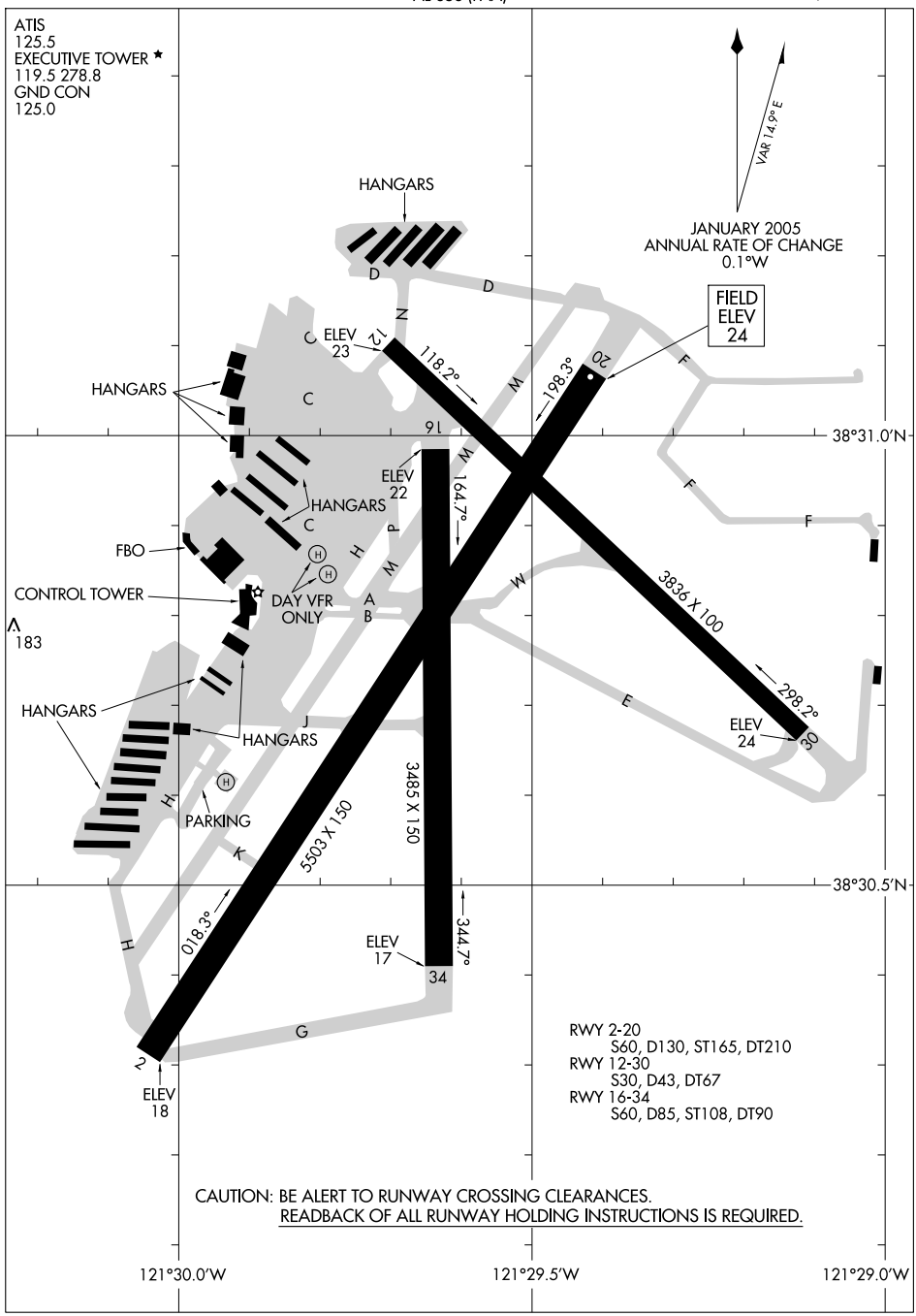
SW-2, 22 OCT 2009 to 19 NOV 2009

09239

AIRPORT DIAGRAM

AL-358 (FAA)

SACRAMENTO EXECUTIVE (SAC)
SACRAMENTO, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-SAC	APP CRS	Rwy Idg	5503
110.3	019°	TDZE	21
		Apt Elev	24

ILS or LOC RWY 2

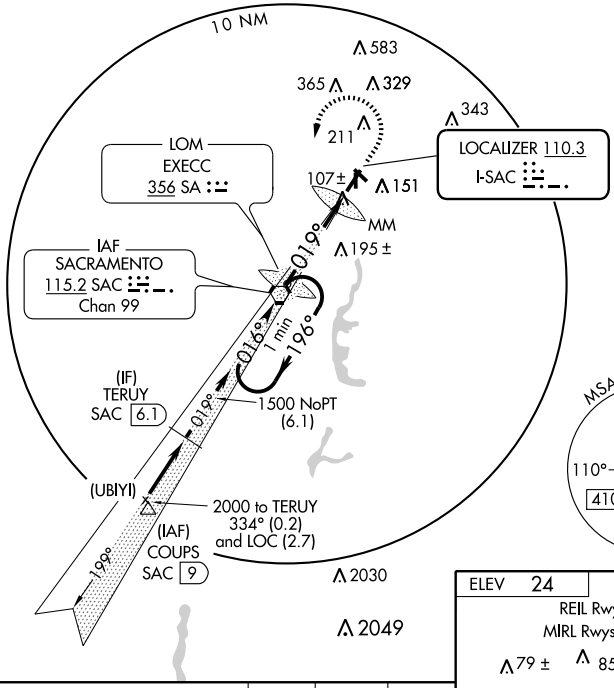
SACRAMENTO EXECUTIVE (SAC)

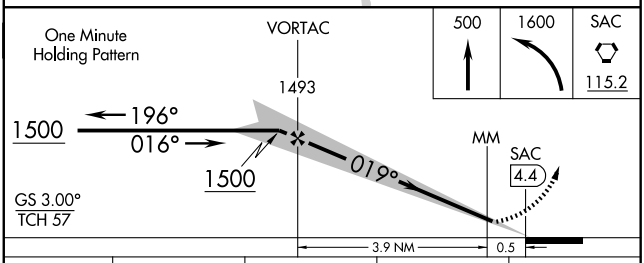
For inoperative MALSR, when using local altimeter setting, increase S-LOC 2 all Cats visibility to 1 mile, when using Sacramento Intl altimeter setting increase S-LOC 2 Cat D visibility to 1¼ mile. Inoperative table does not apply to S-ILS 2. Visibility reduction by helicopters NA. When local altimeter setting not received, use Sacramento Intl altimeter setting and increase all DA/MDA 40 feet.

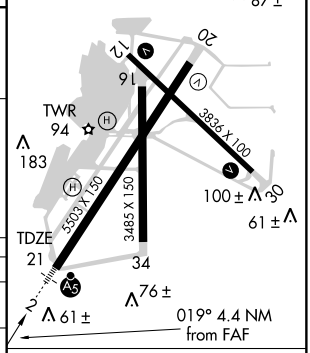
MALSR (A5)

MISSED APPROACH: Climb to 500, then climbing left turn to 1600 direct SAC VORTAC and hold.

ATIS	NORCAL APP CON	EXEC TOWER ★	GND CON	UNICOM
125.5	125.25 257.9 (SE-NW)	119.5 (CTAF) L 278.8	125.0	122.95







CATEGORY	A	B	C	D
S-ILS 2	221-¾ 200 (200-¾)			
S-LOC 2	360-¾ 339 (400-¾)			
CIRCLING	500-1 476 (500-1)	520-1 496 (500-1)	520-1½ 496 (500-1½)	580-2 556 (600-2)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 62810 W02A	APP CRS 019°	Rwy Idg 5503 / TDZE 21 / Apt Elev 24

RNAV (GPS) RWY 2

SACRAMENTO EXECUTIVE (SAC)

T A For inoperative MALSR, when using local altimeter setting, increase LNAV Cats A, B visibility to 1 mile and Cat D to 1¼. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). Inoperative table does not apply to LPV. DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Sacramento Intl altimeter setting and increase all DA/MDA 40 feet. VDP and Baro-VNAV NA when using Sacramento Intl altimeter setting.

MALSR A5

MISSED APPROACH: Climb to 3000 direct HOGBI and via 027° track to ROZZY and hold.

ATIS	NORCAL APP CON	EXEC TOWER *	GND CON	UNICOM
125.5	125.25 257.9 (SE-NW)	119.5 (CTAF) L 278.8	125.0	122.95

Procedure NA for arrivals at EMBER via V150 southwest bound, at COUPS via V6 southbound and at VISTO via V334-392 southbound.

MISSED APCH FIX

ROZZY 024° 204° 4 NM

583 ∧ 027° 365 ∧ ∧329 HOGBI 211 ∧ ∧ 343

RW02 ∧151 107±

∧205±

(FAF) SEBAE

1500 019° (6)

(IF) JIRAG

2000 016° (3)

2000 050° (10.7)

(IAF) COUPS

(IAF) EMBER

2000 348° (9.9)

2030 ∧

2049 ∧

(IAF) VISTO

MSA RW02 25 NM 3900

ELEV 24

∧79± ∧85± ∧87±

TWR 94 ∧183

3836 X 100

5503 X 150

3485 X 150

100± ∧30 61± ∧

TDZE 21 34

∧76± ∧61±

019° to RW02

REIL Rwys 12, 20 and 30 L

MIRL Rwys 2-20 and 12-30 L

Procedure Turn NA

JIRAG SEBAE HOGBI ROZZY

2000 019° 1500 3000 027° track

*1.2 NM to RW02 * LNAV only

GS 3.00° TCH 57

1500 RW02

6 NM 3.2 NM 1.2 NM

CATEGORY	A	B	C	D
LPV DA	221-¾ 200 (200-¾)			
LNAV/VNAV DA	373-¾ 352 (400-¾)			
LNAV MDA	440-¾ 419 (500-¾)			440-1 419 (500-1)
CIRCLING	500-1 476 (500-1)	520-1 496 (500-1)	520-1½ 496 (500-1½)	580-2 556 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC SAC	APP CRS	Rwy Idg	5503
115.2	016°	TDZE	21
Chan 99		Apt Elev	24

VOR RWY 2

SACRAMENTO EXECUTIVE (SAC)

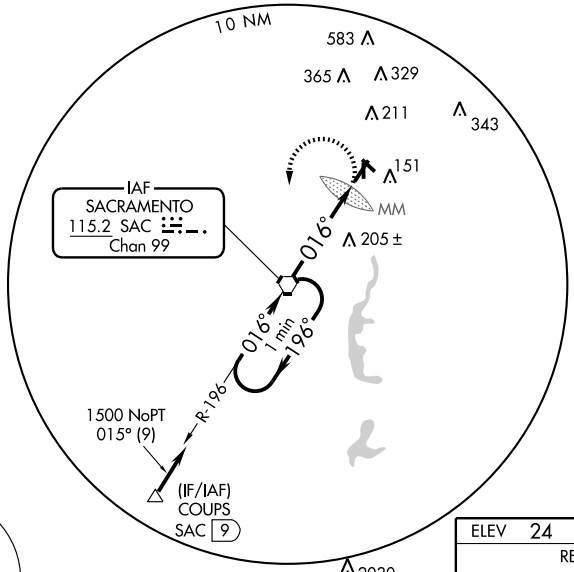
For inoperative MALSR, increase S-2 Cats A, B visibility to 1 mile. Visibility reduction by helicopters NA.

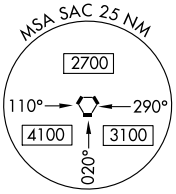
When local altimeter setting not received, use Sacramento Intl altimeter setting and increase all MDA 40 feet and S-2 Cats C, D visibilities ¼ mile. VDP NA when using Sacramento Intl altimeter setting.

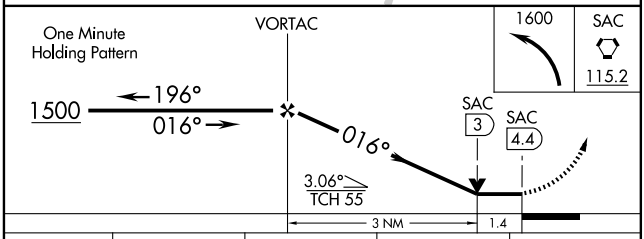
MALSR

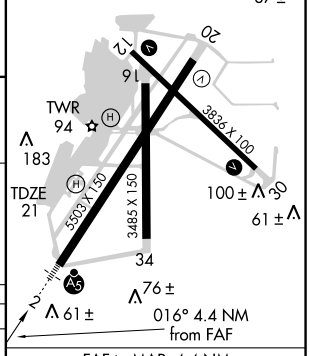
MISSED APPROACH: Climbing left turn to 1600 direct SAC VORTAC and hold.

ATIS	NORCAL APP CON	EXEC TOWER ★	GND CON	UNICOM
125.5	125.25 257.9 (SE-NW)	119.5 (CTAF) L 278.8	125.0	122.95









CATEGORY	A	B	C	D
S-2	520-¾ 499 (500-¾)			520-1 499 (500-1)
CIRCLING	520-1 496 (500-1)		520-1½ 496 (500-1½)	580-2 556 (600-2)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

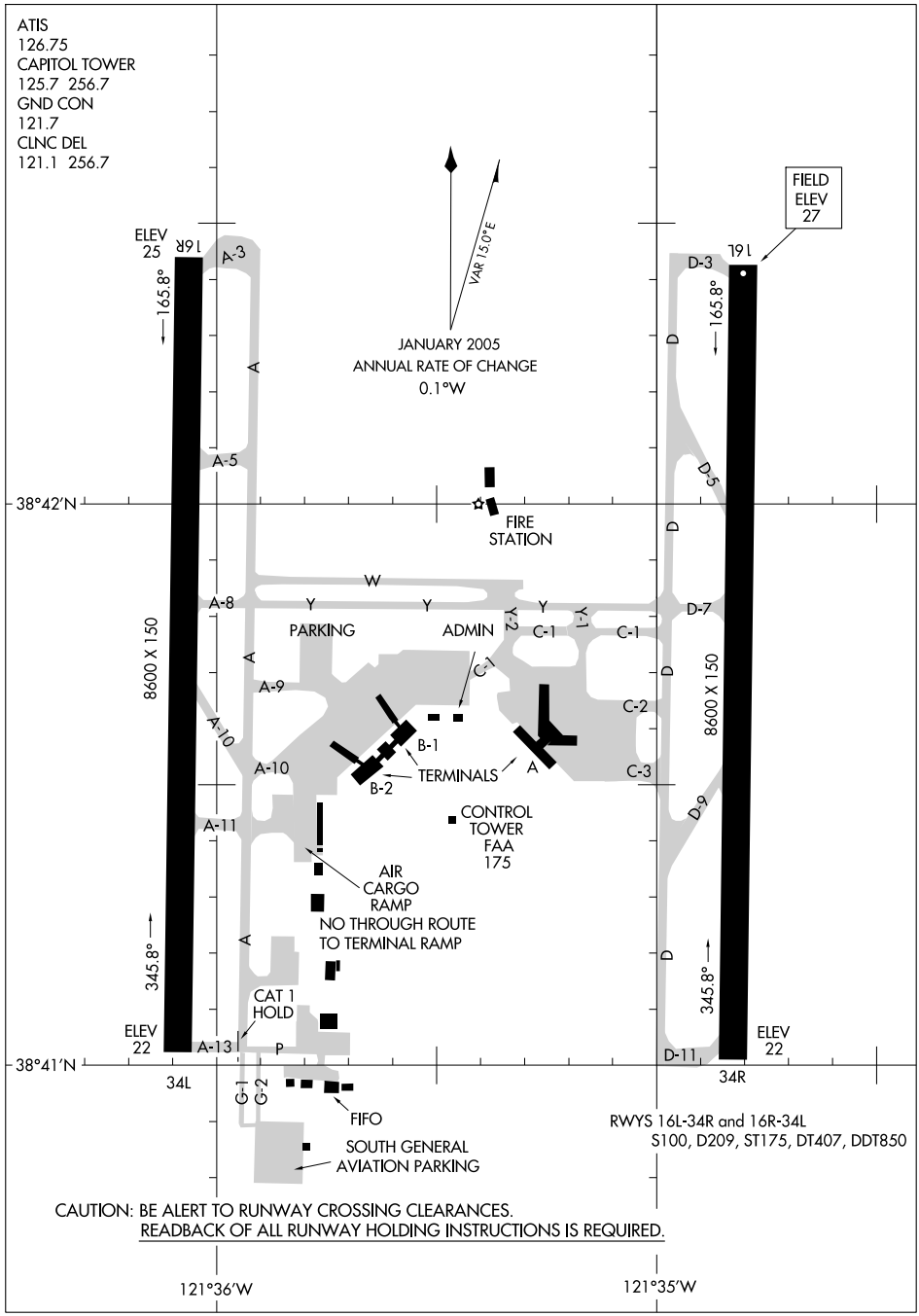
SW-2, 22 OCT 2009 to 19 NOV 2009

09259

AIRPORT DIAGRAM

AL-5490 (FAA)

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA



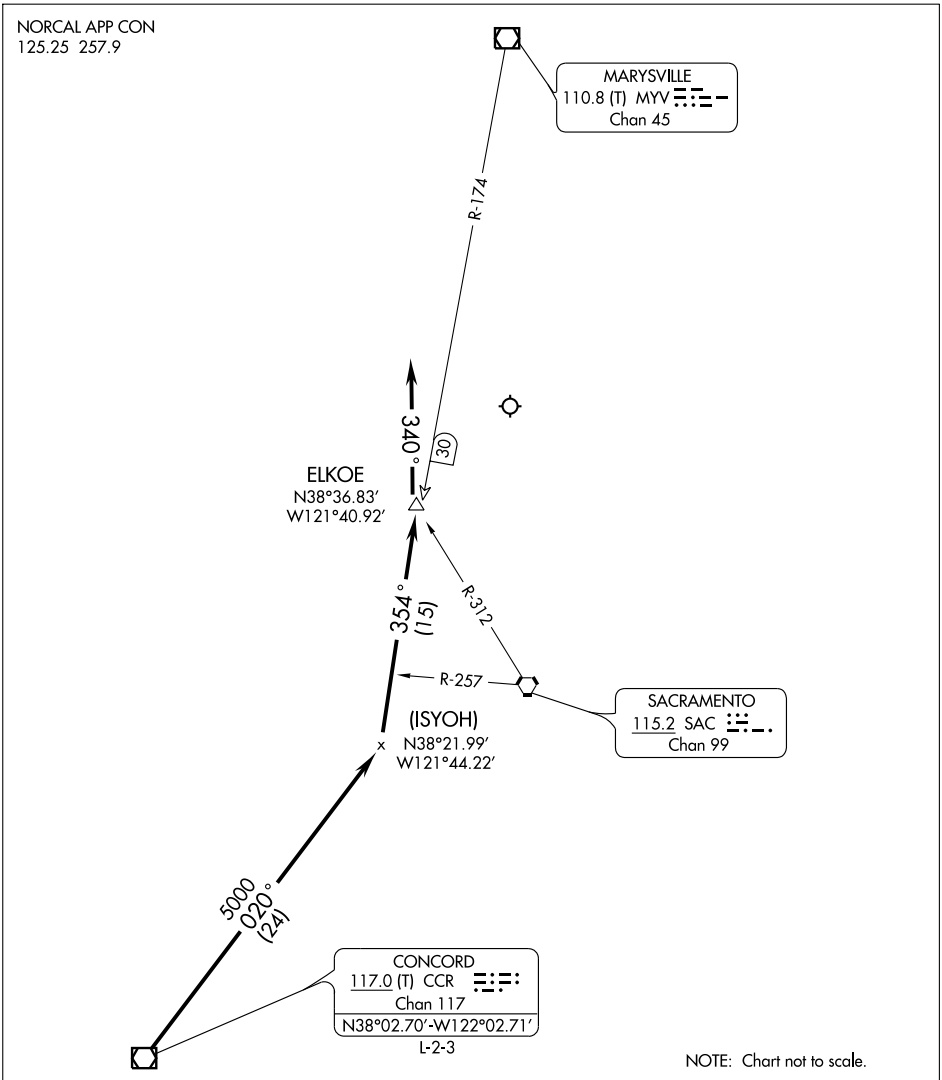
SW-2, 22 OCT 2009 to 19 NOV 2009

(CCR.CCR1) 09127

CONCORD ONE ARRIVAL

ST-5490 (FAA)

SACRAMENTO INTL
SACRAMENTO, CALIFORNIA



From over CCR VOR/DME via CCR R-020 and the MYV R-174 to ELKOE INT then via heading 340° for radar vector to final approach course. Expect descent below 10,000 after passing the SAC R-257.

SW-2, 22 OCT 2009 to 19 NOV 2009

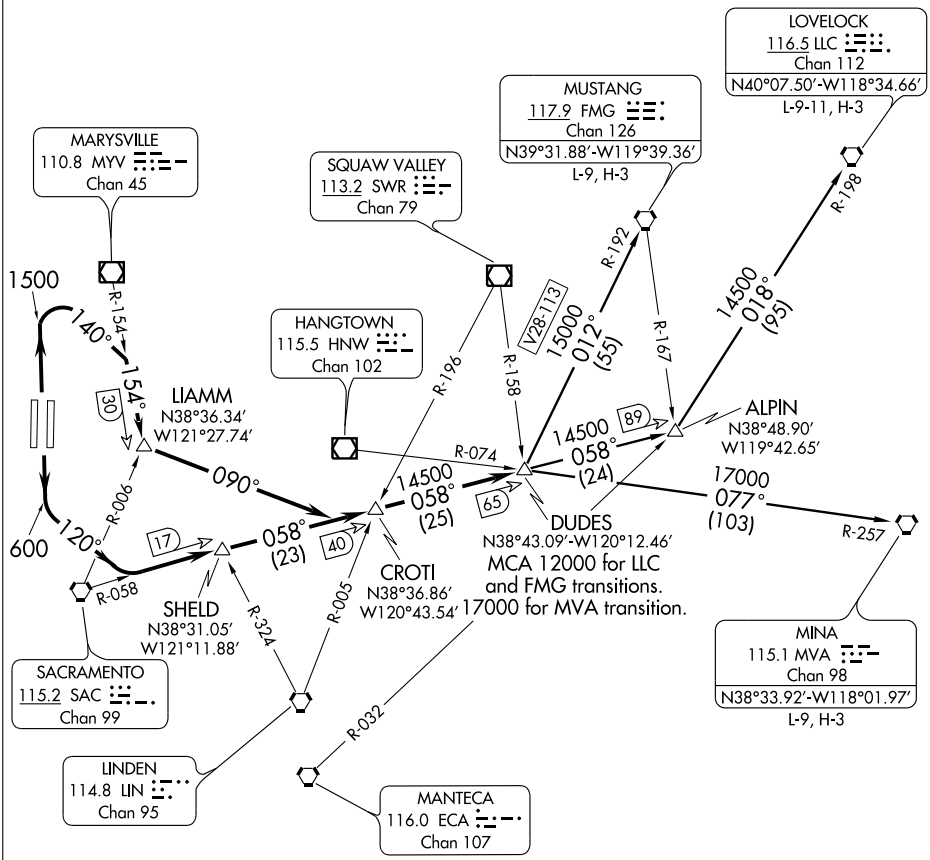
(DUDES9.DUDES) 09127

DUDES NINE DEPARTURE

SL-5490 (FAA)

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA

CLNC DEL
121.1 256.7
NORCAL DEP CON
(S-SW) 125.25 257.9
(W-N) 134.8 270.25
(NE) 125.4 259.1
(E-SE) 127.4 317.5



NOTE: RADAR Required.

NOTE: DME Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R: Maintain runway heading until 600', then turn left to a 120° heading to intercept and proceed via the SAC R-058 to DUDES INT, then via (transition) or (assigned route). Expect further clearance to filed altitude after CROTI INT.

TAKE-OFF RUNWAYS 34L/R: Maintain runway heading until 1500', then turn right to a 140° heading to intercept and proceed via the MYV R-154 to LIAMM INT, then turn left to a 090° heading to intercept and proceed via the SAC R-058 to DUDES INT, then via (transition) or (assigned route). Expect further clearance to filed altitude after CROTI INT.

LOST COMMUNICATIONS: Take-off runways 34L/R: Maintain runway heading until 1500', then turn right heading 140° to intercept and proceed via the MYV R-154 to intercept and proceed via the SAC R-058 to DUDES INT. Then resume own navigation.

LOVELOCK TRANSITION (DUDES9.LLC): From over DUDES INT via the SAC R-058 and the LLC R-198 to LLC VORTAC.

MINA TRANSITION (DUDES9.MVA): From over DUDES INT via the MVA R-257 to MVA VORTAC.

MUSTANG TRANSITION (DUDES9.FMG): From over DUDES INT via the FMG R-192 to FMG VORTAC.

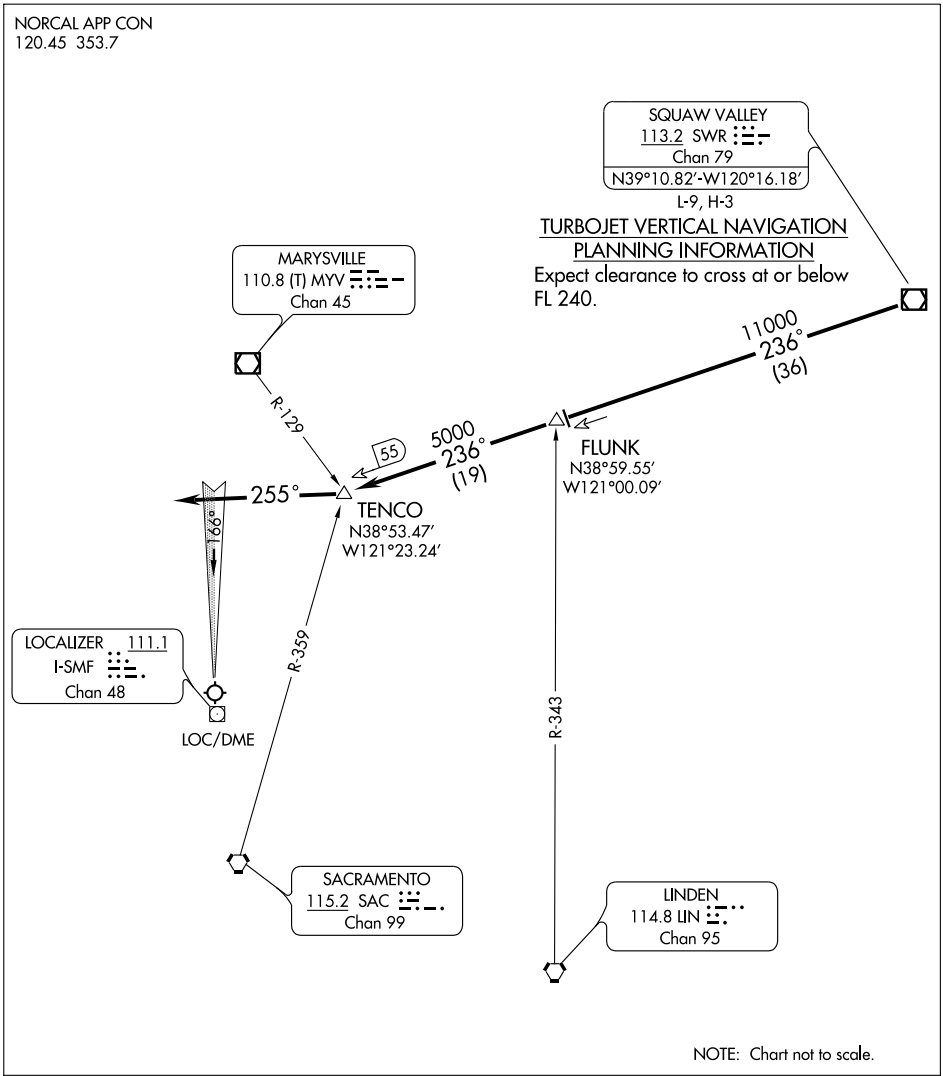
SW-2, 22 OCT 2009 to 19 NOV 2009

(SWR.FLUNK3) 09127

FLUNK THREE ARRIVAL

ST-5490 (FAA)

SACRAMENTO INTL
SACRAMENTO, CALIFORNIA



From over SWR VOR/DME via SWR R-236 to TENCO INT. Depart TENCO INT heading 255° for vector to final approach course. Expect descent below 10000' passing FLUNK INT.

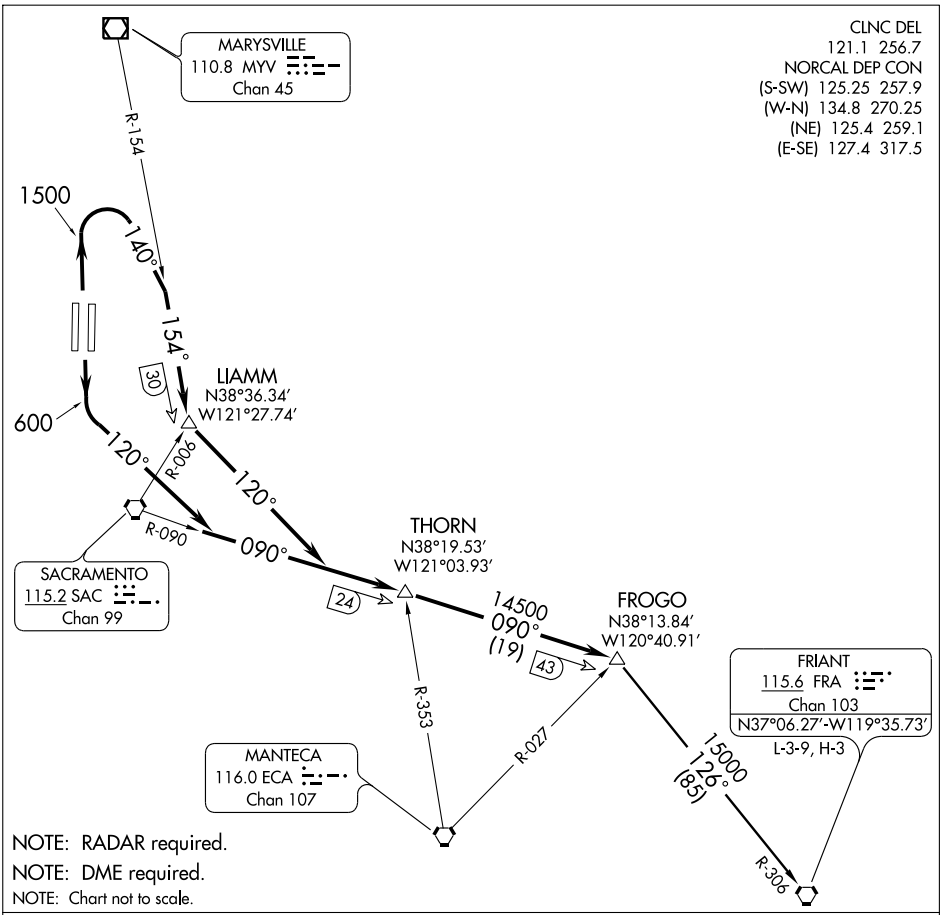
SW-2, 22 OCT 2009 to 19 NOV 2009

(FROGO6.FROGO) 09127

FROGO SIX DEPARTURE

SL-5490 (FAA)

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R: Maintain runway heading until 600′, then turn left heading 120° to intercept and proceed via the SAC R-090 to FROGO INT. Then via (transition) or (assigned route). Expect further clearance to filed altitude after THORN INT.

TAKE-OFF RUNWAYS 34L/R: Maintain runway heading until 1500′, then turn right heading 140° to intercept the MYV R-154. Intercept and proceed via the MYV R-154 to LIAMM INT, then turn left heading 120° to intercept and proceed via the SAC R-090 to FROGO INT. Then via (transition) or (assigned route). Expect further clearance to filed altitude after LIAMM INT.

LOST COMMUNICATIONS: Take-off Runways 34L/R: Maintain runway heading until 1500′ then turn right heading 140° to intercept the MYV R-154. Intercept and proceed via the MYV R-154 to intercept the SAC R-090 to FROGO INT. Then resume own navigation.

FRIANT TRANSITION (FROGO6.FRA): From over FROGO INT via FRA R-306 to FRA VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-MDK	APP CRS	Rwy Idg	8601
111.75	164°	TDZE	27
Chan 54 (Y)		Apt Elev	27

ILS or LOC RWY 16L

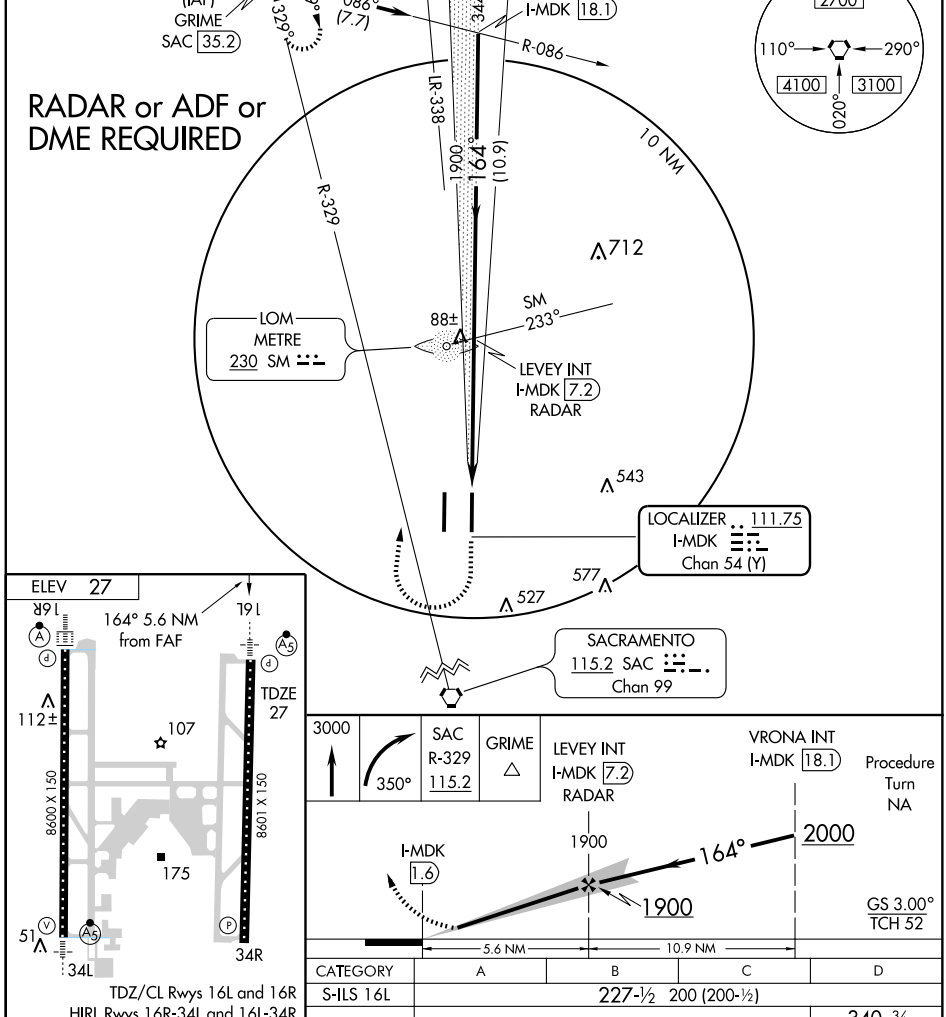
SACRAMENTO INTL (SMF)

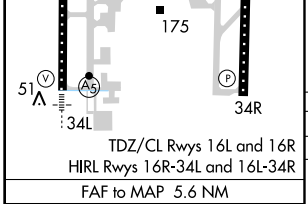
For inoperative MALSR, increase S-LOC Cat D visibility to 1 mile.
Circling not authorized west of Rwy 16L-34R.

MALSR

MISSED APPROACH: Climb to 3000, then right turn via heading 350° and SAC R-329 to GRIME INT/SAC 35.2 DME and hold.

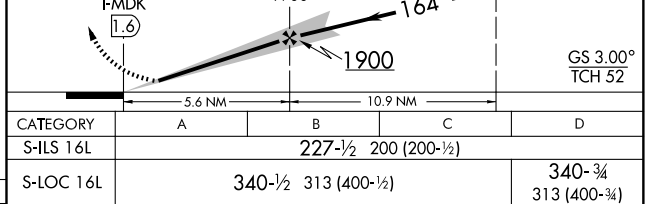
ATIS	NORCAL APP CON				CAPITAL TOWER	GND CON	CLNC DEL
126.75	(S-SW) 125.25 257.9		(NE) 125.4 259.1		125.7 256.7	121.7	121.1 256.7
	(W-N) 134.8 270.25		(E-SE) 127.4 317.5				





TDZ/CL Rwys 16L and 16R
HIRL Rwys 16R-34L and 16L-34R

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52



CATEGORY	A	B	C	D
S-ILS 16L	227-½ 200 (200-½)			
S-LOC 16L	340-½ 313 (400-½)			340-¾ 313 (400-¾)
CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

SACRAMENTO, CALIFORNIA AL-5490 (FAA)

LOC/DME I-SMF	APP CRS	Rwy Idg	8600
111.1	166°	TDZE	25
Chan 48		Apt Elev	27

ILS or LOC RWY 16R

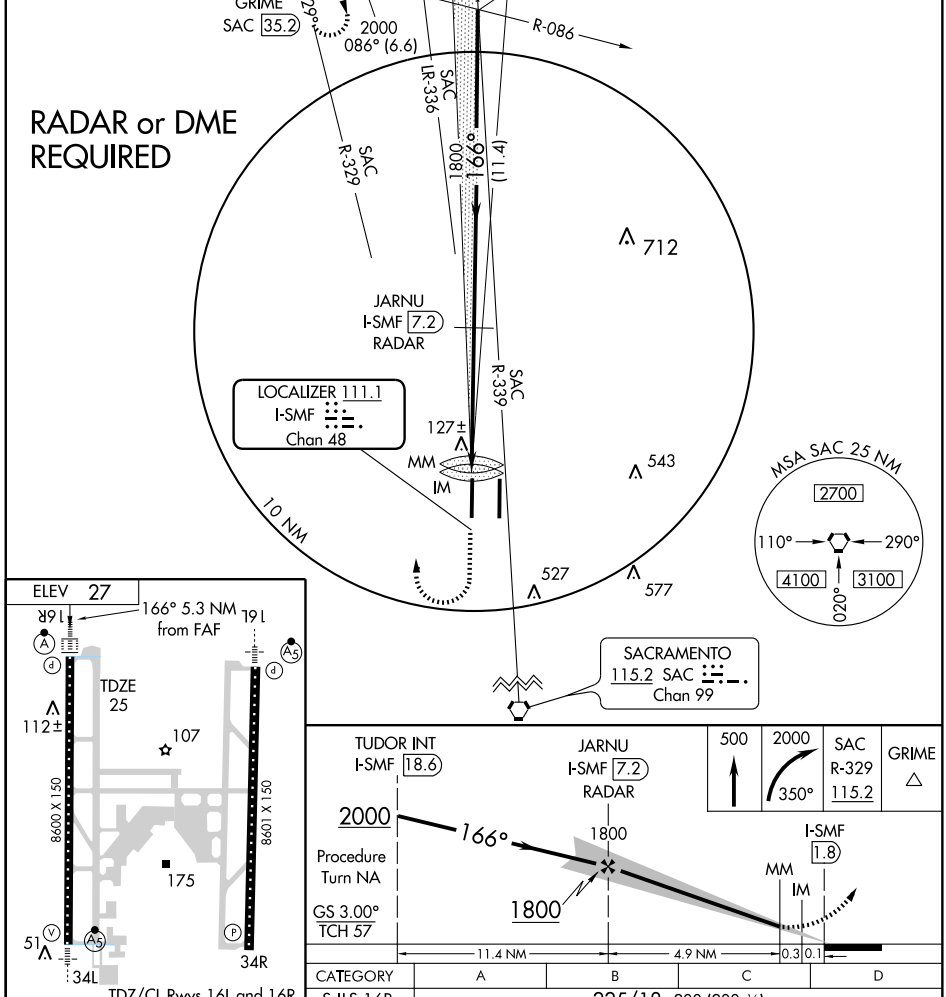
SACRAMENTO INTL (SMF)

Circling not authorized east of Rwy 16R-34L.

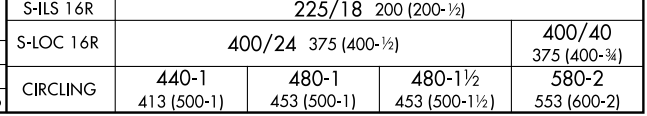
ALSF-2

MISSED APPROACH: Climb to 500, then climbing right turn to 2000 via heading 350° and SAC R-329 to GRIME Int/SAC 35.2 DME and hold.

ATIS	NORCAL APP CON		CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25 (S-SW) 125.25 257.9	(NE) 125.4 259.1 (E-SE) 127.4 317.5	125.7 256.7	121.7	121.1 256.7



TDZ/CL Rwys 16L and 16R
HIRL Rwys 16R-34L and 16L-34R



FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-ILS 16R	225/18 200 (200-½)			
S-LOC 16R	400/24 375 (400-½)			400/40 375 (400-¾)
CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-HUX	APP CRS	Rwy Idg	8600
111.1	344°	TDZE	24
Chan 48		Apt Elev	27

ILS or LOC RWY 34L
SACRAMENTO INTL (SMF)

VDP NA with Sacramento Executive altimeter setting.
For inoperative MALSR increase S-LOC 34L Cat. D visibility to RVR 5000.
Circling NA east of Rwy 16R/34L.
If local altimeter setting not received, use Sacramento Executive altimeter setting and increase all DA/MDAs 40 feet.
* RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 500, then climbing left turn to 2000 via heading 320° and SAC R-329 to GRIME INT/SAC 35.2 DME and hold.

ATIS	NORCAL APP CON		CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25	(NE) 125.4 259.1	125.7 256.7	121.7	121.1 256.7
	(S-SW) 125.25 257.9	(E-SE) 127.4 317.5			

MISSED APCH FIX
114.4 ILA
R-086
Chan 91
149°
329°
GRIME
SAC 35.2
SAC R-329

ALTERNATE MISSED APCH FIX
R-327
147°
327°
MARYSVILLE
MYV
110.8
Chan 45

LOCALIZER 111.1
I-HUX
Chan 48
73±
SAC R-329
543
577
527
583
HADSU
I-HUX 5.7
RADAR
1400
344° (7.3)
R-303
(IF)
ELMAC INT
I-HUX 13
10 NM
2000
303° (3.9)
164°
IAF
SACRAMENTO
115.2 SAC
Chan 99

MSA SAC 25 NM
2700
110° 290°
4100 3100
020°

RADAR or DME REQUIRED

Procedure NA for arrivals on SAC VORTAC airway radials 257 CW 329.

ELEV 27
16R
16L
112±
107
175
8600 X 150
8601 X 150
TDZE
24
51
34L
34R
344° 4.1 NM from FAF
TDZ/CL Rwys 16L and 16R
HIRL Rwys 16R-34L and 16L-34R

ELMAC INT
I-HUX 13
Procedure Turn NA
2000
344°
1400
GS 3.00°
TCH 59
HADSU
I-HUX 5.7
RADAR
500
2000
320°
SAC
R-329
115.2
GRIME
I-HUX
2.4
I-HUX
1.6
7.3 NM
3.3 NM
0.8

CATEGORY	A	B	C	D
S-ILS 34L	* 224/24 200 (200-½)			
S-LOC 34L	340/24 316 (400-½)			340/40 316 (400-¾)
CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SMF	APP CRS	Rwy Idg	8600
111.1	166°	TDZE	25
Chan 48		Apt Elev	27

ILS RWY 16R (CAT II)

SACRAMENTO INTL (SMF)

ALSF-2

MISSED APPROACH: Climb to 500, then climbing right turn to 2000 via heading 350° and SAC R-329 to GRIME Int/SAC 35.2 DME and hold.

ATIS	NORCAL APP CON		CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25 (S-SW) 125.25 257.9	(NE) 125.4 259.1 (E-SE) 127.4 317.5	125.7 256.7	121.7	121.1 256.7

114.4 ILA Chan 91 (IAF) GRIME SAC 35.2

149° 329° 2000 086° (6.6)

346°

TUDOR INT I-SMF 18.6

R-086

MSA SAC 25 NM
2700
110° 290°
4100 3100
020°

SAC LR-336

SAC R-329

1800 166° (11.4)

RADAR or DME REQUIRED

712

JARNU I-SMF 7.2 RADAR

LOCALIZER 111.1 I-SMF Chan 48

SAC R-339

127±

MM IM

543

10 NM

527 577

SACRAMENTO 115.2 SAC Chan 99

ELEV 27

16R 16L

TDZE 25

112±

107

175

8600 X 150

8601 X 150

51

34L 34R

TDZ/CL Rwys 16L and 16R
HIRL Rwys 16R-34L and 16L-34R

TUDOR INT I-SMF 18.6	JARNU I-SMF 7.2 RADAR	Procedure Turn NA	500	2000 350°	SAC R-329 115.2	GRIME

2000 166° 1800 1800

MM DH RA 103 IM

GS 3.00° TCH 57

25 MSL

11.4 NM 4.9 NM 1908′ 788′ 1075′

CATEGORY	A	B	C	D
S-ILS 16R	125/12 100 RA 103			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

SACRAMENTO, CALIFORNIA AL-5490 (FAA)

LOC/DME I-SMF	APP CRS	Rwy Idg	8600
111.1	166°	TDZE	25
Chan 48		Apt Elev	27

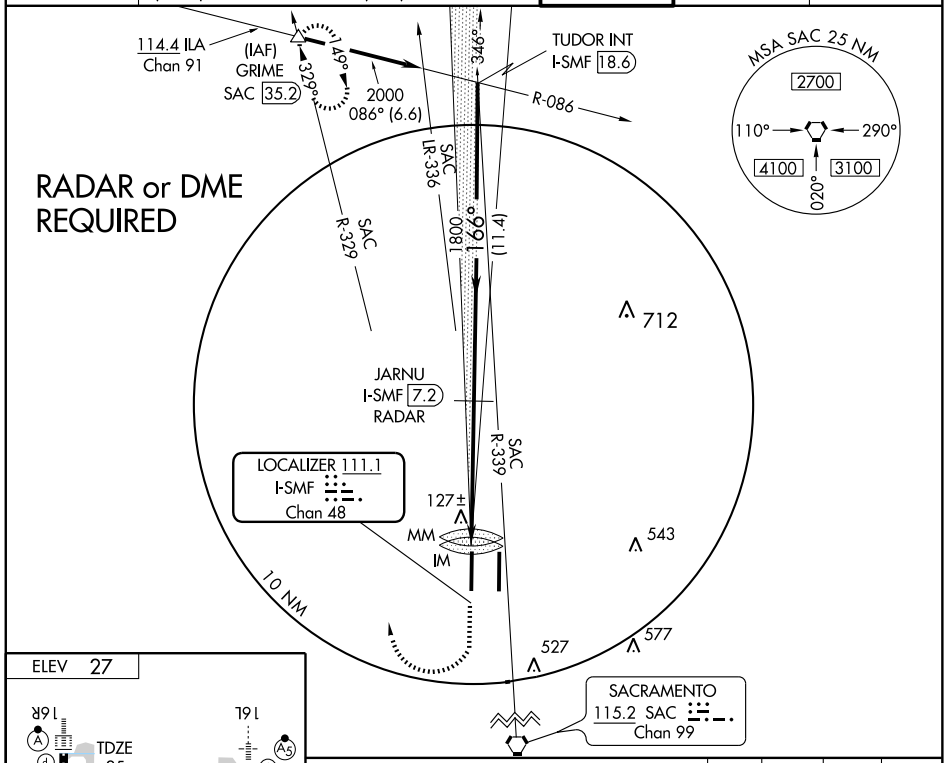
ILS RWY 16R (CAT III)

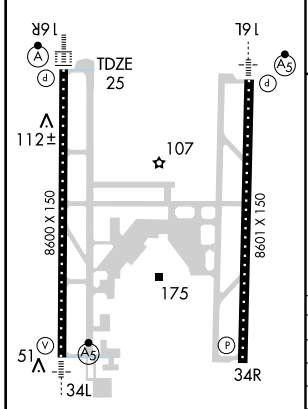
SACRAMENTO INTL (SMF)

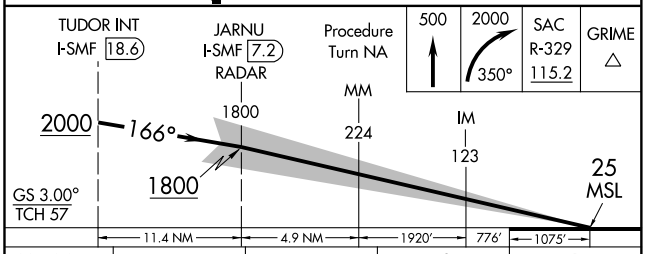
ALSF-2

MISSED APPROACH: Climb to 500, then climbing right turn to 2000 via heading 350° and SAC R-329 to GRIME Int/SAC 35.2 DME and hold.

ATIS	NORCAL APP CON		CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25	(NE) 125.4 259.1	125.7 256.7	121.7	121.1 256.7
	(S-SW) 125.25 257.9	(E-SE) 127.4 317.5			







CATEGORY	A	B	C	D
S-ILS 16R	CAT IIIa RVR 07			
S-ILS 16R	CAT IIIb RVR 06			
S-ILS 16R	CAT IIIc NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8601
164°	TDZE	27
	Apt Elev	27

RNAV (GPS) RWY 16L

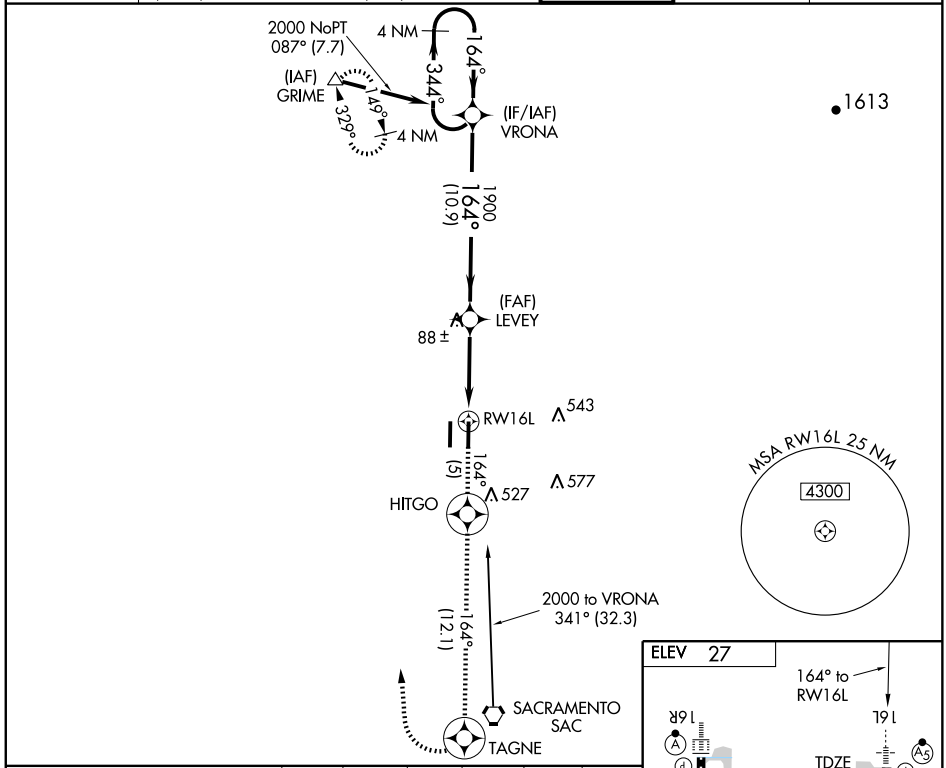
SACRAMENTO INTL (SMF)

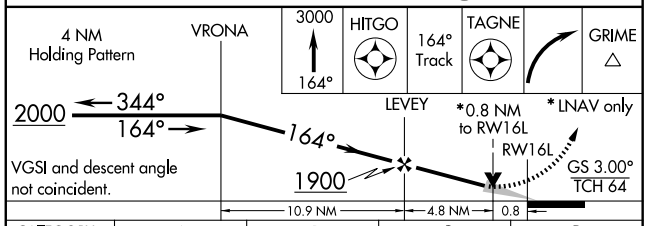
DME/DME RNP- 0.3 NA. Inoperative table does not apply to LNAV Cat. D.
For inoperative MALSR, increase LNAV Cat D visibility to 1¼ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). Circling NA west of Rwy 16L-34R.

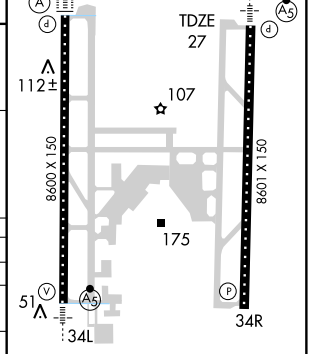
MALSR

MISSED APPROACH: Climb to 3000 via 164° course to HITGO WP, then via track 164° to TAGNE WP, then right turn direct GRIME WP and hold.

ATIS	NORCAL APP CON				CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25		(NE) 125.4 259.1		125.7 256.7	121.7	121.1 256.7
	(S-SW) 125.25 257.9		(E-SE) 127.4 317.5				







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	418-¾ 391 (400-¾)			
LNAV MDA	380-½ 353 (400-½)			380-1 353 (400-1)
CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

TDZ/CL Rwys 16L and 16R
HIRL Rwys 16R-34L and 16L-34R

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8600
164°	TDZE	25
	Apt Elev	27

RNAV (GPS) RWY 16R

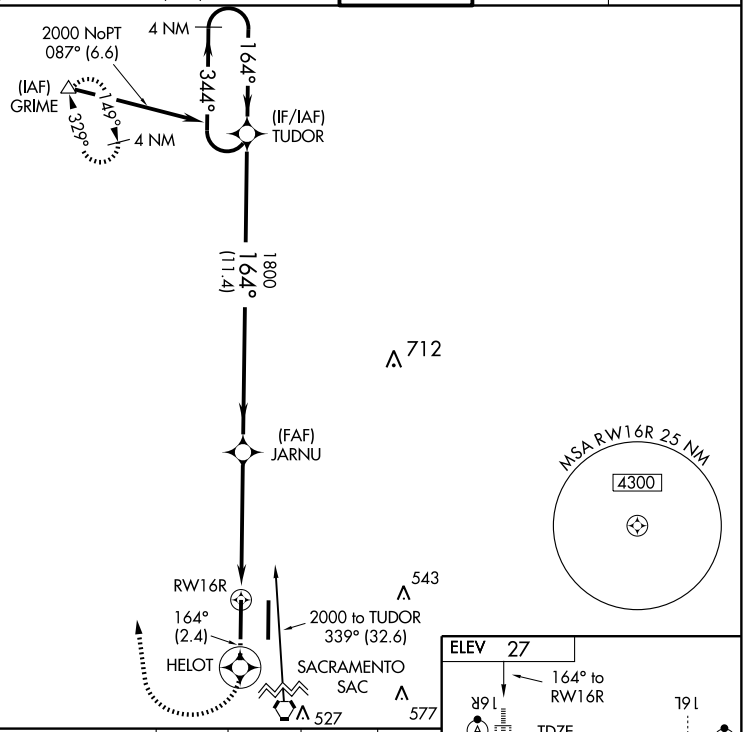
SACRAMENTO INTL (SMF)

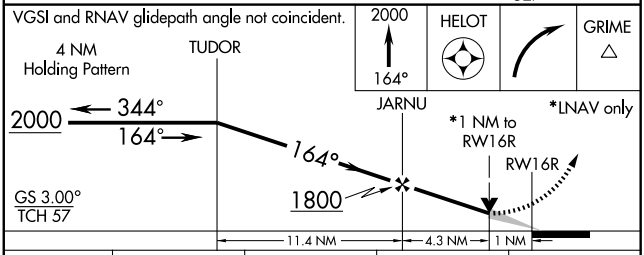
Circling NA east of Rwy 16R-34L. DME/DME RNP- 0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).
For inoperative ALSF-2 increase LNAV Cat D visibility to RVR 6000.

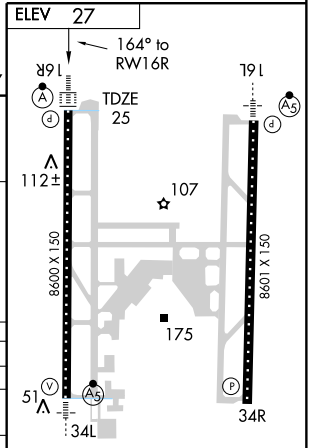
ALSF-2

MISSED APPROACH: Climb to 2000 via 164°course to HELOT WP, then right turn direct GRIME WP and hold.

ATIS	NORCAL APP CON		CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25	(NE) 125.4 259.1	125.7 256.7	121.7	121.1 256.7
	(S-SW) 125.25 257.9	(E-SE) 127.4 317.5			







TDZ/CL Rwys 16L and 16R
HIRL Rwys 16R-34L and 16L-34R

CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	409/40 384 (400-¾)			
LNAV MDA	400/24 375 (400-½)			400/50 375 (400-1)
CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 86602 W34A	APP CRS 344°	Rwy Idg 8600 / TDZE 24 / Apt Elev 27

RNAV (GPS) RWY 34L
SACRAMENTO INTL (SMF)

DME/DME RNP- 0.3 NA. Circling NA east of Rwy 16R-34L.
For inoperative MALSR, increase LNAV/VNAV Cat. D visibility to RVR 5000 and LNAV Cat. D visibility to RVR 6000.
For inoperative MALSR, increase LPV all Cats. visibility to RVR 4000.
Baro-VNAV NA when using Sacramento Executive altimeter setting.
If local altimeter setting not received, use Sacramento Executive altimeter setting and increase all DAs/MDAs 40 feet.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (119°F).
VDP NA with Sacramento Executive altimeter setting.

MALSR

MISSED APPROACH: Climb to 2000 direct RATBE and via 323° track to GRIME and hold.

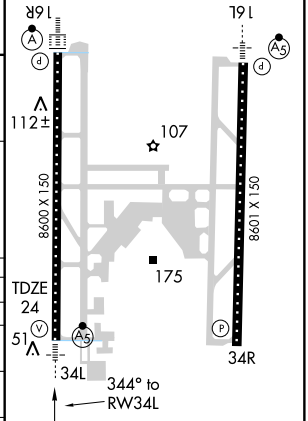
ATIS	NORCAL APP CON		CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25	(NE) 125.4 259.1	125.7 256.7	121.7	121.1 256.7
	(S-SW) 125.25 257.9	(E-SE) 127.4 317.5			

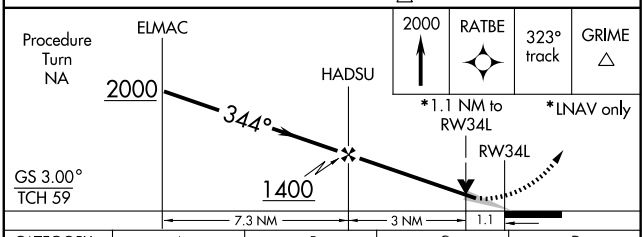
MISSED APCH FIX
GRIME 149° 329° 4 NM

Procedure NA for arrivals at SAC VORTAC on airway radials 257 CW 329.

323°
RATBE
543
RW34L
73±
577
527
(FAF) HADSU
583
1400
344° (7.3)
(IF) ELMAC
MSA RW34L 25 NM
4300
2000
303° (3.9)
2000
355° (10.9)
(IAF) SACRAMENTO SAC
(IAF) COUPS

ELEV 27





CATEGORY	A	B	C	D
LPV DA	274/24 250 (300-½)			
LNAV/VNAV DA	336/24 312 (400-½)			336/40 312 (400-¾)
LNAV MDA	420/24 396 (400-½)			420/50 396 (400-1)
CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8601
344°	TDZE	24
	Apt Elev	27

RNAV (GPS) RWY 34R

SACRAMENTO INTL (SMF)

For uncompensated Baro/VNAV systems, Baro-VNAV NA below -15°C (5°F) or above 48°C (118°F).
Circling not authorized west of Rwy 16L-34R.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 via 344° course to OSAVE WP, then left turn via 320° track to GRIME WP and hold.

ATIS	NORCAL APP CON		CAPITAL TOWER	GND CON	CLNC DEL
126.75	(W-N) 134.8 270.25	(NE) 125.4 259.1	125.7 256.7	121.7	121.1 256.7
	(S-SW) 125.25 257.9	(E-SE) 127.4 317.5			

MISSED APCH FIX

GRIME 149° 329° 4 NM

320° (18.6) OSAVE

344° (2.7)

RW34R

705

543

577

527

(FAF) CEDRA

1400 344° (6.5)

FIPIN

2600 322° (4.1)

(IAF) SACRAMENTO SAC

2600 359° (11.9)

(IAF) COUPS

MSA RW34R 25 NM 4300

ELEV 27

16R 16L

112± 107

8600 X 150 8601 X 150

175

51 34L 34R TDZE 24

344° to RW34R

TDZ/CL Rwys 16L and 16R
HIRL Rwys 16R-34L and 16L-34R

2000 344° OSAVE 320° GRIME

Procedure Turn NA

FIPIN 2600 344° CEDRA 1400 RW34R

*2 NM to RW34R

*LNAV only

GS 3.00° TCH 64

6.5 NM 2.1 NM 2 NM

CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	376-1¼ 352 (400-1¼)			
LNAV MDA	720-1 696 (700-1)		720-2 696 (700-2)	720-2¼ 696 (700-2¼)
CIRCLING	720-1 693 (700-1)		720-2 693 (700-2)	720-2¼ 693 (700-2¼)

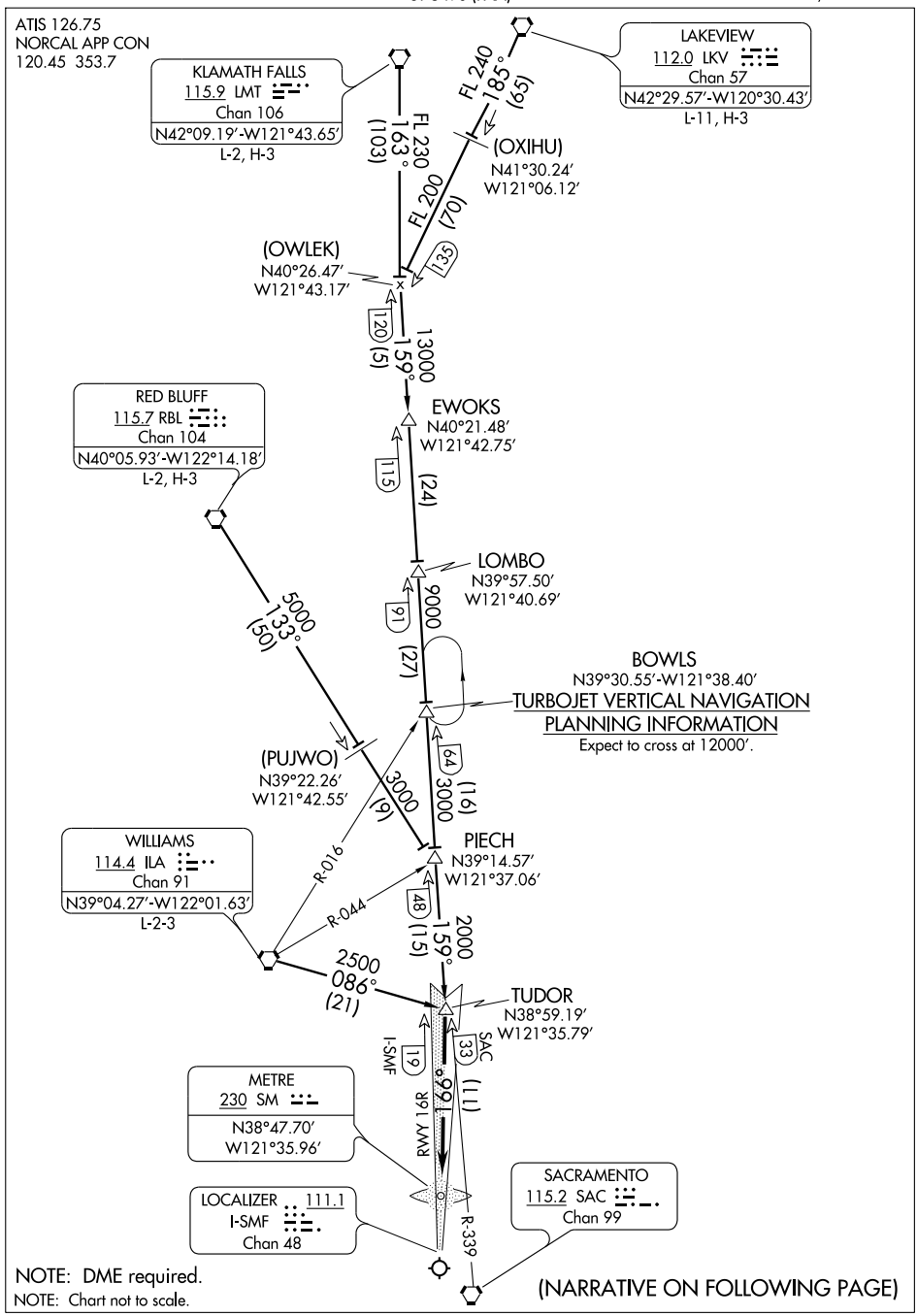
SW-2, 22 OCT 2009 to 19 NOV 2009

(TUDOR.TUDOR1) 09127

TUDOR ONE ARRIVAL

ST-5490 (FAA)

SACRAMENTO INTL
SACRAMENTO, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

TUDOR ONE ARRIVAL

ARRIVAL DESCRIPTION

KLAMATH FALLS TRANSITION(LMT.TUDOR1): From over LMT VORTAC via LMT R-163 and SAC R-339 to TUDOR INT. Thence . . . .
LAKEVIEW TRANSITION (LKV.TUDOR1): From over LKV VORTAC via LKV R-185 and SAC R-339 to TUDOR INT. Thence . . . .
RED BLUFF TRANSITION (RBL.TUDOR1): From over RBL VORTAC via RBL R-133 and SAC R-339 to TUDOR INT. Thence . . . .
WILLIAMS TRANSITION (ILA.TUDOR1): From over ILA VORTAC via ILA R-086 to TUDOR INT. Thence . . . .
. . . .From over TUDOR INT via I-SMF RWY 16R localizer course to SM LOM. Expect ILS RWY 16R approach.

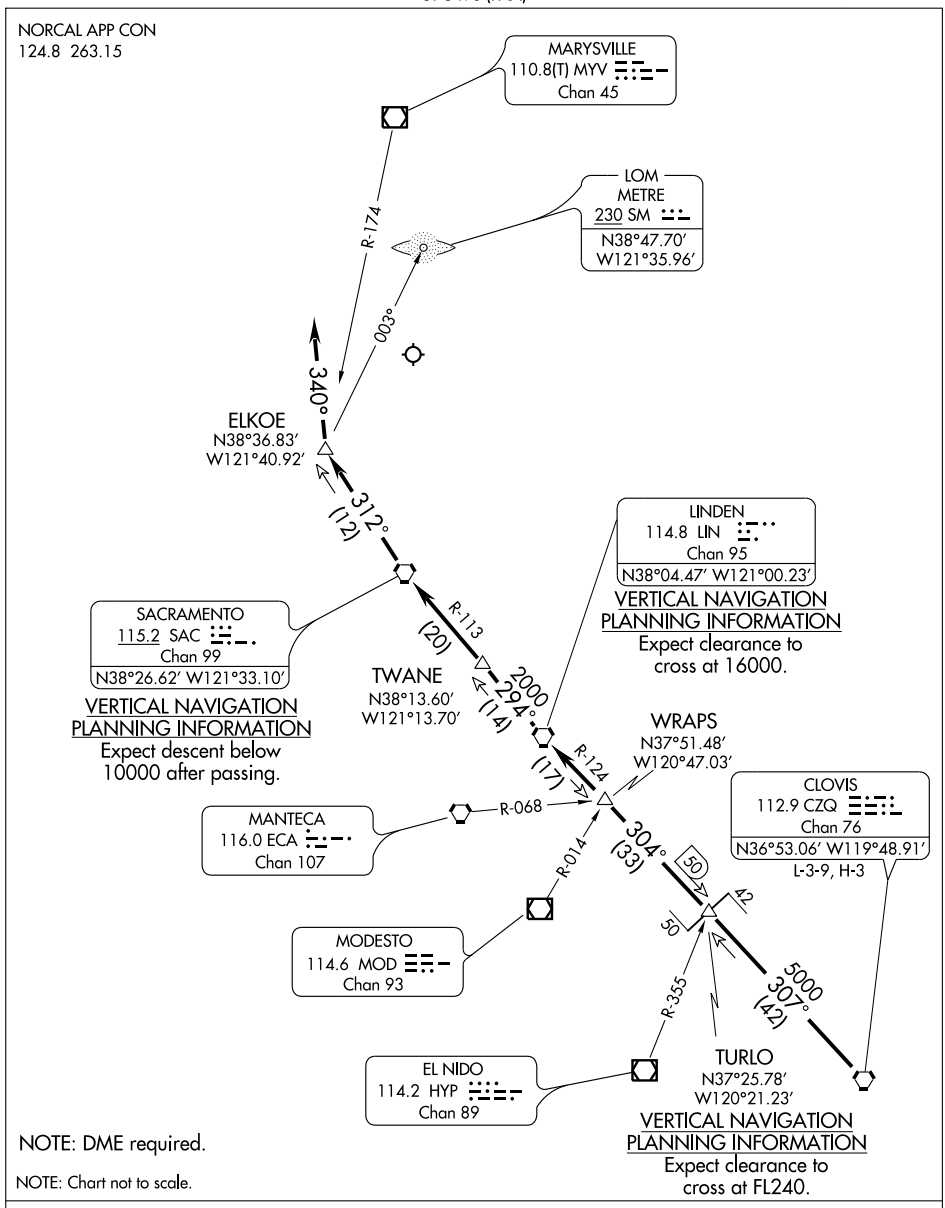
SW-2, 22 OCT 2009 to 19 NOV 2009

(CZQ.WRAPS5) 09127

WRAPS FIVE ARRIVAL

ST-5490 (FAA)

SACRAMENTO INTL
SACRAMENTO, CALIFORNIA



From over CZQ VORTAC via CZQ R-307 to TURLO INT, then via LIN R-124 to LIN VORTAC, then via LIN R-294 and SAC R-113 to SAC VORTAC, then via SAC R-312 to ELKOE INT, then via heading 340° for radar vector to final approach course.

LOST COMMUNICATIONS: After passing ELKOE INT proceed direct SM LOM.

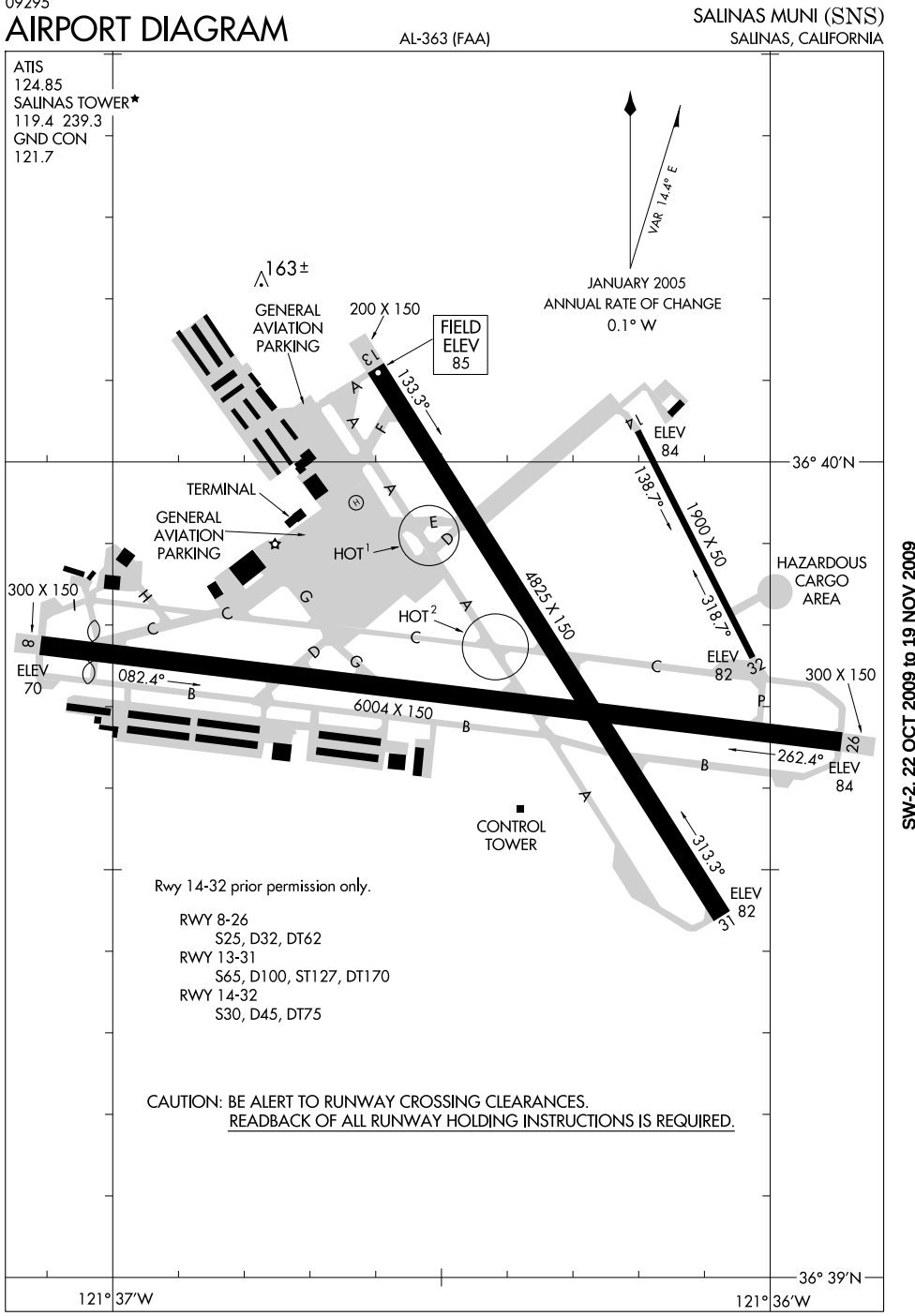
SW-2, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-363 (FAA)

SALINAS MUNI (SNS)
SALINAS, CALIFORNIA

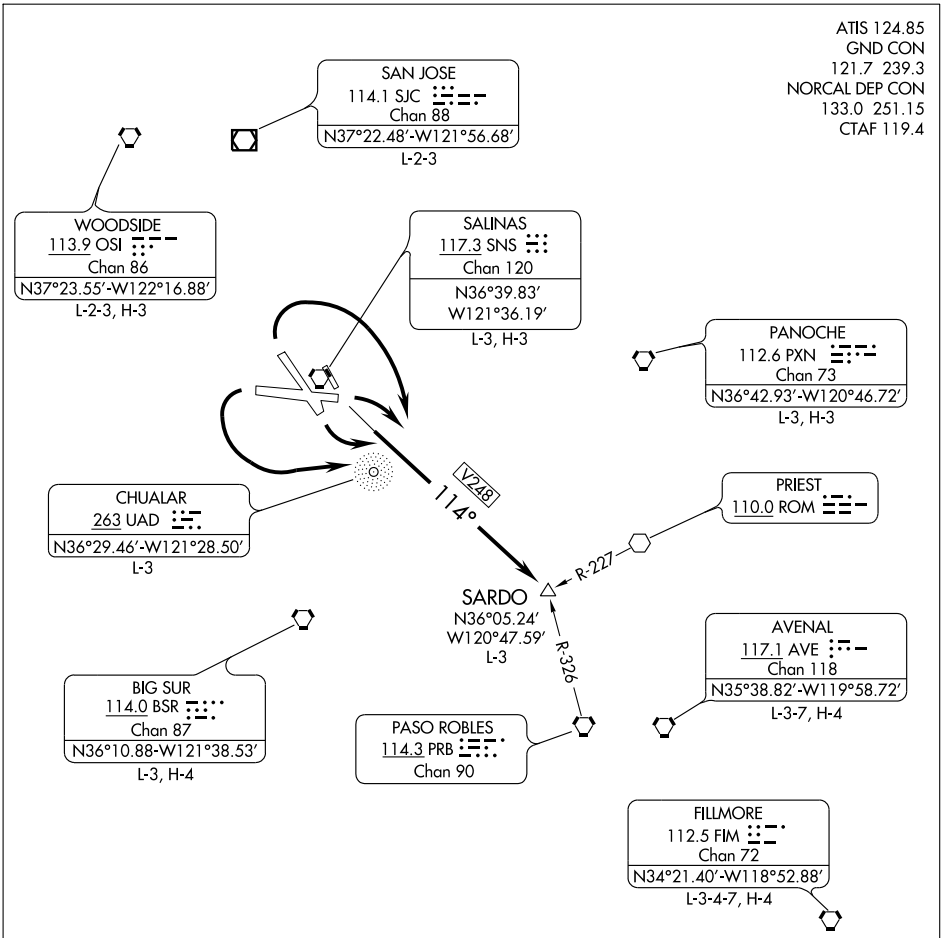


SW-2, 22 OCT 2009 to 19 NOV 2009

CHALONE TWO DEPARTURE

SL-363 (FAA)

SALINAS MUNI (SNS)
SALINAS, CALIFORNIA



NOTE: Rwys 8, 13 departures require a minimum climb of 360′ per NM to 6000′.
Rwys 26, 31 departures: Cats A and B require minimum climb of 360′ per NM to 6000′.
Cats C and D require minimum climb of 550′ per NM to 6000′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

All aircraft climb outbound on the SNS R-114 (V248) to SARDO INT, then proceed on assigned route. Expect clearance to filed altitude five minutes after departure.

TAKE-OFF RUNWAYS 8 and 31: Turn right within 1 mile to intercept and climb via SNS R-114.

TAKE-OFF RUNWAYS 13 and 26: Turn left within 1 mile to intercept and climb via SNS R-114.

SW-2, 22 OCT 2009 to 19 NOV 2009

SALINAS, CALIFORNIA AL-363 (FAA)

LOC I-SNS	APP CRS	Rwy Idg	4825
108.5	311°	TDZE	82
		Apt Elev	85

ILS RWY 31
SALINAS MUNI (SNS)

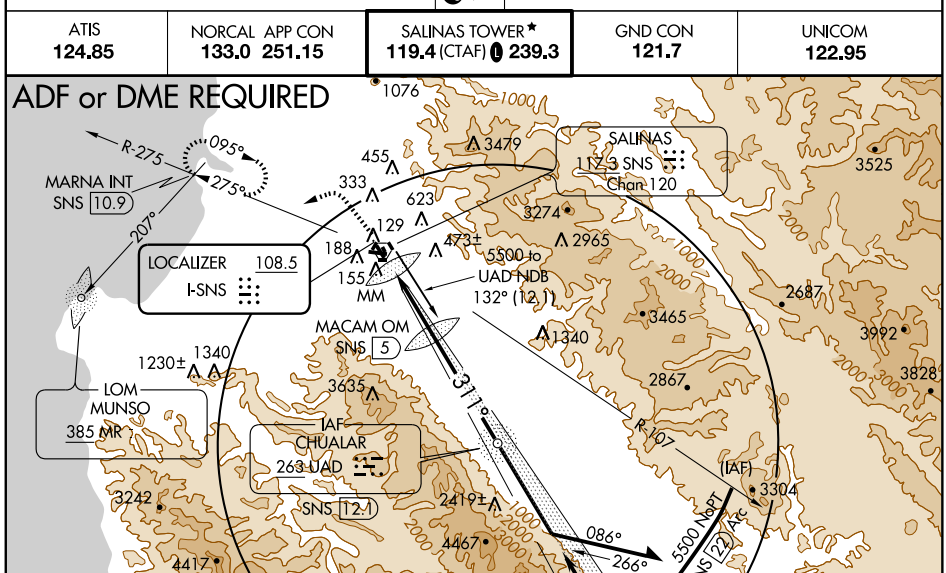
Circling requires descent on glide slope to CMDA.

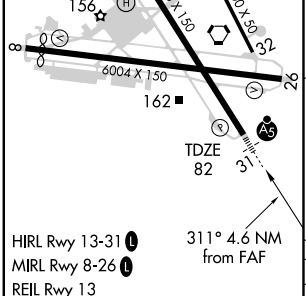
MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 via SNS R-275 to MARNA INT/10.9 DME and hold.

ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.4 (CTAF) L 239.3	121.7	122.95

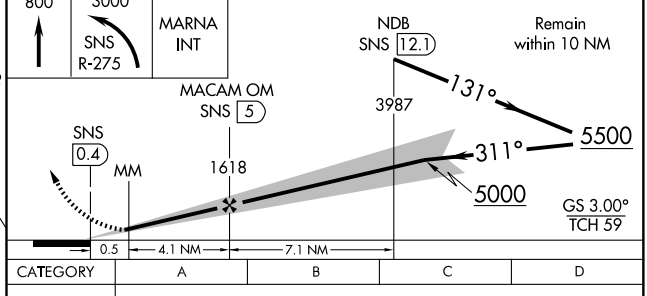
ADF or DME REQUIRED





HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwy 13

311° 4.6 NM from FAF



FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

CATEGORY	A	B	C	D
S-ILS 31	282/24 200 (200-½)			
CIRCLING	560-1 475 (500-1)	580-1 495 (500-1)	580-1½ 495 (500-1½)	780-2¼ 695 (700-2¼)

SW-2, 22 OCT 2009 to 19 NOV 2009

SALINAS, CALIFORNIA

AL-363 (FAA)

LOC I-SNS	APP CRS	Rwy Idg	4825
108.5	311°	TDZE	79
		Apt Elev	84

LOC/DME RWY 31

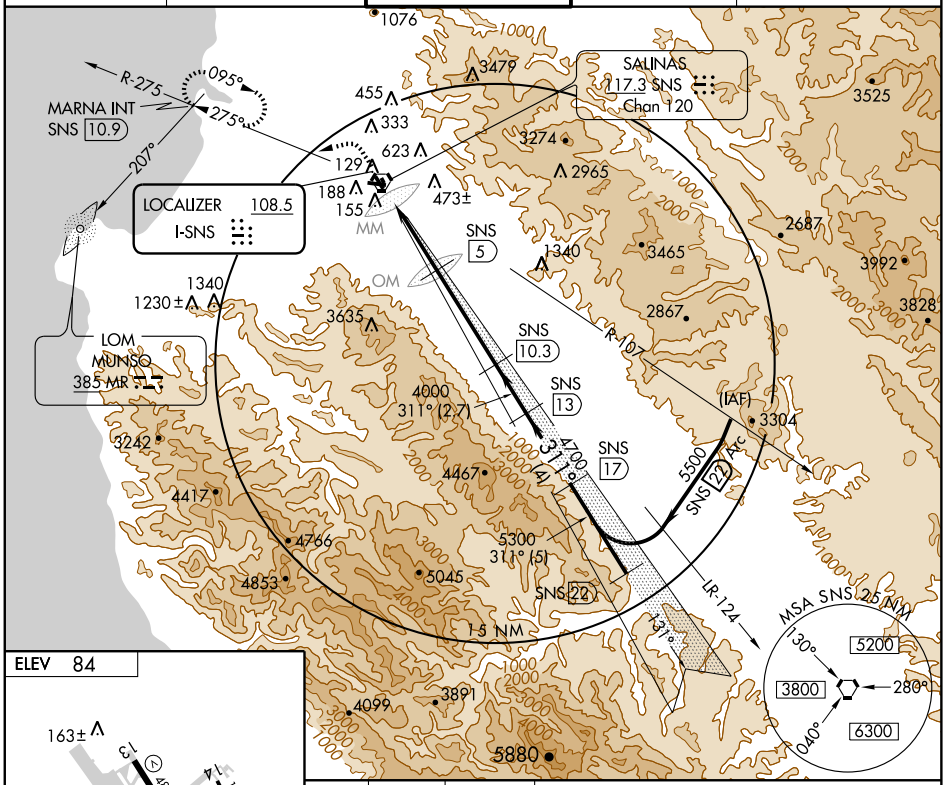
SALINAS MUNI (SNS)

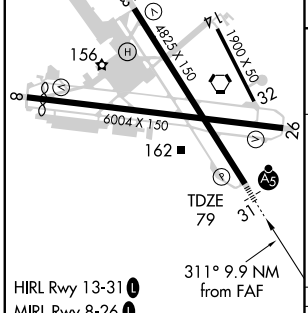
For inoperative MALSR increase S-LOC 31 Cat D visibility to RVR 5000.
Simultaneous reception of I-SNS and SNS DME required.

MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 via SNS R-275 to MARNA INT/10.9 DME and hold.

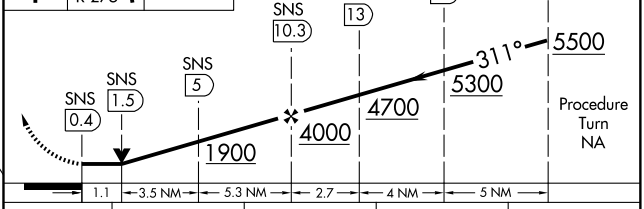
ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.4 (CTAF) L 239.3	121.7	122.95





HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwy 13

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-LOC 31	420/24 341 (400-½)			420/40 341 (400-¾)
CIRCLING	560-1 476 (500-1)	580-1 496 (500-1)	580-1½ 496 (500-1½)	780-2¼ 696 (700-2¼)

SW-2, 22 OCT 2009 to 19 NOV 2009

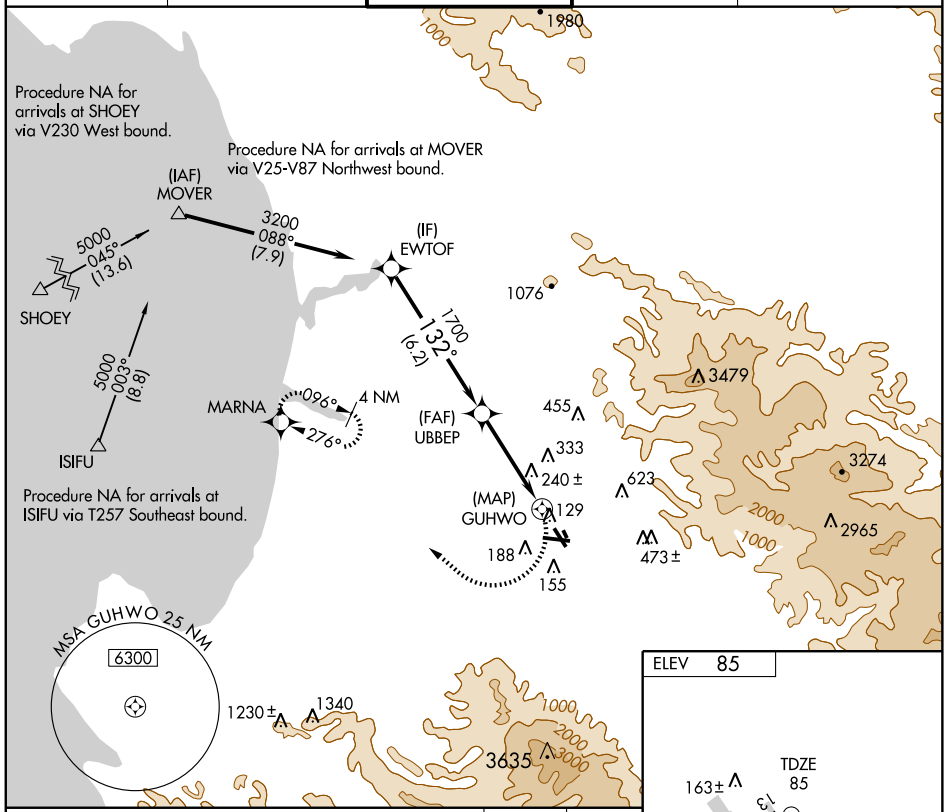
APP CRS	Rwy Idg	4825
132°	TDZE	85
	Apt Elev	85

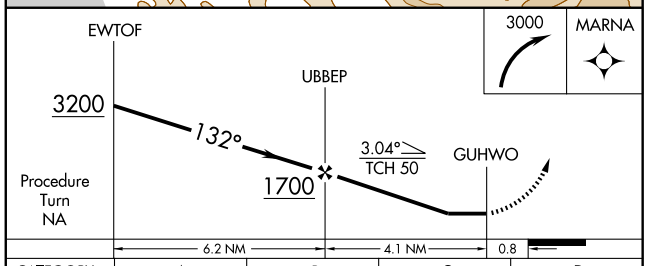
RNAV (GPS) RWY 13
SALINAS MUNI (SNS)

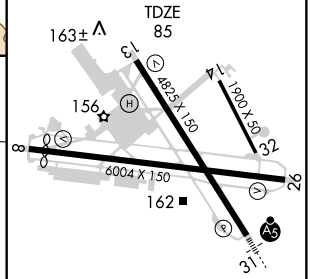
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Monterey Peninsula altimeter setting and increase all MDA 60 feet and increase LNAV Cat C and D visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 direct MARNA and hold.

ATIS	NORCAL APP CON	SALINAS TOWER★	GND CON	UNICOM
124.85	133.0 251.15	119.4 (CTAF) L 239.3	121.7	122.95







CATEGORY	A	B	C	D
LNAV MDA	540-1 455 (500-1)		540-1¼ 455 (500-1¼)	540-1½ 455 (500-1½)
CIRCLING	540-1 455 (500-1)		540-1½ 455 (500-1½)	760-2¼ 675 (700-2¼)

HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwy 13

SW-2, 22 OCT 2009 to 19 NOV 2009

SALINAS, CALIFORNIA

AL-363 (FAA)

RNAV (GPS) Y RWY 31

SALINAS MUNI (SNS)

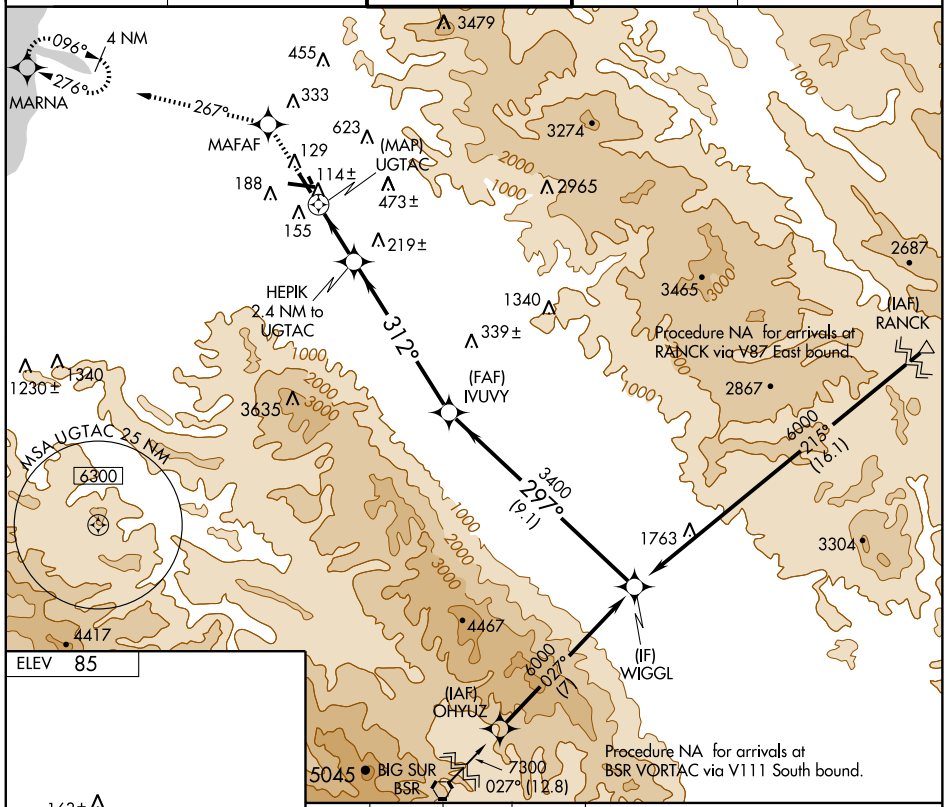
APP CRS	Rwy Idg	4825
312°	TDZE	82
	Apt Elev	85

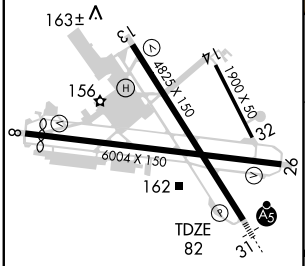
For inoperative MALSR increase LNAV Cat D visibility to RVR 6000. DME/DME RNP-0.3 NA. When local altimeter not received, use Monterey Peninsula altimeter setting and increase all MDA 60 feet and increase LNAV Cat C visibility to RVR 4000.

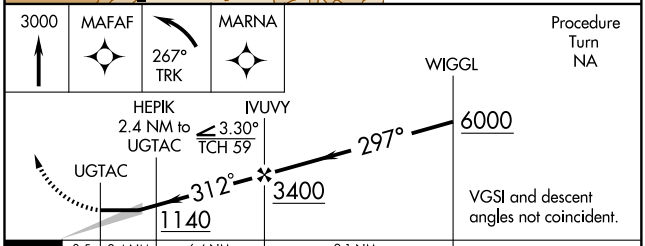
MALSR

MISSED APPROACH: Climb to 3000 direct MAFAF and left turn via track 267° to MARNA and hold.

ATIS	NORCAL APP CON	SALINAS TOWER★	GND CON	UNICOM
124.85	133.0 251.15	119.4 (CTAF) L 239.3	121.7	122.95







CATEGORY	A	B	C	D
LNAV MDA	440/24 358 (400-½)			440/50 358 (400-1)
CIRCLING	500-1 415 (500-1)	540-1 455 (500-1)	540-1½ 455 (500-1½)	760-2¼ 675 (700-2¼)

HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwy 13

SW-2, 22 OCT 2009 to 19 NOV 2009

SALINAS, CALIFORNIA

AL-363 (FAA)

RNAV (GPS) Z RWY 31

SALINAS MUNI (SNS)

WAAS	APP CRS	Rwy Idg	4825
CH 69513	312°	TDZE	82
W31A		Apt Elev	85

Baro-VNAV NA when using Monterey Peninsula altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 50°C (122°F). DME/DME RNP-0.3 NA. Circling requires descent on glidepath to MDA. When local altimeter not received, use Monterey Peninsula altimeter setting and increase all DA 53 feet and all MDA 60 feet and LNAV/VNAV all Cats visibility to RVR 5000 and increase circling Cats A and B visibility ¼ mile.

MALSR

MISSED APPROACH: Climb to 3000 direct MAFAF and left turn via track 267° to MARNA and hold.

ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.4 (CTAF) L 239.3	121.7	122.95

MISSED APCH FIX
096° 4 NM
276°
MARNA
267°
MAFAF

623 3274 2965 473± 114± RW31 129 188 155 3635 3465 1340 2687 RANCK 2867 6200 195° (10.1)

(FAF) GIPVY 5000 312° (3.1)

(IAF) EFGON 3304 5900 222° (9.3)

ACIYO 5500 312° (2.9)

(IF) JECCO

MSA RW31 25 NM 6300

4766

5900 002° (6.4)

7200 050° (12.1)

(IAF) SISQY

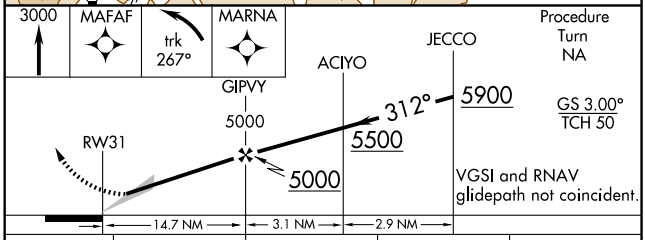
BIG SUR BSR

Procedure NA for arrivals at BSR VORTAC via V111 South bound.

ELEV 85

163± 13 156 4825 X 150 4099 14 1900 X 50 32 8 600 X 150 26 162 TDZE 31 82 312° to RW31

HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwy 13

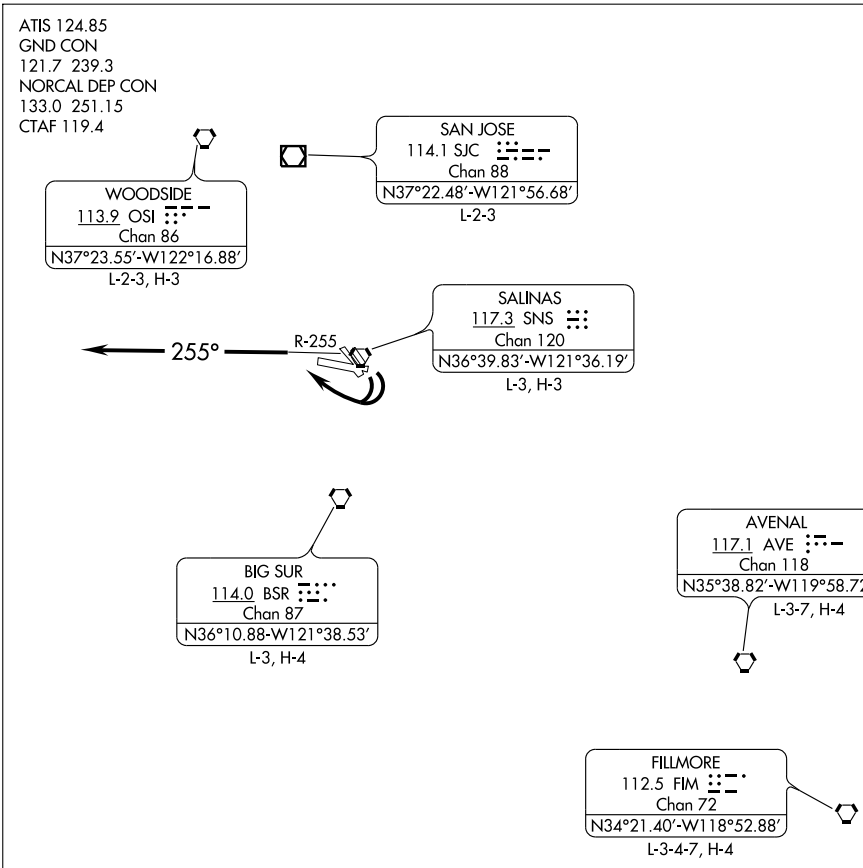


CATEGORY	A	B	C	D
LPV DA	282/24 200 (200-½)			
LNAV/VNAV DA	478/40 396 (400-¾)			
CIRCLING	500-1¼ 415 (500-1¼)	540-1¼ 455 (500-1¼)	540-1½ 455 (500-1½)	760-2¼ 675 (700-2¼)

SW-2, 22 OCT 2009 to 19 NOV 2009

SALINAS TWO DEPARTURE

SL-363 (FAA)



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

All aircraft expect vectors to assigned route. Maintain 6000'. Expect clearance to filed altitude five minutes after departure.

TAKE-OFF RUNWAYS 8 and 13: Turn right within one mile to intercept and climb via SNS R-255 for vector.

TAKE-OFF RUNWAYS 26 and 31: Climb on SNS R-255 for vector.

SW-2, 22 OCT 2009 to 19 NOV 2009

SALINAS, CALIFORNIA

AL-363 (FAA)

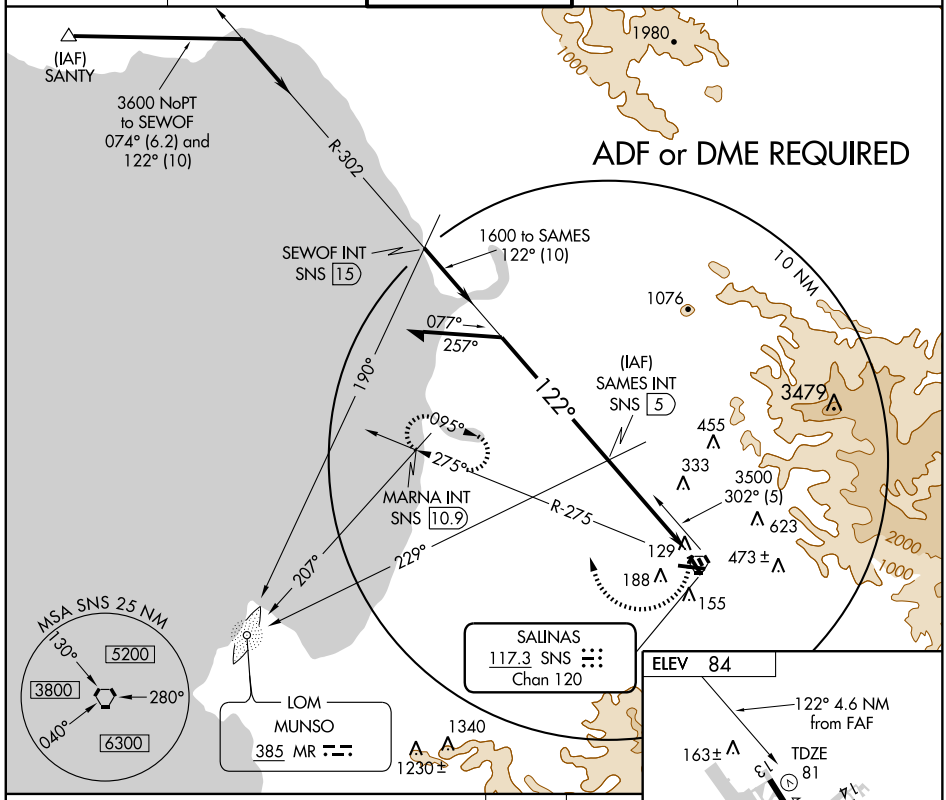
VORTAC SNS 117.3 Chan 120	APP CRS 122°	Rwy Idg 4825 TDZE 81 Apt Elev 84

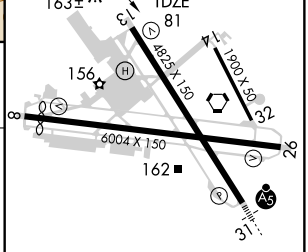
VOR RWY 13

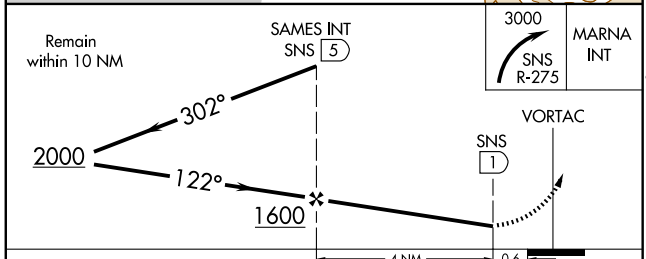
SALINAS MUNI (SNS)

MISSED APPROACH: Climbing right turn to 3000 via SNS R-275 to MARNA INT and hold.

ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.4 (CTAF) L 239.3	121.7	122.95







CATEGORY	A	B	C	D
S-13	500-1 419 (500-1)		500-1¼ 419 (500-1¼)	1020-3 939 (1000-3)
CIRCLING	560-1 476 (500-1)	580-1 496 (500-1)	580-1½ 496 (500-1½)	1020-3 936 (1000-3)

FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN ANDREAS, CALIFORNIA

AL-6708 (FAA)

APP CRS	Rwy Idg	3603
311°	TDZE	1325
	Apt Elev	1325

GPS RWY 31

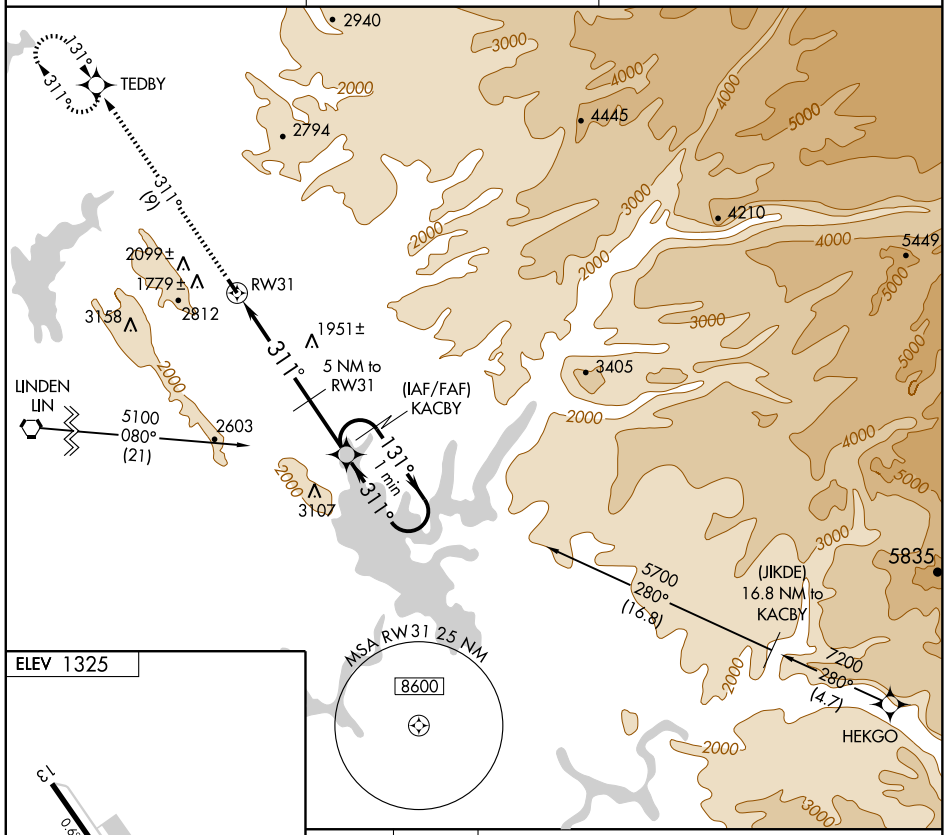
SAN ANDREAS/CALAVERAS COUNTY-MAURY RASMUSSEN FIELD (CPU)

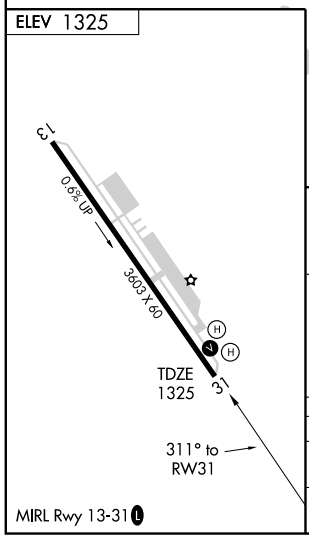
T
NA

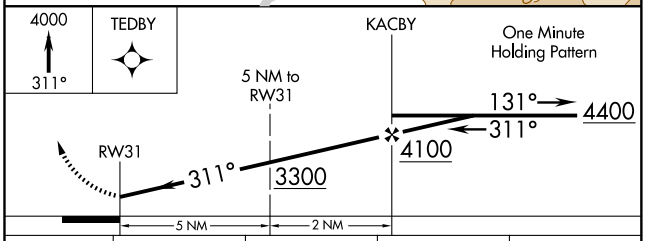
Circling not authorized west of Rwy 13-31.

MISSED APPROACH: Climb to 4000 via 311° course to TEDBY WP and hold.

AWOS-3	OAKLAND CENTER	UNICOM
118.525	126.85 322.55	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-31	2240-1¼	915 (1000-1¼)	NA	
CIRCLING	2240-1¼	915 (1000-1¼)	NA	

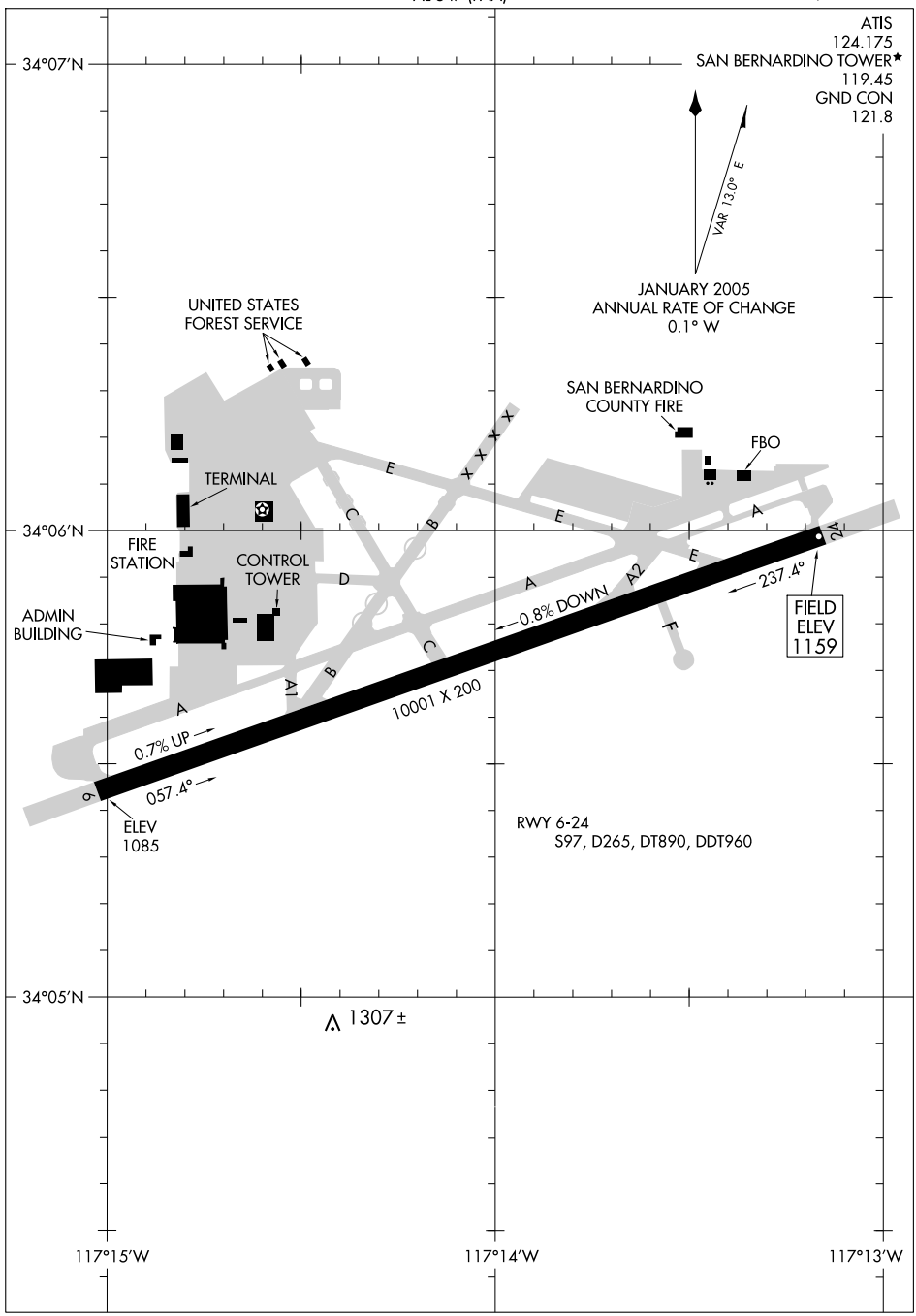
SW-2, 22 OCT 2009 to 19 NOV 2009

09071

AIRPORT DIAGRAM

AL-547 (FAA)

SAN BERNARDINO INTL (SBD)
SAN BERNARDINO, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-SBD	APP CRS	Rwy Idg	10001
109.3	057°	TDZE	1091
		Apt Elev	1159

ILS or LOC Z RWY 6

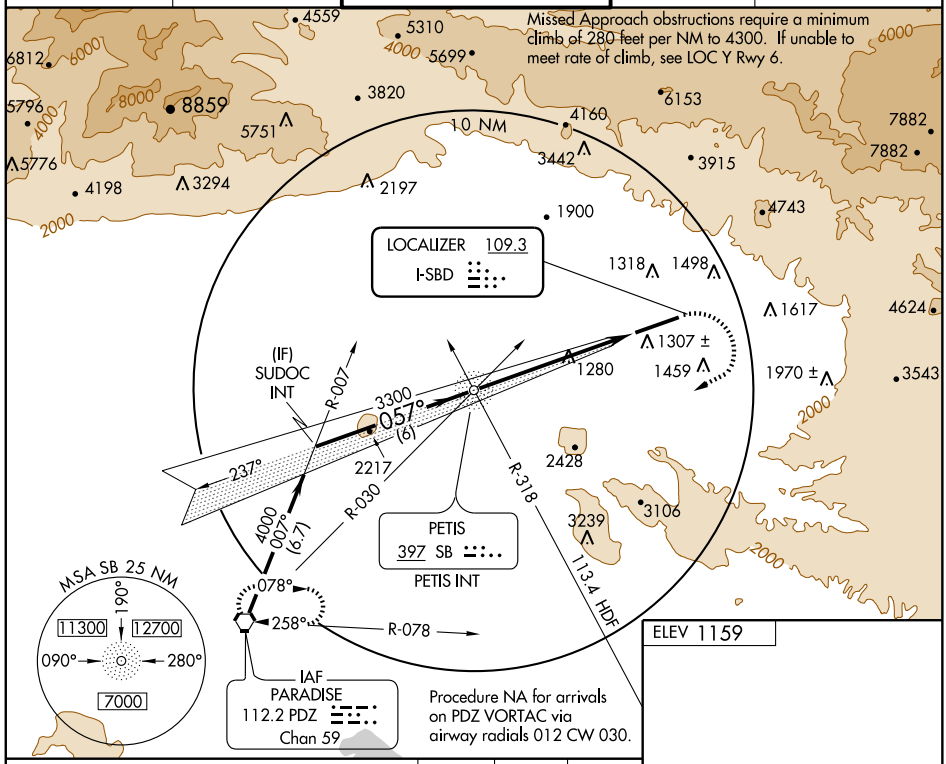
SAN BERNARDINO INTL (SBD)

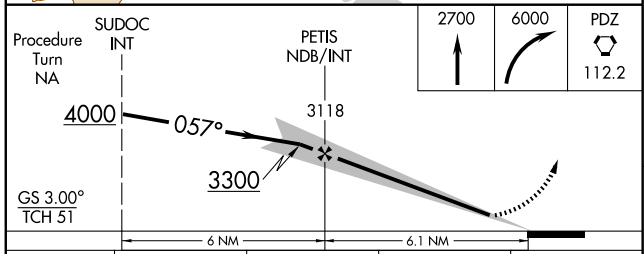
When local altimeter setting not received, use Ontario Intl altimeter setting and increase all DA to 1662 feet and all visibilities ¼ mile. Increase all MDA 80 feet and S-LOC Cat C/D visibilities ¼ mile and Circling Cat C ¼ mile and Cat D ½ mile. Circling NA north of Rwy 6-24. Visibility reduction by helicopters NA.

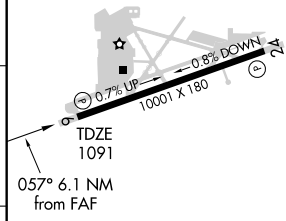
MISSED APPROACH: Climb to 2700, then climbing right turn to 6000 direct PDZ VORTAC and hold, continue climb-in-hold to 6000.

ATIS	SOCAL APP CON	SAN BERNARDINO TOWER ★	GND CON	UNICOM
124.175	127.25 318.2	119.45 (CTAF) L	121.8	122.975

Missed Approach obstructions require a minimum climb of 280 feet per NM to 4300. If unable to meet rate of climb, see LOC Y Rwy 6.







CATEGORY	A	B	C	D
S-ILS 6	1589-1¾ 498 (500-1¾)			
S-LOC 6	1640-1¼ 549 (600-1¼)		1640-1½ 549 (600-1½)	1640-1¾ 549 (600-1¾)
CIRCLING	1640-1¼ 481 (500-1¼)		1660-1½ 501 (600-1½)	1820-2 661 (700-2)

HIRL Rwy 6-24 L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-SBD	APP CRS	Rwy Idg	10001
109.3	057°	TDZE	1091
		Apt Elev	1159

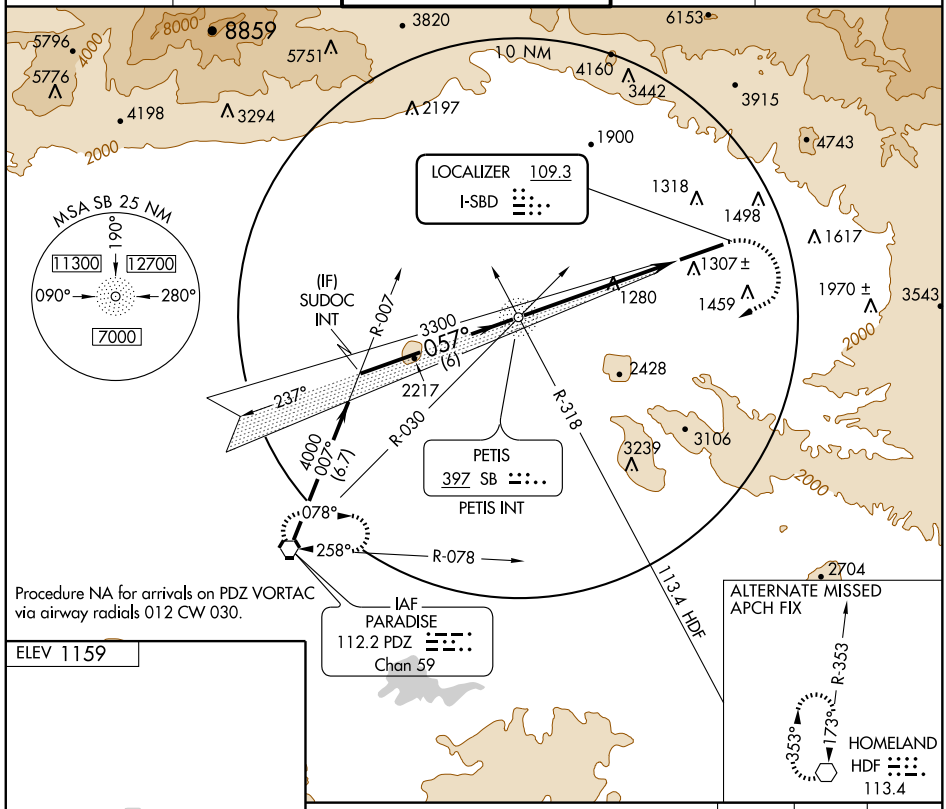
LOC Y RWY 6
SAN BERNARDINO INTL (SBD)

T
A NA

If local altimeter setting not received, use Ontario Intl altimeter setting and increase all MDAs 80 feet.
Circling NA north of Rwy 6-24.
Visibility reduction by helicopters NA.

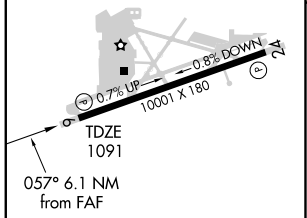
MISSED APPROACH: Climb to 3100, then climbing right turn to 6000 direct PDZ VORTAC and hold, continue climb-in-hold to 6000.

ATIS	SOCAL APP CON	SAN BERNARDINO TOWER★	GND CON	UNICOM
124.175	127.25 318.2	119.45 (CTAF) L	121.8	122.975



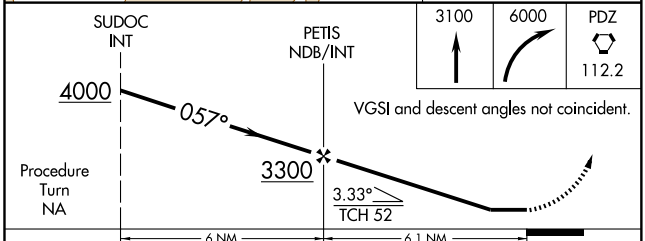
SW-3, 22 OCT 2009 to 19 NOV 2009

ELEV 1159



HIRL Rwy 6-24 L

FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02



CATEGORY	A	B	C	D
S-6	2480-1¼ 1389 (1400-1¼)	2480-1½ 1389 (1400-1½)	2480-3 1389 (1400-3)	
CIRCLING	2480-1¼ 1321 (1400-1¼)	2480-1½ 1321 (1400-1½)	2480-3 1321 (1400-3)	

NDB SB	APP CRS	Rwy Idg	10001
397	056°	TDZE	1091
		Apt Elev	1159

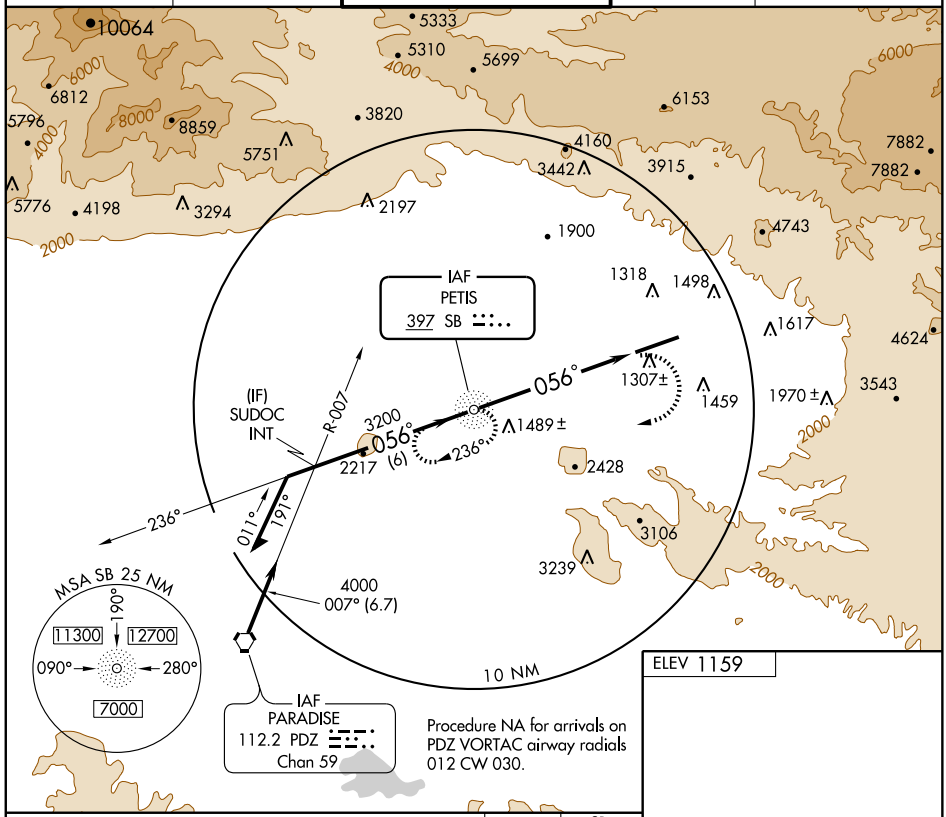
NDB RWY 6

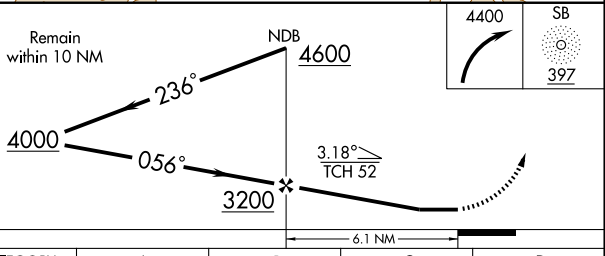
SAN BERNARDINO INTL (SBD)

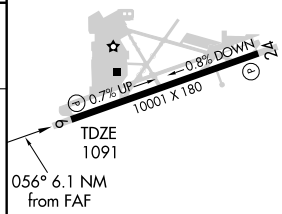
T
ANA When local altimeter setting not received, procedure NA.
Circling NA north of Rwy 6-24.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 4400 direct SB NDB and hold, continue climb-in-hold to 4400.

ATIS	SOCAL APP CON	SAN BERNARDINO TOWER ★	GND CON	UNICOM
124.175	127.25 318.2	119.45 (CTAF) L	121.8	122.975







HIRL Rwy 6-24 L

CATEGORY	A	B	C	D
S-6	2540-1¼ 1449 (1400-1¼)	2540-1½ 1449 (1400-1½)	2540-3	1449 (1400-3)
CIRCLING	2540-1¼ 1381 (1400-1¼)	2540-1½ 1381 (1400-1½)	2540-3	1381 (1400-3)

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN BERNARDINO, CALIFORNIA AL-547 (FAA)

APP CRS	Rwy Idg	10001
057°	TDZE	1091
	Apt Elev	1159

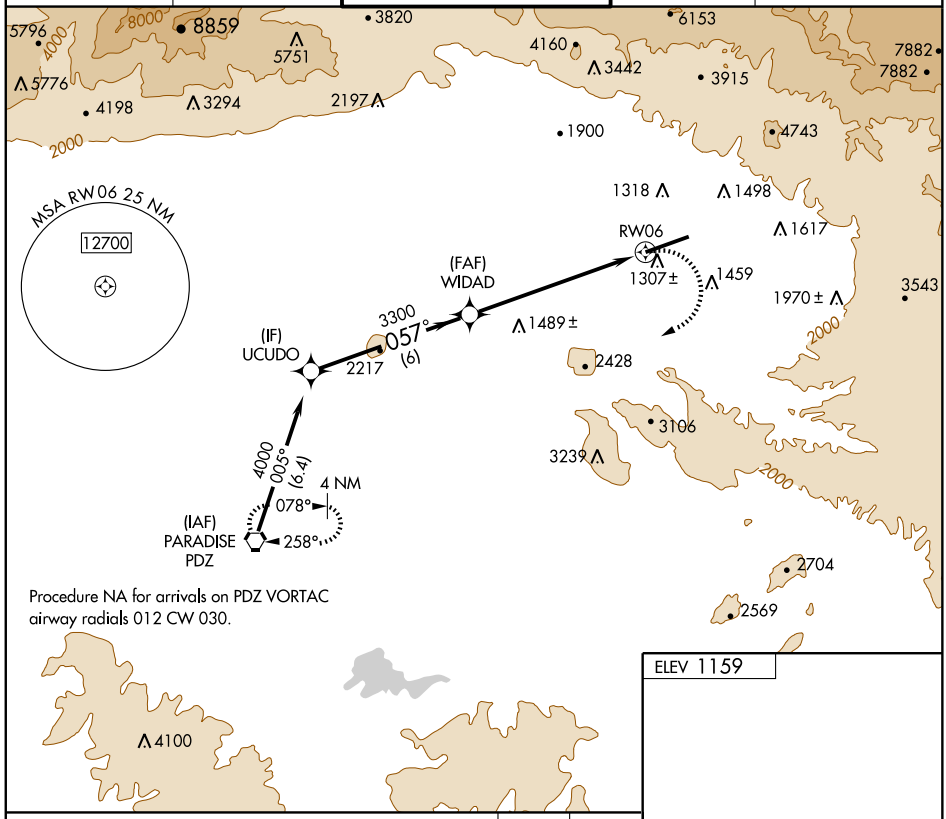
RNAV (GPS) Y RWY 6

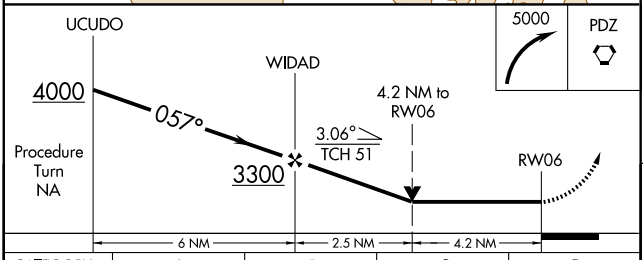
SAN BERNARDINO INTL (SBD)

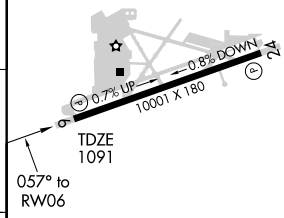
Circling NA north of Rwys 6 and 24. DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 5000 direct PDZ VORTAC and hold.

ATIS	SOCAL APP CON	SAN BERNARDINO TOWER ★	GND CON	UNICOM
124.175	127.25 318.2	119.45 (CTAF) L	121.8	122.975







CATEGORY	A	B	C	D
LNAV MDA	2480-1¼ 1389 (1400-1¼)	2480-1½ 1389 (1400-1½)	2480-3 1389 (1400-3)	
CIRCLING	2480-1¼ 1321 (1400-1¼)	2480-1½ 1321 (1400-1½)	2480-3 1321 (1400-3)	

HIRL Rwy 6-24 L

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10001
057°	TDZE	1091
	Apt Elev	1159

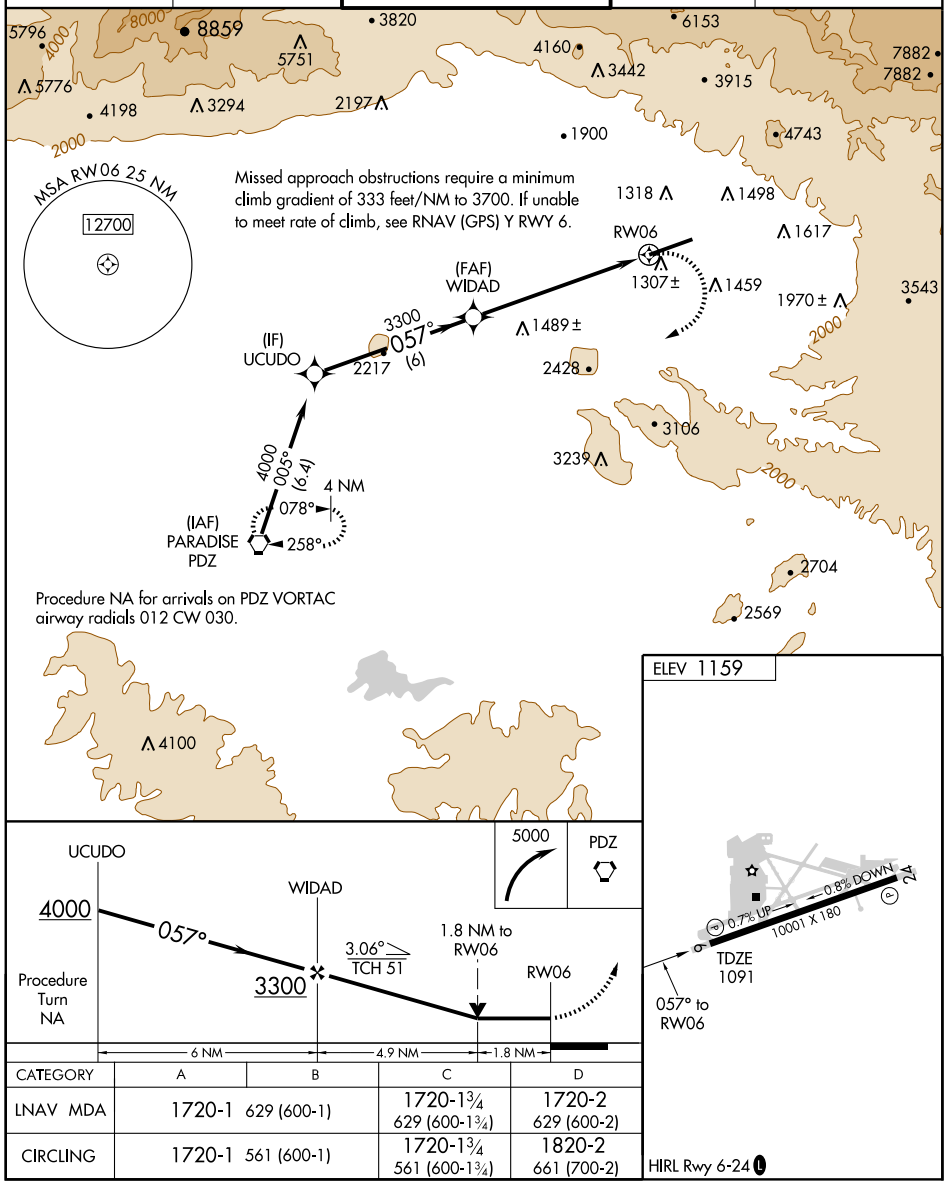
RNAV (GPS) Z RWY 6

SAN BERNARDINO INTL (SBD)

Circling NA north of Rwys 6 and 24. DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 5000 direct PDZ VORTAC and hold.

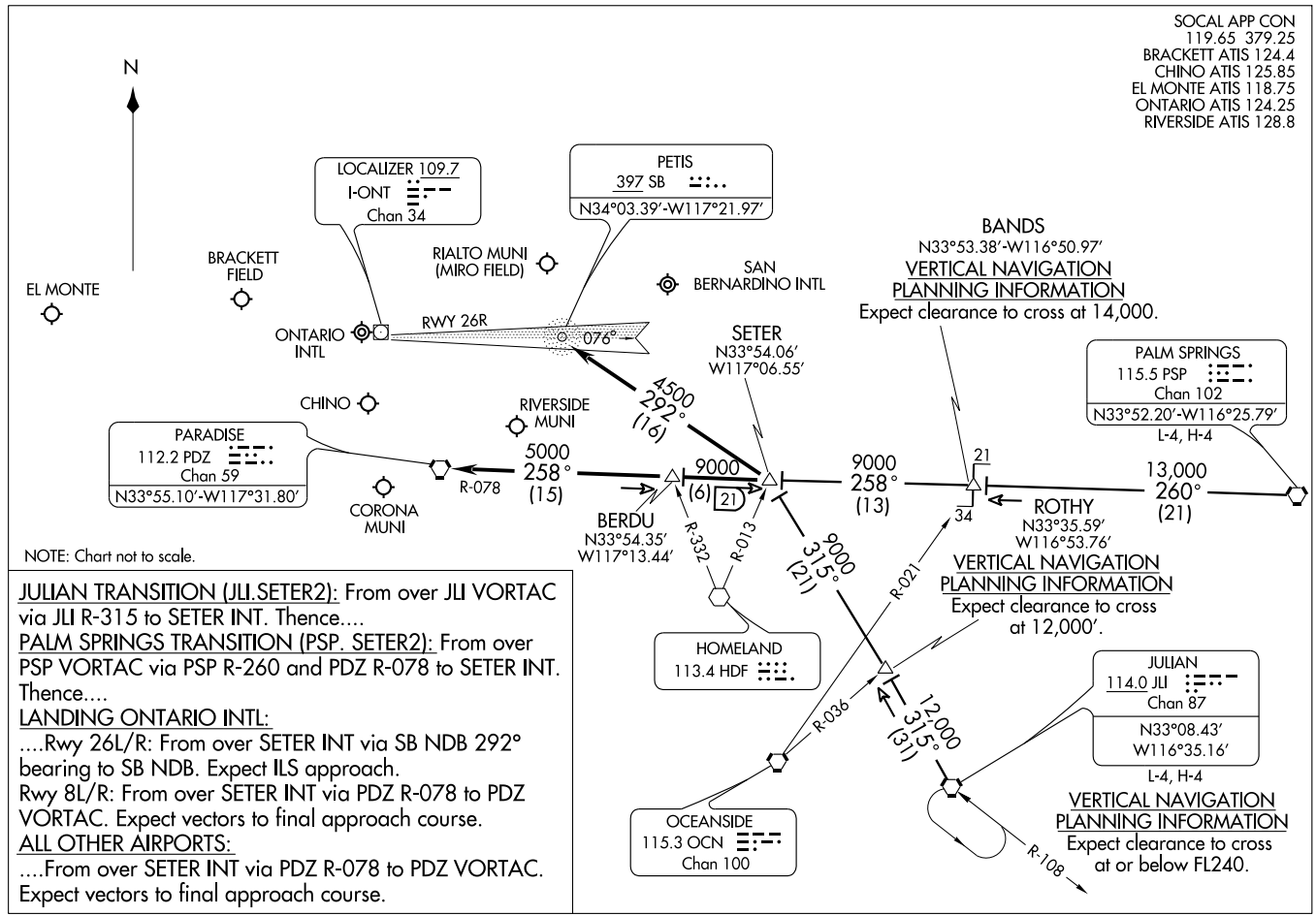
ATIS	SOCAL APP CON	SAN BERNARDINO TOWER ★	GND CON	UNICOM
124.175	127.25 318.2	119.45 (CTAF) L	121.8	122.975



CATEGORY	A	B	C	D
LNAV MDA	1720-1	629 (600-1)	1720-1¾ 629 (600-1¾)	1720-2 629 (600-2)
CIRCLING	1720-1	561 (600-1)	1720-1¾ 561 (600-1¾)	1820-2 661 (700-2)

HIRL Rwy 6-24 L

SW-3, 22 OCT 2009 to 19 NOV 2009



JULIAN TRANSITION (JLI.SETER2): From over JLI VORTAC via JLI R-315 to SETER INT. Thence....

PALM SPRINGS TRANSITION (PSP. SETER2): From over PSP VORTAC via PSP R-260 and PDZ R-078 to SETER INT. Thence....

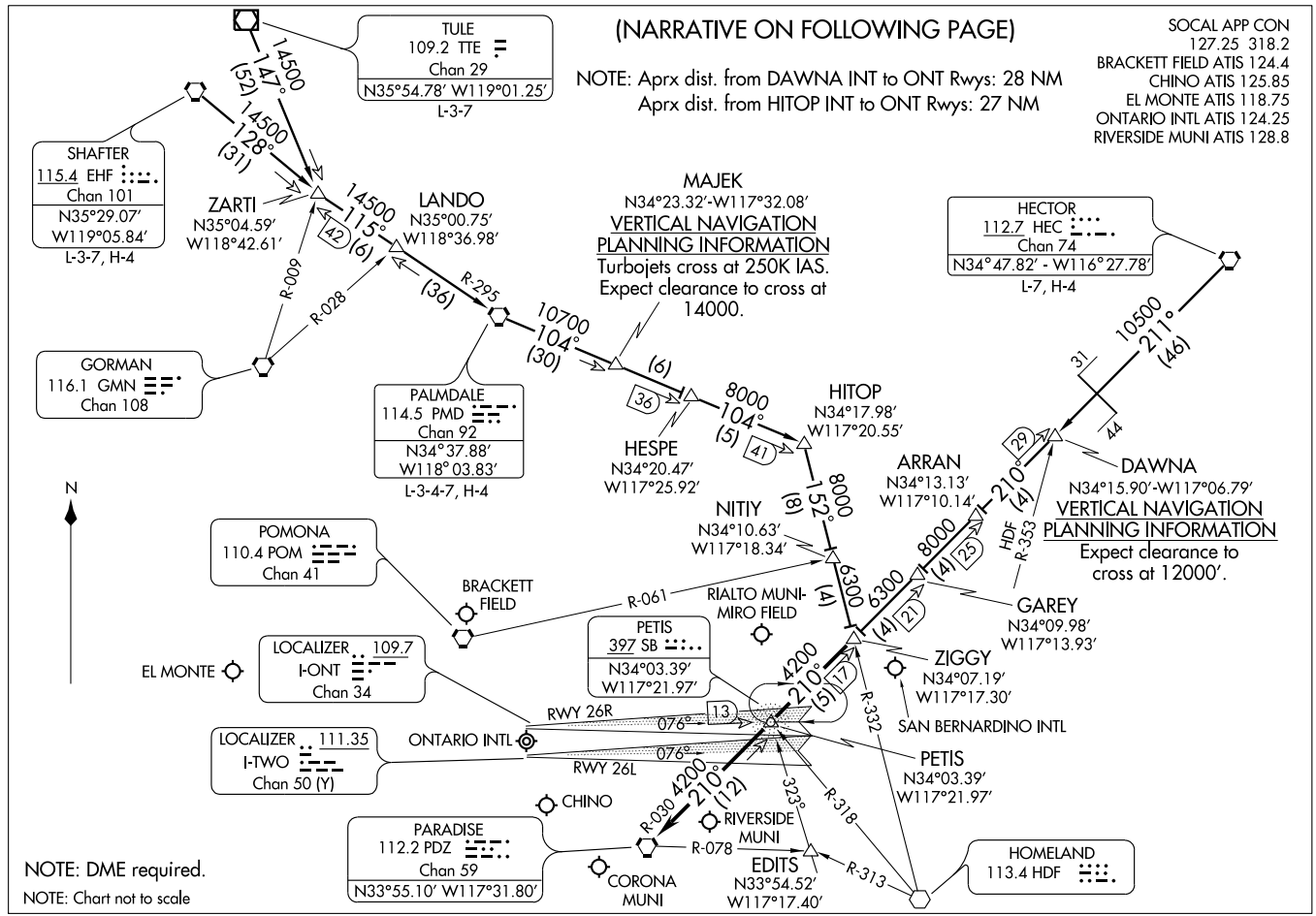
LANDING ONTARIO INTL:

....Rwy 26L/R: From over SETER INT via SB NDB 292° bearing to SB NDB. Expect ILS approach.

Rwy 8L/R: From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.

ALL OTHER AIRPORTS:

....From over SETER INT via PDZ R-078 to PDZ VORTAC. Expect vectors to final approach course.



ZIGGY FOUR ARRIVAL

(ZIGGY.ZIGGY4) 07298

ST-965 (FAA)

ONTARIO, CALIFORNIA

ZIGGY FOUR ARRIVAL

ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to ZIGGY INT. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY4): From over PMD VORTAC via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY4): From over EHF VORTAC via EHF R-128 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

TULE TRANSITION (TTE.ZIGGY4): From over TTE VOR/DME via TTE R-147 and PMD R-295 to PMD VORTAC, then via PMD R-104 to HITOP INT, then via HDF R-332 to ZIGGY INT. Thence . . . .

LANDING ONTARIO INTL:

. . . . RWY 8L/R: From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

. . . . RWY 26 L/R: From over ZIGGY INT via direct PETIS NDB or PDZ R-030 to PETIS INT; expect radar vectors for ILS approach.

ALL OTHER AIRPORTS:

. . . . From over ZIGGY INT via PDZ R-030 to PDZ VORTAC; expect radar vectors to final approach course.

LOST COMMUNICATIONS: For Rialto, California, NDB-A approach, proceed from PDZ VORTAC via PDZ R-078 to EDITS INT, maintain 4200'.

SW-3, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-9219 (FAA)

SAN CARLOS (SQL)
SAN CARLOS, CALIFORNIA

ATIS
125.9
SAN CARLOS TOWER ★
119.0 (CTAF) 326.2
GND CON
121.6

VAR 14.8° E

JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

37°31'N

TERMINAL

ELEV
5

123.2°

RWY 12-30
S12.5

2600 X 75

303.2°

CONTROL
TOWER
60

FIELD
ELEV
5

37°30.5'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

122°15'W

122°14.5'W

SW-2, 22 OCT 2009 to 19 NOV 2009

POINT REYES ONE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA

NORCAL APP CON
133.95 317.6
SAN FRANCISCO TOWER
120.5 269.1
SAN FRANCISCO INTL ATIS
113.7 118.85
SAN CARLOS TOWER★
119.0 326.2
SAN CARLOS ATIS
125.9
PALO ALTO TOWER★
118.6
PALO ALTO ATIS
135.275
MOFFETT FEDERAL AFLD TOWER★
119.55 346.25
MOFFETT FEDERAL AFLD ATIS
124.175 283.0
SAN JOSE TOWER★
124.0 257.6
NORMAN Y. MINETA
SAN JOSE INTL ATIS
126.95
REID-HILLVIEW TOWER★
119.8 RWY 13L/31R
126.1 RWY 13R/31L
REID-HILLVIEW ATIS
125.2

MAXWELL
110.0 MXW
Chan 37
N39°19.06′-W122°13.29′
L-2

MENDOCINO
112.3 ENI
Chan 70
N39°03.19′-W123°16.45′
L-2, H-3

SANTA ROSA
113.0 STS
Chan 77

SACRAMENTO
115.2 SAC
Chan 99
N38°26.62′-W121°33.10′
L-2-3, H-3

POPES
N38°29.16′
W122°20.75′

SCAGGS ISLAND
112.1 SGD
Chan 58

POINT REYES
113.7 PYE
Chan 84
N38°04.79′-W122°52.07′

SAUSALITO
116.2 SAU
Chan 109

SAN FRANCISCO
115.8 SFO
Chan 105

OAKLAND
116.8 OAK
Chan 115

STINS
N37°49.42′
W122°45.40′

SAN FRANCISCO INTL

PALO ALTO AIRPORT OF SANTA CLARA COUNTY

SAN CARLOS

MOFFETT FEDERAL AFLD

NORMAN Y. MINETA SAN JOSE INTL

REID-HILLVIEW OF SANTA CLARA COUNTY

HADLY
N37°24.14′
W122°34.54′

WOODSIDE
113.9 OSI
Chan 86
N37°23.55′-W122°16.88′

6500 184° (80)
6000 146° (61)
5000 208° (35)
5000 257° (38)
V494
R-077
22
R-347
R-005
R-028
R-325
144° (16)
R-243
V27
R-287
144° (27)
43
R-204
076° (14)
R-256

NOTE: SACRAMENTO Transition to be used only when assigned by ATC.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

MAXWELL TRANSITION (MXW.PYE1): From over MXW VORTAC via MXW R-184 and PYE R-005 to PYE VORTAC. Thence....

MENDOCINO TRANSITION (ENI.PYE1): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

SACRAMENTO TRANSITION (SAC. PYE1): From over SAC VORTAC via SAC R-257 and PYE R-028 to PYE VORTAC. Thence....

....From over PYE VORTAC via PYE R-144 to HADLY INT, then via OSI R-256 to OSI VORTAC. Expect radar vectors to final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

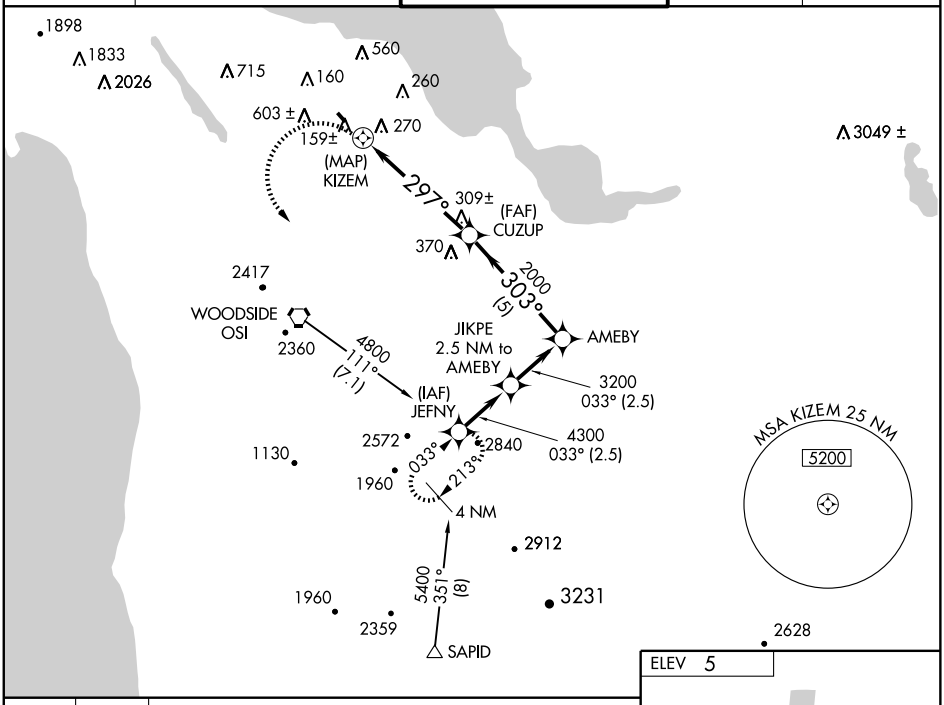
APP CRS	Rwy Idg	2600
297°	TDZE	5
	Apt Elev	5

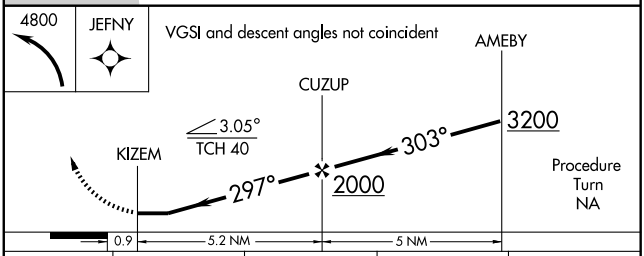
RNAV (GPS) RWY 30
SAN CARLOS (SQL)

Circling NA west of runway 12-30.
When control tower closed, use San Francisco Intl altimeter setting.

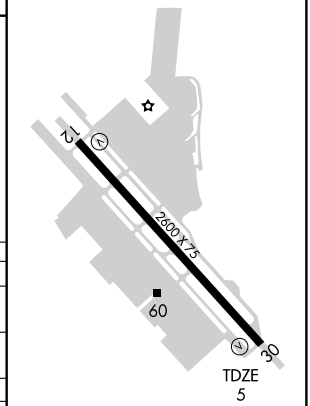
MISSED APPROACH: Climbing left turn to 4800 direct JEFNY WP and hold.

ATIS	NORCAL APP CON	SAN CARLOS TOWER ★	GND CON	UNICOM
125.9	133.95 317.6	119.0 (CTAF) L 326.2	121.6	122.95



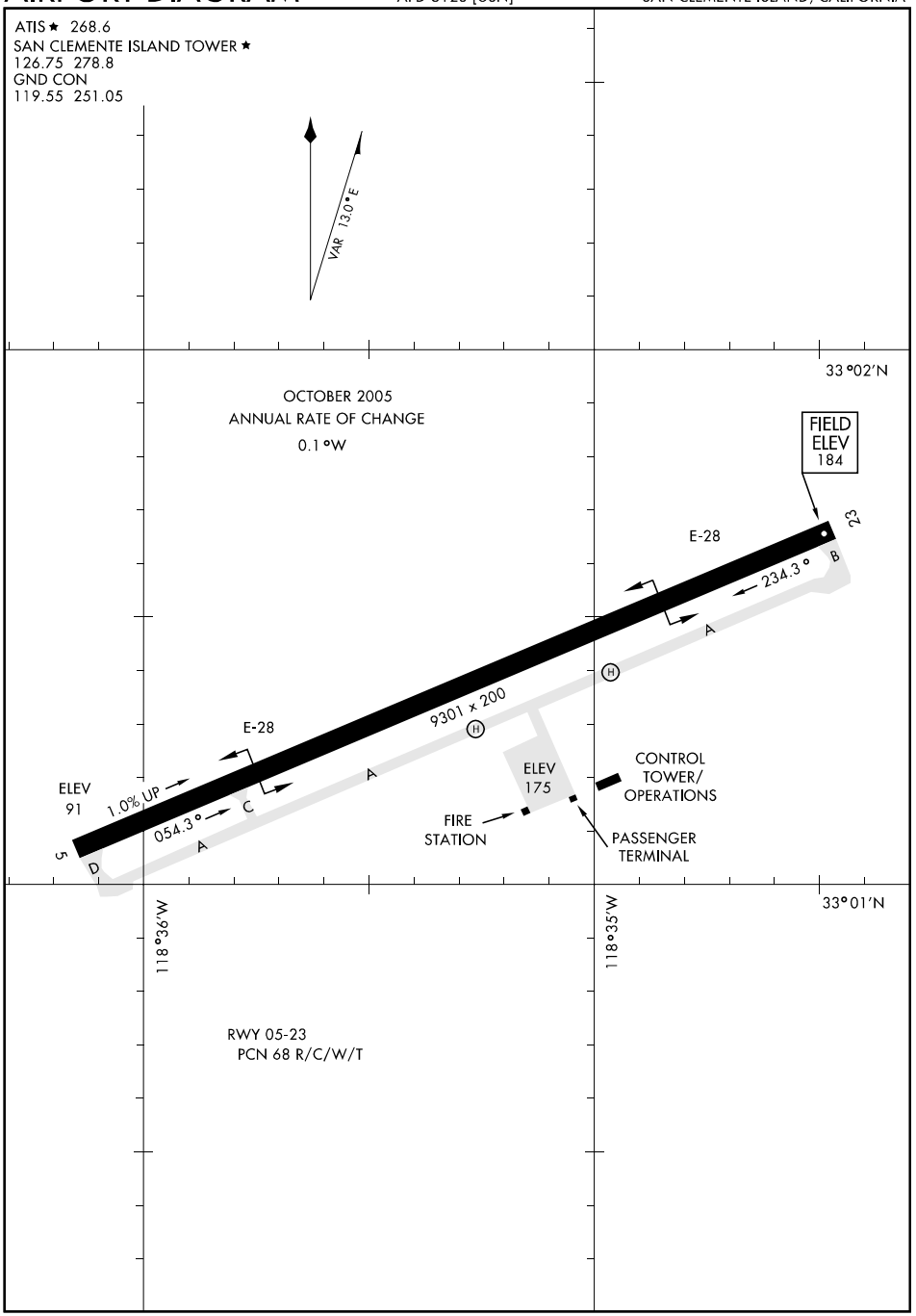


CATEGORY	A	B	C	D
LNAV MDA	640-1	635 (700-1)	NA	
CIRCLING	640-1	635 (700-1)	NA	
SAN FRANCISCO INTL ALTIMETER SETTING MINIMUMS				
LNAV MDA	660-1	655 (700-1)	NA	
CIRCLING	660-1	655 (700-1)	NA	



REIL Rwy 12
REIL Rwy 30 L
MIRL Rwy 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

SAN CLEMENTE ISLAND, CALIFORNIA

HI-TACAN RWY 23

SAN CLEMENTE ISLAND NALF
(FREDERICK SHERMAN FLD) (KNUC)

TACAN NUC Chan 123	APCH CRS 233°	Rwy Idg 9301 TDZE 184 Arpt Elev 184

JAL-5126 [USN]

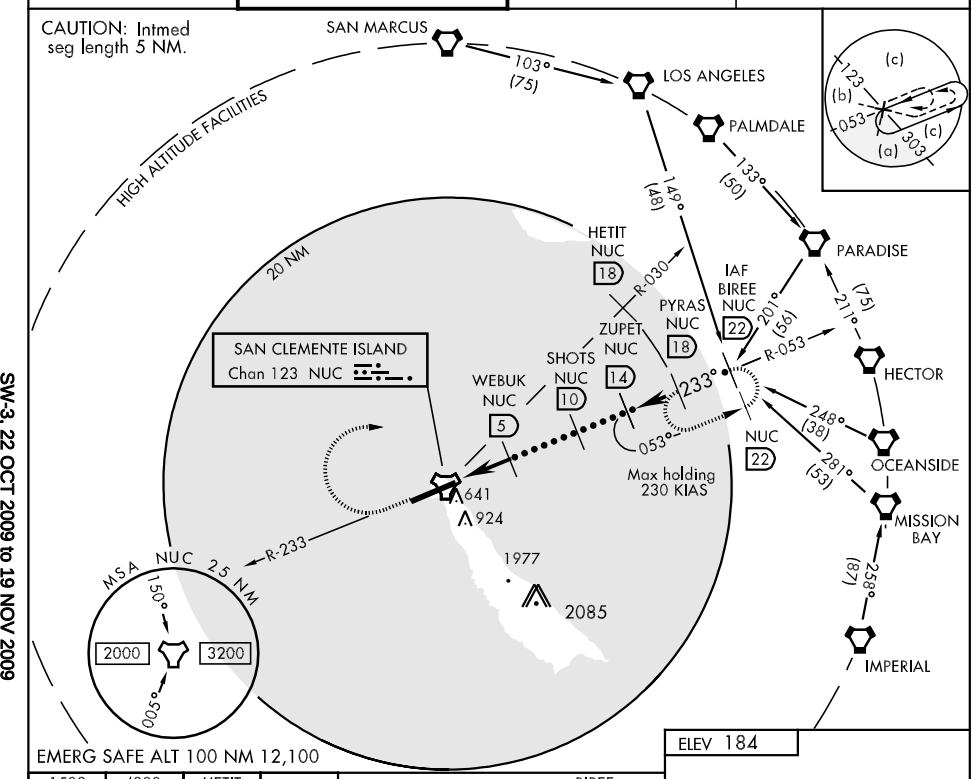
▼ *Circling not authorized S of Rwy 5-23.

CAUTION: Procedure in uncontrolled airspace.

MISSED APPROACH: Climb to 1500 via NUC TACAN R-233 then climbing right turn to 4000 via NUC R-030 to HETIT. Then arc NE of the NUC TACAN via the 18 DME arc to PYRAS and hold.

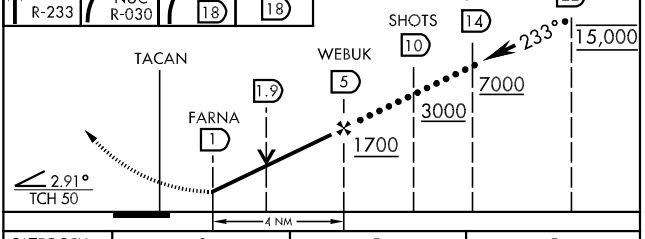
ATIS ★	SAN CLEMENTE ISLAND TOWER ★	GND CON	ASR/PAR
268.6	126.75 278.8	C 119.55 251.05	

CAUTION: Intmd seg length 5 NM.

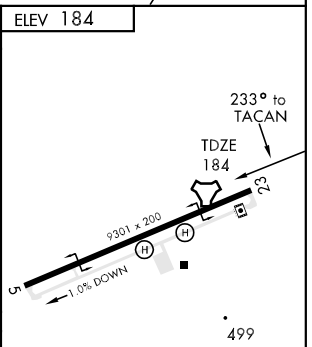


EMERG SAFE ALT 100 NM 12,100

1500 NUC R-233	4000 NUC R-030	HETIT Arc 18	PYRAS R-053 18	BIREE R-053 22



ELEV 184



CATEGORY	C	D	E
S-23	760-1½ 576 (600-1½)	760-1¾ 576 (600-1¾)	760-2 576 (600-2)
CIRCLING *	760-1½ 576 (600-1½)	760-2 576 (600-2)	
S-PAR 23	434-1	250 (300-1)	GS 3.0°

HIRL Rwy 5-23 C
REIL Rwy 5-23 C

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 23

(FEDERICK SHERMAN FLD)
SAN CLEMENTE ISLAND NALF (KNUC)

APCH CRS	Rwy Idg	TDZE	Arpt Elev
233°	9301	184	184

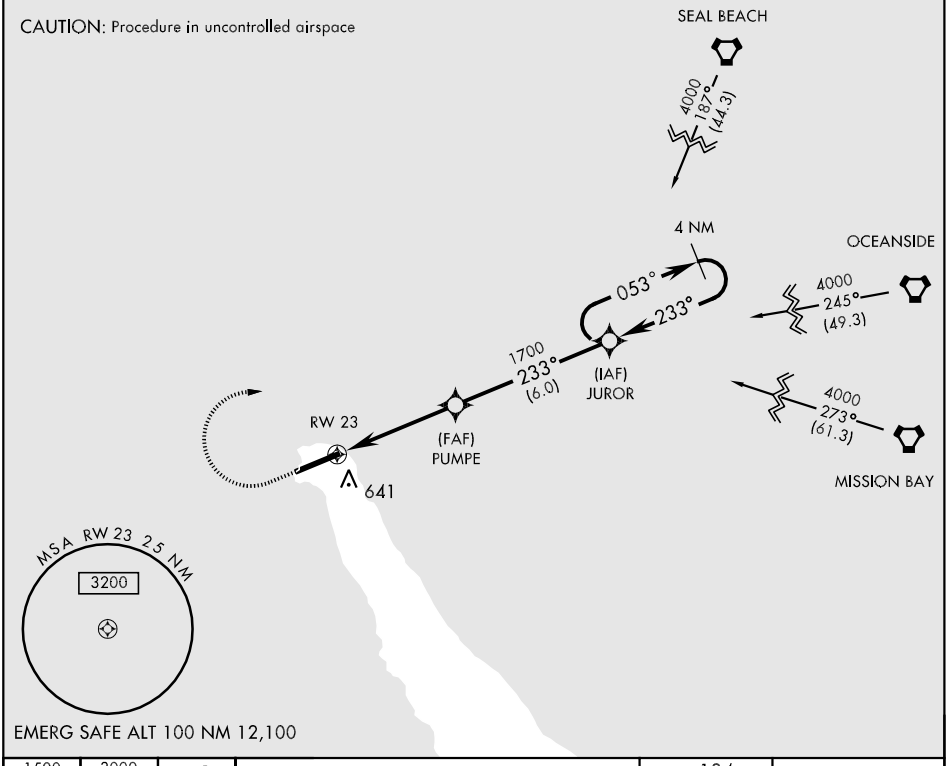
AL-5126 [USN]

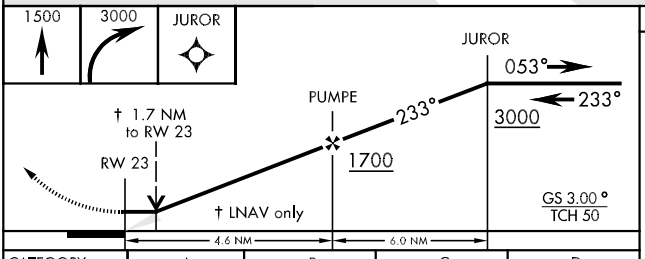
* Circling not authorized S of Rwy 5 - 23.
DME/DME RNP-0.3 NA
Baro VNAV NA below -15°C (4°F) or above 41°C (106°F)

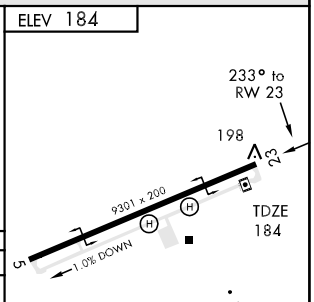
MISSED APPROACH: Climb to 1500, then climbing right turn to 3000 direct JUROR WP and hold.

ATIS ★	SAN CLEMENTE ISLAND TOWER ★	GND CON	ASR/PAR
268.6	126.75 278.8	119.55 251.05	

CAUTION: Procedure in uncontrolled airspace







CATEGORY	A	B	C	D
LNAV/VNAV DA	740-2 556 (600-2)			
LNAV MDA	760-1 576 (600-1)		760-1½ 576 (600-1½)	760-1¾ 576 (600-1¾)
CIRCLING *	760-2 576 (600-2)			
S-PAR 23	434-1 250 (300-1) GS 3.0°			

HIRL Rwy 5-23 L
REIL Rwy 5-23 L

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 23

SAN CLEMENTE ISLAND NALF
(FREDERICK SHERMAN FLD) (KNUC)

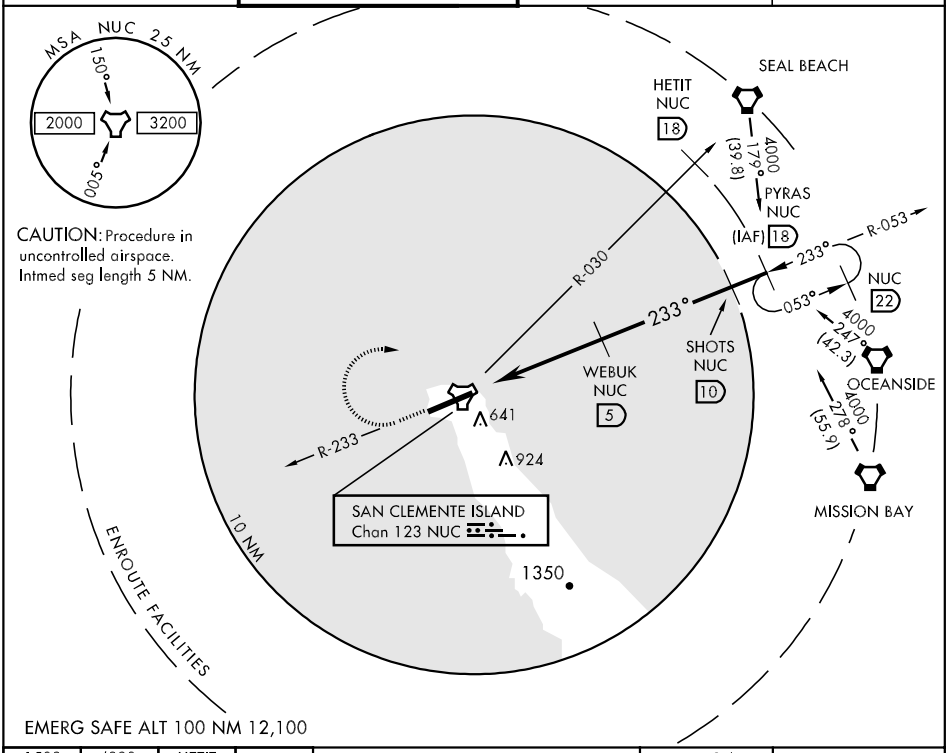
TACAN	APCH CRS	Rwy Idg	9301
NUC Chan 123	233°	TDZE	184
		Arpt Elev	184

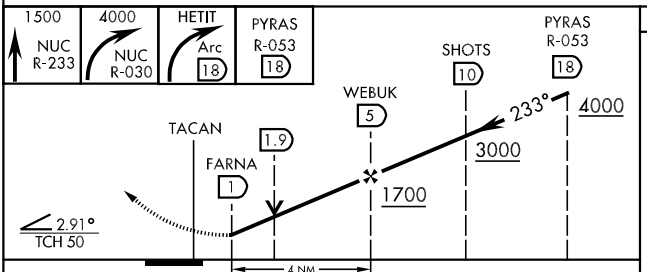
AL-5126 [USN]

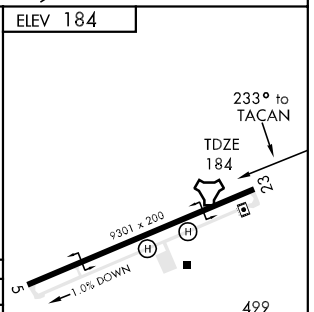
* Circling not authorized S of Rwy 5-23.

MISSED APPROACH: Climb to 1500 via NUC TACAN R-233 then climbing right turn to 4000 via NUC R-030 to HETIT. Then arc NE of NUC TACAN via the 18 DME arc to PYRAS and hold.

ATIS *	SAN CLEMENTE ISLAND TOWER *	GND CON	ASR/PAR
268.6	126.75 278.8	L 119.55 251.05	







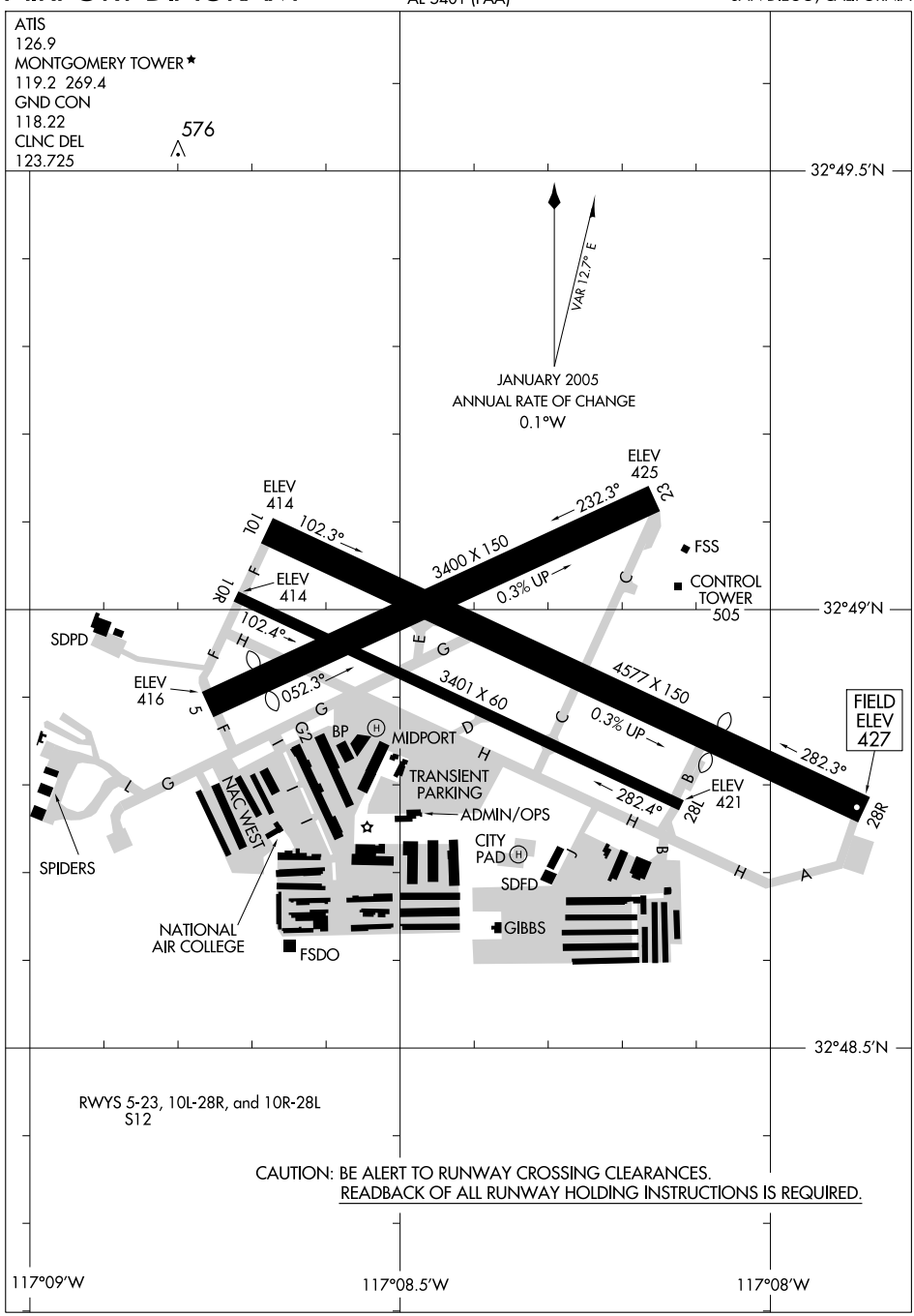
CATEGORY	A	B	C	D
S-23	760-1 576 (600-1)		760-1½ 576 (600-1½)	760-1¾ 576 (600-1¾)
CIRCLING *	760-1 576 (600-1)		760-1½ 576 (600-1½)	760-2 576 (600-2)
S-PAR 23	434-1 250 (300-1) GS 3.0°			

HIRL Rwy 5-23 L
REIL Rwy 5-23 L

AIRPORT DIAGRAM

AL-5401 (FAA)

SAN DIEGO/MONTGOMERY FIELD (MYF)
SAN DIEGO, CALIFORNIA



RWYS 5-23, 10L-28R, and 10R-28L
S12

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN DIEGO, CALIFORNIA

AL-5401 (FAA)

LOC/DME I-MYF	APP CRS	Rwy Idg	3401
111.7	281°	TDZE	423
Chan 54		Apt Elev	427

ILS or LOC/DME RWY 28R

SAN DIEGO/ MONTGOMERY FIELD (MYF)

MALSR

MISSED APPROACH: Climb to 1100 then climbing left turn to 3000 via heading 270° and MZB R-326 to CARIF INT.

ATIS	SOCAL APP CON	MONTGOMERY TOWER *	GND CON	CLNC DEL	SAN DIEGO RADIO
126.9	124.35 279.625	119.2 (CTAF) L 269.4	118.22	123.725	122.4

115.3 OCN Chan 100

114.0 JLI Chan 87

R-145

R-246

CARIF

MZB 16.3

MSA MZB 25 NM

4400

130°

220°

2100

5400

340°

2140

2974

3103

1608

2696

3226

R-326

LOCALIZER 111.7 I-MYF Chan 54

10 NM

DME REQUIRED

Miramar MCAS/ Mitscher Field

3675

114.0 JLI Chan 87

R-196

4187

R-187

1049

577±

PALOS I-MYF 3.4

473

546

1612

549±

979

(IAF) BAKEL INT MZB 19.3

OGOTE INT MZB 23.5

BARET MZB 27.7

5800 256° (4.2)

1373

R-076

2500

281° (4.3)

3600

281° (3.3)

4100 196° (4.21)

6100 256° (4.3)

2801

3836

MISSION BAY 117.8 MZB Chan 125

HUROT I-MYF 7

NESTY I-MYF 11.2

2791±

(IF)

101°

2059

MIBBY INT I-MYF 14.5

JLI 29.6

3760

3339

ELEV 427

522

480

465

472

505

TDZE 423

10L

28L

28R

10R

3400 X 150

0.3% UP

4577 X 150

3401 X 60

0.3% UP

1100

3000

270°

MZB R-326 117.8

CARIF

Procedure Turn NA

*LOC only

I-MYF 0.7

I-MYF 1.8

PALOS I-MYF 3.4

HUROT I-MYF 7

2500

NESTY I-MYF 11.2

MIBBY INT I-MYF 14.5

281° 3600

4100

2500

1320*

GS 3.00° TCH 41

1.1 NM | 1.6 NM | 3.6 NM | 4.3 NM | 3.3 NM

281° 6.3 NM from FAF

CATEGORY	A	B	C	D
S-ILS 28R	623-½ 200 (200-½)		NA	
S-LOC 28R	800-½ 377 (400-½)		NA	
CIRCLING	880-1 453 (500-1)		NA	

REIL Rwy 28L

MIRL Rwy 10L-28R

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	3401
CH 45710	281°	TDZE	423
W28A		Apt Elev	427

RNAV (GPS) RWY 28R

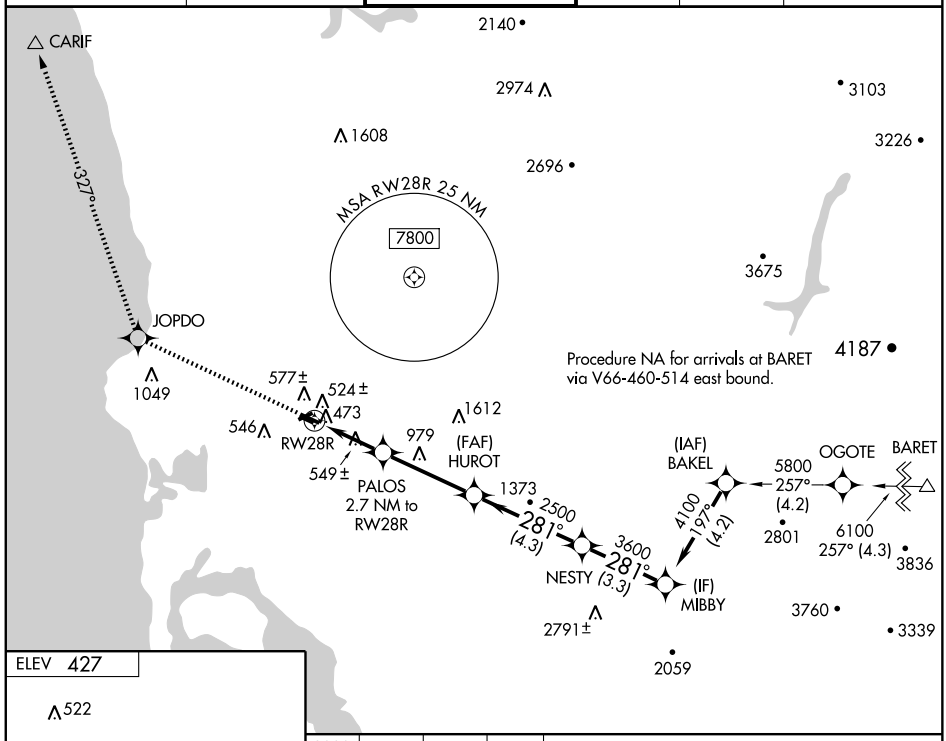
SAN DIEGO/ MONTGOMERY FIELD (MYF)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

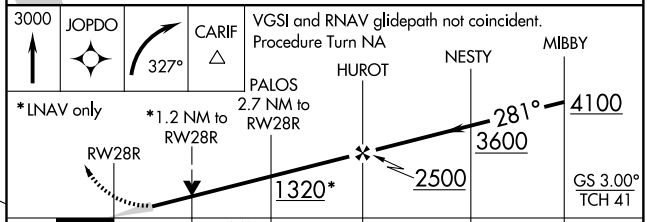
MALSR

MISSED APPROACH: Climb to 3000 direct JOPDO and right turn via 327° track to CARIF.

ATIS	SOCAL APP CON	MONTGOMERY TOWER*	GND CON	CLNC DEL	SAN DIEGO RADIO
126.9	124.35 279.625	119.2 (CTAF) L 269.4	118.22	123.725	122.4

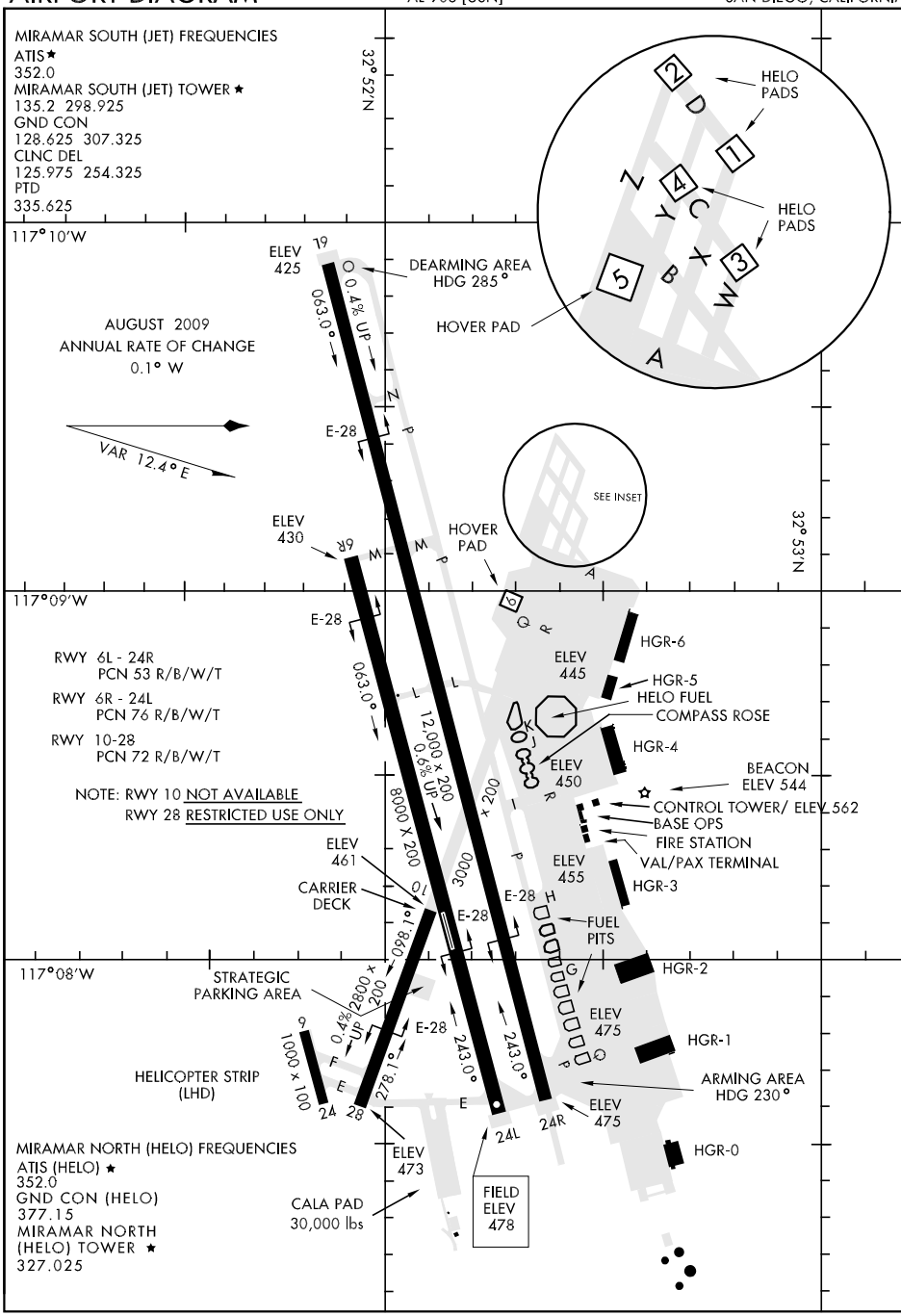


REIL Rwy 28L
MIRL Rwy 10L-28R



CATEGORY	A	B	C	D
LPV DA	623-½ 200 (200-½)		NA	
LNAV/VNAV DA	750-¾ 327 (400-¾)		NA	
LNAV MDA	840-½ 417 (500-½)		NA	
CIRCLING	880-1 453 (500-1)		NA	

SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

ARLO-TWO DEPARTURE (ARLO2 • REDIN)

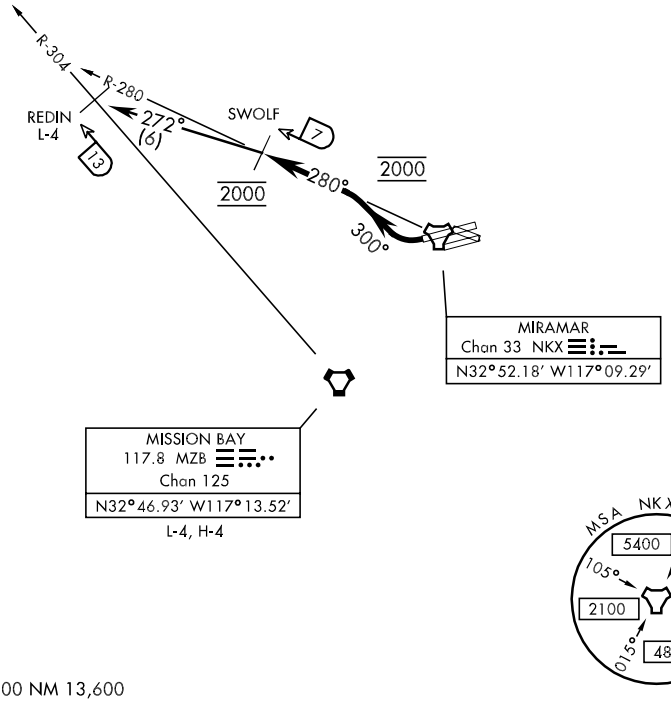
ATIS ★ 352.0
CLNC DEL
125.975 254.325
GND CON
128.625 307.325
MIRAMAR TOWER ★
135.2 298.925
SOCAL DEP CON
119.6 363.1 W

SL-903 [USN]

Rwy	Knots	60	120	180	240
24L/R	V/V(fpm)	780	1560	2340	3120

ATC Climb Rate to 2000

RESTRICTED TO CAT A & B ACFT ONLY



EMERG SAFE ALT 100 NM 13,600

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 24L/R: Climbing right turn to 2000 via heading 300° to intercept and join NKX R-280 to SWOLF. Complete turn within NKX 2 DME. Join NKX R-280 at 2000 mand. Cross SWOLF at 2000 mand.

REDIN TRANSITION (ARLO2• REDIN): Turn left heading 272° to intercept MZB R-304 at REDIN.

HI-TACAN RWY 24R

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
NKX Chan 33	244°	12,000	475	478

JAL-903 [USN] MIRAMAR MCAS (MITSCHER FLD) (KNKX)

▼ * When ALS inop, increase vis CAT C to 1¾ miles, CAT D to 2 miles, CAT E to 2¼ miles.
** Circling not authorized to Rwy 10-28. CAT E circling not authorized S of Rwy 6R-24L.

ALSF-1

† MISSED APPROACH: Climb to 1500, then climbing right turn to 6000 via NKX R-360 to HUKVO. Cross R-320 at 3000 Mand., cross HUKVO at 6000 mandatory. Arc NE of NKX TACAN climbing to 7000 via 16 mile arc to WARNT and hold.

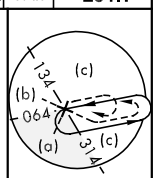
ATIS ★	SOCAL APP CON	MIRAMAR TOWER ★	GND CON	CLNC DEL	ASR/PAR	LA CENTER
352.0	132.2 269.1	135.2 298.925	128.625 307.325	125.975 254.325		291.7

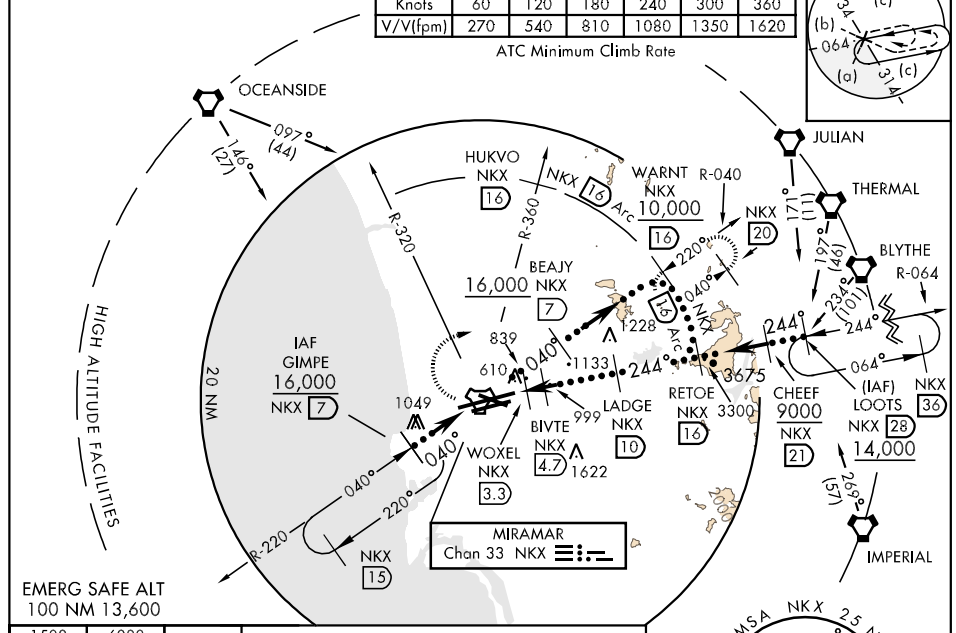
*** When ALS inop, increase vis CAT CDE to ½ mile.

† CAUTION: Missed Approach Minimum Climb Rate to 6000

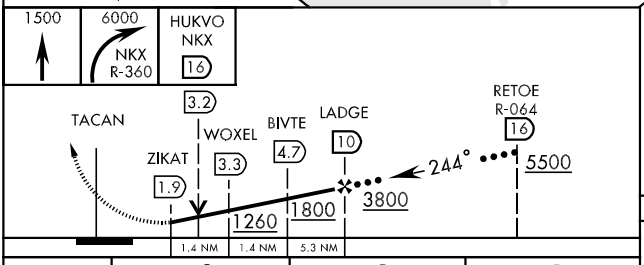
Knots	60	120	180	240	300	360
V/V(fpm)	270	540	810	1080	1350	1620

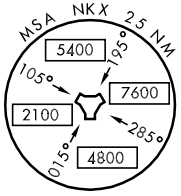
ATC Minimum Climb Rate



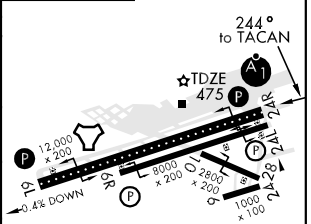


EMERG SAFE ALT
100 NM 13,600





ELEV 478



HIRL Rwy 6L-24R, 6R-24L and 10-28

CATEGORY	C 4.1 NM	D	E
S-24R *	1100-1¼ 625 (700-1¼)	1100-1½ 625 (700-1½)	1100-1¾ 625 (700-1¾)
SIDE-STEP 24L	1100-1¾ 622 (700-1¾)	1100-2 622 (700-2)	1100-2¼ 622 (700-2¼)
CIRCLING **	1100-1¾ 622 (700-1¾)	1160-2¼ 682 (700-2¼)	1360-3 882 (900-3)
S-PAR 24R ***	575-¼	100 (100-¼)	GS 3.0°

SW-3, 22 OCT 2009 to 19 NOV 2009

ILS OR LOC/DME RWY 24R

LOC I-NKX	APCH CRS	Rwy ldg / TDZE / Arpt Elev	AL-903 [USN]	MIRAMAR MCAS (MITSCHER FLD) (KNKX)
111.15	240°	12,000 / 475 / 478		

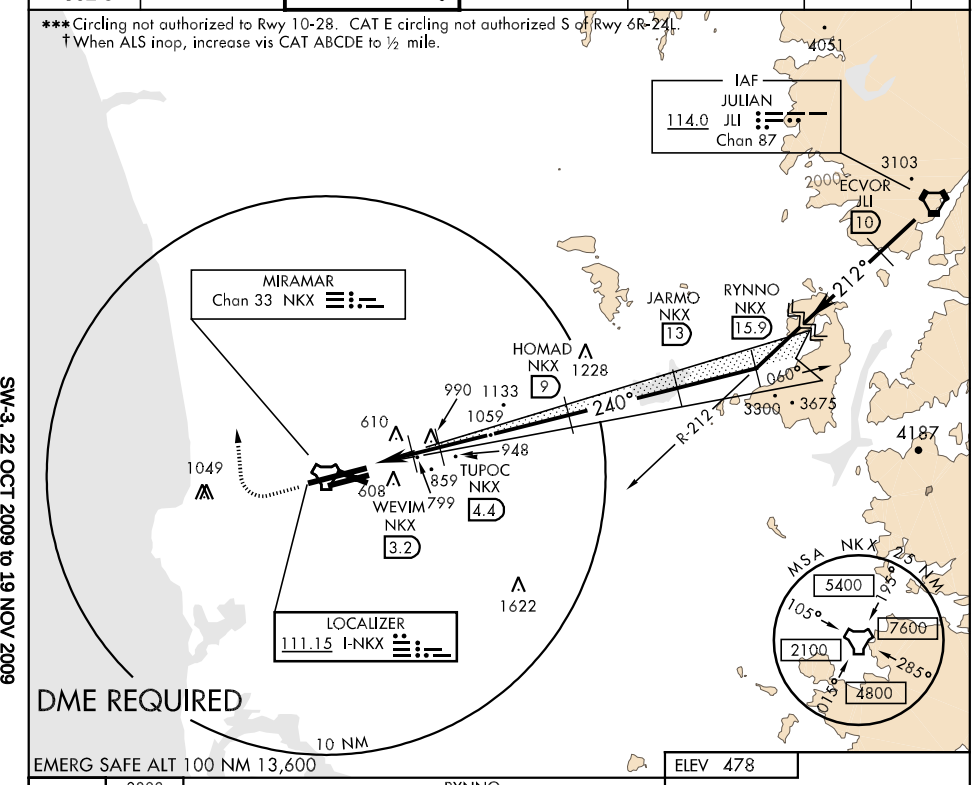
▼ * When ALS inop, increase vis CAT ABCDE to ¾ mile.
** When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1 ½ miles, CAT D to 1 ¾ miles, CAT E to 2 miles.

ALSF-1

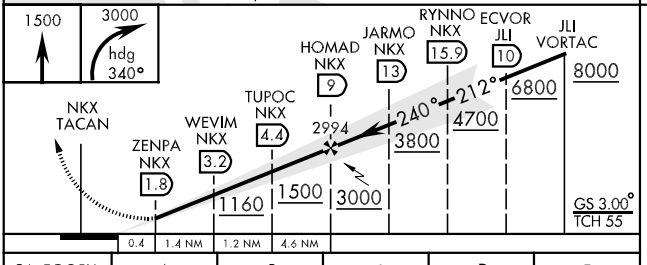
MISSED APPROACH: Climb to 1500, then climbing right turn to 3000 via heading 340°. Expect radar vectors.

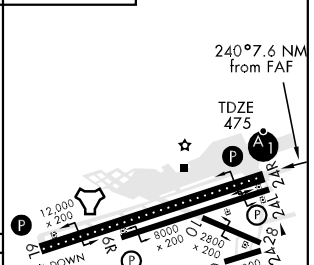
ATIS ★	SOCAL APP CON	MIRAMAR TOWER ★	GND CON	CLNC DEL	LA CENTER	ASR/PAR
352.0	132.2 269.1	135.2 298.925 C	128.625 307.325	125.975 254.325	291.7	

***Circling not authorized to Rwy 10-28. CAT E circling not authorized S of Rwy 6R-24L.
†When ALS inop, increase vis CAT ABCDE to ½ mile.



ELEV 478





CATEGORY	A	B	C	D	E
S-ILS 24R *	675 - ½		200	(200-½)	
S-LOC/DME 24R **	1060- ½ 585 (600-½)		1060-1 585 (600-1)	1060-1¼ 585 (600-1¼)	1060-1½ 585 (600-1½)
CIRCLING ***	1060-1 582 (600-1)		1060-1½ 582 (600-1½)	1160-2¼ 682 (700-2¼)	1360-3 882 (900-3)
S-PAR 24R †	575 - ¼		100 (100 - ¼)	GS 3.0°	

HIRL Rwy 6L-24R, C
6R-24L and 10-28

SW-3, 22 OCT 2009 to 19 NOV 2009

JULIAN-FIVE DEPARTURE (JLI 5 • JLI)

SAN DIEGO, CALIFORNIA

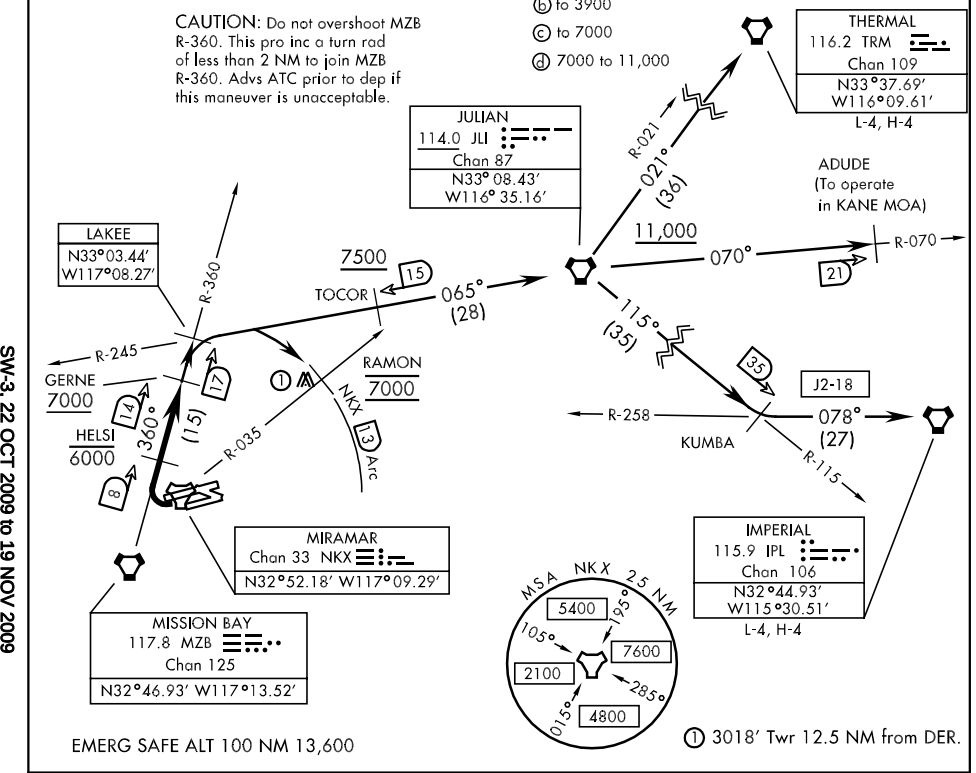
ATIS ★ 352.0
CLNC DEL
125.975 254.325
GND CON
128.625 307.325
MIRAMAR TOWER ★
135.2 298.925
SOCAL DEP CON
132.2 269.1 E

SHL-903 [USN]

Rwy	Knots	60	120	180	240	300	360
* 24L/R ⓐ	V/V(fpm)	280	560	840	1120	1400	1680
** 24L/R ⓑ	V/V(fpm)	305	610	915	1220	1525	1830
† 24L/R ⓒ	V/V(fpm)	735	1470	2205	2940	3675	4410
† 24L/R ⓓ	V/V(fpm)	234	468	702	936	1170	1404

* Military Minimum ** Civil Minimum † ATC Minimum
ⓐ to 3600
ⓑ to 3900
ⓒ to 7000
ⓓ 7000 to 11,000

CAUTION: Do not overshoot MZB R-360. This pro inc a turn rad of less than 2 NM to join MZB R-360. Advs ATC prior to dep if this maneuver is unacceptable.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 24L/R: Turn right to intercept and proceed via MZB R-360 to LAKEE int. Cross HELSI at or below 6000. Cross GERNE at or above 7000. Thence...

ADUDE TRANSITION (JLI5•ADUDE): Via JLI R-245 to JLI VORTAC. Then via JLI R-070 to ADUDE. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000. (To operate in KANE MOA.)

IMPERIAL TRANSITION (JLI5•IPL): Via JLI R-245 to JLI VORTAC. Then via JLI R-115 to KUMBA int, then via IPL R-258 to IPL VORTAC. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000.

(Continued on next page)

SW-3, 22 OCT 2009 to 19 NOV 2009

SHL-903 [USN]

DEPARTURE ROUTE DESCRIPTION
(Continued)

JULIAN TRANSITION (JLI5•JLI): Via JLI R-245 to JLI VORTAC. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000.

LAKEE TRANSITION (JLI5 • LAKEE): Turn right to intercept and proceed via MZB R-360 to LAKEE int. Cross HELSI at or below 6000. Cross GERNE at or above 7000.

RAMON TRANSITION (JLI 5 • RAMON): Via JLI R-245 to 13 DME. Then arc NE of NKX TACAN via the 13 DME arc to RAMON. Cross RAMON at 7000 mandatory.

THERMAL TRANSITION (JLI 5 • TRM): Via JLI R-245 to JLI VORTAC. Then via JLI R-021 to TRM VORTAC. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000.

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 24L

APCH CRS	Rwy ldg	8000
240°	TDZE	478
	Arpt Elev	478

AL-903 [USN] MIRAMAR MCAS (MITSCHER FLD) (KNKX)

* Circling not authorized to Rwy 10-28. CAT E circling not authorized S of Rwy 6R-24L.

ALSF-1

†MISSED APPROACH: Climb to 1500 direct HULSI WP then climbing right turn to 6000 via 330° track to OCVIL WP. Cross OCVIL WP at 6000 mand, then climbing right turn to 7000 via 085° track to WARNT and hold.

ATIS ★	SOCAL APP CON	MIRAMAR TOWER ★	GND CON	CLNC DEL	LA CENTER	ASR/PAR
352.0	132.2 269.1	135.2 298.925 (L)	128.625 307.325	125.975 254.325	291.7	

BARO VNAV NA below -16°C (3°F).
GPS or RNP- 0.3 Required DME/DME RNP-0.3 NA.

† CAUTION: Missed Approach Minimum Climb Rate to 6000.

Knots	60	120	180	240	300	360
V/V(fpm)	330	660	990	1320	1650	1980

ATC Minimum Climb Rate

OCEANSIDE 7000 101° (29.4)

OCVIL

(IAF) WARNT 7000

220° 4 NM 040°

Max holding 230 KIAS

162° (9.0) 4400

JULIAN 8000 231° (17.1)

8000 199° (23.8)

POCOB 3200 240° (4.0)

2600 240° (2.0) TEBGE

1133 2600 240° (3.4) RAIDE

859 799 OCABO 1500

1200 240° (1.0) NABSE 939

RW24L HULSI 1049

328° (7.1) 4400

Max holding 230 KIAS 4 NM

088° 268°

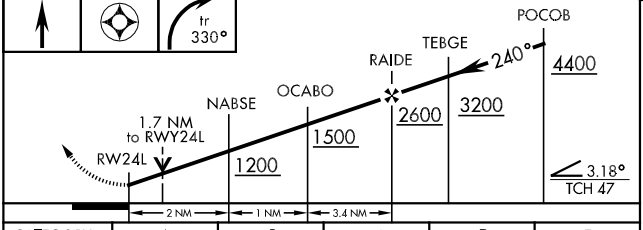
(IAF) JEMAN 6000

MSA RW24L 25 NM 7600

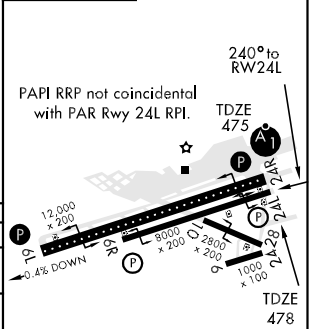
4187 3675 3900 4555 4051 3103

EMERG SAFE ALT 100 NM 13,600 1622

1500 HULSI 6000 tr 330°



ELEV 478



CATEGORY	A	B	C	D	E
LNAV MDA	1060-1 582 (600-1)		1060-1½ 582 (600-1½)	1060-1¾ 582 (600-1¾)	1060-2 582 (600-2)
LNAV/VNAV DA	900-1½ 422 (500-1½)				
CIRCLING *	1060-1 582 (600-1)		1060-1½ 582 (600-1½)	1160-2¼ 682 (700-2¼)	1360-3 882 (900-3)
S-PAR 24L	578-½ 100 (100-½) GS 3.0°				

HIRL Rwy 6L-24R, (L) 6R-24L and 10-28

SW-3, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 24R

APCH CRS	Rwy ldg	12,000
240°	TDZE	475
	Arpt Elev	478

AL-903 [USN] MIRAMAR MCAS (MITSCHER FLD) (KNKX)

* When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1½ miles, CAT D to 1¾ miles, CAT E to 2 miles.

ALSF-1

† MISSED APPROACH: Climb to 1500 direct PEGNE WP then climbing right turn to 6000 via 330° track to OCVIL WP. Cross OCVIL at 6000 mand, then climbing right turn to 7000 via 085° track to WARNT WP and hold.

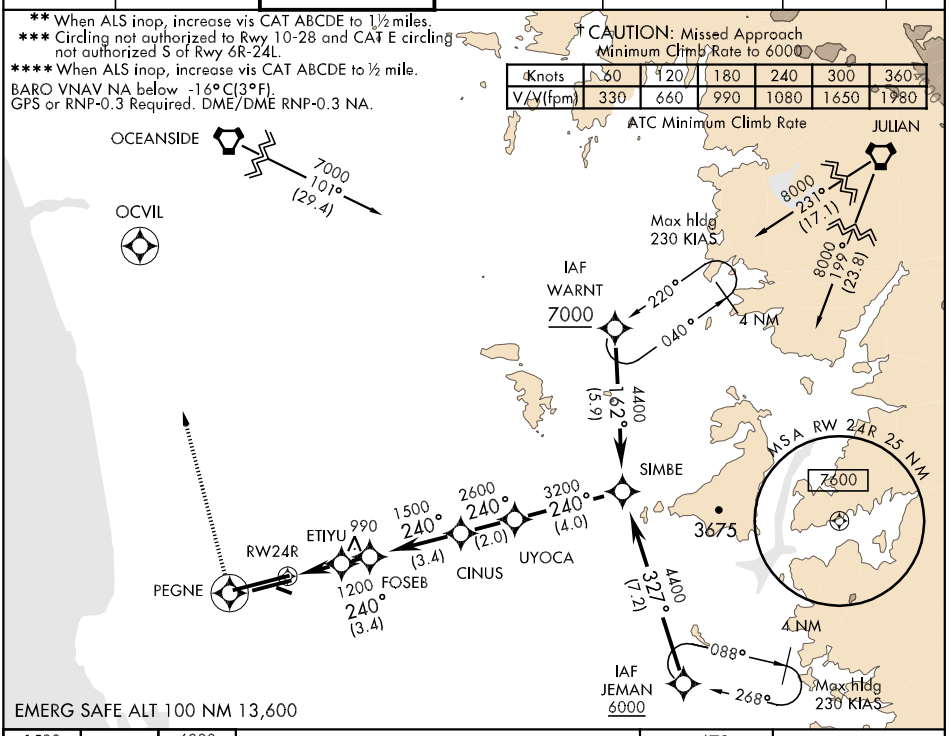
ATIS ★	SOCAL APP CON	MIRAMAR TOWER ★	GND CON	CLNC DEL	LA CENTER	ASR/PAR
352.0	132.2 269.1	135.2 298.925 (L)	128.625 307.325	125.975 254.325	291.7	

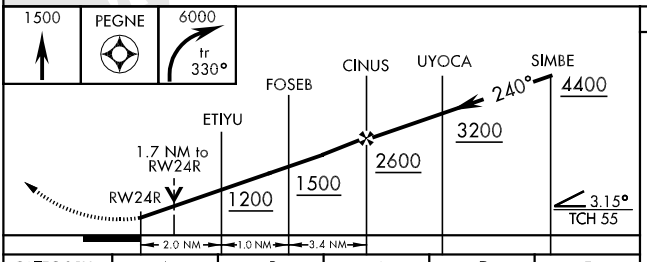
** When ALS inop, increase vis CAT ABCDE to 1½ miles.
*** Circling not authorized to Rwy 10-28 and CAT E circling not authorized S of Rwy 6R-24L.
**** When ALS inop, increase vis CAT ABCDE to ½ mile.
BARO VNAV NA below -16°C(3°F).
GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA.

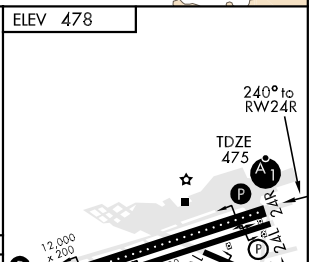
† CAUTION: Missed Approach Minimum Climb Rate to 6000

Knots	60	120	180	240	300	360
V/V(fpm)	330	660	990	1080	1650	1980

ATC Minimum Climb Rate







CATEGORY	A	B	C	D	E
LNAV MDA *	1060-½ 585 (600-½)		1060-1 585 (600-1)	1060-1¼ 585 (600-1¼)	1060-1½ 585 (600-1½)
LNAV/VNAV DA**	900 - 1 425 (500-1)				
CIRCLING***	1060-1 582 (600-1)		1060-1½ 582 (600-1½)	1160-2¼ 682 (600-2¼)	1360-3 882 (900-3)
S-PAR 24R ****	575 -¼ 100 (100-¼) GS 3.0°				

HIRL Rwy 6L-24R, (L)
6R-24L and 10-28

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN PEDRO-TWO DEPARTURE (SNRO 2 • TINNY)

SAN DIEGO, CALIFORNIA

ATIS ★ 352.0
CLNC DEL
125.975 254.325
GND CON
128.625 307.325
MIRAMAR TOWER ★
135.2 298.925
SOCAL DEP CON
119.6 363.1 W

SHL-903 [USN]

Rwy	Knots	60	120	180	240	300	360
24L/R	V/V(fpm)	780	1560	2340	3120	3900	4680

ATC Minimum Climb Rate to 2000

SHAFTER
115.4 EHF
Chan 101
N35° 29.07′
W119° 05.84′
L-3,L-7,H-4

SAN MARCUS
114.9 RZS
Chan 96
N34° 30.57′
W119° 46.26′
L-3,L4,L7,H-4

289° (43)

SHAFTER TRANSITION
325° (123)

SAN MARCUS TRANSITION
298° (51)

VTU R-118

70

TINNY

VENTURA
108.2 VTU
Chan 19
N34° 06.90′
W119° 02.97′

MIRAMAR
Chan 33 NKX
N32° 52.18′ W117° 09.29′

300° (51)

R-280

R-145

SWOLF
2000

7

253°

300°

R-300

MSA NKX 2.5 NM
5400
195°
105°
7600
2100
285°
015°
4800

MISSION BAY
117.8 MZB
Chan 125
N32° 46.93′ W117° 13.52′

EMERG SAFE ALT 100 NM 13,600

NOTE: Chart not to scale

SAN PEDRO-TWO DEPARTURE (SNRO 2 • TINNY)

SAN DIEGO, CALIFORNIA

SHL-903 [USN]

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 24L/R: Climbing right turn to 2000 via heading 300° to intercept and join NKX R-280 to SWOLF. Complete turn within NKX 2 DME. Join NKX R-280 at 2000 mand. Cross SWOLF at 2000 mand. Then turn left heading 253° to intercept and proceed via MZB R-300 to TINNY INT. Thence...

SAN MARCUS TRANSITION (SNRO 2 • RZS): Via VTU R-118 to VTU VOR/DME, then via RZS R-109 to RZS VORTAC.

SHAFTER TRANSITION (SRNO 2• EHF): Via EHF R-145 to EHF VORTAC.

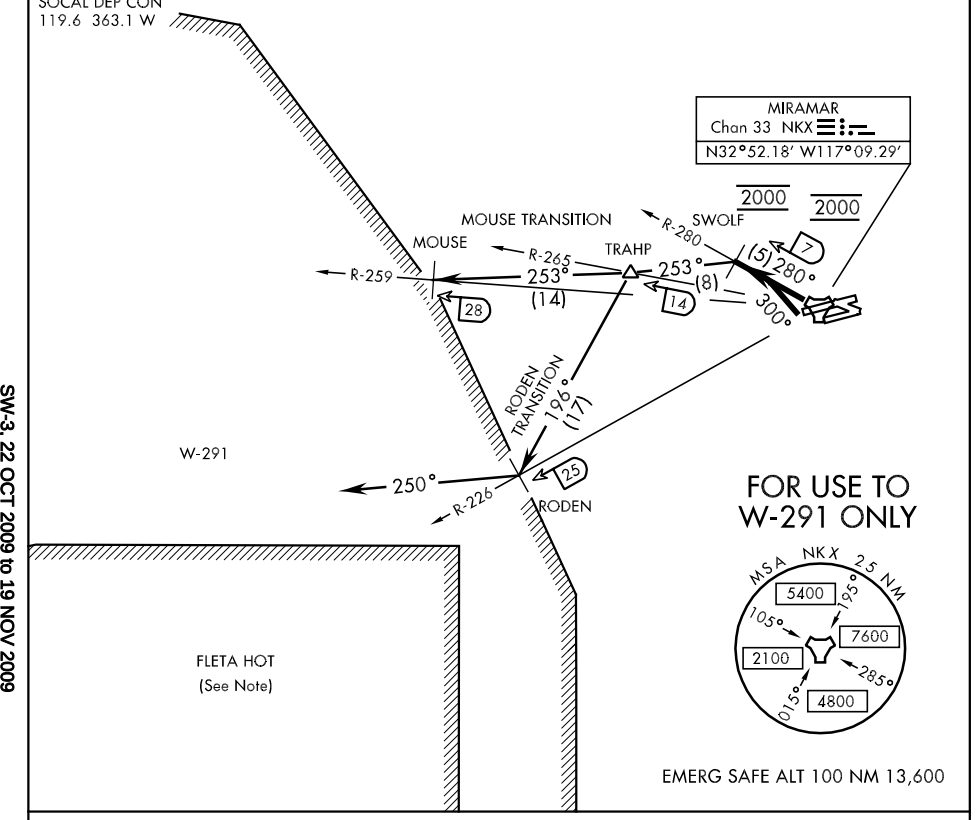
SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS ★ 352.0
CLNC DEL
125.975 254.325
GND CON
128.625 307.325
MIRAMAR TOWER ★
135.2 298.925
SOCAL DEP CON
119.6 363.1 W

SHL-903 [USN]

Rwy	Knots	60	120	180	240	300	360
24L/R	V/V(fpm)	780	1560	2340	3120	3900	4680

ATC Minimum Climb Rate to 2000



SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 24L/R: Climbing right turn to 2000 via heading 300° to intercept and proceed via NKX R-280 to SWOLF. Complete turn within NKX 2 DME. Join NKX R-280 at 2000 mand. Cross SWOLF at 2000 mand. Thence...

MOUSE TRANSITION (SWOLF 5 • MOUSE): Turn left heading 253° to intercept NKX R-259 at MOUSE. Maintain 2000 for entry into W-291.

(Continued on next page)

SHL-903 [USN]

DEPARTURE ROUTE DESCRIPTION

(Continued)

RODEN TRANSITION (SWOLF 5 • RODEN): Turn left heading 253° to intercept NKX R-265 TRAHP. Then turn left heading 196° to intercept NKX R-226 at RODEN. Maintain 2000 for entry into W-291.

NOTE:

(1) FLETA HOT-ACTIVE FIRING AREA (DANGER, REMAIN CLEAR).

(2) ALL AIRCRAFT SHOULD MAINTAIN LAST ASSIGNED HEADING/RADIAL AND ALTITUDE TO AVOID INBOUND MILITARY OR CIVIL AIRCRAFT AT HIGHER ALTITUDES!

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 24R

TACAN NKX Chan 33	APCH CRS 244°	Rwy ldg 12,000 TDZE 475 Arpt Elev 478	AL-903 [USN]	MIRAMAR MCAS (MITSCHER FLD) (KNKX)

▼ * When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¾ miles, CAT D to 2 miles.
** Circling not authorized to Rwy 10-28.

ALSF-1

† MISSED APPROACH: Climb to 1500 then climbing right turn to 6000 via NKX R-360 to HUKVO. Cross NKX R-320 at 3000 Mand., cross HUKVO at 6000 mand. Arc NE of NKX TACAN climbing to 7000 via 16 mile arc to WARNT and hold.

ATIS ★	SOCAL APP CON	MIRAMAR TOWER ★	GND CON	CLNC DEL	LA CENTER	ASR/ PAR
352.0	132.2 269.1	135.2 298.925 C	128.625 307.325	125.975 254.325	291.7	

*** When ALS inop, increase vis CAT ABCD to ½ mile.

OCEANSIDE

MSA NKX 25 NM
5400
7600
2100
4800
195°
105°
285°
015°

HUKVO NKX 16

7000 101° (29.4) NKX 16 Arc

8000 103° (38.4)

R-360

(IAF) WARNT NKX 16 7000

R-040

220°

040°

NKX 20

3103

8000 231° (17.1)

JULIAN

† CAUTION: Missed Approach Minimum Climb Rate to 6000

Knots	60	120	180	240	300	360
V/V(fpm)	270	540	810	1080	1350	1620

ATC Minimum Climb Rate

10 NM

NKX 16 Arc

(IAF) CHEEF NKX 21 8000

8000 199° (14.1)

R-064

244°

064°

RETOE NKX 16

1228

LADGE NKX 10

R-320

999 1133

839 990

760

244°

3675

3300

4187

NKX 25

1049

859

948

WOXEL NKX 3.3

BIVTE NKX 4.7

MIRAMAR Chan 33 NKX

NKX 16 Arc

8000 199° (23.8)

NKX 20

088°

268°

R-088

(IAF) JEMAN NKX 16 6000

EMERG SAFE ALT 100 NM 13,600

1622

4555

4031

1500

6000 NKX R-360

HUKVO NKX 16

RETOE R-064 16

NKX TACAN

3.2

WOXEL

BIVTE 4.7

LADGE 10

ZIKAT 1.9

3.3

244°

5500

3800

1260

1800

1.4 NM 1.4 NM 5.3 NM

ELEV 478

PAPI RRP not coincidental with PAR Rwy 24L RPI.

244° to TACAN

TDZE 475

12,000 × 200

8000 × 200

2800 × 200

1000 × 100

0.4% DOWN

TDZE 478

CATEGORY	A	B	C	D
S-24R *	1100-½ 625 (700-½)		1100-1¼ 625 (700-1¼)	1100-1½ 625 (700-1½)
SIDE-STEP 24L	1100-1 622 (700-1)		1100-1¾ 622 (700-1¾)	1100-2 622 (700-2)
CIRCLING **	1100-1 622 (700-1)		1100-1¾ 622 (700-1¾)	1160-2¼ 682 (700-2¼)
S-PAR 24R ***	575-¼ 100 (100-¼) GS 3.0°			

HIRL Rwy 6L-24R, C
6R-24L and 10-28

SW-3, 22 OCT 2009 to 19 NOV 2009

VITKO-ONE DEPARTURE (VITKO1 • VITKO)

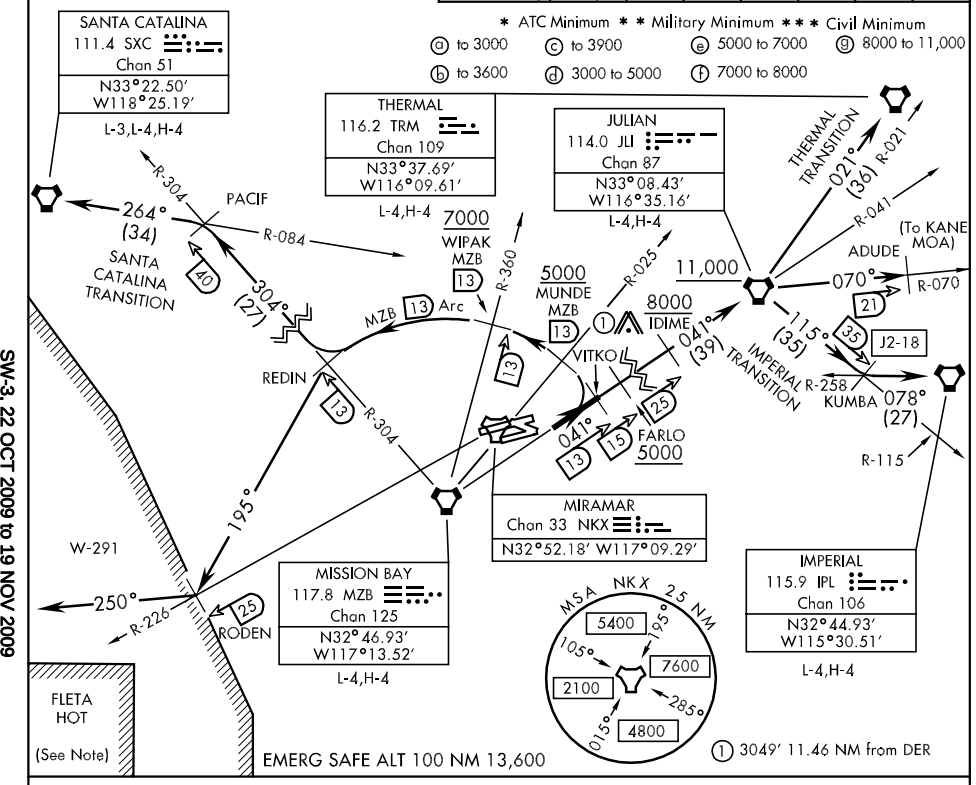
SAN DIEGO, CALIFORNIA

ATIS ★ 352.0
CLNC DEL
125.975 254.325
GND CON
128.625 307.325
MIRAMAR TOWER ★
135.2 298.925
SOCAL DEP CON
132.2 269.1 E

SHL-903 [USN]

Rwy	Knots	60	120	180	240	300	360
* 6L/R(a)	V/V(fpm)	520	1040	1560	2080	2600	3120
** 6L/R(b)	V/V(fpm)	280	560	840	1120	1400	1680
*** 6L/R(c)	V/V(fpm)	300	600	900	1200	1500	1800
* 6L/R(d)	V/V(fpm)	680	1360	2040	2720	3400	4080
* 6L/R(e)	V/V(fpm)	353	706	1059	1412	1765	2118
* 6L/R(f)	V/V(fpm)	300	600	900	1200	1500	1800
* 6L/R(g)	V/V(fpm)	220	440	660	880	1100	1320

* ATC Minimum ** Military Minimum *** Civil Minimum
(a) to 3000 (c) to 3900 (e) 5000 to 7000 (g) 8000 to 11,000
(b) to 3600 (d) 3000 to 5000 (f) 7000 to 8000



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 6L/R: Climb heading 060° to intercept and proceed via MZB R-041 to VITKO. Join MZB R-041 at or above 3000. Thence...

ADUDE TRANSITION (VITKO1 • ADUDE): Via MZB R-041 to JLI VORTAC. Then JLI R-070 to ADUDE. Cross FARLO at or above 5000. Cross IDIME at or above 8000. Cross JLI VORTAC at or above 11,000. (To operate in KANE MOA.)

IMPERIAL TRANSITION(VITKO1 • IPL): Via MZB R-041 to JLI VORTAC. Then via JLI R-115 to KUMBA INT, then via IPL R-258 to IPL R-258 to IPL VORTAC. Cross FARLO at or above 5000. Cross IDIME at or above 8000. Cross JLI VORTAC at or above 11,000.

(Continued on next page)

SW-3, 22 OCT 2009 to 19 NOV 2009

SHL-903 [USN]

DEPARTURE ROUTE DESCRIPTION

(Continued)

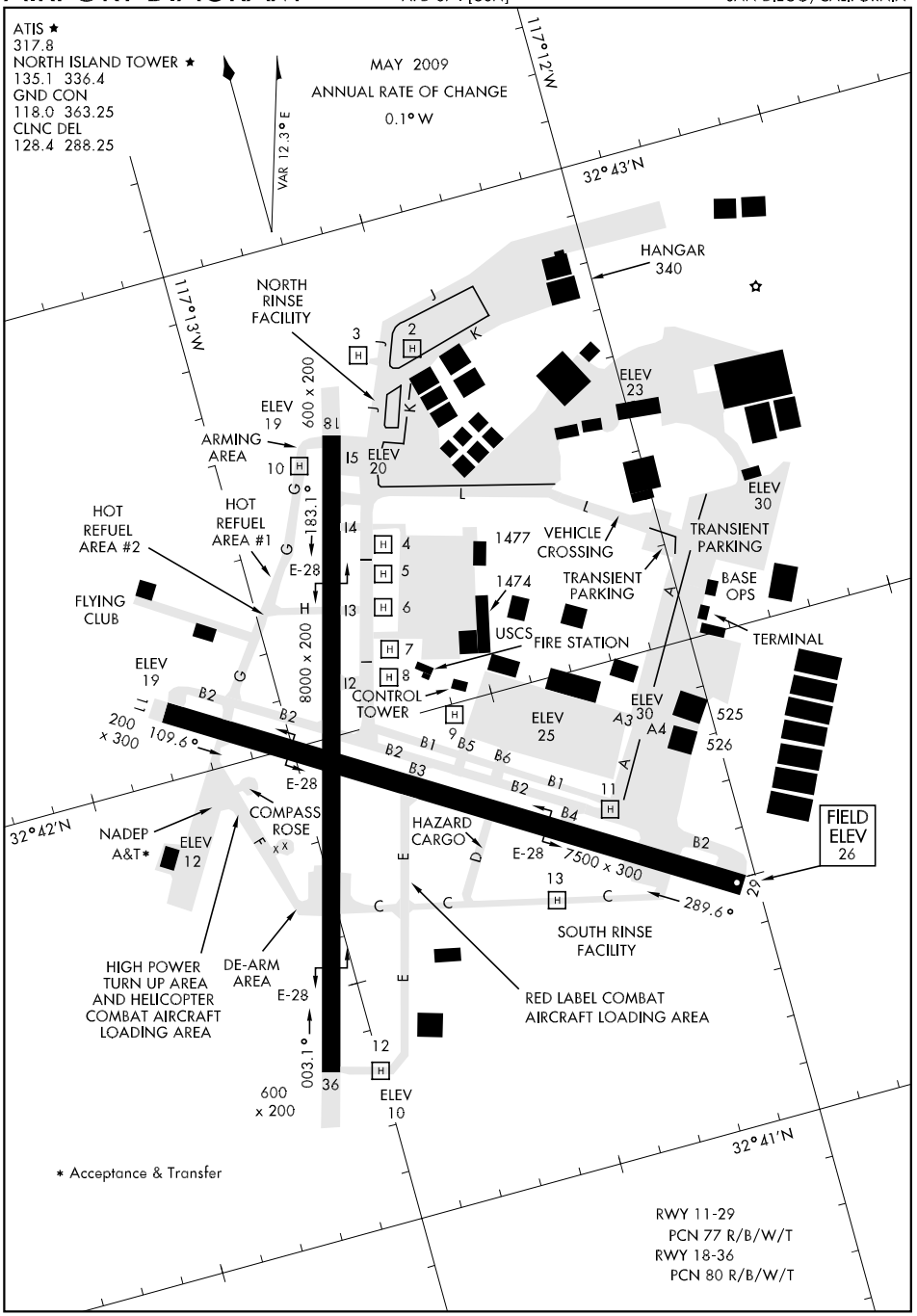
RODEN TRANSITION (VITKO1 • RODEN): Arc N of MZB VORTAC via the 13 mile arc to REDIN. Then turn left heading 195° to intercept NKX R-226 at RODEN. Then turn right heading 250° for entry into W-291. Cross MUNDE at or above 5000. Cross WIPAK at or above 7000.

SANTA CATALINA TRANSITION (VITKO1 • SXC): Arc N of MZB VORTAC via the 13 mile arc to REDIN. Then via MZB R-304 to PACIF INT. Then via SXC R-084 to SXC VORTAC. Cross MUNDE at or above 5000. Cross WIPAK at or above 7000.

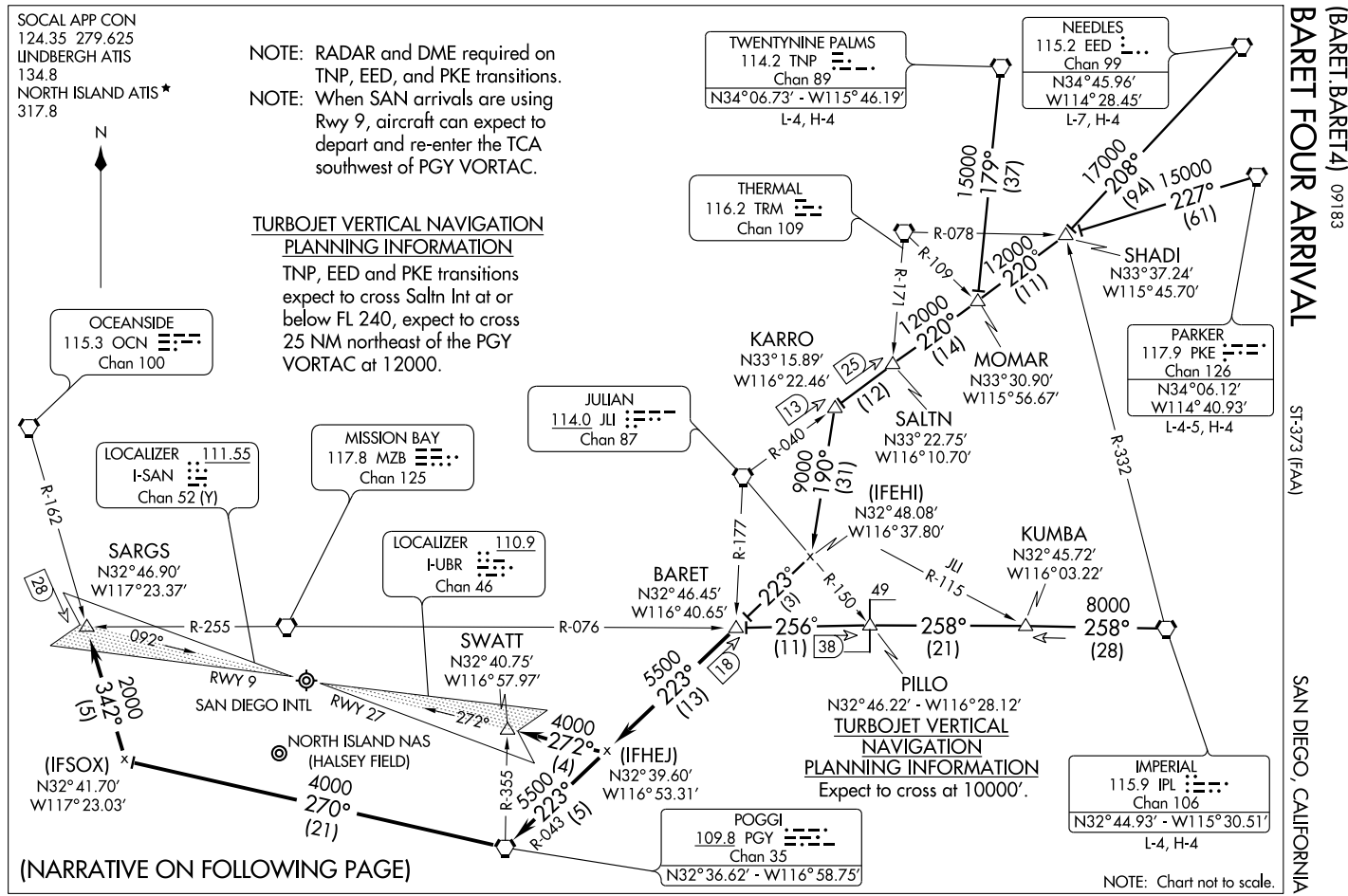
THERMAL TRANSITION (VITKO1 • TRM): Via MZB R-041 to JLI VORTAC. Then via JLI R-021to TRM VORTAC. Cross FARLO at or above 5000. Cross IDIME at or above 8000. Cross JLI VORTAC at or above 11,000.

NOTE:
(1) FLETA HOT-ACTIVE FIRING AREA (DANGER, REMAIN CLEAR).
(2) ALL AIRCRAFT SHOULD MAINTAIN LAST ASSIGNED HEADING/RADIAL AND ALTITUDE TO AVOID INBOUND MILITARY OR CIVIL AIRCRAFT AT HIGHER ALTITUDES!

SW-3, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009


SOCAL APP CON
124.35 279.625
LINDBERGH ATIS
134.8
NORTH ISLAND ATIS ★
317.8
N
NOTE: RADAR and DME required on TNP, EED, and PKE transitions.
NOTE: When SAN arrivals are using Rwy 9, aircraft can expect to depart and re-enter the TCA southwest of PGY VORTAC.
TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
TNP, EED and PKE transitions expect to cross Saltn Int at or below FL 240, expect to cross 25 NM northeast of the PGY VORTAC at 12000.
TWENTYNINE PALMS
114.2 TNP
Chan 89
N34°06.73′ - W115°46.19′
L-4, H-4
NEEDLES
115.2 EED
Chan 99
N34°45.96′
W114°28.45′
L-7, H-4
THERMAL
116.2 TRM
Chan 109
OCEANSIDE
115.3 OCN
Chan 100
JULIAN
114.0 JLI
Chan 87
KARRO
N33°15.89′
W116°22.46′
MOMAR
N33°30.90′
W115°56.67′
SHADI
N33°37.24′
W115°45.70′
PARKER
117.9 PKE
Chan 126
N34°06.12′
W114°40.93′
L-4-5, H-4
SALTN
N33°22.75′
W116°10.70′
LOCALIZER 111.55
I-SAN
Chan 52 (Y)
MISSION BAY
117.8 MZB
Chan 125
LOCALIZER 110.9
I-UBR
Chan 46
(IFEHI)
N32°48.08′
W116°37.80′
KUMBA
N32°45.72′
W116°03.22′
SARGS
N32°46.90′
W117°23.37′
BARET
N32°46.45′
W116°40.65′
SWATT
N32°40.75′
W116°57.97′
PILLO
N32°46.22′ - W116°28.12′
TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at 10000′.
SAN DIEGO INTL
RWY 9
RWY 27
NORTH ISLAND NAS
(HALSEY FIELD)
(IFSOX)
N32°41.70′
W117°23.03′
(IFHEJ)
N32°39.60′
W116°53.31′
IMPERIAL
115.9 IPL
Chan 106
N32°44.93′ - W115°30.51′
L-4, H-4
POGGI
109.8 PGY
Chan 35
N32°36.62′ - W116°58.75′
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Chart not to scale.
BARET FOUR ARRIVAL
(BARET.BARET4) 09183
ST-373 (FAA)
SAN DIEGO, CALIFORNIA

BARET FOUR ARRIVAL

ARRIVAL DESCRIPTION

IMPERIAL TRANSITION (IPL.BARET4): From over IPL VORTAC via IPL R-258 and MZB R-076 to BARET INT. Thence....

NEEDLES TRANSITION (EED.BARET4): From over EED VORTAC via EED R-208 to SHADI INT, thence via JLI R-040 to MOMAR INT, then via JLI R-040 to KARRO DME. Depart KARRO DME heading 190° to intercept PGY R-043 to BARET INT. Thence....

PARKER TRANSITION (PKE.BARET4): From over PKE VORTAC via PKE R-227 to SHADI INT, thence via JLI R-040 to MOMAR INT, then via JLI R-040 to KARRO DME FIX. Depart KARRO DME heading 190° to intercept PGY R-043 to BARET INT. Thence....

TWENTYNINE PALMS TRANSITION (TNP.BARET4): From over TNP VORTAC via TNP R-179 to MOMAR INT, then via JLI R-040 to KARRO DME FIX. Depart KARRO DME heading 190° to intercept PGY R-043 to PGY VORTAC. Thence....

....WHEN SAN ARRIVALS USING RWY 9: Via PGY R-043 to PGY VORTAC, then via PGY R-270 to intercept the OCN R-162, then via OCN R-162 to SARGS INT. Expect ILS Rwy 9 approach to SAN or ILS-A approach to NZY.

....WHEN SAN ARRIVALS USING RWY 27: Via PGY R-043 to intercept I-UBR localizer, then via I-UBR localizer to SWATT INT. Expect LOC Rwy 27 approach to SAN or LOC-A approach to NZY.

LOST COMMUNICATIONS: In the event of lost communications, North Island arrival shall execute the TACAN Rwy 29 or Rwy 36.

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 29

TACAN	APCH CRS	Rwy Idg	7500
Chan 117	296°	TDZE	26
		Arpt Elev	26

JAL-374 [USN]

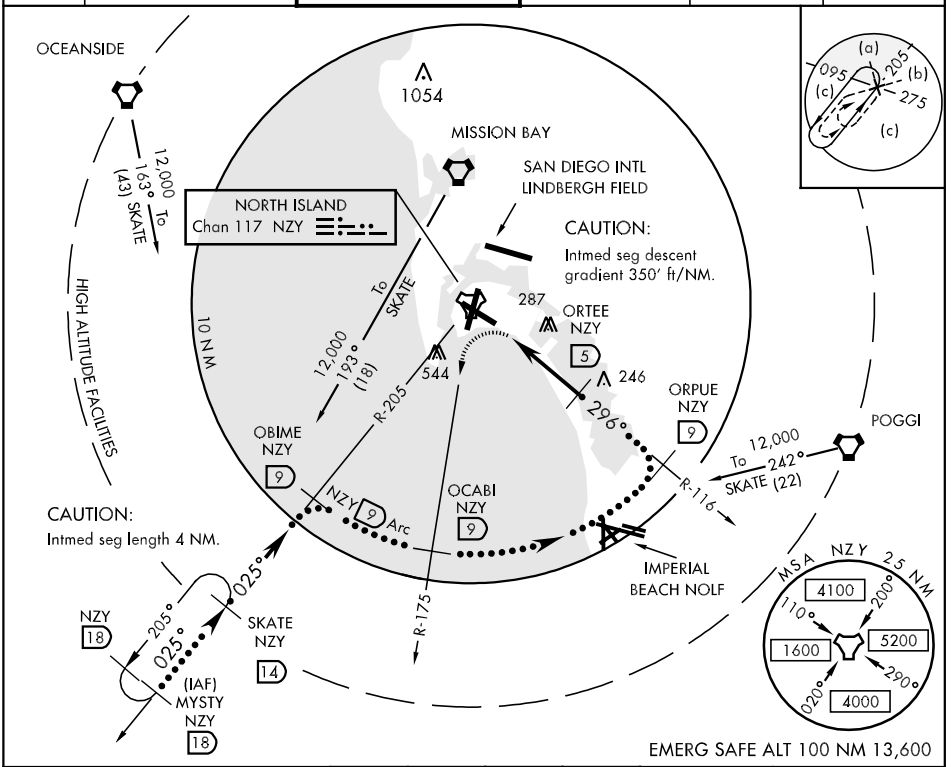
NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

▼ * When ALS inop, increase vis CAT C to 1½ miles, CAT DE to 1¾ miles.
** When ALS inop, increase vis CAT CDE to 1 mile.

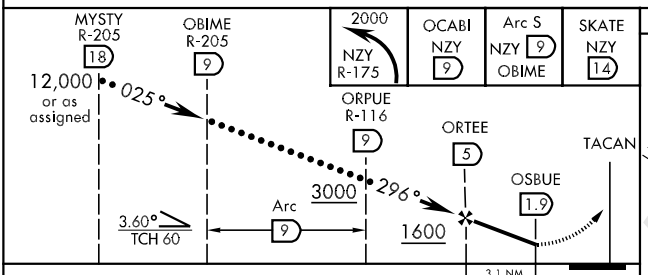
ALSF-1 (A1)

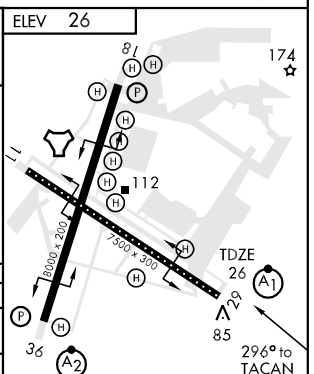
MISSED APPROACH: Climbing to left turn to 2000 via NZY TACAN R-175 to OCABI. Arc S on the NZY 9 DME arc to OBIME, then via NZY R-205 to SKATE and hold.

ATIS ★	SOCAL APP CON	NORTH ISLAND TOWER ★	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.0 363.25	128.4 288.25	



EMERG SAFE ALT 100 NM 13,600





CATEGORY	C	D	E
S-29 *	540-1 514 (600-1)	540-1¼ 514 (600-1¼)	
CIRCLING	NOT AUTHORIZED		
S-PAR 29 **	276-¾ 250 (300-¾) GS 3.00°		

REIL Rwy 18-36
HIRL Rwy 11-29,18-36

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 36

TACAN	APCH CRS	Rwy ldg	8000
Chan 117	358°	TDZE	19
		Arpt Elev	26

JAL-374 [USN] NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

▼ * When ALS inop, increase vis CAT C to 2¼ miles, CAT D to 2½miles, CAT E to 2¾ miles .
** When ALS inop, increase vis CAT CDE to ½mile.

SALSF

MISSED APPROACH: Climbing right turn to 2000 intercept the NZY TACAN R-205 to SKATE and hold.

ATIS ★	SOCAL APP CON	NORTH ISLAND TOWER ★	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.0 363.25	128.4 288.25	

OCEANSIDE
12,000 To (43) SKATE 163°
1054
To SKATE 12,000 193° (18)
MISSION BAY
NORTH ISLAND Chan 117 NZY
SAN DIEGO INTL LINDBERGH FIELD
WASIR NZY 544
OBIME NZY 4
9
358°
To SKATE 12,000 242° (22)
POGGI
3737
2000
HUPKO NZY 9
UNITED STATES
MEXICO
205° 025° NZY 9 Arc
SKATE NZY 14
R-178
R-140
CAUTION: Intmed seg len 5 NM.
(IAF) MYSTY NZY 18
R-205
20 NM
HIGH ALTITUDE FACILITIES
EMERG SAFE ALT 100 NM 13,600

(a) 095 205 (b) 275 (c) (c)

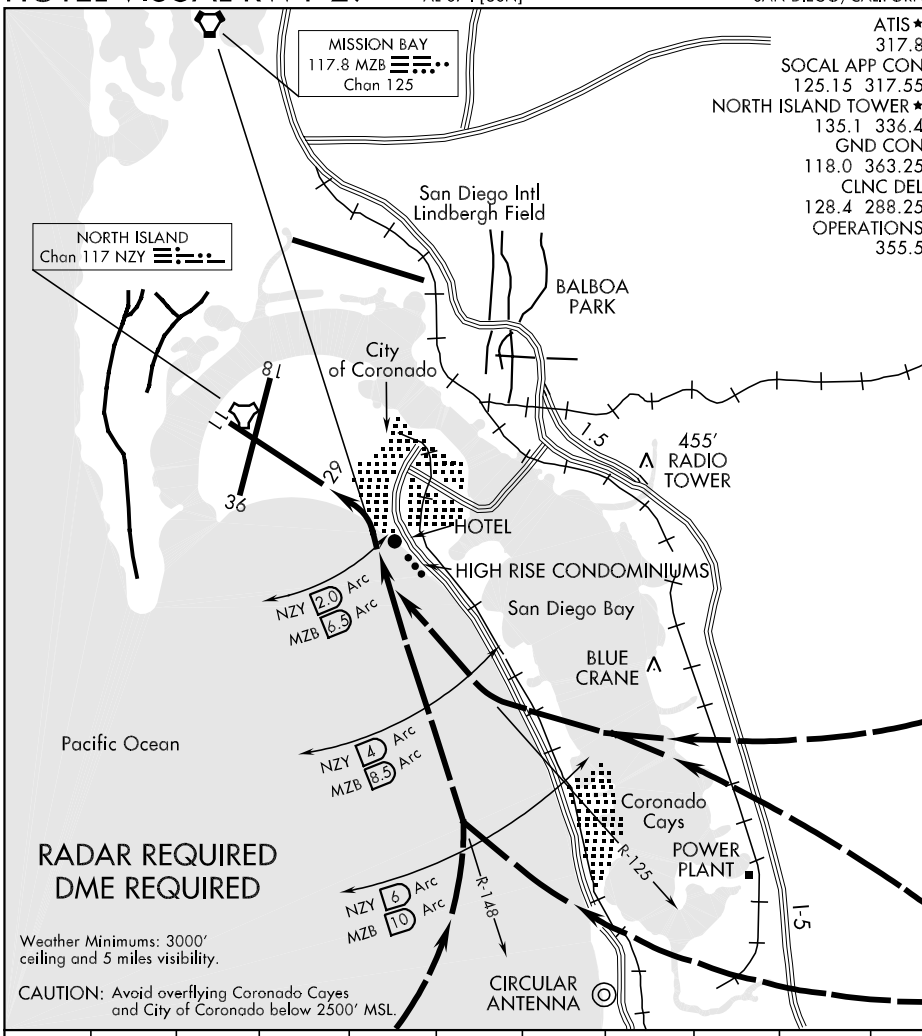
MSA NZY 25 NM
4100
110° 200°
1600 5200
290°
020°
4000

ELEV 26

MYSTY R-205 18
OBIME R-205 9
HUPKO R-178 9
WASIR 4
TACAN
12,000 or as assigned
025°
3000
2000
358°
3.2
ZOLOK 1.5
1000
Arc 9
2.80° TCH 47
2.5 NM
2000 NZY R-205
SKATE NZY 14

81 174 112 11 29 85 36
7300 x 200
5000 x 200
TDZE 19
358° to TACAN
REIL Rwy 18-36
HIRL Rwy 11-29, 18-36

CATEGORY	C	D	E
S-36 *	800-2 781 (800-2)	800-2 ¼ 781 (800-2¼)	800-2½ 781 (800-2½)
CIRCLING	NOT AUTHORIZED		
S-PAR 36 **	119-¼ 100 (100-¼) GS 3.00°		



HOTEL VISUAL RWY 29

Aircraft avoid overflying Coronado Cayes and City of Coronado below 2500' MSL. Proceed visually via the NZY R-125 or MZB R-148 until reaching NZY 2 DME / MZB 6.5 DME, then maneuver to runway centerline for straight-in Runway 29.

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME-A

LOC I-UBR	APCH CRS	Rwy Idg	N/A
110.9	272°	TDZE	N/A
Chan 46		Arpt Elev	26

AL-374 [USN]

NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

▼ * CAUTION: Maneuvering for circling approach not authorized W of Rwy18-36 centerline. Approach authorized for Rwy 18 or left downwind approach to Rwy 29 after flying down Rwy 18.

MISSED APPROACH: Climb and maintain 2000 via hdg 175°, intercept PGY VORTAC R-250 to HANIS and hold.

ATIS *	SOCAL APP CON	NORTH ISLAND TOWER *	LINDBERGH TOWER	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.3 270.9	118.0 363.25	128.4 288.25	

CAUTION: Aircraft executing missed approach after beginning circling maneuver do not return to missed approach point.

Procedure NA for arrivals at RYAHN via V66-440-514 Eastbound.

MISSION BAY
117.8 MZB
Chan 125

LOCALIZER 110.9
I-UBR
Chan 46

(IAF)
RYAHH
PGY
5000
11.8
R-018

SAN DIEGO INTL
LINDBERGH FIELD

R-076
R-084

5000
198°
(27)

I-UBR
CIJHI
8.4

OKAIN
I-UBR
12.3

4000
198°
(4.6)

DOUGA
PGY
5000
8.9

I-UBR
REEBO
6.5

272°
092°

R-304
R-314
R-351
R-018

HANIS
PGY
20

VYDDA
I-UBR
14.3

10 NM

R-250
250°
070°

POGGI
109.8 PGY
Chan 35

3675
2801
3737
1054
524
803
1328
2791
394
544

MSA
MZ B
25 NM
130°
220°
340°
4400
2100
5400

ELEV 26

217° 2 NM from ZOLPA

174
63
112
85
29
36
11
8
7500 x 150
8000 x 200

A1
A2

REIL Rwy 18-36
HIRL Rwy 11-29, 18-36

EMERG SAFE ALT 100 NM 13,600

2000 hdg 175°
PGY R-250
HANIS PGY 20

visual to airport 217° 2 NM

ZOLPA
I-UBR
1.3

REEBO
PGY R-304
I-UBR
6.5

CIJHI
PGY R-314
I-UBR
8.4

OKAIN
PGY R-351
I-UBR
12.3

VYDDA
PGY R-018
I-UBR
14.3

1800
2400
3600
4000
272°

5.2 NM

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

CATEGORY	A	B	C	D
CIRCLING *	860-2½	834	(900-2½)	860-2¾ 834 (900-2¾)

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME-B

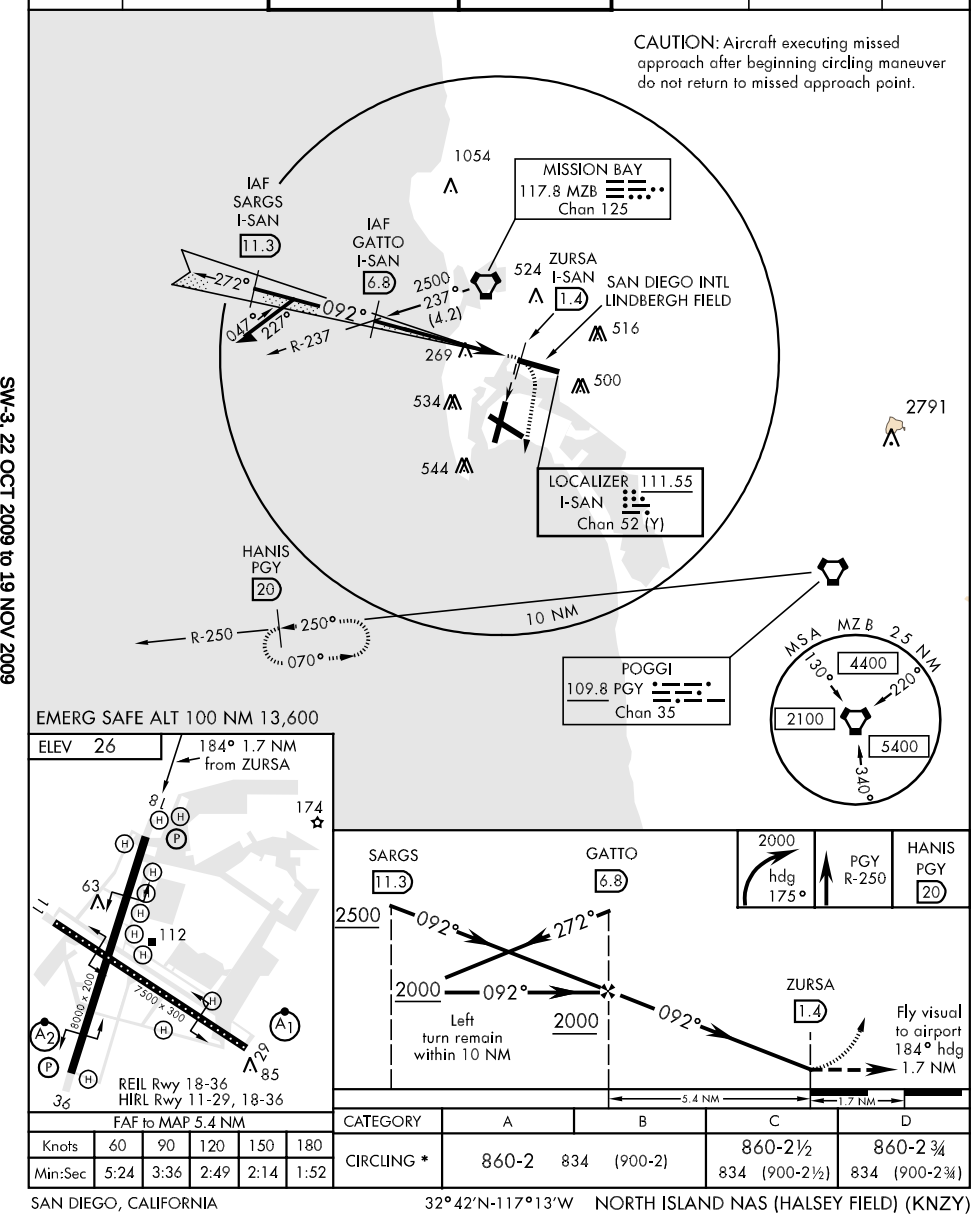
LOC I-SAN 111.55 Chan 52 (Y)	APCH CRS 092°	Rwy Idg N/A TDZE N/A Arpt Elev 26	AL-374 [USN]	NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

* CAUTION: Maneuvering for circling approach not authorized W of Rwy18-36 centerline. Approach authorized for Rwy 18 or left downwind approach to Rwy 29 after flying down Rwy 18.

MISSED APPROACH: Climb and maintain 2000 via hdg 175°,intercept PGY VORTAC R-250 to HANIS and hold.

ATIS ★	SOCAL APP CON	NORTH ISLAND TOWER ★	LINDBERGH TOWER	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.3 270.9	118.0 363.25	128.4 288.25	

CAUTION: Aircraft executing missed approach after beginning circling maneuver do not return to missed approach point.



FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:49	2:14	1:52

CATEGORY	A	B	C	D
CIRCLING *	860-2 834 (900-2)		860-2½ 834 (900-2½)	860-2¾ 834 (900-2¾)

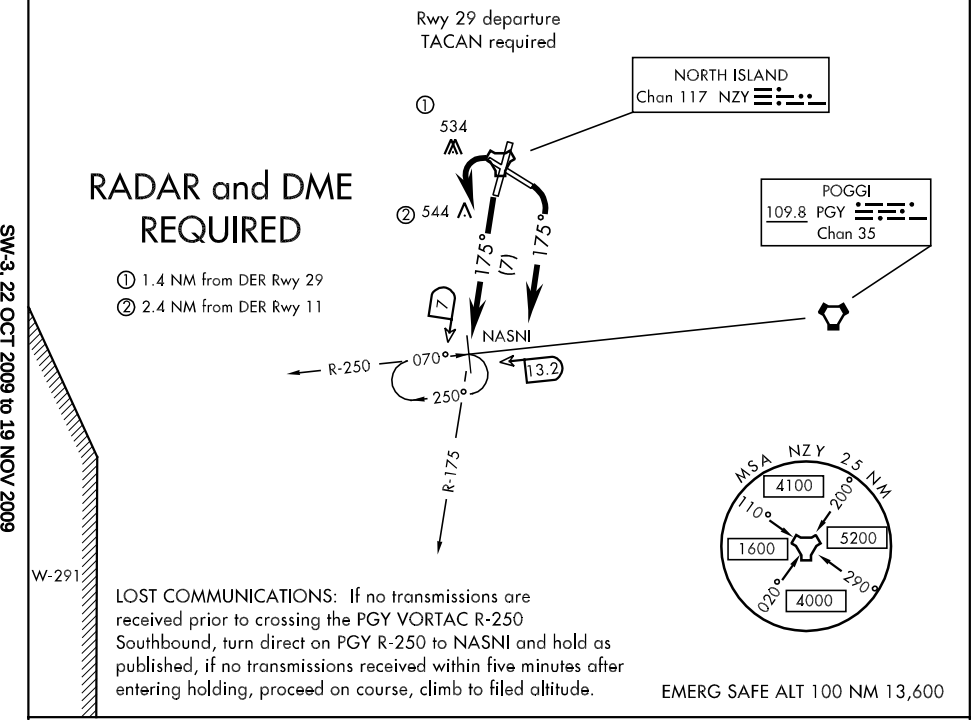
SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS ★
317.8
CLNC DEL
128.4 288.25
GND CON
118.0 363.25
NORTH ISLAND TOWER ★
135.1 336.4
SOCAL DEP CON
125.15 317.55

Minimum Climb Rate

Rwy	Knots	60	120	180	240	300	360
11 ⓐ	V/V(fpm)	265	530	795	1060	1325	1590
11 ⓑ	V/V(fpm)	290	580	870	1160	1450	1740
29 ⓒ	V/V(fpm)	410	820	1230	1640	2050	2460
29 ⓓ	V/V(fpm)	480	960	1440	1920	2400	2880

ⓐ Military climb to 700 or 600-2¼ authorized in lieu of climb rate.
ⓑ Civil climb to 700 or 600-2¼ authorized in lieu of climb rate.
ⓒ Military climb to 400 or 600-2½ authorized in lieu of climb rate.
ⓓ Civil climb to 500 or 600-2½ authorized in lieu of climb rate.



LOST COMMUNICATIONS: If no transmissions are received prior to crossing the PGY VORTAC R-250 Southbound, turn direct on PGY R-250 to NASNI and hold as published, if no transmissions received within five minutes after entering holding, proceed on course, climb to filed altitude.

EMERG SAFE ALT 100 NM 13,600

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 11: Immediate climbing right turn to 2000 via heading 175°, remain within NZY TACAN 1.4 DME to not overfly the City of Coronado, thence...

TAKE-OFF RWY 18: Climb to 2000 via heading 175°, thence ....

TAKE-OFF RWY 29: Immediate climbing left turn to 2000, remain within NZY TACAN 1 DME to not overfly Point Loma, intercept the NZY R-175 to NASNI, thence...

Expect radar vector to join assigned route.

RNAV (GPS) RWY 36

APCH CRS	Rwy ldg	8000
355°	TDZE	19
	Arpt Elev	26

AL-374 [USN]

NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

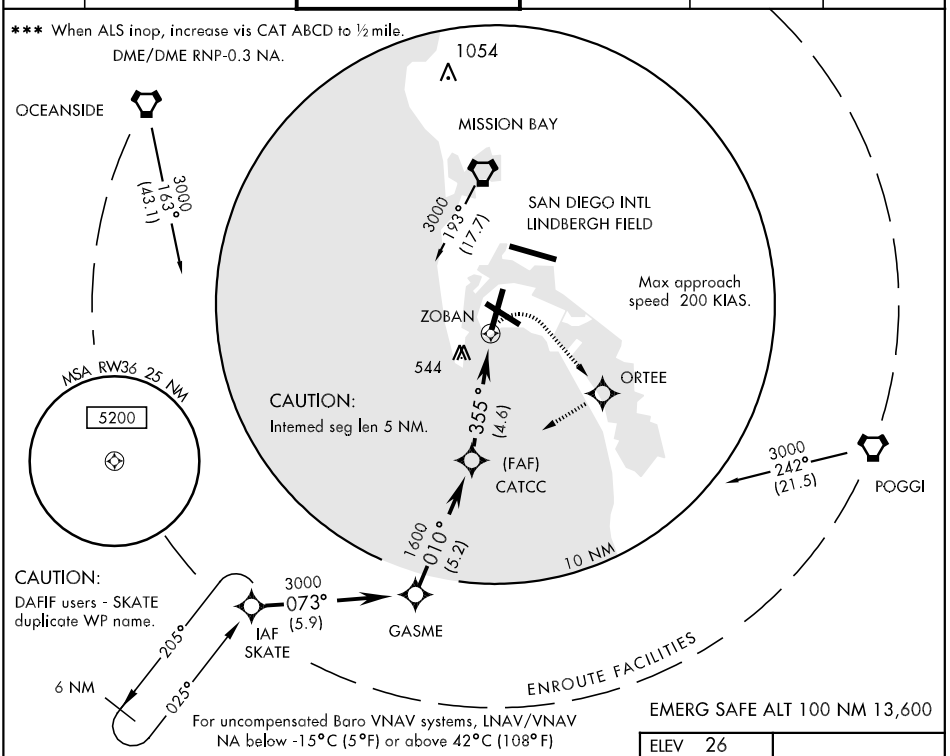
▼ * When ALS inop, increase vis CAT ABCD to 1¼ miles.
** When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles.

SALSF (A2)

MISSED APPROACH: Climbing right turn to 2000 direct ORTEE, then turn right via track 226° to SKATE and hold.

ATIS ★	SOCAL APP CON	NORTH ISLAND TOWER ★	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.0 363.25	128.4 288.25	

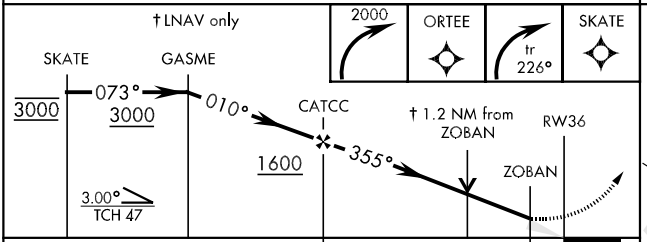
*** When ALS inop, increase vis CAT ABCD to ½ mile.
DME/DME RNP-0.3 NA.



For uncompensated Baro VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 42°C (108°F)

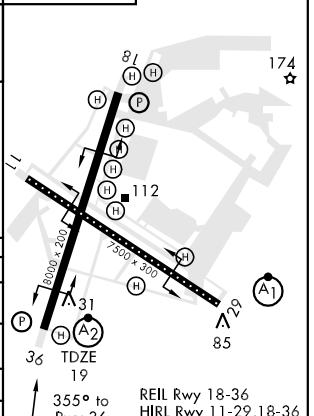
EMERG SAFE ALT 100 NM 13,600

† LNAV only



CATEGORY	A	B	C	D
LNAV/VNAV DA *	380-1	361 (400-1)		
LNAV MDA **	460-¾ 441 (500-¾)		460-1 441 (500-1)	460-1¼ 441 (500-1¼)
CIRCLING	NOT AUTHORIZED			
S-PAR 36***	119-¼ 100 (100-½) GS 3.00°			

ELEV 26



TACAN RWY 29

TACAN	APCH CRS	Rwy ldg	7500
Chan 117	296°	TDZE	26
		Arpt Elev	26

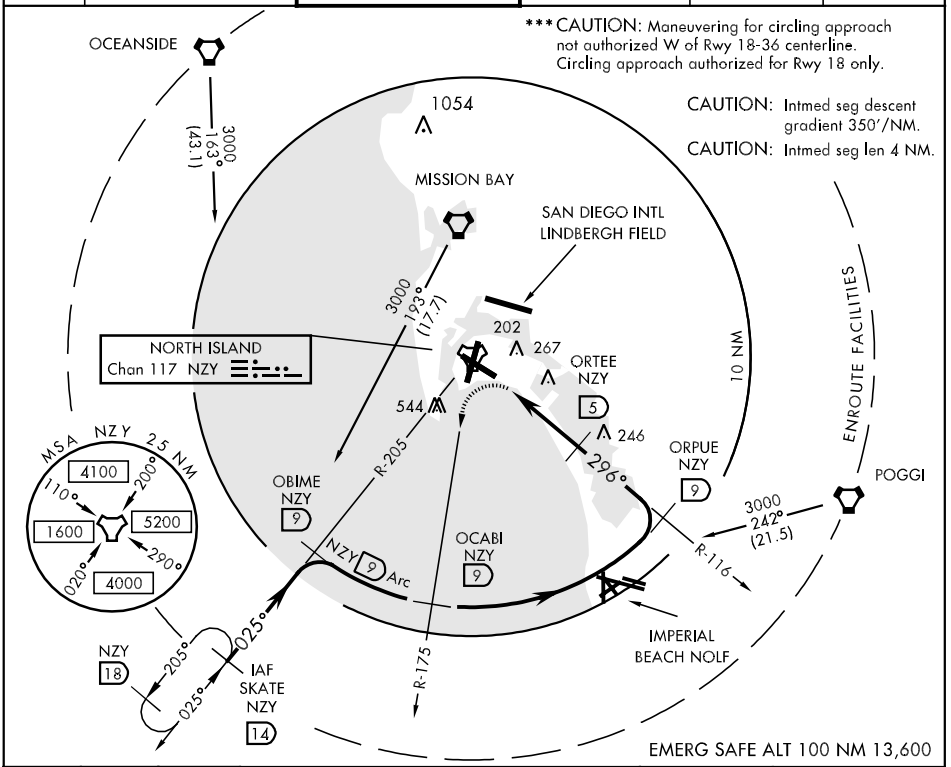
AL-374 [USN] NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

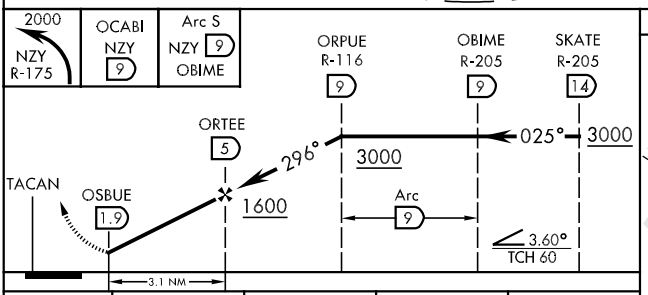
▼ * When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1½ miles, CAT D to 1¾ miles.
** When ALS inop, increase vis CAT ABCD to 1 mile.

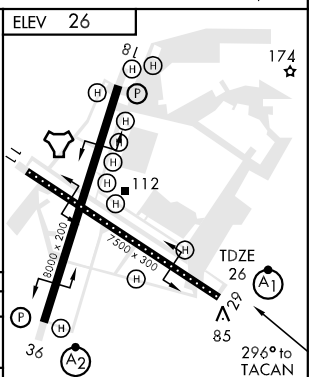
ALSF-1 (A1)

MISSED APPROACH: Climbing left turn to 2000 via NZY TACAN R-175 to OCABI. Arc S on NZY 9 DME arc to OBIME, then via NZY R-205 to SKATE and hold.

ATIS ★	SOCAL APP CON	NORTH ISLAND TOWER ★	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.0 363.25	128.4 288.25	







CATEGORY	A	B	C	D
S-29 *	540-½ 514 (600-½)		540-1 514 (600-1)	540-1¼ 514 (600-1¼)
CIRCLING***	620-1 594 (600-1)		NOT AUTHORIZED	
S-PAR 29 **	276-¾ 250 (300-¾)		GS 3.00°	

REIL Rwy 18-36
HIRL Rwy 11-29,18-36

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 36

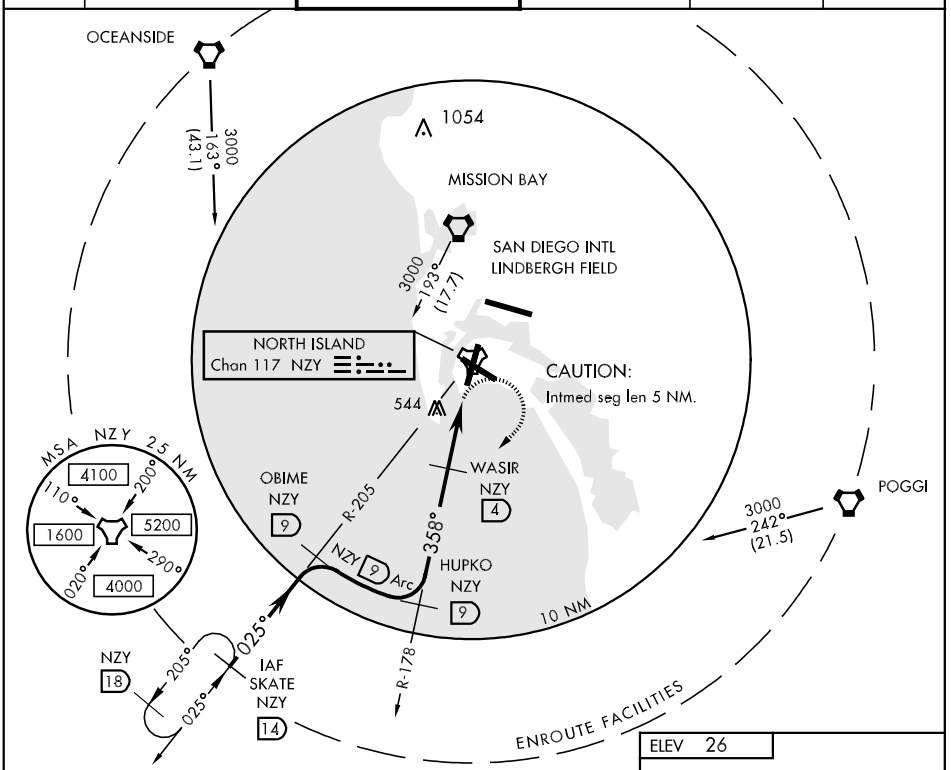
TACAN NZY Chan 117	APCH CRS 358°	Rwy ldg 8000 TDZE 19 Arpt Elev 26	AL-374 [USN]	NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

* When ALS inop, increase vis CAT A to 1 mile, CAT B to 1¼ miles, CAT C to 2¼ miles, CAT D to 2½ miles.
** When ALS inop, increase vis CAT ABCD to ½ mile.

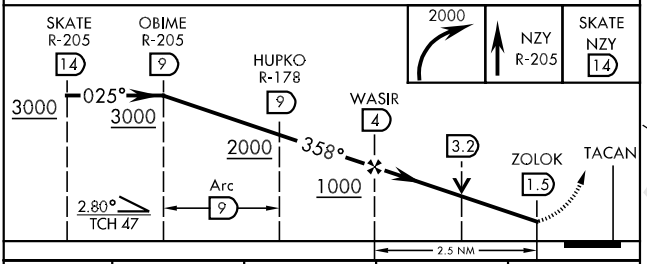
SALSF A2

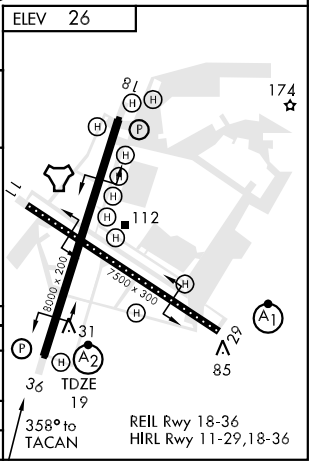
MISSED APPROACH: Climbing right turn to 2000 intercept the NZY TACAN R-205 to SKATE and hold.

ATIS ★	SOCAL APP CON	NORTH ISLAND TOWER ★	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.0 363.25	128.4 288.25	



EMERG SAFE ALT 100 NM 13,600





CATEGORY	A	B	C	D
S-36 *	800-¾ 781 (800-¾)	800-1 781 (800-1)	800-2 781 (800-2)	800-2¼ 781 (800-2¼)
CIRCLING	NOT AUTHORIZED			
S-PAR 36 **	119-¼ 100 (100-¼) GS 3.00°			

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME RWY 29

VORTAC PGY 109.8 Chan 35	APCH CRS 279°	Rwy ldg 7500 TDZE 26 Arpt Elev 26

AL-374 [USN] NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

* When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¾ miles, CAT D to 2 miles.
** When ALS inop, increase vis CAT ABCD to 1 mile.

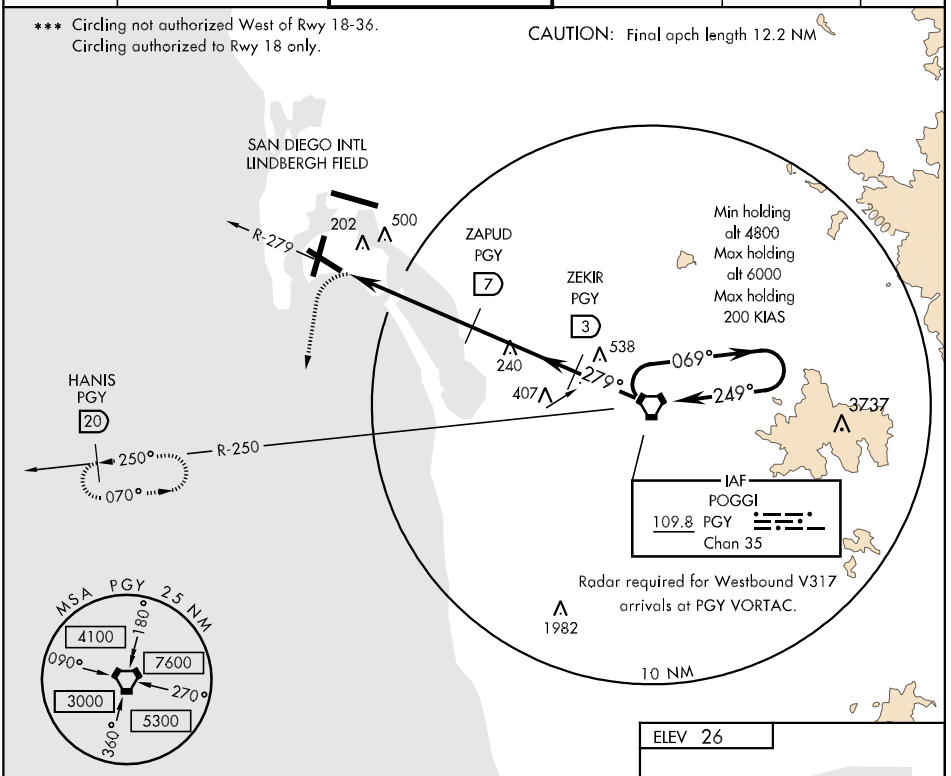
ALSF-1

MISSED APPROACH: Climbing left turn to 2000 via hdg 175° intercept PGY VORTAC R-250 to HANIS and hold.

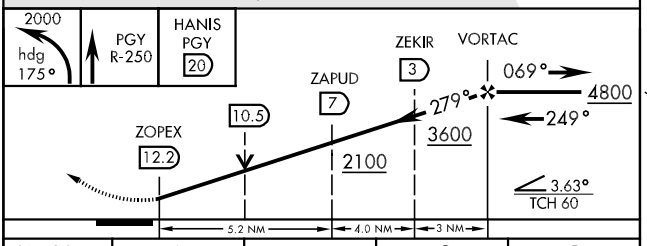
ATIS ★	SOCAL APP CON	NORTH ISLAND TOWER ★	GND CON	CLNC DEL	PAR/ASR
317.8	125.15 317.55	135.1 336.4	118.0 363.25	128.4 288.25	

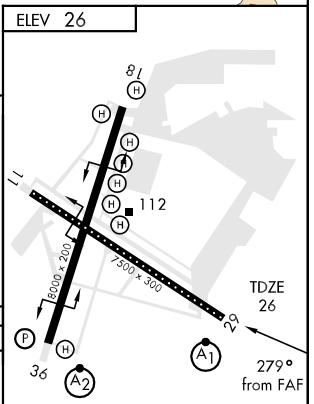
*** Circling not authorized West of Rwy 18-36.
Circling authorized to Rwy 18 only.

CAUTION: Final apch length 12.2 NM

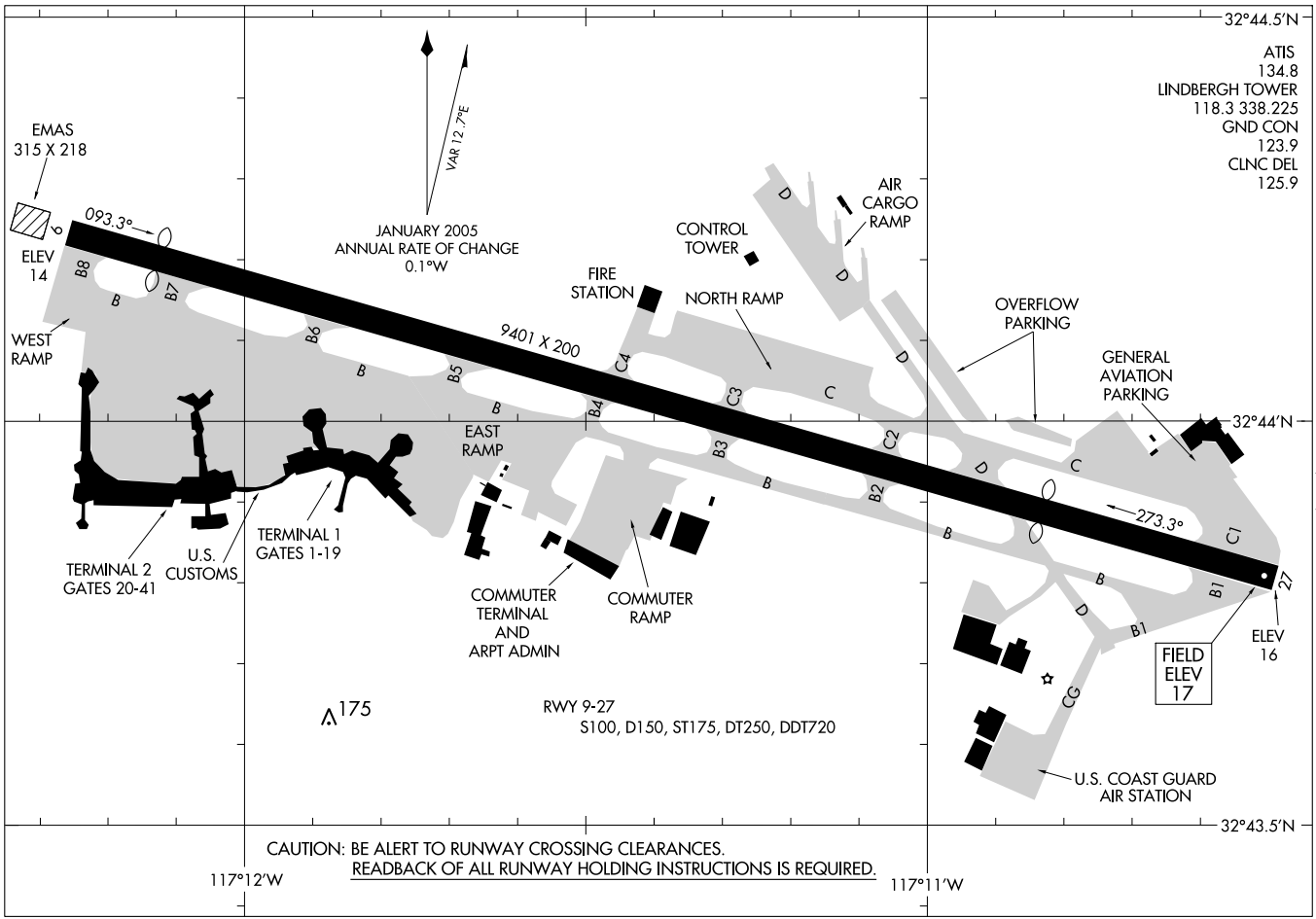


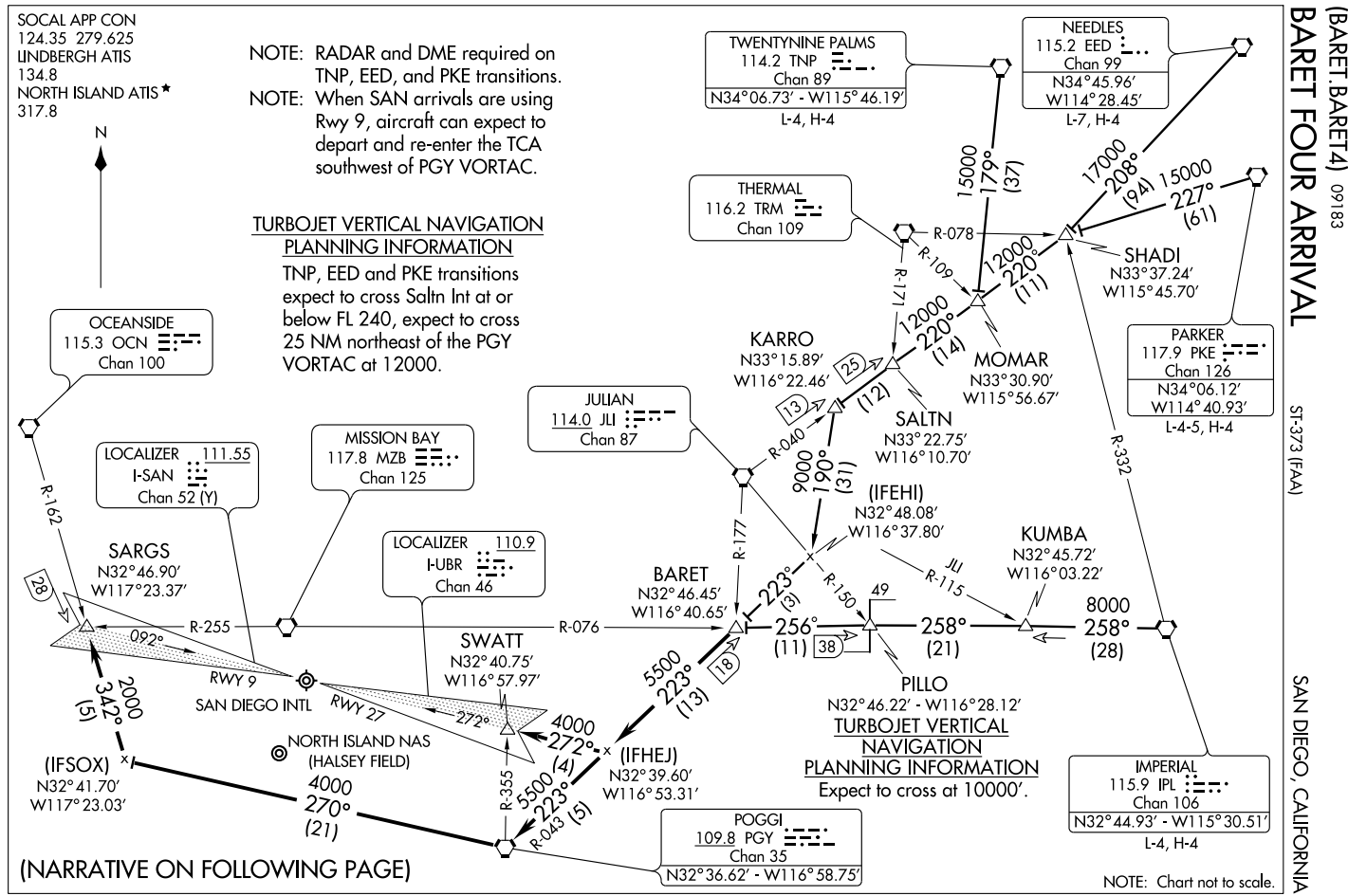
EMERG SAFE ALT 100 NM 13,600





CATEGORY	A	B	C	D
S-29 *	640-½ 614 (700-½)		640-1¼ 614 (700-1¼)	640-1½ 614 (700-1½)
CIRCLING***	640-1 614 (700-1)		NOT AUTHORIZED	
S-PAR 29 **	276-¾ 250 (300-¾) GS 3.00°			


AIRPORT DIAGRAM
SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA
AL-373 (FAA)
32°44.5'N
32°44'N
32°43.5'N
117°12'W
117°11'W
ATIS
134.8
LINDBERGH TOWER
118.3 338.225
GND CON
123.9
CLNC DEL
125.9
EMAS
315 X 218
ELEV
14
093.3°
273.3°
9401 X 200
VAR 12.7°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
CONTROL
TOWER
FIRE
STATION
AIR
CARGO
RAMP
NORTH RAMP
OVERFLOW
PARKING
GENERAL
AVIATION
PARKING
WEST
RAMP
EAST
RAMP
TERMINAL 2
GATES 20-41
U.S.
CUSTOMS
TERMINAL 1
GATES 1-19
COMMUTER
TERMINAL
AND
ARPT ADMIN
COMMUTER
RAMP
FIELD
ELEV
17
ELEV
16
U.S. COAST GUARD
AIR STATION
RWY 9-27
S100, D150, ST175, DT250, DDT720
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.


SOCAL APP CON
124.35 279.625
LINDBERGH ATIS
134.8
NORTH ISLAND ATIS ★
317.8
N
NOTE: RADAR and DME required on TNP, EED, and PKE transitions.
NOTE: When SAN arrivals are using Rwy 9, aircraft can expect to depart and re-enter the TCA southwest of PGY VORTAC.
TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
TNP, EED and PKE transitions expect to cross Saltn Int at or below FL 240, expect to cross 25 NM northeast of the PGY VORTAC at 12000.
TWENTYNINE PALMS
114.2 TNP
Chan 89
N34°06.73′ - W115°46.19′
L-4, H-4
NEEDLES
115.2 EED
Chan 99
N34°45.96′
W114°28.45′
L-7, H-4
THERMAL
116.2 TRM
Chan 109
OCEANSIDE
115.3 OCN
Chan 100
JULIAN
114.0 JLI
Chan 87
KARRO
N33°15.89′
W116°22.46′
MOMAR
N33°30.90′
W115°56.67′
SHADI
N33°37.24′
W115°45.70′
PARKER
117.9 PKE
Chan 126
N34°06.12′
W114°40.93′
L-4-5, H-4
SALTN
N33°22.75′
W116°10.70′
LOCALIZER 111.55
I-SAN
Chan 52 (Y)
MISSION BAY
117.8 MZB
Chan 125
LOCALIZER 110.9
I-UBR
Chan 46
(IFEHI)
N32°48.08′
W116°37.80′
KUMBA
N32°45.72′
W116°03.22′
SARGS
N32°46.90′
W117°23.37′
BARET
N32°46.45′
W116°40.65′
SWATT
N32°40.75′
W116°57.97′
PILLO
N32°46.22′ - W116°28.12′
TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at 10000′.
SAN DIEGO INTL
RWY 9
RWY 27
NORTH ISLAND NAS
(HALSEY FIELD)
(IFSOX)
N32°41.70′
W117°23.03′
(IFHEJ)
N32°39.60′
W116°53.31′
IMPERIAL
115.9 IPL
Chan 106
N32°44.93′ - W115°30.51′
L-4, H-4
POGGI
109.8 PGY
Chan 35
N32°36.62′ - W116°58.75′
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Chart not to scale.
BARET FOUR ARRIVAL
(BARET.BARET4) 09183
ST-373 (FAA)
SAN DIEGO, CALIFORNIA

BARET FOUR ARRIVAL

ARRIVAL DESCRIPTION

IMPERIAL TRANSITION (IPL.BARET4): From over IPL VORTAC via IPL R-258 and MZB R-076 to BARET INT. Thence....

NEEDLES TRANSITION (EED.BARET4): From over EED VORTAC via EED R-208 to SHADI INT, thence via JLI R-040 to MOMAR INT, then via JLI R-040 to KARRO DME. Depart KARRO DME heading 190° to intercept PGY R-043 to BARET INT. Thence....

PARKER TRANSITION (PKE.BARET4): From over PKE VORTAC via PKE R-227 to SHADI INT, thence via JLI R-040 to MOMAR INT, then via JLI R-040 to KARRO DME FIX. Depart KARRO DME heading 190° to intercept PGY R-043 to BARET INT. Thence....

TWENTYNINE PALMS TRANSITION (TNP.BARET4): From over TNP VORTAC via TNP R-179 to MOMAR INT, then via JLI R-040 to KARRO DME FIX. Depart KARRO DME heading 190° to intercept PGY R-043 to PGY VORTAC. Thence....

....WHEN SAN ARRIVALS USING RWY 9: Via PGY R-043 to PGY VORTAC, then via PGY R-270 to intercept the OCN R-162, then via OCN R-162 to SARGS INT. Expect ILS Rwy 9 approach to SAN or ILS-A approach to NZY.

....WHEN SAN ARRIVALS USING RWY 27: Via PGY R-043 to intercept I-UBR localizer, then via I-UBR localizer to SWATT INT. Expect LOC Rwy 27 approach to SAN or LOC-A approach to NZY.

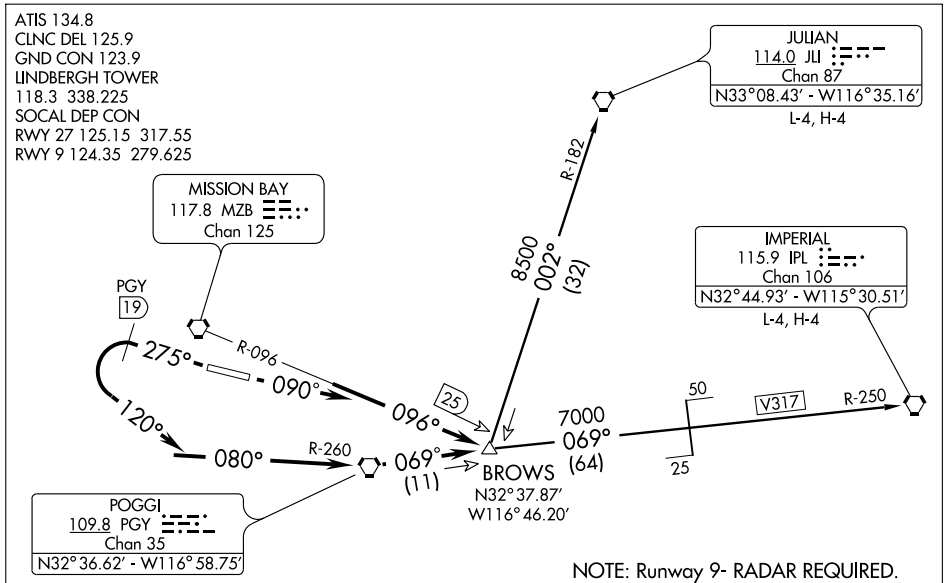
LOST COMMUNICATIONS: In the event of lost communications, North Island arrival shall execute the TACAN Rwy 29 or Rwy 36.

SW-3, 22 OCT 2009 to 19 NOV 2009

BORDER FIVE DEPARTURE

SL-373 (FAA)

SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA



NOTE: Runway 9- RADAR REQUIRED.

NOTE: Runway 27- DME REQUIRED.

TAKE-OFF MINIMUMS

Rwy 9, 300-1 with minimum climb of 610′ per NM to 1900.

Rwy 27, 300-1½ or standard with minimum climb of 317′ per NM to 400.

TAKE-OFF NOTES

Rwy 9: Trees 792 feet from departure end of runway, 142 feet left of centerline, 60′ AGL/99′ MSL.
Antenna 740 feet from departure end of runway, 302 feet right of centerline, 62′ AGL/82′ MSL.
Antenna 1946 feet from departure end of runway, 969 feet left of centerline, 126′ AGL/192′ MSL.
Trees 1377 feet from departure end of runway, 285 feet left of centerline, 80′ AGL/135′ MSL.
Trees 4625 feet from departure end of runway, 1414 feet left of centerline, 250′ AGL/385′ MSL.

Rwy 27: Trees 1 mile from departure end of runway, 685 feet right of centerline, 220′ AGL/253′ MSL.
Flagpole 2511 feet from departure end of runway, 700 feet left of centerline, 90′ AGL/116′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

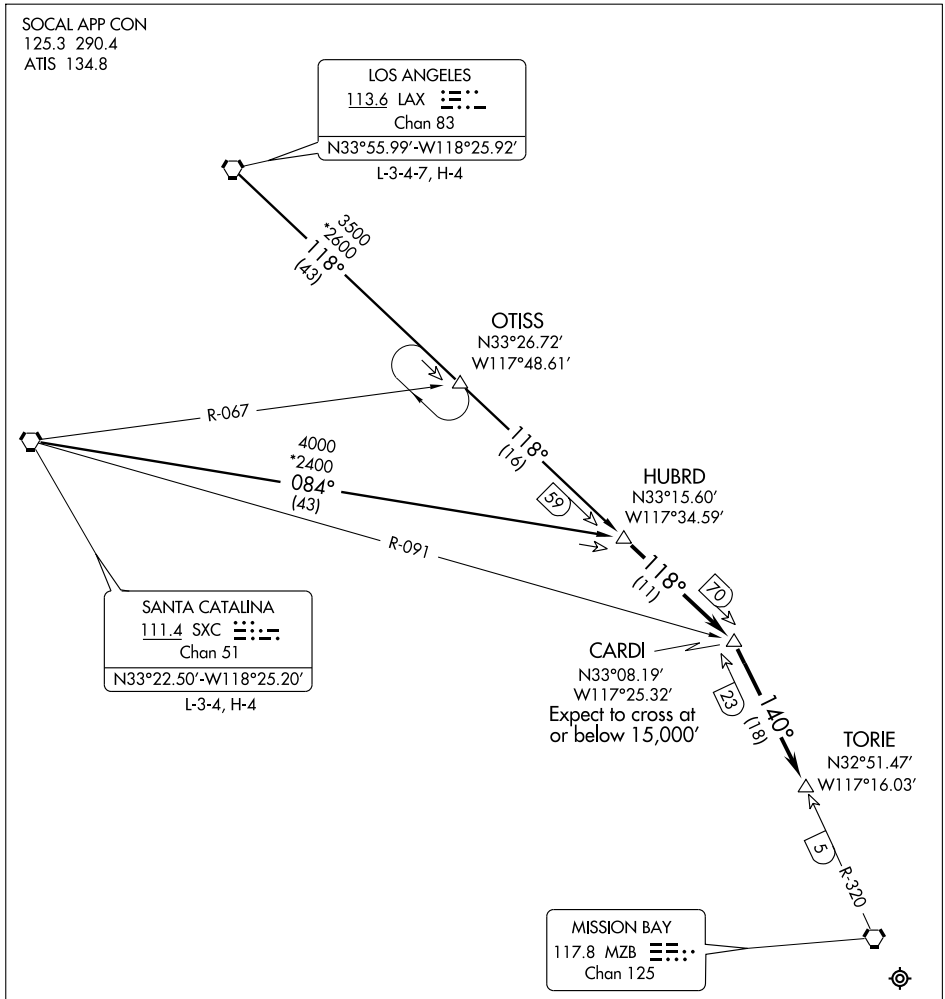
TAKE-OFF RUNWAY 9: Climb via heading 090° to intercept and proceed via MZB R-096 to BROWS INT. Then via (transition) or (assigned route). Maintain assigned altitude.

TAKE-OFF RUNWAY 27: Climb via heading 275° until PGY 19 DME, then turn left via heading 120° to intercept and proceed via PGY R-260 and R-069 to BROWS INT. Then via (transition) or (assigned route). Maintain assigned altitude.

IMPERIAL TRANSITION (BRDR5.IPL): From over BROWS INT via PGY R-069 and IPL R-250 to IPL VORTAC.

JULIAN TRANSITION (BRDR5.JLI): From over BROWS INT via JLI R-182 to JLI VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009



NOTE: Chart not to scale.

LOS ANGELES TRANSITION (LAX.HUBRD1): From over LAX VORTAC via LAX R-118 to OTISS INT, then via LAX R-118 to HUBRD INT. Thence . . . .

SANTA CATALINA TRANSITION (SXC.HUBRD1): From over SXC VORTAC via SXC R-084 to HUBRD INT. Thence . . . .

. . . . From over HUBRD INT via LAX R-118 to CARDI FIX via MZB R-320 to TORIE FIX. Expect vector to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SAN	APP CRS	Rwy Idg	8701
111.55	092°	TDZE	17
Chan 52 (Y)		Apt Elev	17

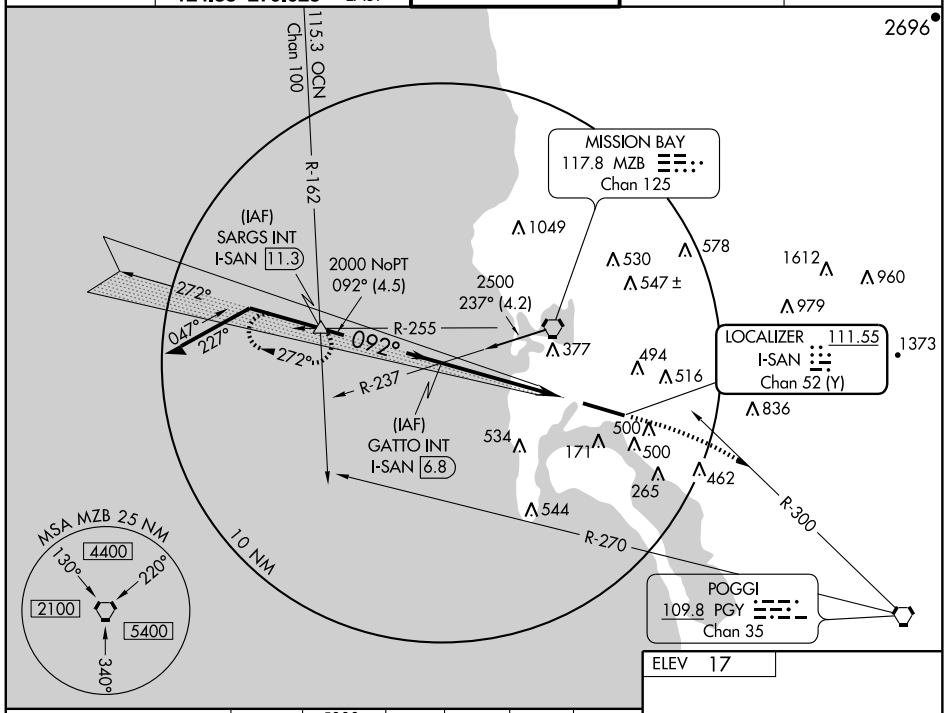
ILS or LOC RWY 9

SAN DIEGO INTL (SAN)

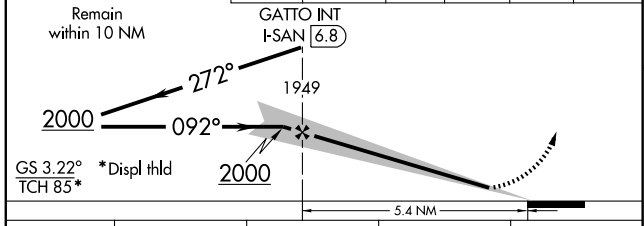
Inoperative table does not apply. MALSR

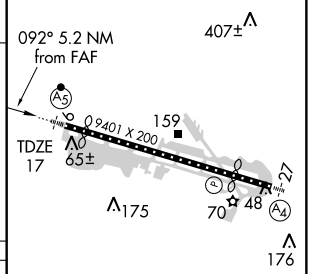
MISSED APPROACH: Climb to 3000 via heading 092° until intercepting PGY R-300, then continue climb to 5000 via PGY R-300 to PGY VORTAC. Then right turn via PGY R-270 to intercept OCN R-162 to SARGS Int and hold.

ATIS	SOCAL APP CON	LINDBERGH TOWER	GND CON	CLNC DEL
134.8	119.6 363.1 WEST 124.35 279.625 EAST	118.3 338.225	123.9	125.9



3000	5000	PGY	PGY	OCN	SARGS
092°	PGY R-300	109.8	R-270	R-162 115.3	△





CATEGORY	A	B	C	D
S-ILS 9	353/50 336 (400-1)			
S-LOC 9	540/50 526 (600-1)		540-1½ 526 (600-1½)	540-1¾ 526 (600-1¾)
CIRCLING	820-1 803 (900-1)	820-1¼ 803 (900-1¼)	820-2¼ 803 (900-2¼)	820-2½ 803 (900-2½)

TDZ/CL Rwys 9 and 27
HIRL Rwy 9-27

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

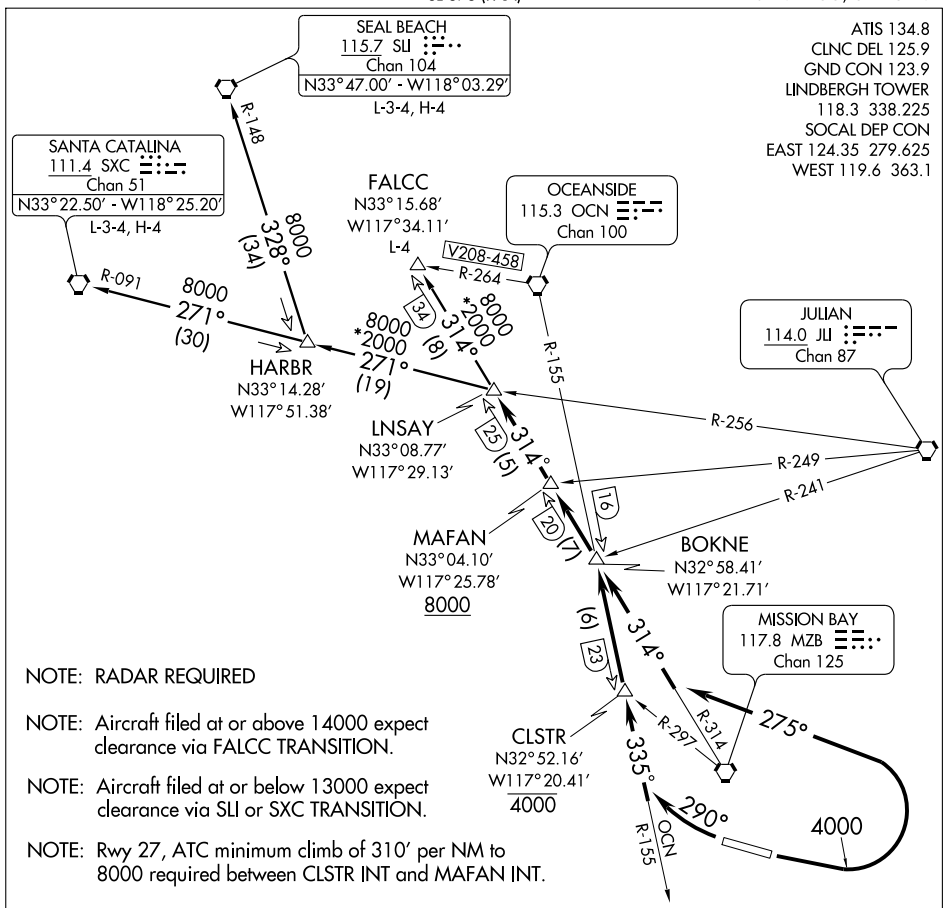
SW-3, 22 OCT 2009 to 19 NOV 2009

(LNSAY2.LNSAY) 09183

LNSAY TWO DEPARTURE

SL-373 (FAA)

SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA



NOTE: RADAR REQUIRED

NOTE: Aircraft filed at or above 14000 expect clearance via FALCC TRANSITION.

NOTE: Aircraft filed at or below 13000 expect clearance via SLI or SXC TRANSITION.

NOTE: Rwy 27, ATC minimum climb of 310′ per NM to 8000 required between CLSTR INT and MAFAN INT.

TAKE-OFF MINIMUMS

Rwy 9, 300-1 with minimum climb of 610′ per NM to 1900.
Rwy 27, 300-1½ or standard with minimum climb of 317′ per NM to 400.

TAKE-OFF NOTES

Rwy 9: Trees 792 feet from departure end of runway, 142 feet left of centerline, 60′ AGL/99′ MSL.
Antenna 740 feet from departure end of runway, 302 feet right of centerline, 62′ AGL/82′ MSL.
Antenna 1946 feet from departure end of runway, 969 feet left of centerline, 126′ AGL/192′ MSL.
Trees 1377 feet from departure end of runway, 285 feet left of centerline, 80′ AGL/135′ MSL.
Trees 4625 feet from departure end of runway, 1414 feet left of centerline, 250′ AGL/385′ MSL.

Rwy 27: Trees 1 mile from departure end of runway, 685 feet right of centerline, 220′ AGL/253′ MSL.
Trees 3118 feet from departure end of runway, 846 feet right of centerline, 120′ AGL/149′ MSL.
Flagpole 2511 feet from departure end of runway, 700 feet left of centerline, 90′ AGL/116′ MSL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climb runway heading to 4000', then turn left via heading 275° to intercept and proceed via MZB R-314 to MAFAN INT. Thence. . . .

TAKE-OFF RUNWAY 27: Climbing right turn via heading 290° to intercept and proceed via OCN R-155 to CLSTR INT. Cross CLSTR INT at or below 4000', then via OCN R-155 and MZB R-314 to MAFAN INT. Thence. . . .

....cross MAFAN INT at or above 8000', then via MZB R-314 to LNSAY INT. Then via (transition) or (assigned route). Maintain assigned altitude.

FALCC TRANSITION (LNSAY2.FALCC): From over LNSAY INT via MZB R-314 to FALCC INT.

SANTA CATALINA TRANSITION (LNSAY2.SXC): From over LNSAY INT via SXC R-091 to SXC VORTAC.

SEAL BEACH TRANSITION (LNSAY2.SLI): From over LNSAY INT via SXC R-091 and SLI R-148 to SLI VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN DIEGO, CALIFORNIA AL-373 (FAA)

LOC/DME I-UBR	APP CRS	Rwy Idg	7591
110.9	272°	TDZE	17
Chan 46		Apt Elev	17

LOC RWY 27

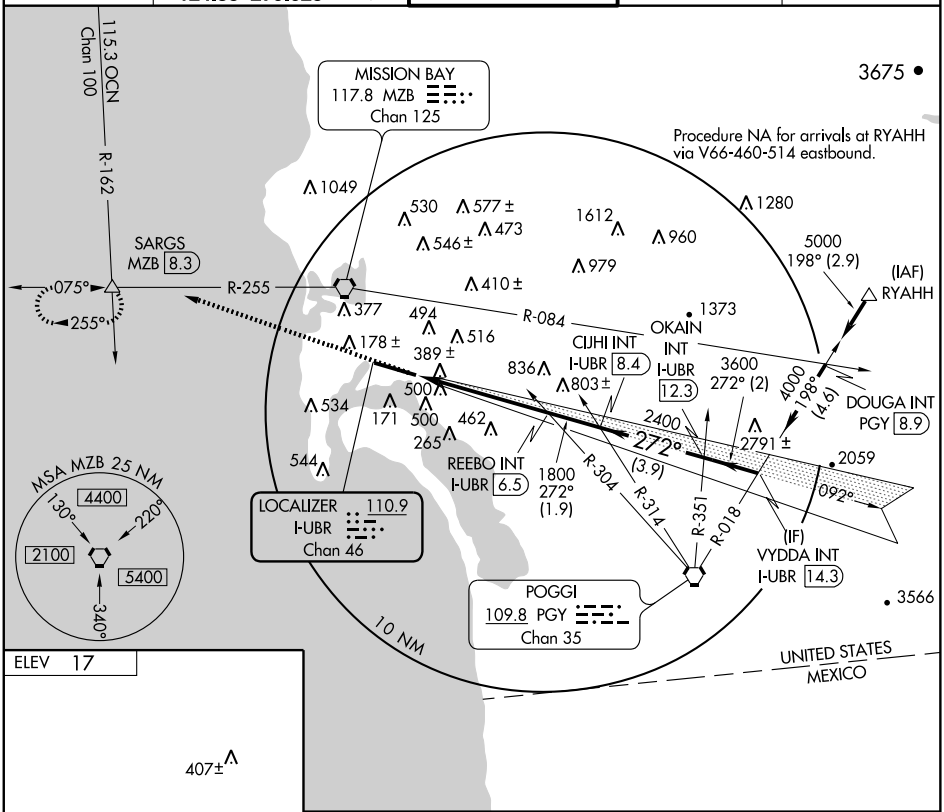
SAN DIEGO INTL (SAN)

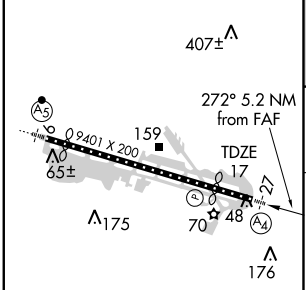
Inoperative table does not apply.
Visibility reduction by helicopters NA.

MALS

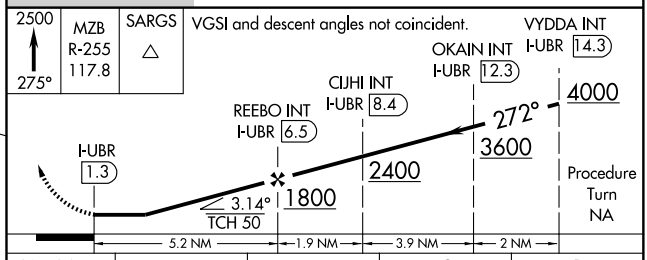
MISSED APPROACH: Climb to 2500 via heading 275° and MZB VORTAC R-255 to SARGS INT/8.3 DME and hold.

ATIS	SOCAL APP CON	LINDBERGH TOWER	GND CON	CLNC DEL
134.8	119.6 363.1 WEST 124.35 279.625 EAST	118.3 338.225	123.9	125.9





TDZ/CL Rwys 9 and 27
HIRL Rwy 9-27



FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

CATEGORY	A	B	C	D
S-27	640/50 623 (700-1)		640-1¾ 623 (700-1¾)	640-2 623 (700-2)
CIRCLING	820-1 803 (900-1)	820-1¼ 803 (900-1¼)	820-2¼ 803 (900-2¼)	820-2½ 803 (900-2½)

SW-3, 22 OCT 2009 to 19 NOV 2009

IMPERIAL TRANSITION (IPL.LYNDI1)

NEEDLES TRANSITION (EED.LYNDI1)

PARKER TRANSITION (PKE.LYNDI1)

TWENTYNINE PALMS TRANSITION (TNP.LYNDI1)

From LUCKI WP via 236° track to cross LYNDI WP at/above 5000 (MOCA 5000). Expect RNAV (GPS) Rwy 27 approach.

LOST COMMUNICATIONS: Join the San Diego RNAV (GPS) RWY 27 approach at LYNDI.

SOCAL APP CON
124.35 279.625
ATIS
134.8

TWENTYNINE PALMS
TNP

NEEDLES
EED

PARKER
PKE

15000 *7100 180° (37)

15000 *7200 209° (94)

15000 *6600 228° (61)

SHADI

14000 *6100 221° (11)

MOMAR

7 NM

13000 *7900 221° (14)

SALTN

12500 *8300 221° (4)

DSURT

12000 *7900 192° (22)

TRIXI
14000 270 KIAS

10000 *8500 192° (11)

SLOYD

8000 *7600 226° (8)

BARET

6100 *6100 227° (8)

LUCKI

6100 *6100 254° (8)

MORAA

8000 *7500 246° (8)

CUCCA
11000

10000 *8300 246° (11)

GREED
14000 270 KIAS

12000 *7100 257° (12)

KUMBA

15000 *4700 258° (28)

IMPERIAL
IPL

236° (3)

LYNDI
5000

NOTE: RADAR required.

NOTE: Turbojet aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1

NOTE: EED TRANSITION: For non-GPS equipped aircraft EED and JLI must be operational.

NOTE: IPL, PKE, and TNP TRANSITIONS: For non-GPS equipped aircraft JLI must be operational.

N

NOTE: Chart not to scale

(LYNDI.LYNDI1) 09183

LYNDI ONE ARRIVAL (RNAV)

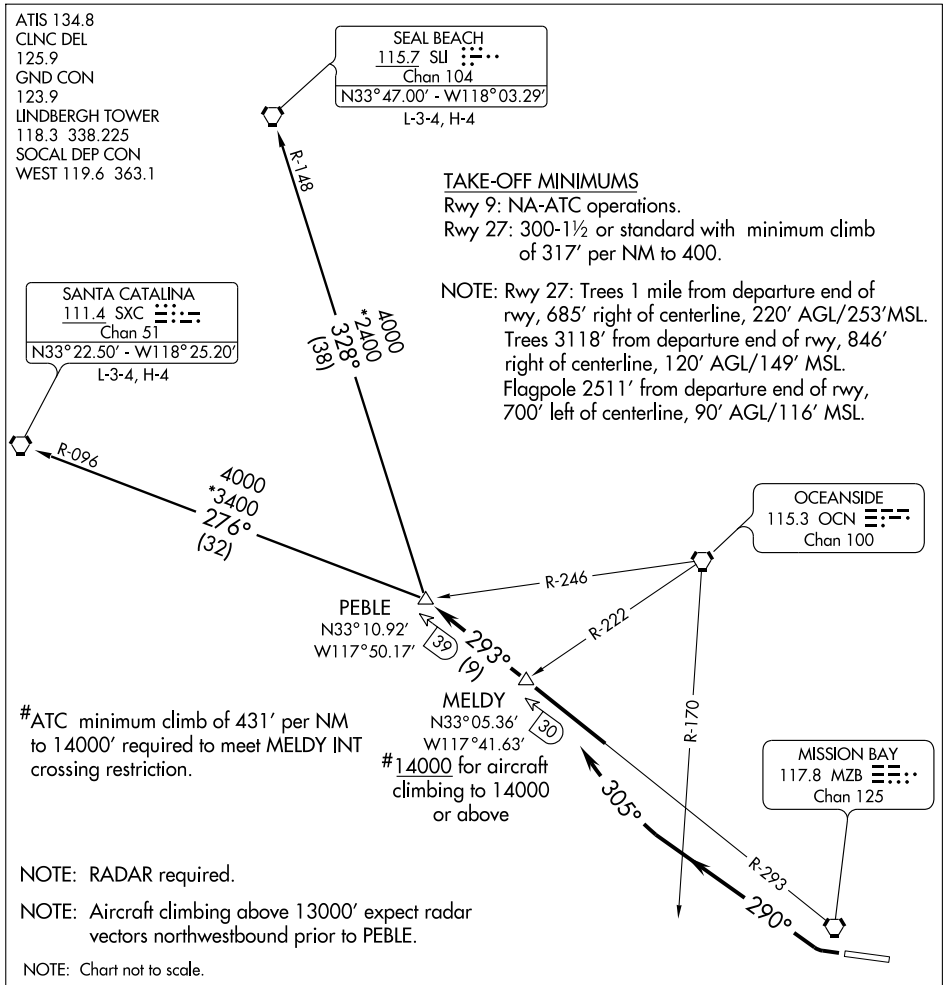
ST-373 (FAA)

SAN DIEGO INTL
SAN DIEGO, CALIFORNIA

PEBLE THREE DEPARTURE

SL-373 (FAA)

SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 27: Climbing right turn via heading 290° until crossing OCN VORTAC R-170, then turn right via heading 305° to intercept and proceed via via MZB VORTAC R-293 to PEBLE INT. Aircraft climbing to 14000' or above, cross MELDY INT at or above 14000'. Then via (transition) or (assigned altitude). Maintain assigned altitude.

SANTA CATALINA TRANSITION (PEBLE3.SXC): From over PEBLE INT via SXC R-096 to SXC VORTAC.

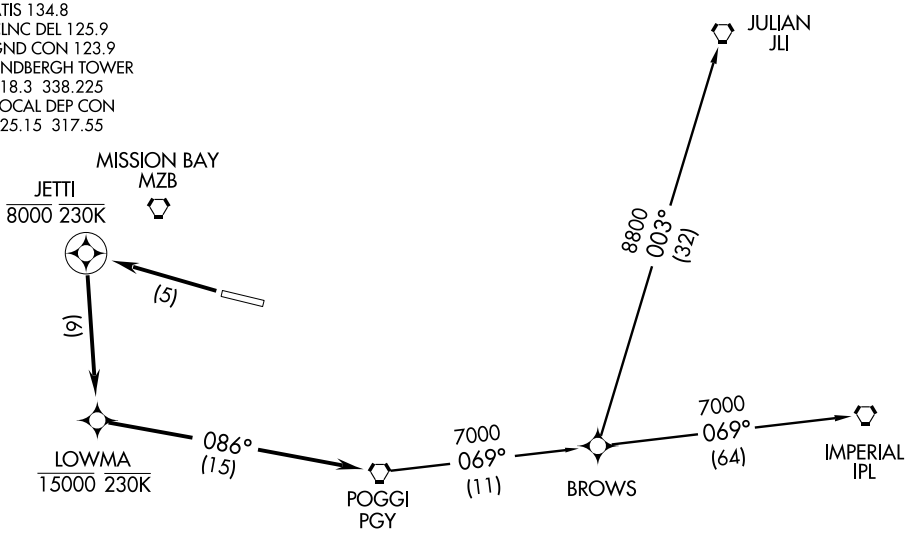
SEAL BEACH TRANSITION (PEBLE3.SLI): From over PEBLE INT via SLI R-148 to SLI VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

POGGI TWO DEPARTURE (RNAV)

SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA

ATIS 134.8
CLNC DEL 125.9
GND CON 123.9
LINDBERGH TOWER
118.3 338.225
SOCAL DEP CON
125.15 317.55



NOTE: DME/DME/IRU or GPS required.
NOTE: Imperial Transition: For Non-GPS equipped aircraft PGY, MZB, JLI VORTACs must be operational.
NOTE: Julian Transition: For Non-GPS equipped aircraft PGY VORTAC must be operational.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.
NOTE: Do not exceed 230 KIAS until LOWMA.

TAKE-OFF MINIMUMS

Rwy 9, NA-ATC.
Rwy 27, Standard with minimum ATC climb of 400' per NM to 520 and minimum obstacle climb of 317' per NM to 1600.

TAKE-OFF OBSTACLE NOTES

Rwy 27: Multiple trees, flag pole, light pole, and obstruction lights beginning at 287' from DER, 1985' left to 1577' right of centerline, up to 116' AGL/269' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 27: Climb direct to cross JETTI at or below 8000, then climbing left turn direct to cross LOWMA at or below 15000, then via 086° track to POGGI VORTAC, Thence....

....via (transition). Maintain 15000 or as assigned by ATC, expect filed altitude 10 minutes after departure.

IMPERIAL TRANSITION (POGGI2.IPL)

JULIAN TRANSITION (POGGI2.JLI)

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8701
092°	TDZE	17
	Apt Elev	17

RNAV (GPS) RWY 9

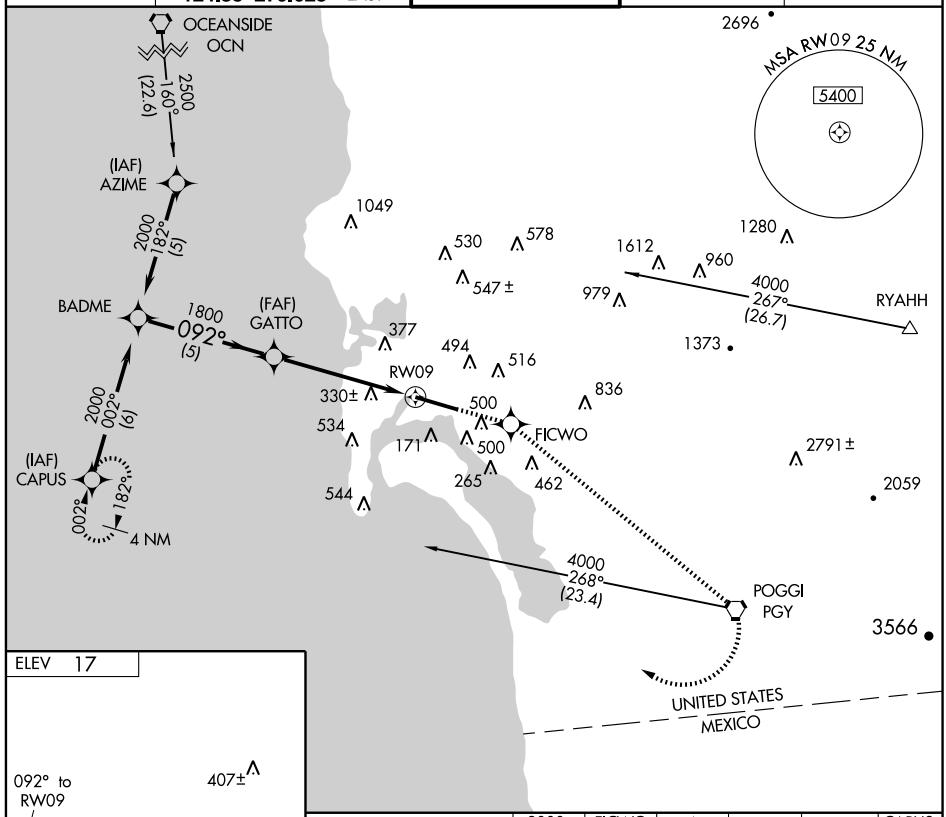
SAN DIEGO INTL (SAN)

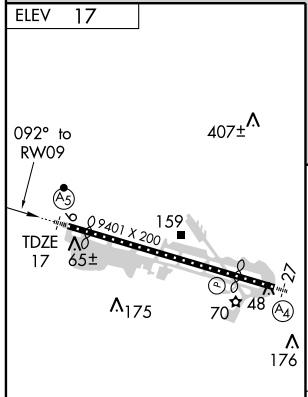
T Inoperative table does not apply to Cats A/B.
A DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MALSR (A5)

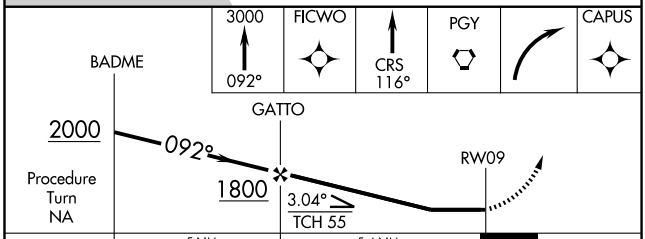
MISSED APPROACH: Climb to 3000 via 092° course to FICWO WP then via 116°course to PGY VORTAC, then right turn direct CAPUS WP and hold.

ATIS	SOCAL APP CON	LINDBERGH TOWER	GND CON	CLNC DEL
134.8	119.6 363.1 WEST 124.35 279.625 EAST	118.3 338.225	123.9	125.9





TDZ/CL Rwys 9 and 27
HIRL Rwy 9-27



CATEGORY	A	B	C	D
LNAV MDA	600/50 583 (600-1)			600/60 583 (600-1¼)
CIRCLING	820-1 803 (900-1)	820-1¼ 803 (900-1¼)	820-2¼ 803 (900-2¼)	820-2½ 803 (900-2½)

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7591
272°	TDZE	17
	Apt Elev	17

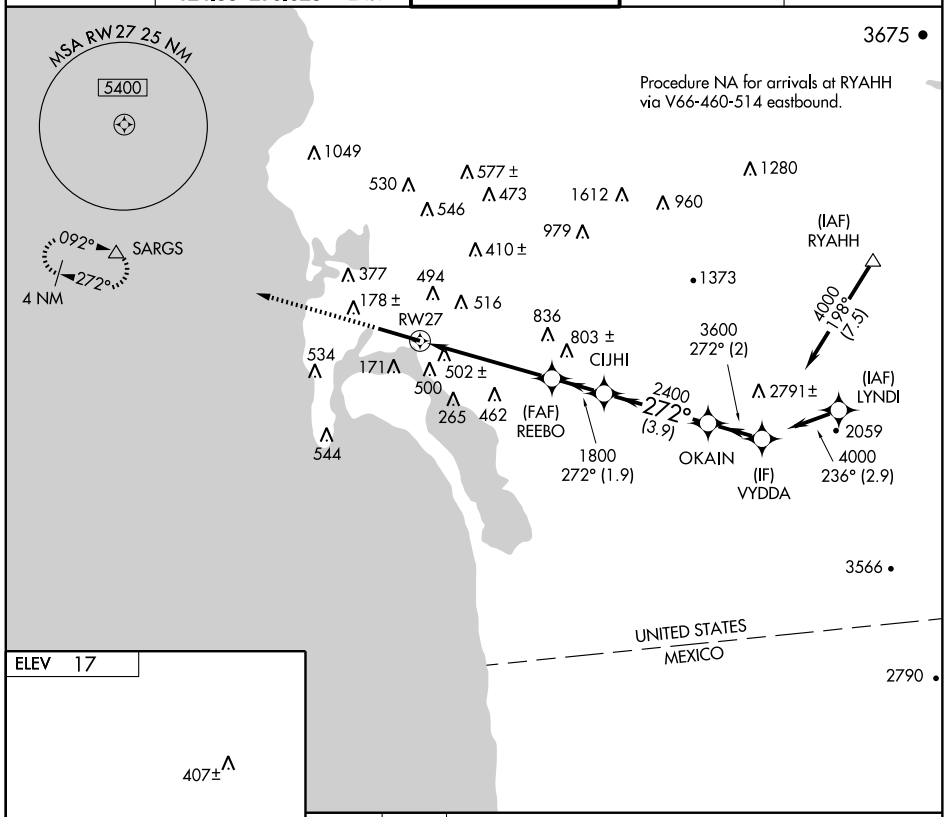
RNAV (GPS) RWY 27
SAN DIEGO INTL (SAN)

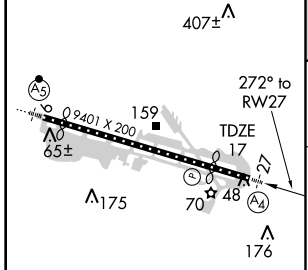
T Inoperative table does not apply.
NA Visibility reduction by helicopters NA.
DME/DME RNP-0.3 NA.

MALS

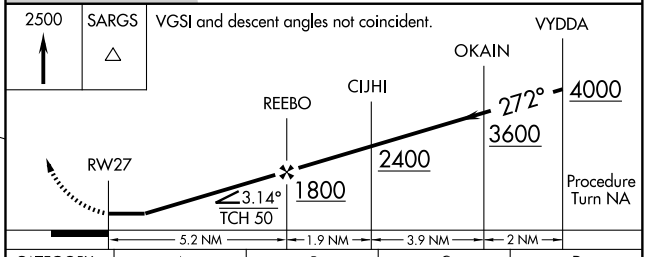
MISSED APPROACH: Climb to 2500 direct SARGS and hold.

ATIS	SOCAL APP CON	LINDBERGH TOWER	GND CON	CLNC DEL
134.8	119.6 363.1 WEST 124.35 279.625 EAST	118.3 338.225	123.9	125.9





TDZ/CL Rwys 9 and 27
HIRL Rwy 9-27



CATEGORY	A	B	C	D
LNAV MDA	760/50 743 (800-1)	760/60 743 (800-1¼)	760-2¼ 743 (800-2¼)	760-2½ 743 (800-2½)
CIRCLING	820-1 803 (900-1)	820-1¼ 803 (900-1¼)	820-2¼ 803 (900-2¼)	820-2½ 803 (900-2½)

SW-3, 22 OCT 2009 to 19 NOV 2009

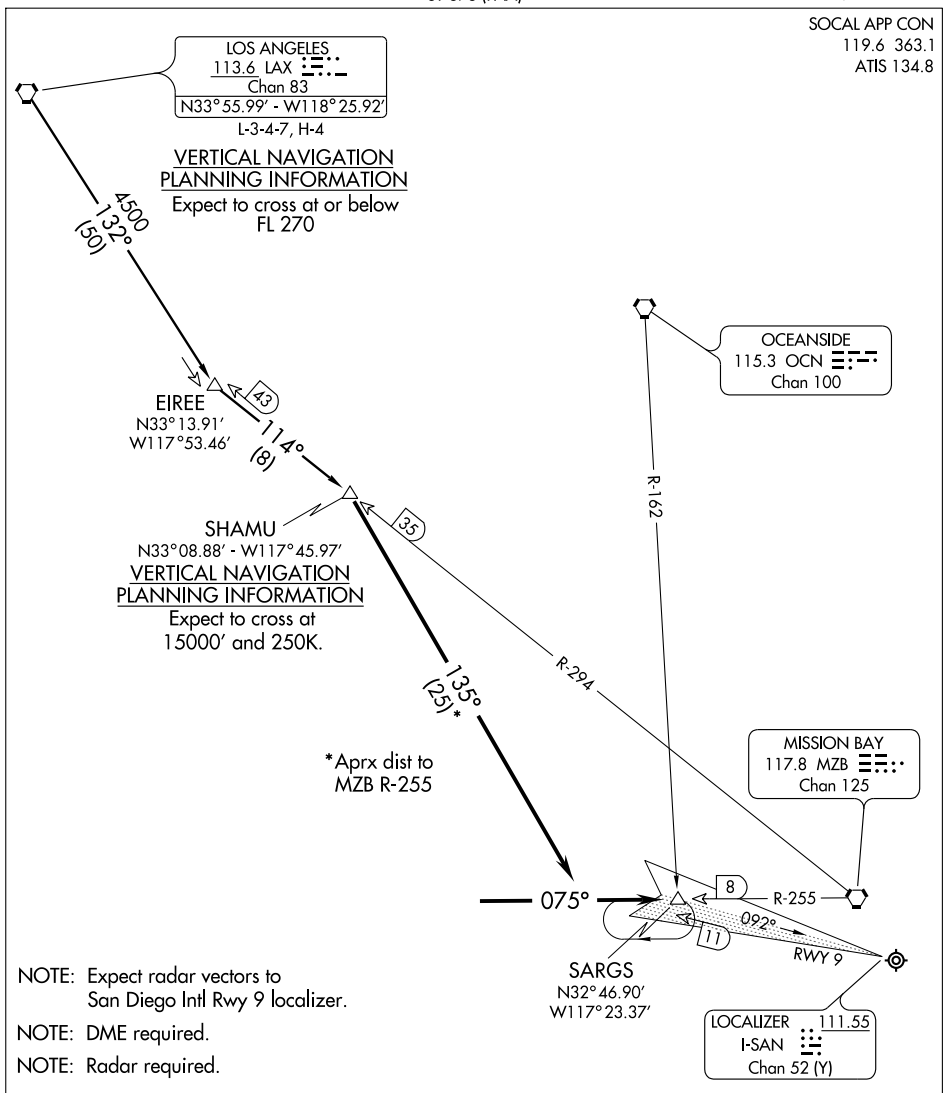
(SHAMU.SHAMU1) 09127

SHAMU ONE ARRIVAL

ST-373 (FAA)

SAN DIEGO INTL
SAN DIEGO, CALIFORNIA

SOCAL APP CON
119.6 363.1
ATIS 134.8



NOTE: Expect radar vectors to San Diego Intl Rwy 9 localizer.

NOTE: DME required.

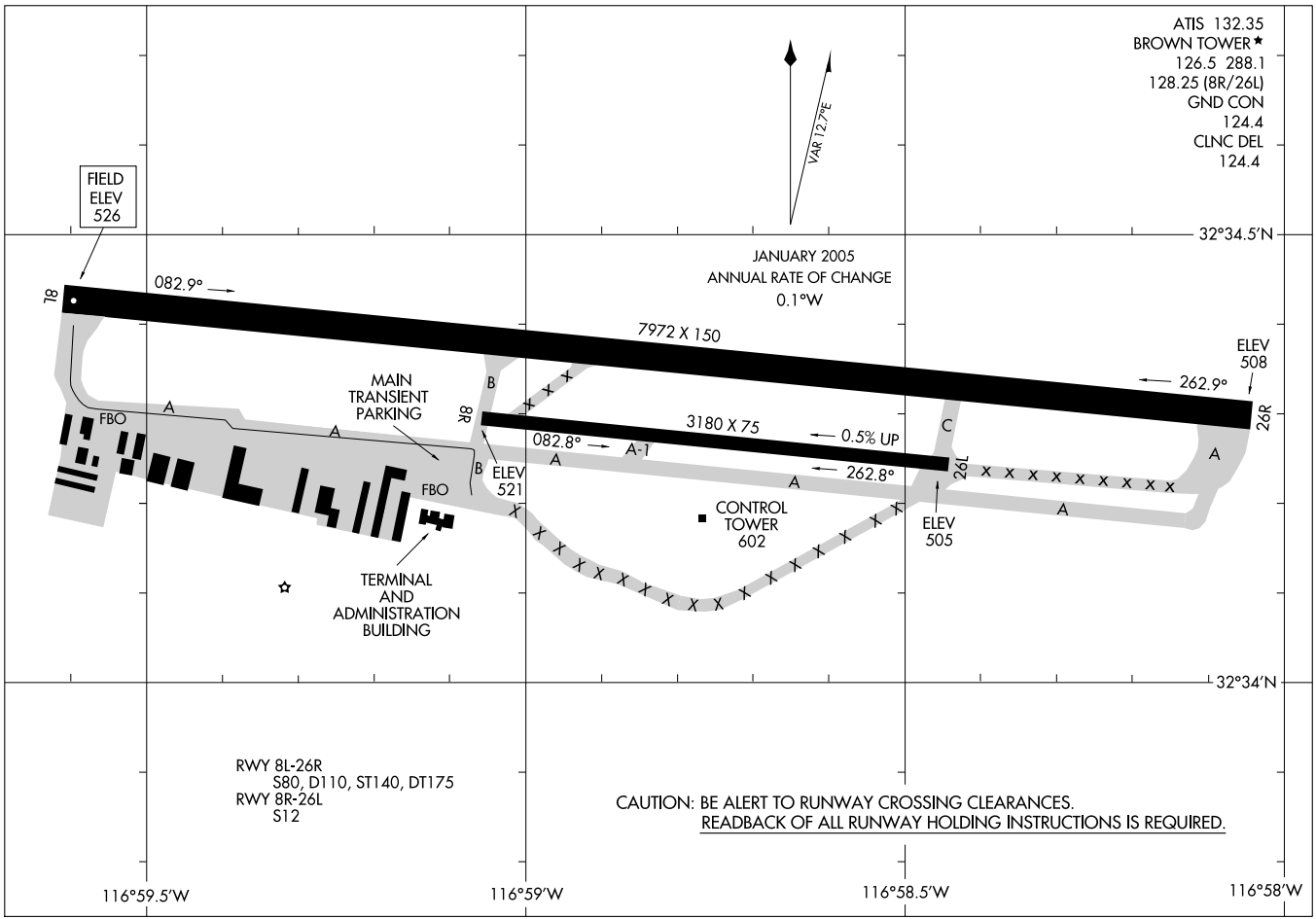
NOTE: Radar required.

NOTE: Chart not to scale.

LOS ANGELES TRANSITION (LAX.SHAMU1): From over LAX VORTAC via LAX R-132 and MZB R-294 to SHAMU FIX. Thence....

....From over SHAMU FIX via heading 135° to intercept MZB R-255 then via MZB R-255 to SARGS INT. Expect radar vectors to SAN Rwy 9 localizer.

SW-3, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-5814 (FAA)

SAN DIEGO/ BROWN FIELD MUNI (SDM)
SAN DIEGO, CALIFORNIA

APP CRS	Rwy Idg	7972
082°	TDZE	526
	Apt Elev	526

RNAV (GPS) RWY 8L

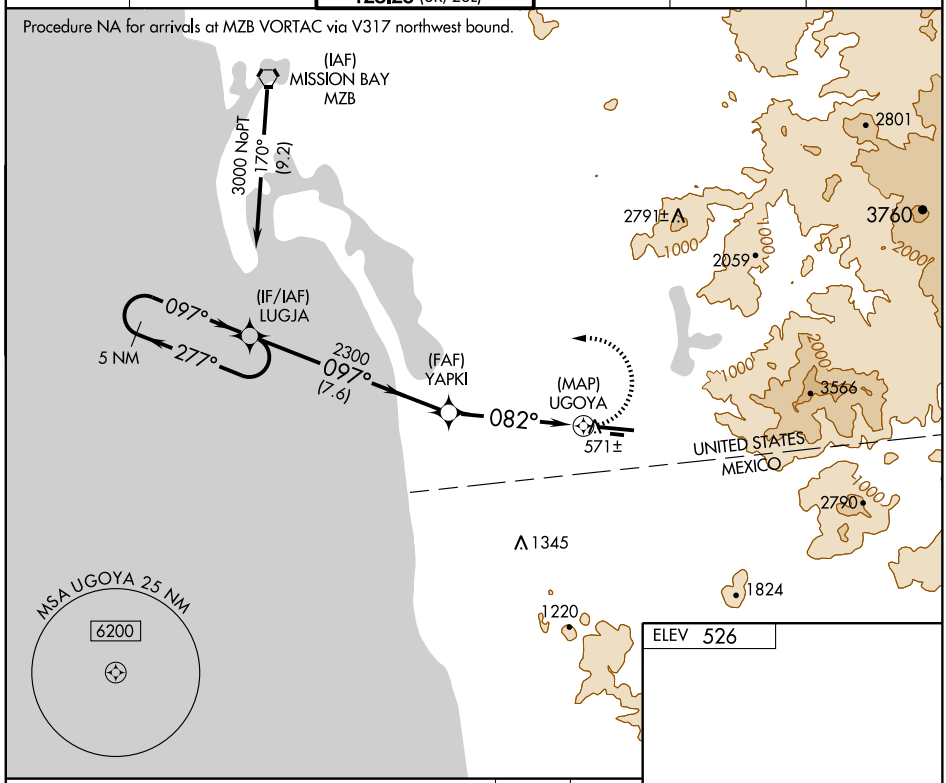
SAN DIEGO/ BROWN FIELD MUNI (SDM)

DME/DME RNP -0.3 NA.
Circling NA south of Rwy 8R-26L.
If local altimeter setting not received, use San Diego Intl altimeter setting and increase all MDAs 120 feet.
VDP NA when using San Diego Intl altimeter setting.

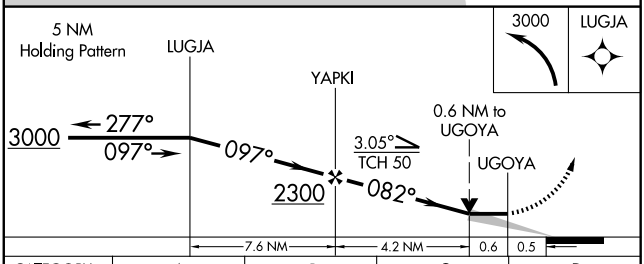
MISSED APPROACH: Climbing left turn to 3000 direct LUGJA and hold.

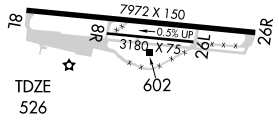
ATIS	SOCAL APP CON	BROWN TOWER ★	GND CON	CLNC DEL	UNICOM
132.35	124.35 279.625	126.5 (CTAF) 288.1 128.25 (8R/26L)	124.4	124.4	122.95

Procedure NA for arrivals at MZB VORTAC via V317 northwest bound.



ELEV 526





CATEGORY	A	B	C	D
LNAV MDA	940-1 414 (500-1)		940-1¼ 414 (500-1¼)	
CIRCLING	980-1 454 (500-1)	1020-1 494 (500-1)	1020-1½ 494 (500-1½)	1080-2 554 (600-2)

MIRL Rwy 8L-26R

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC PGY 109.8 Chan 35	APP CRS 156°	Rwy Idg N/A TDZE N/A Apt Elev 524

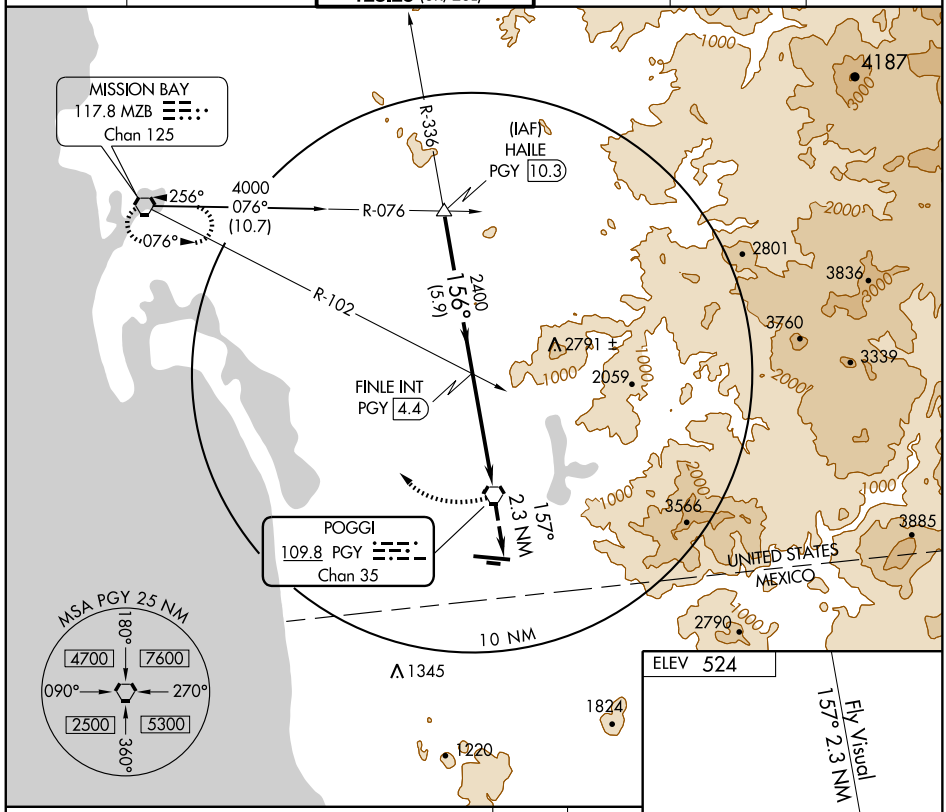
VOR or GPS-A

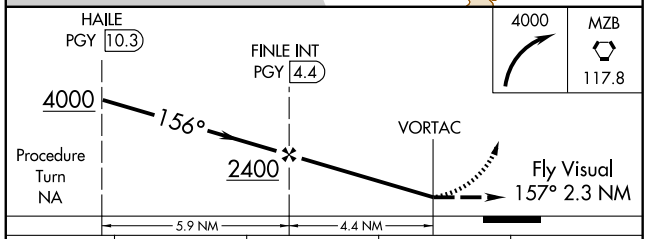
SAN DIEGO/ BROWN FIELD MUNI (SDM)

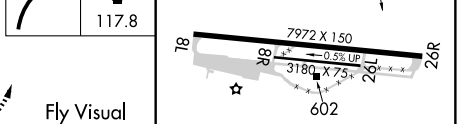
When control tower closed, use San Diego Intl altimeter setting minimums.
Circling not authorized south of runway 8R-26L.

MISSED APPROACH: Climbing right turn to 4000 direct MZB VORTAC and hold.

ATIS	SOCAL APP CON	BROWN TOWER ★	GND CON	CLNC DEL	UNICOM
132.35	124.35 279.625	126.5 (CTAF) 288.1 128.25 (8R/26L)	124.4	124.4	122.95







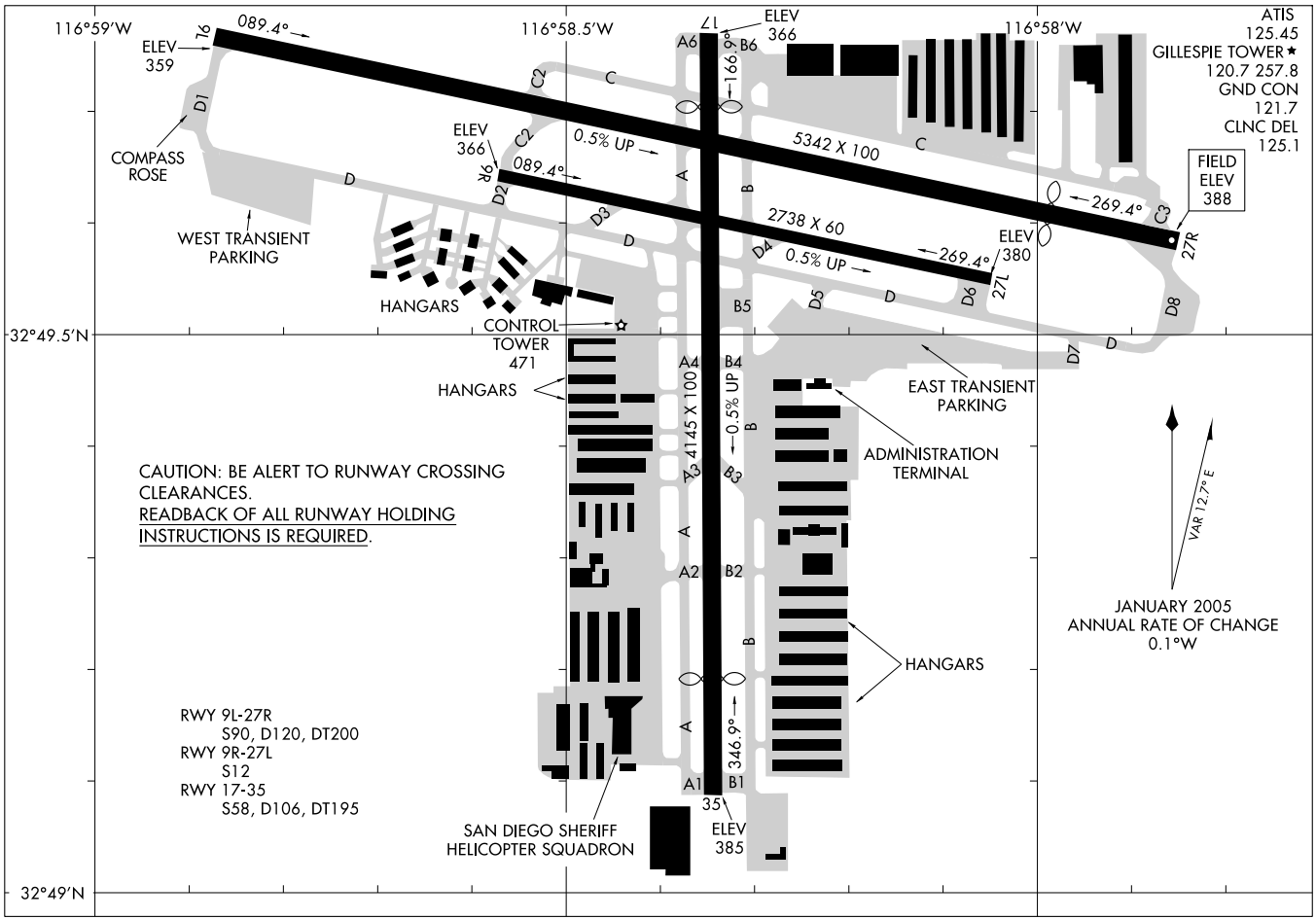
CATEGORY	A	B	C	D
CIRCLING	1220-2¾ 696 (700-2¾)			

SAN DIEGO INTL ALTIMETER SETTING MINIMUMS

CIRCLING	1340-2¾ 816 (900-2¾)			

MIRL Rwy 8L-26R

SW-3, 22 OCT 2009 to 19 NOV 2009


AIRPORT DIAGRAM
AL-5402 (FAA)
SAN DIEGO/GILLESPIE FIELD (SEE)
SAN DIEGO (EL CAJON), CALIFORNIA
116°59'W
116°58.5'W
116°58'W
32°49.5'N
32°49'N
ATIS
125.45
GILLESPIE TOWER★
120.7 257.8
GND CON
121.7
CLNC DEL
125.1
ELEV 359
ELEV 366
ELEV 366
ELEV 380
ELEV 385
FIELD ELEV 388
089.4°
269.4°
166.9°
346.9°
5342 X 100
2738 X 60
4145 X 100
0.5% UP
COMPASS ROSE
WEST TRANSIENT PARKING
HANGARS
CONTROL TOWER 471
HANGARS
EAST TRANSIENT PARKING
ADMINISTRATION TERMINAL
HANGARS
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RWY 9L-27R
S90, D120, DT200
RWY 9R-27L
S12
RWY 17-35
S58, D106, DT195
SAN DIEGO SHERIFF HELICOPTER SQUADRON
VAR 12.7° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

LOC I-SEE	APP CRS	Rwy Idg	N/A
110.5	269°	TDZE	N/A
		Apt Elev	387

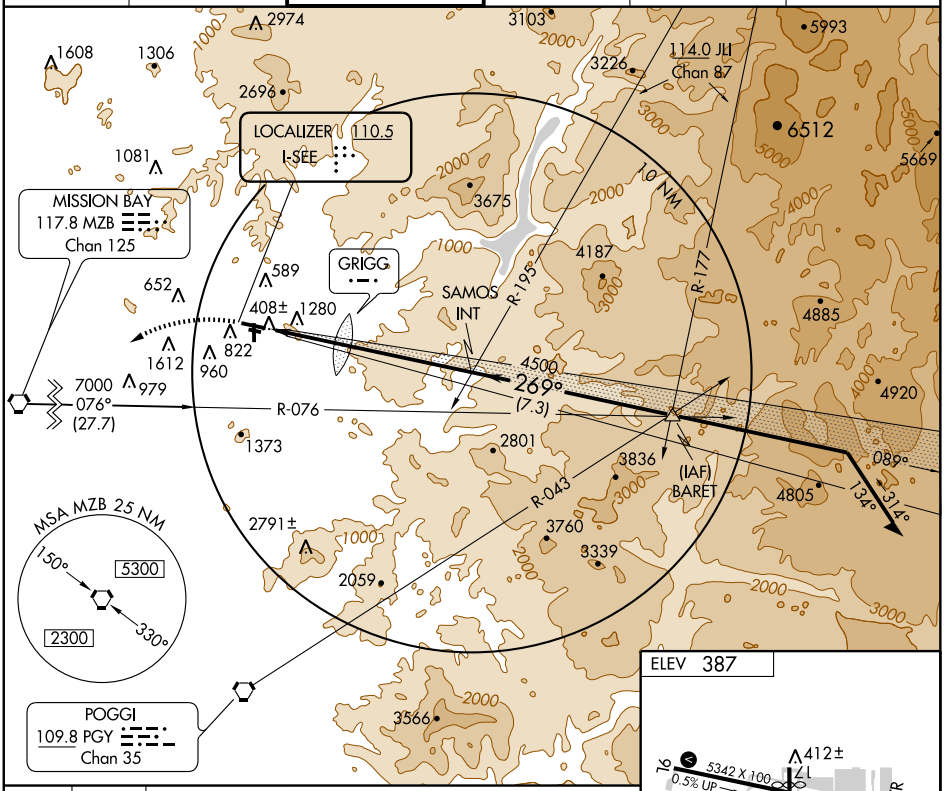
LOC-D

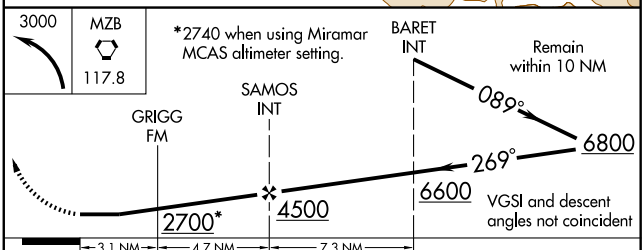
SAN DIEGO/ GILLESPIE FIELD (SEE)

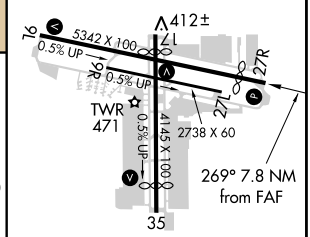
Circling not authorized NE of Rwys 17 and 27R.
When control tower closed use Miramar MCAS, CA altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climbing left turn to 3000 direct to MZB VORTAC.

ATIS	SOCAL APP CON	GILLESPIE TOWER★	GND CON	CLNC DEL	UNICOM
125.45	124.35 279.625	120.7 (CTAF) L 257.8	121.7	125.1	123.05







CATEGORY	A	B	C	D
CIRCLING	2700-1¼ 2313 (2400-1¼)	2700-1½ 2313 (2400-1½)	2700-3 2313 (2400-3)	

MIRL Rwys 9L-27R and 17-35 L

GRIGG FM MINIMUMS

CIRCLING	1580-1¼ 1193 (1200-1¼)	1580-1½ 1193 (1200-1½)	1580-3 1193 (1200-3)	1920-3 1533 (1600-3)

FAF to MAP 7.8 NM

Knots	60	90	120	150	180
Min:Sec	7:48	5:12	3:54	3:07	2:36

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN DIEGO (EL CAJON), CALIFORNIA AL-5402 (FAA)

APP CRS	Rwy Idg	3695
152°	TDZE	379
	Apt Elev	388

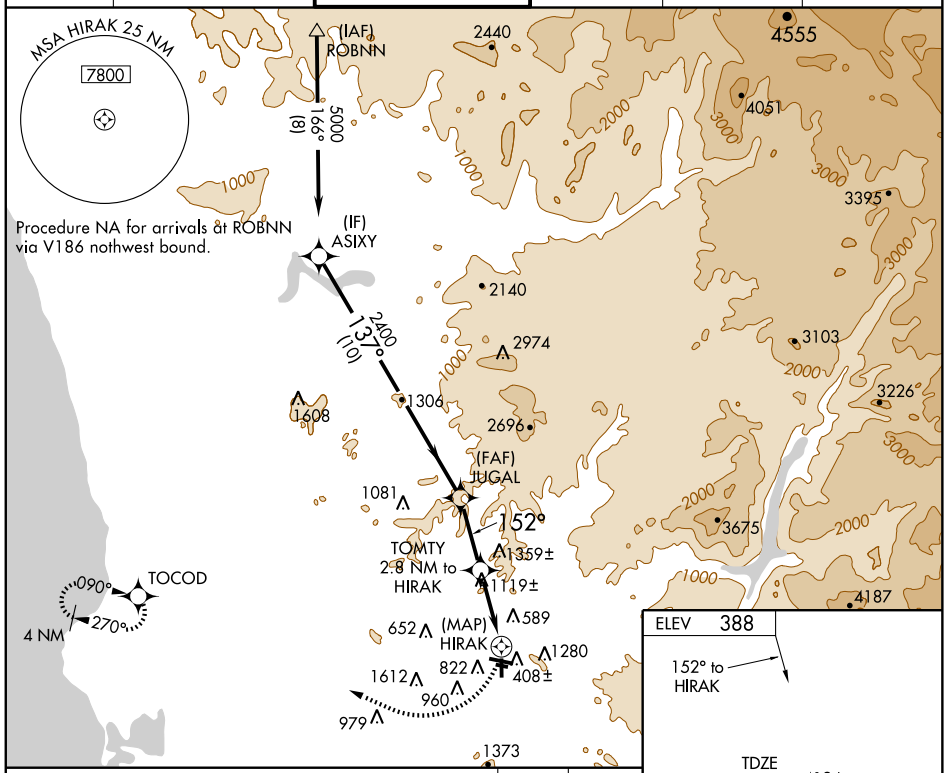
RNAV (GPS) RWY 17

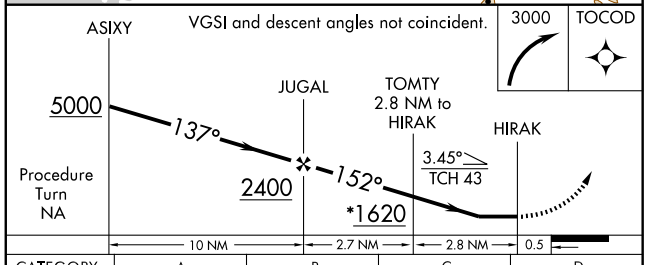
SAN DIEGO/GILLESPIE FIELD (SEE)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Miramar MCAS altimeter setting and increase all MDA 40 feet.
*1660 when using Miramar MCAS altimeter setting.
LNAV MDA Cat D minima NA when using Miramar MCAS altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 direct TOCOD and hold.

ATIS	SOCAL APP CON	GILLESPIE TOWER*	GND CON	CLNC DEL	UNICOM
125.45	124.35 279.625	120.7 (CTAF) L 257.8	121.7	125.1	123.05

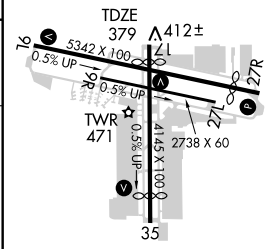




CATEGORY	A	B	C	D
LNAV MDA	1440-1¼ 1061 (1100-1¼)	1440-1½ 1061 (1100-1½)	1440-3 1061 (1100-3)	
CIRCLING	1440-1¼ 1052 (1100-1¼)	1440-1½ 1052 (1100-1½)	1440-3 1052 (1100-3)	1520-3 1132 (1200-3)

ELEV 388

152° to HIRAK



466 ±
465 ±

MIRL Rwys 9L-27R and 17-35 L

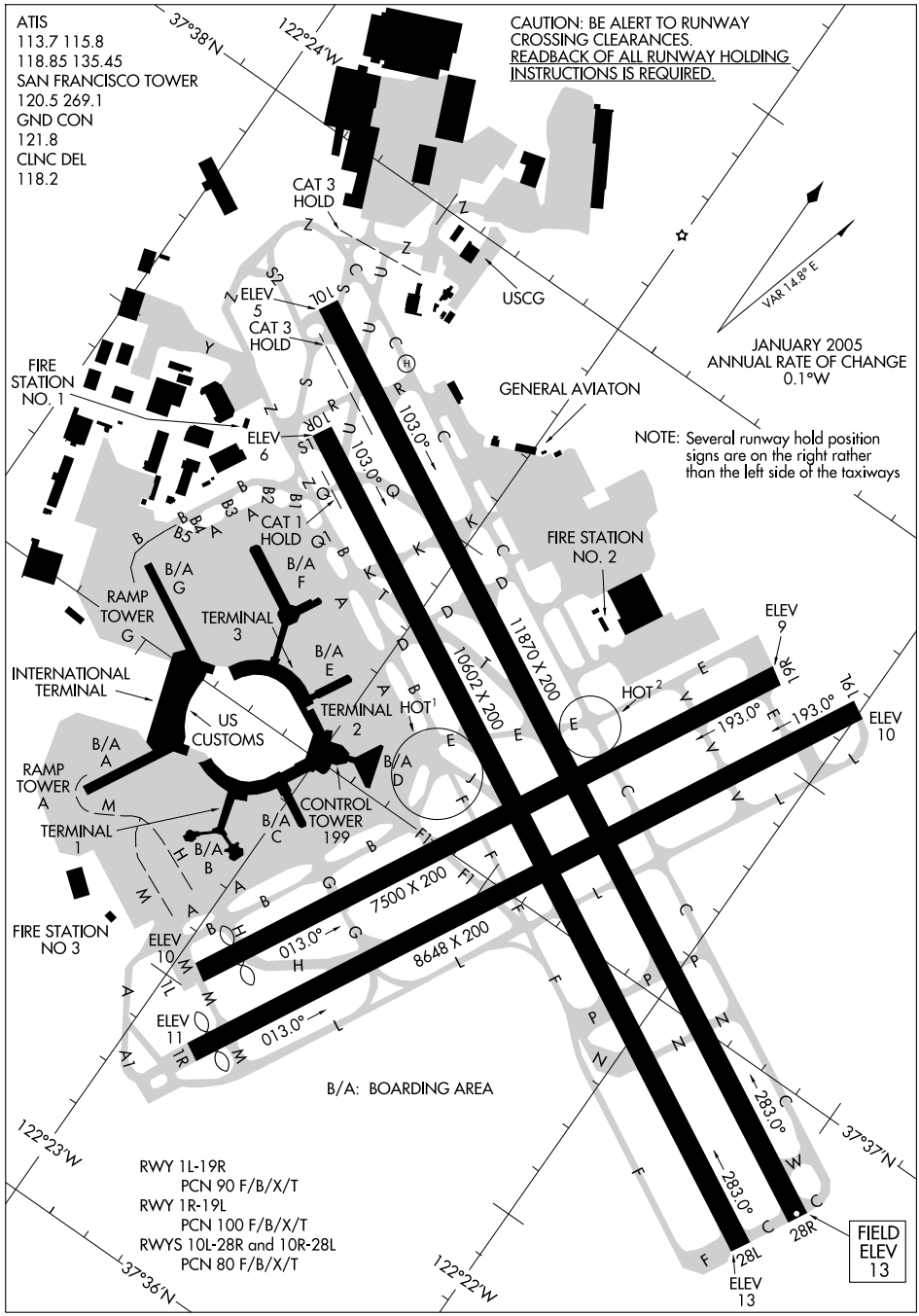
SW-3, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



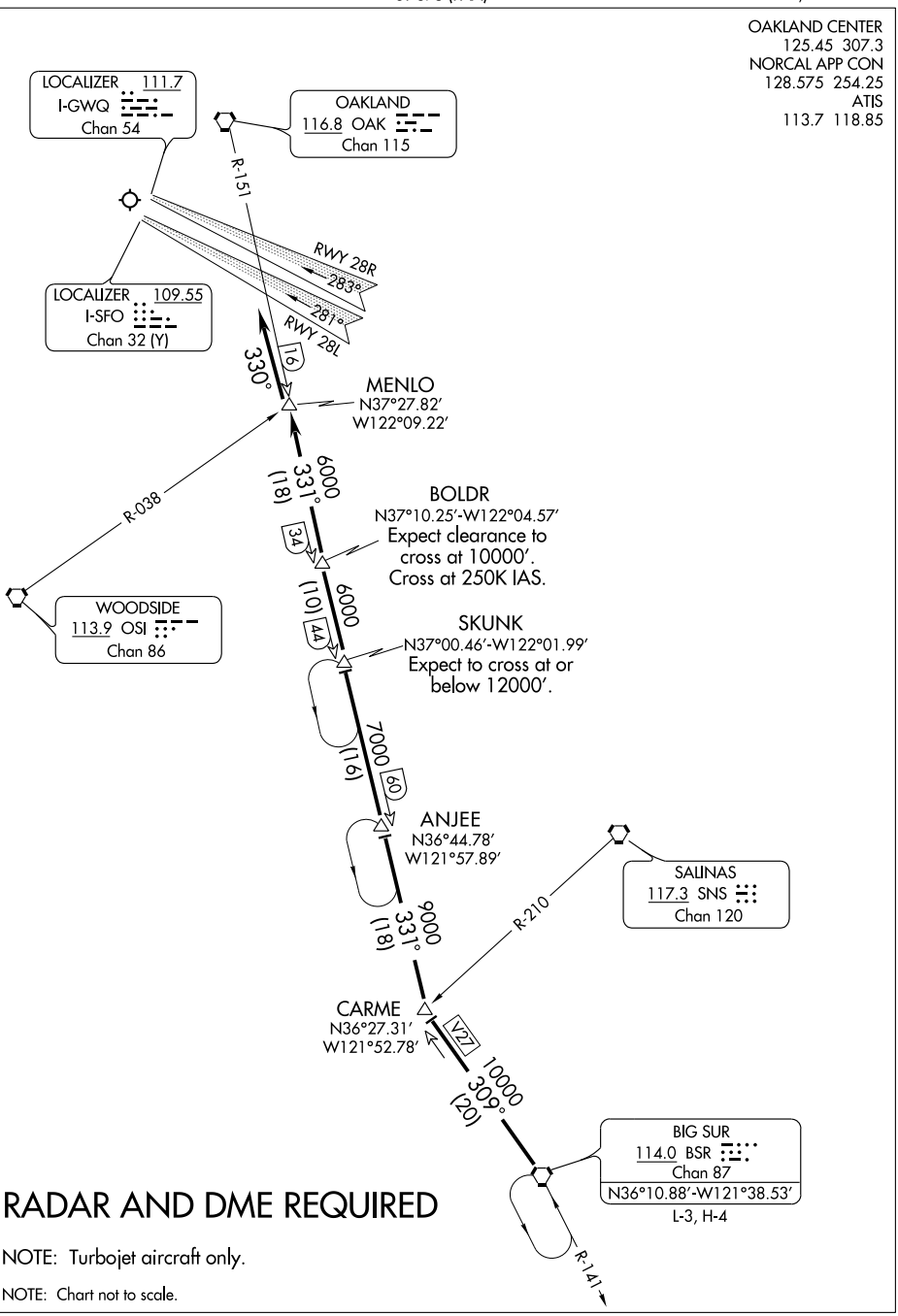
SW-2, 22 OCT 2009 to 19 NOV 2009

(BSR.BSR2) 07298

BIG SUR TWO ARRIVAL

ST-375 (FAA)

SAN FRANCISCO INTL
SAN FRANCISCO, CALIFORNIA



RADAR AND DME REQUIRED

NOTE: Turbojet aircraft only.

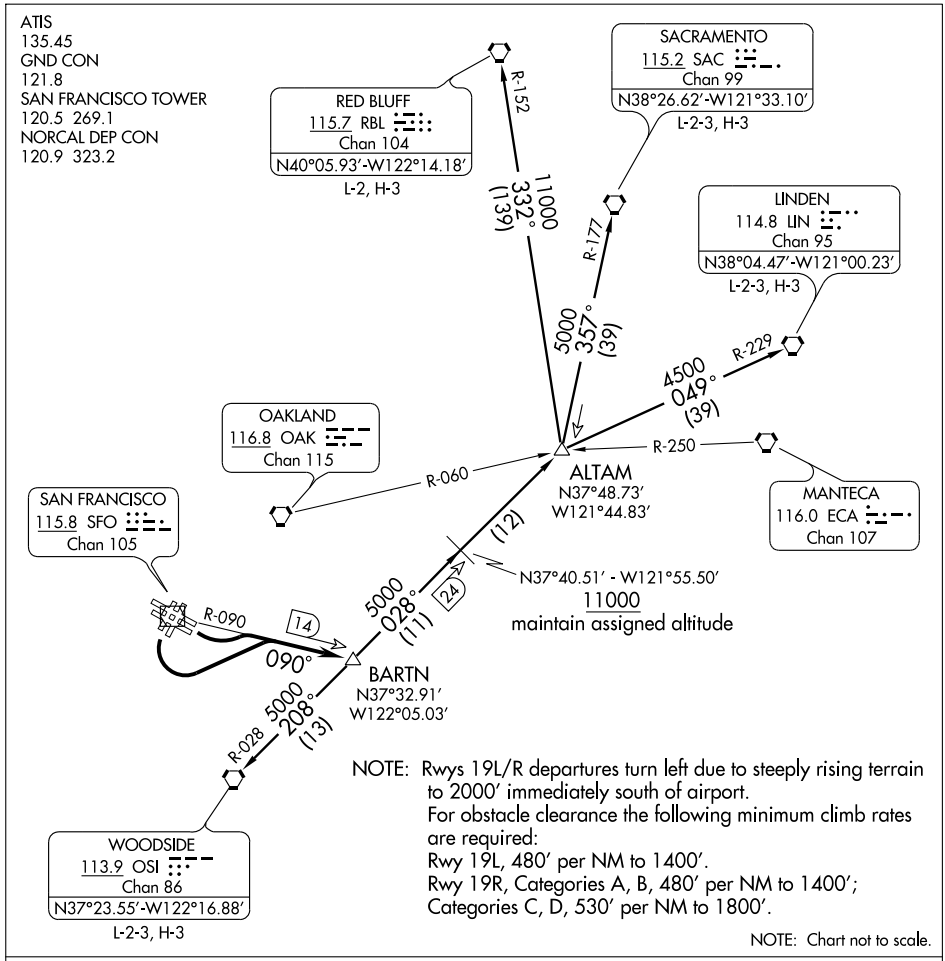
NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

DUMBARTON SIX DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



NOTE: Rwys 19L/R departures turn left due to steeply rising terrain to 2000′ immediately south of airport.
For obstacle clearance the following minimum climb rates are required:
Rwy 19L, 480′ per NM to 1400′.
Rwy 19R, Categories A, B, 480′ per NM to 1400′; Categories C, D, 530′ per NM to 1800′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 10L/R and 19L/R: Turn left and climb via SFO R-090 to BARTN INT, thence via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure.

LINDEN TRANSITION (DUMB6.LIN): From over BARTN INT via OSI R-028 and LIN R-229 to LIN VORTAC.

RED BLUFF TRANSITION (DUMB6.RBL): From over BARTN INT via OSI R-028 and RBL R-152 to RBL VORTAC.

SACRAMENTO TRANSITION (DUMB6.SAC): From over BARTN INT via OSI R-028 and SAC R-177 to SAC VORTAC.

WOODSIDE TRANSITION (DUMB6.OSI): From over BARTN INT via OSI R-028 to OSI VORTAC.

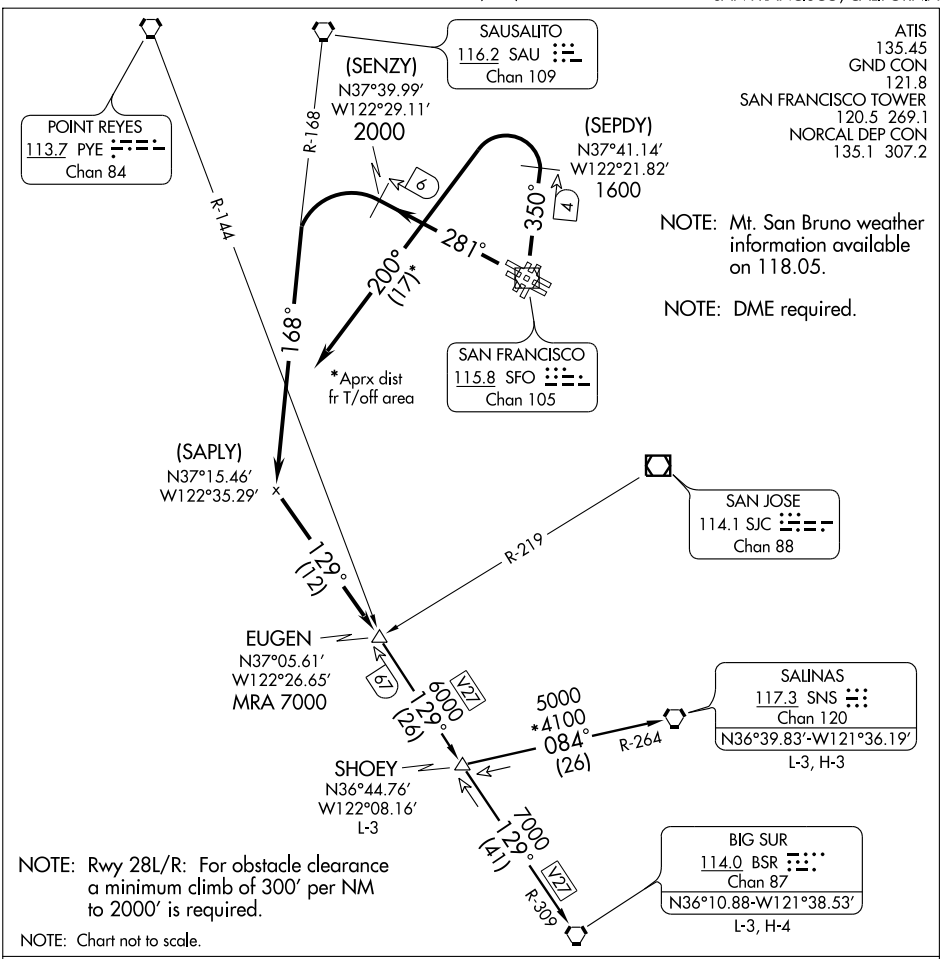
SW-2, 22 OCT 2009 to 19 NOV 2009

(EUGEN5.EUGEN) 07298

EUGEN FIVE DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via SFO R-350, after passing the 4 DME fix and after reaching 1600', turn left heading 200° to intercept and proceed via SAU R-168 and BSR R-309 to EUGEN INT. Thence....

TAKE-OFF RUNWAYS 28L/R: Climb via SFO R-281, after passing 6 DME fix and reaching 2000', turn left to intercept and proceed via SAU R-168 and BSR R-309 to EUGEN INT. Thence....

....via (transition) or (assigned route). Expect further clearance to filed alittude 10 minutes after departure.

BIG SUR TRANSITION (EUGEN5.BSR)

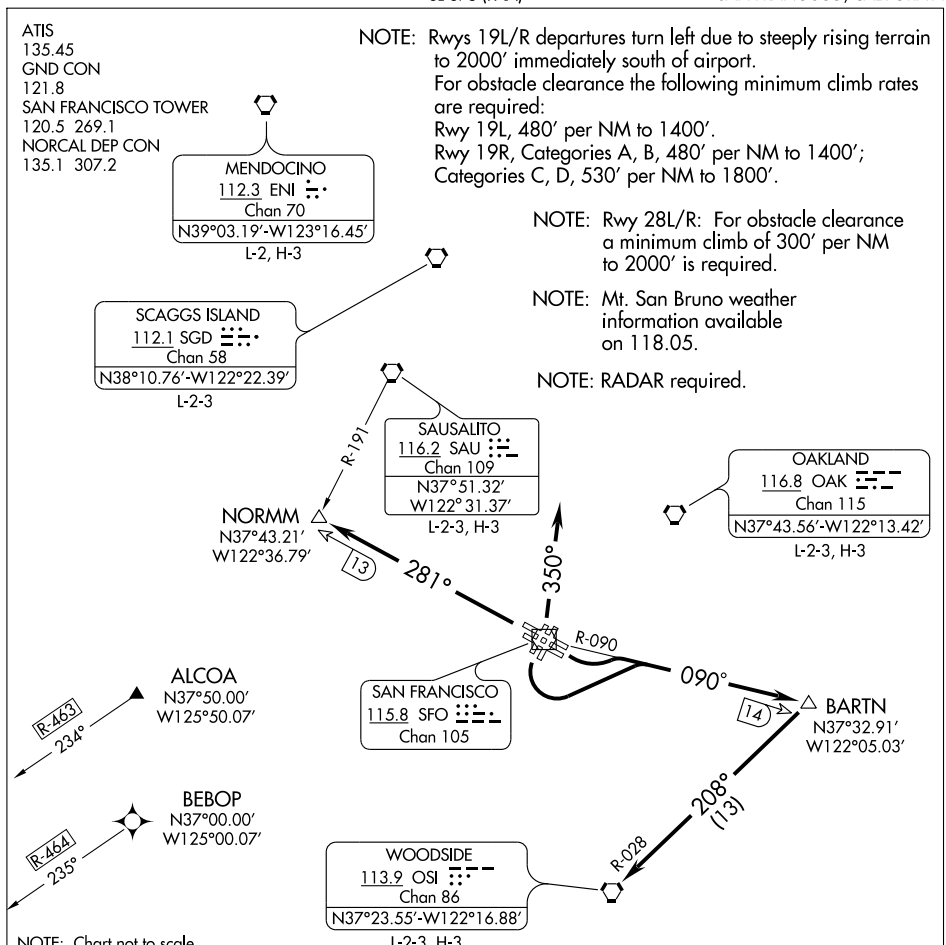
SALINAS TRANSITION (EUGEN5.SNS)

SHOEY TRANSITION (EUGEN5.SHOEY)

SW-2, 22 OCT 2009 to 19 NOV 2009

GAP THREE DEPARTURE

SL-375 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via heading 350° (or as assigned) for vector to assigned route/fix. Expect further clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 10L/R and 19L/R: Turn left and climb via SFO R-090 and OSI R-028 to OSI VORTAC; expect vector to assigned route/fix after OSI VORTAC. Expect further clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 28L/R: Climb via SFO VOR/DME R-281 to NORMM INT; expect vector to assigned route/fix after NORMM INT. Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:
ALL RUNWAYS: If not in contact with departure control after reaching 3000', continue climb to assigned altitude and proceed direct to assigned route/fix.

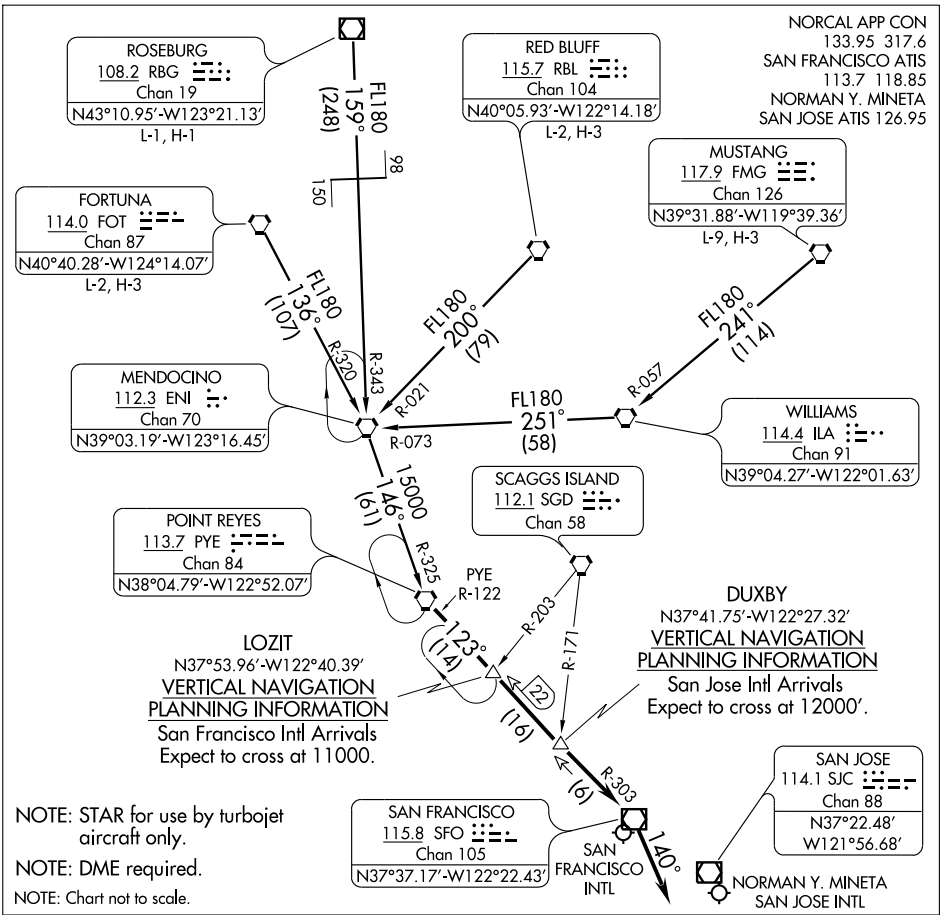
SW-2, 22 OCT 2009 to 19 NOV 2009

(PYE.GOLDN5) 08101

GOLDEN GATE FIVE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA



FORTUNA TRANSITION (FOT.GOLDN5): From over FOT VORTAC via FOT R-136 and ENI R-320 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

MUSTANG TRANSITION (FMG.GOLDN5): From over FMG VORTAC via FMG R-241 and ILA R-057 to ILA VORTAC, then via ILA R-251 and ENI R-073 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

RED BLUFF TRANSITION (RBL.GOLDN5): From over RBL VORTAC via RBL R-200 and ENI R-021 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

ROSEBURG TRANSITION (RBG.GOLDN5): From over RBG VOR/DME via RBG R-159 and ENI R-343 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

....From over PYE VORTAC via SFO R-303 to SFO VOR/DME, then via heading 140° (MEA 6000). Expect vectors to final approach course.

LOST COMMUNICATIONS: San Jose Intl: After SFO VOR/DME proceed direct SJC VOR/DME. (MEA 6000).

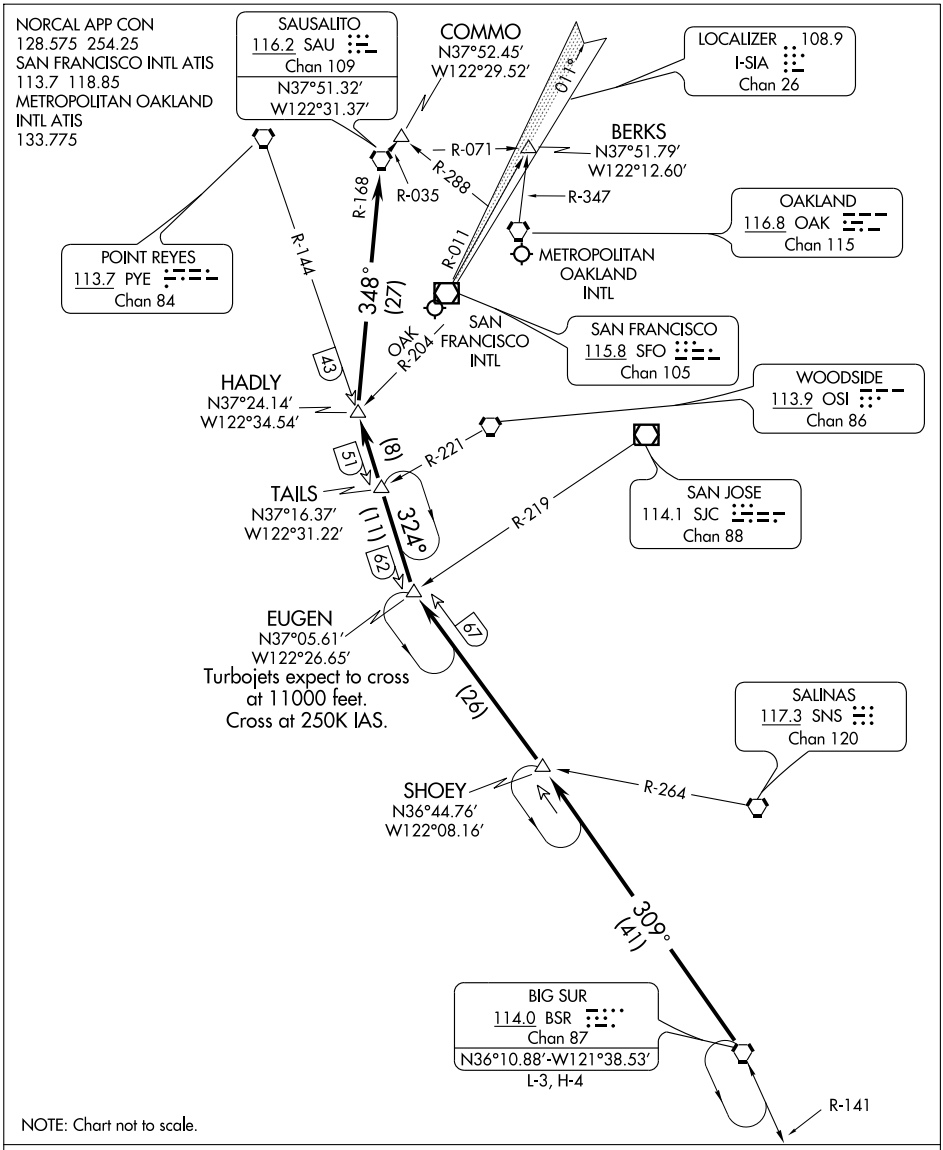
SW-2, 22 OCT 2009 to 19 NOV 2009

(BSR.HADLY2) 07298

HADLY TWO ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA



From over BSR VORTAC via BSR R-309 to EUGEN INT, then via PYE R-144 to HADLY INT, then via direct SAU VORTAC. Expect vectors to final approach course. Expect clearance to cross EUGEN INT at 11000′ and at 250K IAS.

LOST COMMUNICATIONS

San Francisco Intl: Depart SAU VORTAC via SAU R-071 to BERKS INT.

Metropolitan Oakland Intl: Depart SAU VORTAC via SAU R-035 to COMMO INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN FRANCISCO, CALIFORNIA — AL-375 (FAA)

LOC/DME I-SIA	APP CRS	Rwy 19L lda 8648	Rwy 19R lda 7500
108.9 Chan 26	191°	TDZE 11	TDZE 10
		Apt Elev 13	Apt Elev 13

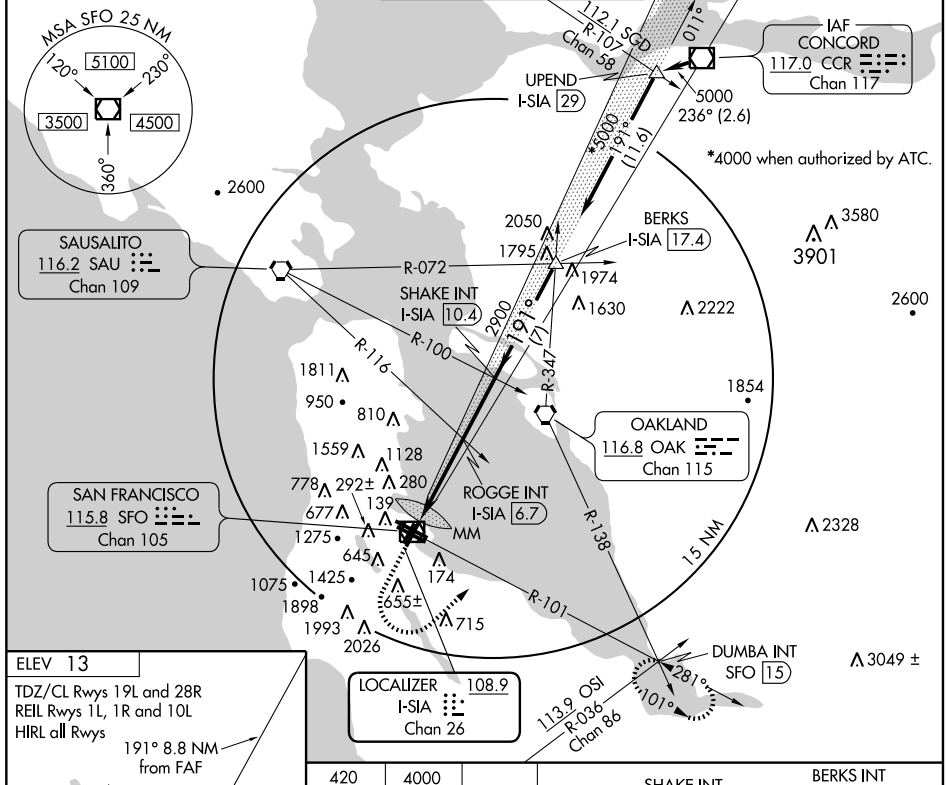
ILS or LOC RWY 19L
SAN FRANCISCO INTL (SFO)

Inoperative table does not apply.

SSALS Rwy 19L (A4)

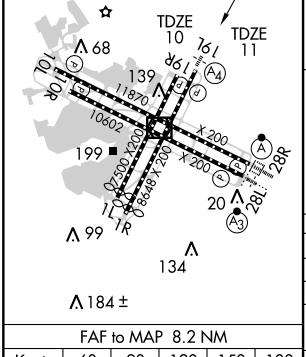
MISSED APPROACH: Climb to 420 then climbing left turn to 4000 via SFO VOR/DME R-101 to DUMBA Int and hold.

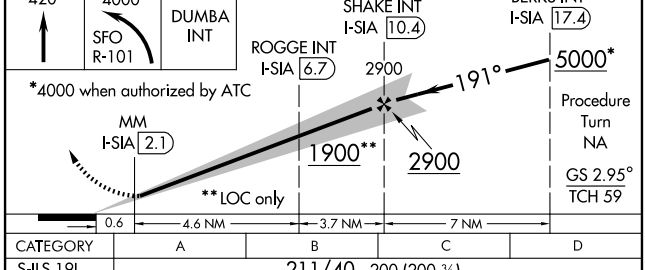
ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2



ELEV 13

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys





CATEGORY	A	B	C	D
S-ILS 19L	211/40	200 (200-¾)		
S-LOC 19L	340/50	329 (400-1)		
SIDESTEP RWY 19R	340/50	330 (400-1)	340-1½ 330 (400-1½)	340-2 330 (400-2)
CIRCLING	760-1¼ 747 (800-1¼)	940-1½ 927 (1000-1½)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

FAF to MAP 8.2 NM

Knots	60	90	120	150	180
Min:Sec	8:12	5:28	4:06	3:17	2:44

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SFO	APP CRS	Rwy 28L Idg 10602	Rwy 28R Idg 11870
109.55 Chan 32 (Y)	281°	TDZE 13	TDZE 13
		Apt Elev 13	Apt Elev 13

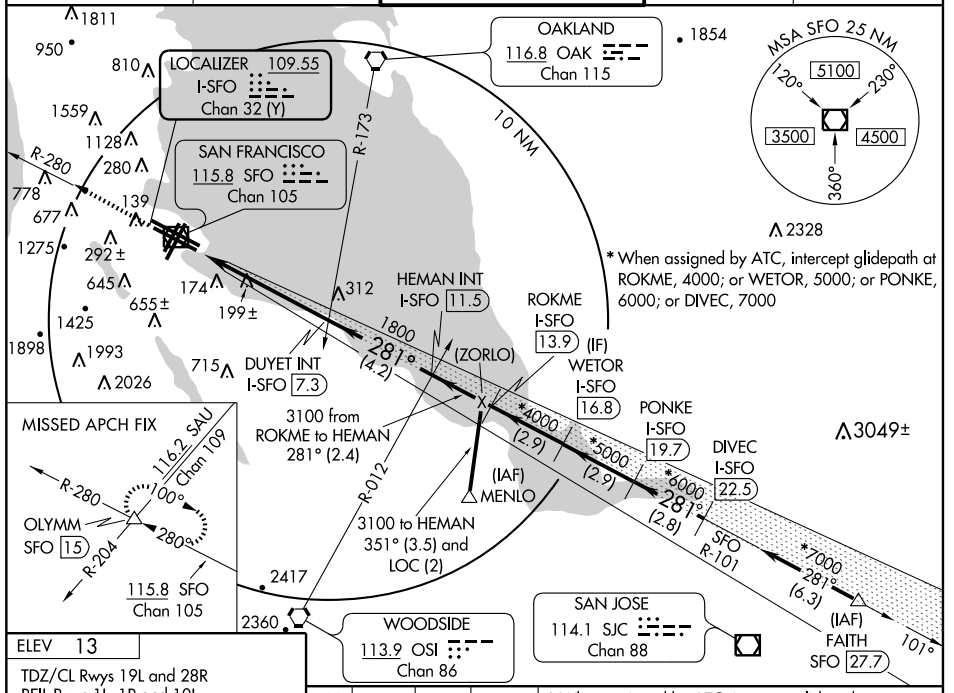
ILS or LOC RWY 28L
SAN FRANCISCO INTL (SFO)

Inoperative table does not apply to sidestep 28R Cat A and B. Disregard IM and MM indications. #RVR 1800 authorized with the use of FD or AP or HUD to DA.

SSALR Rwy 28L (A2) ALSF-2 Rwy 28R (A)

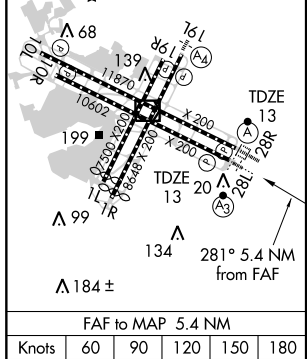
MISSED APPROACH: Climb to 600 then climbing right turn to 3000 via heading 285° and SFO VOR/DME R-280 to OLYMM INT 15 DME and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2

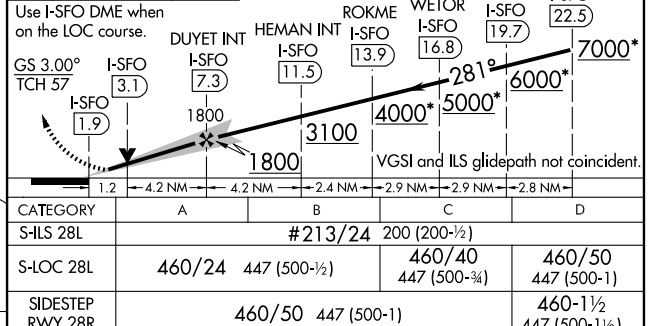


ELEV 13

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys



FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-ILS 28L	#213/24 200 (200-½)			
S-LOC 28L	460/24 447 (500-½)		460/40 447 (500-¾)	460/50 447 (500-1)
SIDESTEP RWY 28R	460/50 447 (500-1)			460-1½ 447 (500-1½)
CIRCLING	760-1 747 (800-1)	940-1¼ 927 (1000-1¼)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN FRANCISCO, CALIFORNIA — AL-375 (FAA)

LOC/DME I-GWQ	APP CRS	Rwy 28R Idg **11870**	Rwy 28L Idg **10602**
111.7 Chan **54**	**283°**	TDZE **13**	TDZE **13**
		Apt Elev **13**	Apt Elev **13**

ILS or LOC RWY 28R
SAN FRANCISCO INTL (SFO)

Inoperative table does not apply to Sidestep Rwy 28L Cat A and Cat B.
For inoperative SSALR, increase Sidestep R28L Cat C visibility to RVR 6000.

ALSF-2 Rwy 28R (A) — SSALR Rwy 28L (A3)

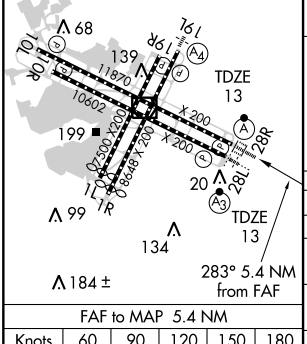
MISSED APPROACH: Climb to 600, then climbing left turn to 3000 via heading 281° and SFO VOR/DME R-279 to VIKYU Int/SFO 12 DME and hold. #

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	**134.5 338.2**	**120.5 269.1**	**121.8**	**118.2**

Obstructions in missed approach area require a minimum rate of climb 400 FPM/100K, 600 FPM/150K, 800 FPM/200K to 900, no wind conditions.

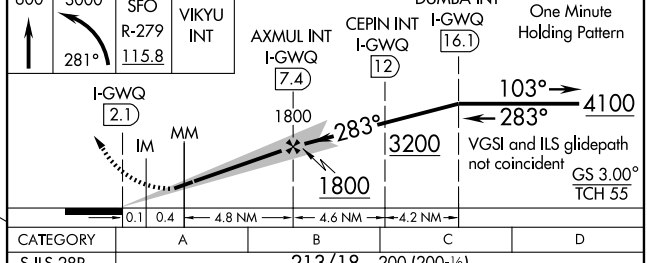
OAKLAND 116.8 OAK Chan 115
SAN FRANCISCO 115.8 SFO Chan 105
LOCALIZER 111.7 I-GWQ Chan 54
VIKYU INT SFO 12
116.2 SAU Chan 109
R-186 099° 279° R-279
AXMUL INT I-GWQ 7.4
CEPIN INT I-GWQ 12
(IF/IAF) DUMBA INT I-GWQ 16.1
(IAF) MENLO
(IAF) MEHTA INT
WOODSIDE 113.9 OSI Chan 86
MSA SFO 25 NM 5100 3500 4500
R-173 R-151 R-138 R-101 R-036 R-056
4100 138° (14.7)
283° (4.6) 283° (4.2) 331° (4.4) 103° 1 min
3200 1800
4100 NoPT 281° (5.4)
4100 to Dumba 036° (11.1)
10 NM
1811 950 1854 810 1559 1128 280 778 677 139 1275 292± 645 1425 655± 1075 1898 1993 2026 715 174 199± 312 2328 2417 2360

ELEV 13
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys



283° 5.4 NM from FAF

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-ILS 28R	213/18 200 (200-½)			
S-LOC 28R	460/24 447 (500-½)		460/40 447 (500-¾)	460/50 447 (500-1)
SIDESTEP RWY 28L	460/50 447 (500-1)			460-1½ 447 (500-1½)
CIRCLING	760-1 747 (800-1)	940-1¼ 927 (1000-1¼)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN FRANCISCO, CALIFORNIA

AL-375 (FAA)

ILS PRM RWY 28L (SIMULTANEOUS CLOSE PARALLEL)

SAN FRANCISCO INTL (SFO)

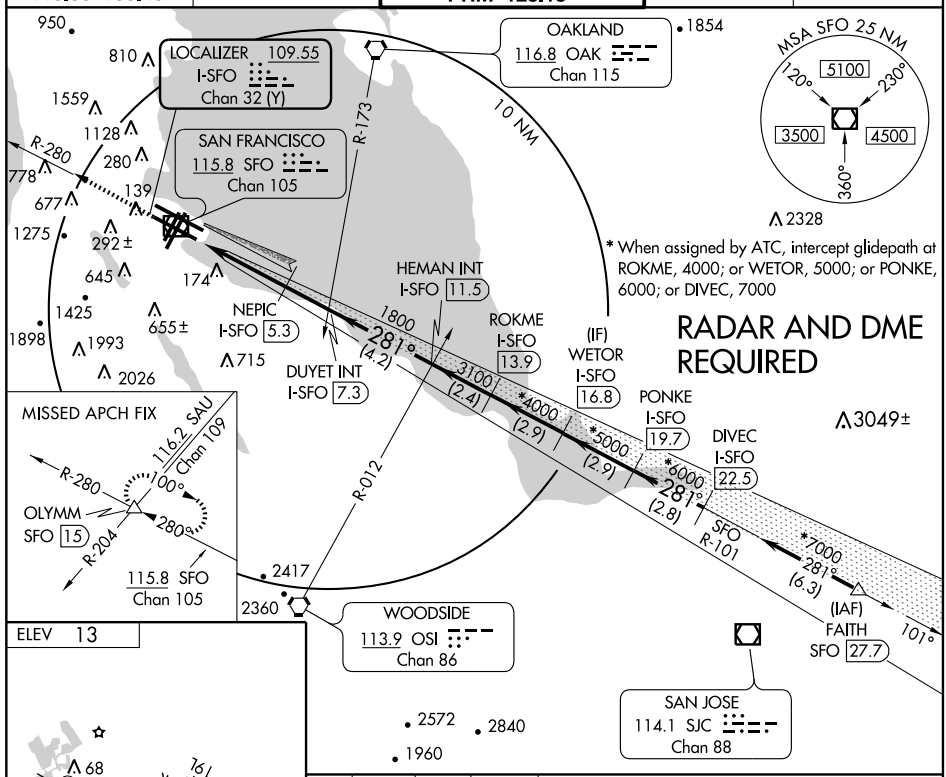
LOC/DME I-SFO	APP CRS	Rwy Idg	10602
109.55	281°	TDZE	13
Chan 32 (Y)		Apt Elev	13

NA Simultaneous close parallel approach authorized with LDA PRM Rwy 28R. Localizer only not authorized during close-parallel operations. Dual VHF comm required. Disregard IM and MM indications. See additional requirements on AAUP. Runway 28L and 28R separated by 750' centerline to centerline.

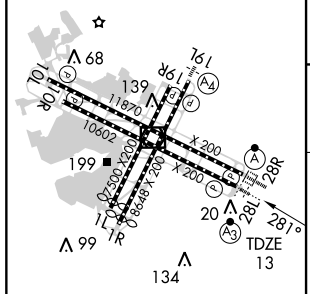
SSALR (Ag)

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 via heading 285° and SFO VOR/DME R-280 to OLYMM INT/SFO VOR/DME 15 DME and hold.

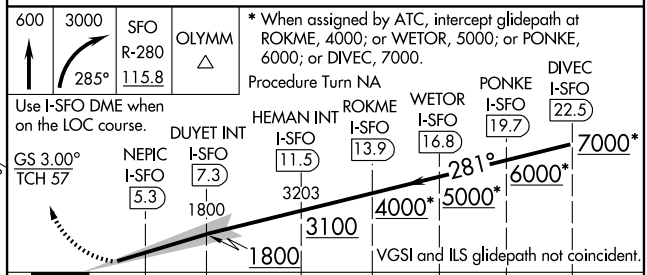
ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8	134.5 338.2	120.5 269.1	121.8	118.2
118.85 135.45		PRM 125.15		



ELEV 13



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys



CATEGORY	A	B	C	D
S-ILS 28L	213/24 200 (200-½)			

SW-2, 22 OCT 2009 to 19 NOV 2009

ATTENTION ALL USERS PAGE (AAUP)

Condensed Briefing Points:

- Listen to the PRM monitor frequency when communicating with NORCAL approach control (135.65), no later than LOC intercept.
- Expect to be switched to SFO Tower (120.5) at NEPIC (I-SFO 5.3 DME).
- PRM monitor frequency may be de-selected after determining that the aircraft is on the tower frequency.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM and LDA/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 28L approach. If later advised to expect an ILS 28L approach, the ILS/PRM 28L chart may be used after completing the following briefing items:

   (a) Minimums and missed approach procedures are unchanged.
   (b) Monitor frequency no longer required.
   (c) A different glideslope intercept altitude may be assigned when advised to expect the ILS 28L approach.

Simultaneous parallel approaches will only be offered/conducted when the weather is at least 2100 feet (ceiling) and 4 miles (visibility).

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a PRM monitor frequency. The NORCAL approach controller will transmit on both frequencies. The PRM Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the approach controller's frequency (135.65), but will listen to both frequencies. Select the PRM monitor frequency audio only when in contact with NORCAL approach control (135.65). The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked. The PRM monitor frequency may be de-selected passing NEPIC.

3. **ALL "Breakouts"** are to be hand flown to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

   (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1000 feet required obstruction clearance. The MVA in the final approach segment is 1600 feet at San Francisco International Airport.

   (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE" (NTZ), the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

   "TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. Descending on (not above) the ILS glideslope ensures complying with any charted crossing restrictions and assists traffic on the LDA PRM 28R approach to mitigate possible wake turbulence encounters without destabilizing the LDA approach and creating a go-around.

5. **LDA Traffic:** While conducting this ILS/PRM approach to Runway 28L, other aircraft may be conducting the offset LDA/PRM approach to Runway 28R. These aircraft will approach from the right-rear and will re-align with 28R after making visual contact with the ILS traffic.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to SFO as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Oakland ARTCC as soon as practical, but at least 100 miles from SFO.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-GWQ	APP CRS	Rwy Idg	11870
111.7	283°	TDZE	13
Chan 54		Apt Elev	13

ILS RWY 28R (CAT II)

SAN FRANCISCO INTL (SFO)

ALSF-2

MISSED APPROACH: Climb to 600, then climbing left turn to 3000 via heading 281° and SFO VOR/DME R-279 to VIKYU Int/SFO 12 DME and hold. #

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2

Obstructions in missed approach area require a minimum rate of climb 400 FPM/100K, 600 FPM/150K, 800 FPM/200K to 900, no wind conditions.

OAKLAND 116.8 OAK Chan 115

SAN FRANCISCO 115.8 SFO Chan 105

LOCALIZER 111.7 I-GWQ Chan 54

VIKYU INT SFO 12

116.2 SAU Chan 109

R-186 099° 279° R-279

AXMUL INT I-GWQ 7.4

CEPIN INT I-GWQ 12

(IF/IAF) DUMBA INT I-GWQ 16.1

(IAF) MENLO

(IAF) MEHTA INT

4100 to DUMBA 036° (11.1)

SFO R-101 138° (14.7) 4100

SFO R-101 283° (4.6) 1800

SFO R-101 283° (4.2) 3200

SFO R-101 331° (4.4) 3200

SFO R-101 4100 NoPT 281° (5.4)

283° 1 min 103°

R-173 R-151 R-138 R-036 R-056

10 NM

MSA SFO 25 NM

120° 230° 360°

5100 3500 4500

ELEV 13

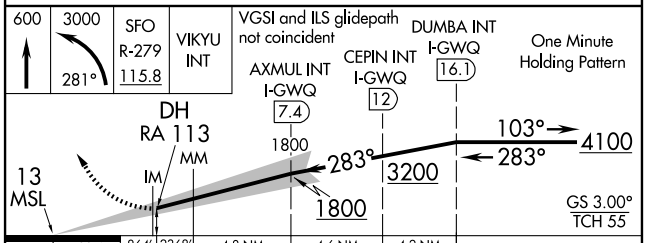
TDZE 13

10L 19L 10R 19R 28L 28R 1L 1R

11870 X 200 10602 X 200 12000 X 200 8648 X 200

68 139 199 99 134 184 ± 1811 950 1854 810 1559 1128 280 778 677 1275 139 292 ± 645 1425 655 ± 1075 1898 1993 2026 174 199 ± 312 1800 715 715 2328 2417 2360

WOODSIDE 113.9 OSI Chan 86



CATEGORY	A	B	C	D
S-ILS 28R	113/12 100 RA 113			

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-GWQ	APP CRS	Rwy Idg	11870
111.7	283°	TDZE	13
Chan 54		Apt Elev	13

ILS RWY 28R (CAT III)

SAN FRANCISCO INTL (SFO)

ALSF-2

MISSED APPROACH: Climb to 600, then climbing left turn to 3000 via heading 281° and SFO VOR/DME R-279 to VIKYU Int/SFO 12 DME and hold. #

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2

Obstructions in missed approach area require a minimum rate of climb 400 FPM/100K, 600 FPM/150K, 800 FPM/200K to 900, no wind conditions.

OAKLAND 116.8 OAK Chan 115

SAN FRANCISCO 115.8 SFO Chan 105

LOCALIZER 111.7 I-GWQ Chan 54

116.2 SAU Chan 109

R-186 099° 279° R-279

VIKYU INT SFO 12

AXMUL INT I-GWQ 7.4

CEPIN INT I-GWQ 12

(IF/IAF) DUMBA INT I-GWQ 16.1

R-173 R-151 R-138 R-036

4100 138° (14.7)

10 NM

283° (4.6) 283° (4.2) 331° (4.4) 283° 1 min 103°

SFO R-101

4100 NoPT 281° (5.4)

(IAF) MENLO

(IAF) MEHTA INT

4100 to DUMBA 036° (11.1) R-056

MSA SFO 25 NM

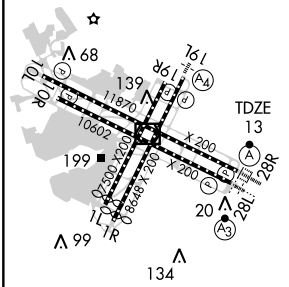
5100 3500 4500

120° 230° 360°

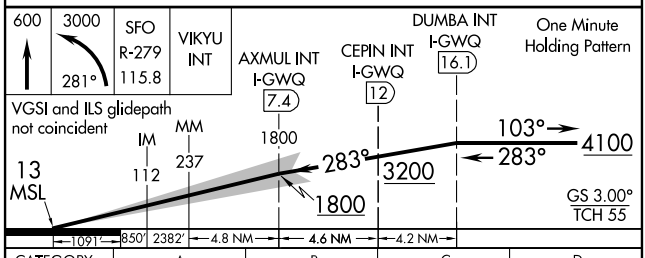
WOODSIDE 113.9 OSI Chan 86

1811 950 1854 810 1559 1128 280 778 677 139 1275 292± 645 1425 655± 1075 1898 1993 2026 174 199± 312 715 2328 2417 2360

ELEV 13



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys



CATEGORY	A	B	C	D
S-ILS 28R	CAT IIIA	RVR 07		
S-ILS 28R	CAT IIIB	RVR 06		
S-ILS 28R	CAT IIIC	NA		

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-FNP	APP CRS	Rwy Idg	11870
110.75	278°	TDZE	13
Chan 44(Y)		Apt Elev	13

LDA/DME RWY 28R
SAN FRANCISCO INTL (SFO)

NA

Runway 28L and 28R separated by 750 feet centerline to centerline.
Procedure NA when glideslope is not available.
Localizer course 1199' right of Rwy 28R threshold.
Inoperative table does not apply.

ALSF-2

MISSED APPROACH: Climbing right turn to 6000 via heading 030° and SFO VOR/DME R-035 and OAK VORTAC R-060 to SALAD INT and hold, continue climb in hold to 6000.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2

RADAR AND DME REQUIRED
LDA/GLIDESLOPE

OAKLAND
116.8 OAK
Chan 115

LOCALIZER 110.75
I-FNP
Chan 44(Y)
LOC offset 3.01°

SALAD
OAK 12.9
112.1 SGD
Chan 58

R-060 R-035 R-124 240° 060°

10 NM

Fly Visual
274° 3.4 NM

DARNE I-FNP 4
GOBEC I-FNP 6
MIUKE I-FNP 9.7
WASOP I-FNP 12.6
HEGOT I-FNP 15.5
FATUS I-FNP 18.4
(IAF) ANETE I-FNP 21.3

1800 (3.6) 278° 3000 (3) *4000 (2.9) *5000 (2.9) *6000 (2.8) 278°

*When assigned by ATC, intercept glidepath at WASOP, 4000; or HEGOT, 5000; or FATUS, 6000.

SAN FRANCISCO
115.8 SFO
Chan 105

MSA SFO 25 NM
5100
120° 230°
3500 4500
360°

1811 950 810 1559 1128 778 280 677 139 1275 292± 645 174 1075 1425 655± 1898 1993 2026 715 1630 2222 1854 2328 3049± 2417 2360

ELEV 13

TDZE 13
28R 28L
19L 19R 10L 10R
11870 10602 7500 X 200 8648 X 200 X 200
68 139 199 99 134 184±

Fly Visual
274°
3.4 NM

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R, and 10L
HIRL all Rwys

6000	SFO	OAK	SALAD
030°	R-035 115.8	R-060 116.8	△

*When assigned by ATC, intercept glidepath at WASOP, 4000; or HEGOT, 5000; or FATUS, 6000.

DARNE I-FNP 4 — GOBEC I-FNP 6 — MIUKE I-FNP 9.7 — WASOP I-FNP 12.6 — HEGOT I-FNP 15.5 — FATUS I-FNP 18.4 — ANETE I-FNP 21.3

Fly Visual 274° 3.4 NM — 1800 — 3000 — 4000* — 5000* — 6000* — 7000 — 278° — GS 3.00° TCH 57

3.4 — 2 NM — 3.6 NM — 3 NM — 2.9 NM — 2.9 NM — 2.8 NM

CATEGORY	A	B	C	D
S-LDA/GS 28R	1140-4	1127 (1200-4)		

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN FRANCISCO, CALIFORNIA

AL-375 (FAA)

LDA PRM RWY 28R
(SIMULTANEOUS CLOSE PARALLEL)
SAN FRANCISCO INTL (SFO)

LOC/DME I-FNP	APP CRS	Rwy Idg	11870
110.75	278°	TDZE	13
Chan 44(Y)		Apt Elev	13

T
ANA

Simultaneous close parallel approach authorized with ILS PRM Rwy 28L.
Localizer only not authorized during close parallel operations.
Dual VHF comm required. See additional requirements on AAUP.
Runway 28L and 28R separated by 750 feet centerline to centerline.
Localizer course 1199' right of Rwy 28R threshold.
Inoperative table does not apply.

ALSF-2

MISSED APPROACH: Climbing right turn to 6000 via heading 030° and SFO VOR/DME R-035 and OAK VORTAC R-060 to SALAD INT and hold, continue climb in hold to 6000.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1 PRM 127.675	121.8	118.2

RADAR AND DME REQUIRED
LDA/GLIDESLOPE

OAKLAND 116.8 OAK Chan 115

SALAD OAK 12.9 112.1 SGD Chan 58

LOCALIZER 110.75 I-FNP Chan 44(Y) LOC offset 3.01°

R-060 R-035 R-124 240° 060° 10 NM

NOTE: If go around executed after crossing DARNE, terrain in missed approach area requires a rate of climb of at least 475 FPM/100K, 713 FPM/150K, 950 FPM/200K, to 1600 no wind conditions.

Fly Visual 274° 3.4 NM

DARNE I-FNP 4 GOBEC I-FNP 6 MIUKE I-FNP 9.7 WASOP I-FNP 12.6 HEGOT I-FNP 15.5 FATUS I-FNP 18.4 (IAF) ANETE I-FNP 21.3

1800 278° (3.6) 3000 (3) *4000 (2.9) *5000 (2.9) *6000 278° (2.8)

*When assigned by ATC, intercept glidepath at WASOP, 4000; or HEGOT, 5000; or FATUS, 6000.

SAN FRANCISCO 115.8 SFO Chan 105

MSA SFO 25 NM
120° 230° 360°
5100
3500 4500

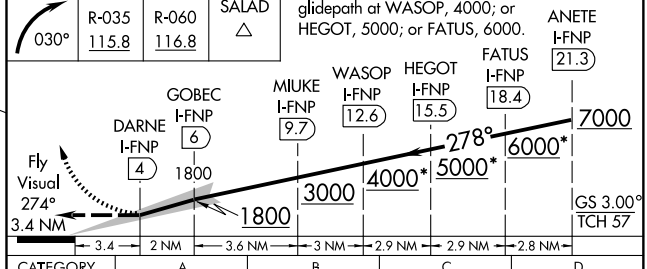
098°

ELEV 13

TDZE 13

6000	SFO	OAK	SALAD
030°	R-035 115.8	R-060 116.8	△

*When assigned by ATC, intercept glidepath at WASOP, 4000; or HEGOT, 5000; or FATUS, 6000.



CATEGORY	A	B	C	D
S-LDA/GS 28R	1140-4 1127 (1200-4)			

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R, and 10L
HIRL all Rwys

SW-2, 22 OCT 2009 to 19 NOV 2009

ATTENTION ALL USERS PAGE (AAUP)

Condensed Briefing Points:

- Listen to the PRM monitor frequency when communicating with the NORCAL approach control (frequency 120.35), no later than LOC intercept.
- Report the ILS traffic in sight as soon as practical and prior to DARNE. DO NOT PASS.
- Expect to be switched to SFO tower (120.5) at DARNE, (I-FNP 4.0 DME).
- Remain on the LDA until passing DARNE (LDA MAP) so as not to penetrate the NTZ.
- PRM monitor frequency may be de-selected after determining that the aircraft is on the tower frequency.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM and LDA/PRM approaches are in progress, pilots should brief to fly the LDA/PRM 28R approach. If later advised to expect an LDA/DME 28R approach, the LDA/PRM 28R chart may be used after completing the following briefing items:

(a) Minimums and missed approach procedures are unchanged.
(b) Monitor frequency no longer required.
(c) A different glideslope intercept altitude may be assigned when advised to expect LDA/DME 28R approach.

Simultaneous parallel approaches will only be offered/conducted when the weather is at least 2100 feet (ceiling) and 4 miles (visibility).

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a PRM monitor frequency. The NORCAL approach controller will transmit on both frequencies. The PRM Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the approach controller's frequency (120.35), but will listen to both frequencies. Select the PRM monitor frequency audio only when in contact with the NORCAL approach control (120.35). The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked. If executing a missed approach at DARNE, begin the turn as soon as practical.

3. **ALL "Breakouts"** are to be hand flown to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

(a) ATC Directed "Breakouts": ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1000 feet required obstruction clearance. The applicable MVA is 1600 feet at SFO.

(b) Phraseology - "TRAFFIC ALERT" : If an aircraft enters the "NO TRANSGRESSION ZONE" (NTZ), the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **Glide Slope Navigation:** Descending on the glide slope ensures compliance with any charted crossing restrictions.

5. **SFO LDA Visual Segment.** If ATC advises that there is traffic on the 28L ILS, pilots are authorized to continue past the LDA 28R MAP to align with runway 28R centerline when:

(a) the ILS traffic is in sight and is expected to remain in sight.
(b) ATC has been advised that "traffic is in sight." (ATC is not required to acknowledge this transmission.)
(c) the runway environment is in sight.

Otherwise, a missed approach must be executed at the LDA MAP. Between DARNE and the runway threshold, pilots of the LDA aircraft are responsible for separating themselves visually from traffic on the ILS approach, which means maneuvering the aircraft as necessary to avoid the ILS traffic until landing (do not pass), and providing wake turbulence avoidance, if applicable. If visual contact with the ILS traffic is subsequently lost, advise ATC as soon as practical and execute the published missed approach unless otherwise instructed by ATC.

Refer to "special pilot training required" on the ILS PRM 28L AAUP for specific non-participation procedures.

SW-2, 22 OCT 2009 to 19 NOV 2009

CLOVIS TRANSITION (CZQ.LOCKE1): From over CZQ VORTAC via CZQ R-305 and MOD R-093 to MOD VOR/DME. Thence....

COALDALE TRANSITION (OAL.LOCKE1): From over OAL VORTAC via OAL R-246 and MOD R-064 to MOD VOR/DME. Thence...

MINA TRANSITION (MVA.LOCKE1): From over MVA VORTAC via MVA R-204, OAL R-246 and MOD R-064 to MOD VOR/DME. Thence....

MUSTANG TRANSITION (FMG.LOCKE1): From over FMG VORTAC via FMG R-182 and MOD R-064 to MOD VOR/DME. Thence....

....From over MOD VOR/DME via MOD R-245 to GROAN INT, then via SGD VORTAC R-107 to UPEND INT. Expect vectors to final approach course.

LOST COMMUNICATIONS METRO OAKLAND INTL ONLY: Depart UPEND INT via SGD R-107 to intercept and proceed via SAU R-035 to COMMO INT.

OAKLAND CENTER
134.37 281.5
NORCAL APP CON
128.325 254.3
SAN FRANCISCO INTL ATIS
113.7 118.85

MUSTANG
117.9 FMG
Chan 126
N39°31.88'-W119°39.36'
L-9, H-3

MINA
115.1 MVA
Chan 98
N38°33.92'-W118°01.97'
L-9, H-3

COALDALE
117.7 OAL
Chan 124
N38°00.20'-W117°46.23'
L-9, H-3

CLOVIS
112.9 CZQ
Chan 76
N36°53.06'-W119°48.91'
L-3-9, H-3

SCAGGS ISLAND
112.1 SGD
Chan 58

LOCALIZER 108.9
I-SIA
Chan 26

MANTECA
116.0 ECA
Chan 107

MODESTO
114.6 MOD
Chan 93
N37°37.64'-W120°57.47'

COMMO
N37°52.45'
W122°29.52'

116.2 SAU
R-035
Chan 109

UPEND
N38°01.92'
W122°05.82'

GROAN
N37°35.42'
W121°17.11'

(ITGIJ)
N37°49.56'
W119°22.09'

INYOE
N37°53.74'
W118°45.90'

TROSE
N37°41.95'
W120°24.25'

(IVIPY)
N37°28.56'
W120°26.39'

LOCKE
N37°42.81'
W121°30.58'

METRO OAKLAND INTL

SAN FRANCISCO INTL

OAKLAND
116.8 OAK
Chan 115

SAN FRANCISCO
115.8 SFO
Chan 105

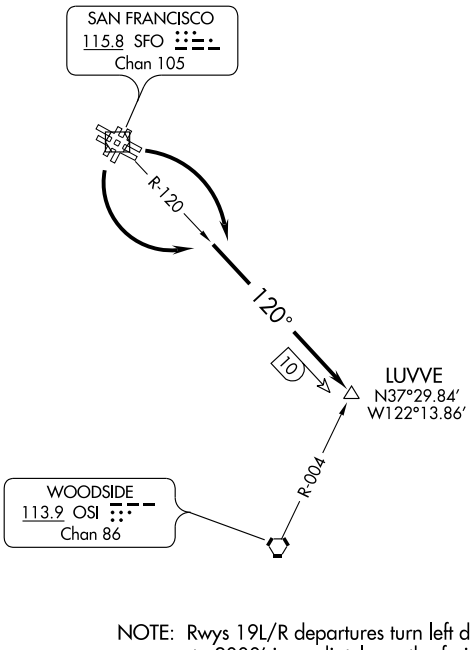
R-107
191°
R-229
R-288
R-011
287° (34) 50
6000
287° (13) 63
8000
245° (16)
R-064
R-093
FL180
244° (27)
273° (26)
FL180
244° (50) 77
77
246° (29)
FL220
182° (115)
FL190
204° (53)
FL190
246° (48)
8000
305° (47)

Expect clearance to cross at 10,000 feet. Turbojets cross at 250K IAS.

NOTE: Chart not to scale.

LUVVE TWO DEPARTURE

ATIS 135.45
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1
NORCAL DEP CON
135.1 307.2



NOTE: Rwys 19L/R departures turn left due to steeply rising terrain to 2000′ immediately south of airport.
For obstacle clearance the following minimum climb rates are required:
Rwy 19L, 480′ per NM to 1400′.
Rwy 19R, Categories A, B, 480′ per NM to 1400′; Categories C, D, 530′ per NM to 1800′.

NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 10L/R: Turn right and climb via SFO R-120 to LUVVE INT, expect vector to assigned route/fix after LUVVE INT. Expect further clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 19L/R: Turn left and climb via SFO R-120 to LUVVE INT, expect vector to assigned route/fix after LUVVE INT. Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:

TAKE-OFF RUNWAYS 10L/R and 19L/R: If not in contact with departure control after reaching 3000′ continue climb to assigned altitude and proceed direct to assigned route/fix.

MODESTO THREE ARRIVAL

SAN FRANCISCO INTL
SAN FRANCISCO, CALIFORNIA

CLOVIS TRANSITION (CZQ.MOD3): From over CZQ VORTAC via CZQ R-305 and MOD R-092 to MOD VOR/DME. Thence....

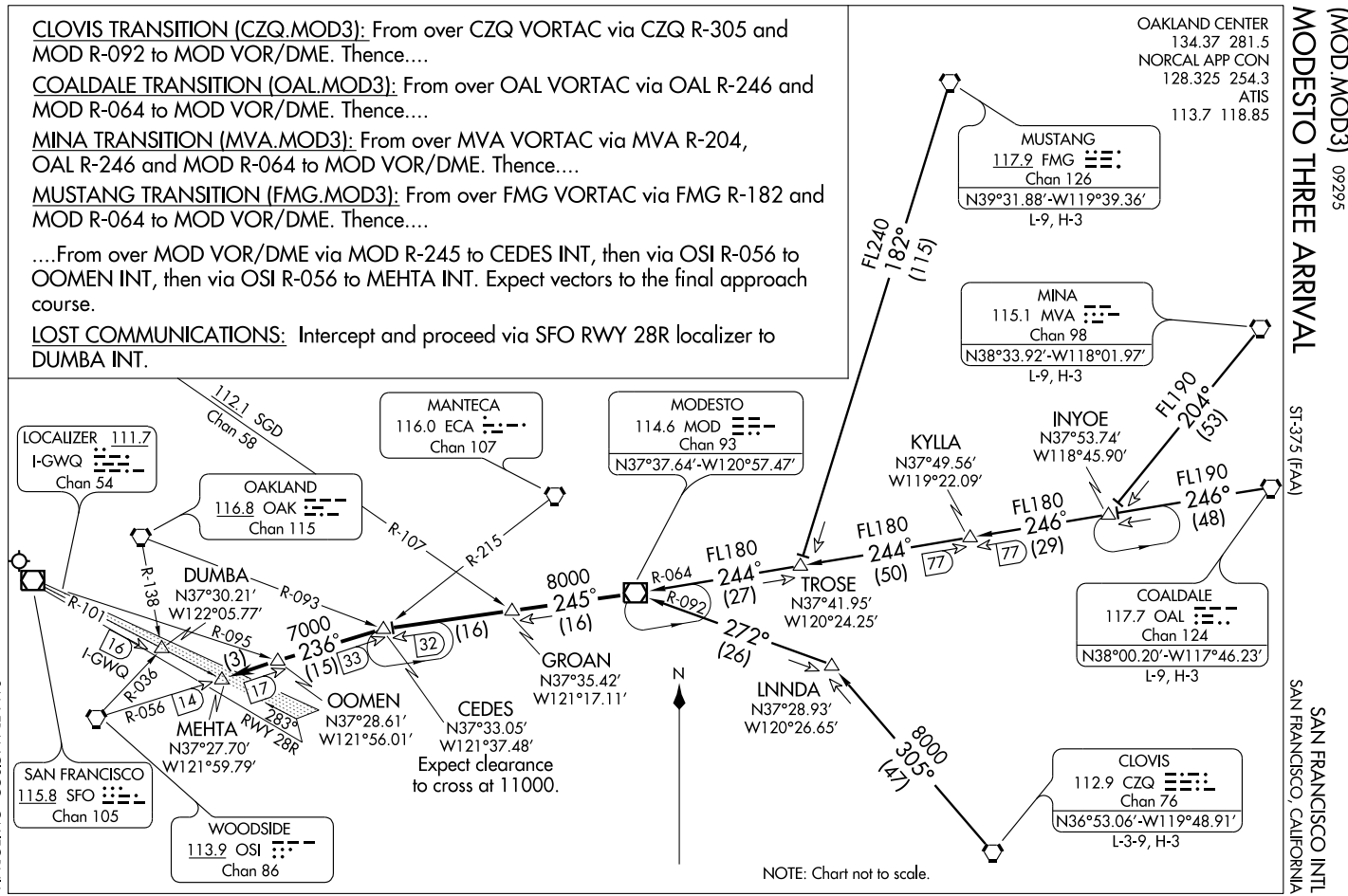
COALDALE TRANSITION (OAL.MOD3): From over OAL VORTAC via OAL R-246 and MOD R-064 to MOD VOR/DME. Thence....

MINA TRANSITION (MVA.MOD3): From over MVA VORTAC via MVA R-204, OAL R-246 and MOD R-064 to MOD VOR/DME. Thence....

MUSTANG TRANSITION (FMG.MOD3): From over FMG VORTAC via FMG R-182 and MOD R-064 to MOD VOR/DME. Thence....

....From over MOD VOR/DME via MOD R-245 to CEDES INT, then via OSI R-056 to OOMEN INT, then via OSI R-056 to MEHTA INT. Expect vectors to the final approach course.

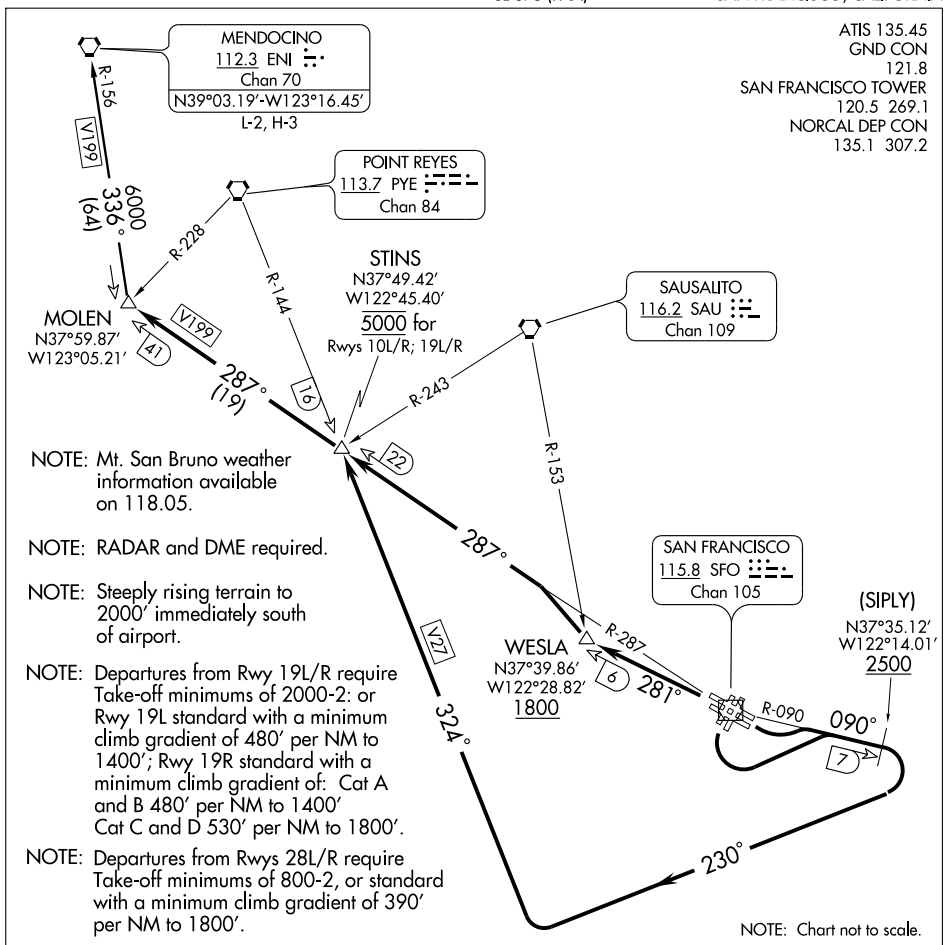
LOST COMMUNICATIONS: Intercept and proceed via SFO RWY 28R localizer to DUMBA INT.



MOLEN THREE DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 10L/R and 19L/R: Turn left and climb via the SFO R-090 to the 7 DME Fix, then turn right heading 230° to intercept and proceed via PYE R-144 to STINS INT. Cross the SFO R-090 7 DME Fix at or above 2500'. Cross STINS INT at 5000'. Thence via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 28L/R: Intercept and proceed via SFO R-281 to WESLA INT, then turn right to intercept and proceed via SFO R-287 to MOLEN INT. Cross the SFO R-281 6 DME Fix (WESLA INT) at or above 1800'. Thence via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure.

MENDOCINO TRANSITION (MOLEN3.ENI): From over MOLEN INT via ENI R-156 ENI VORTAC.

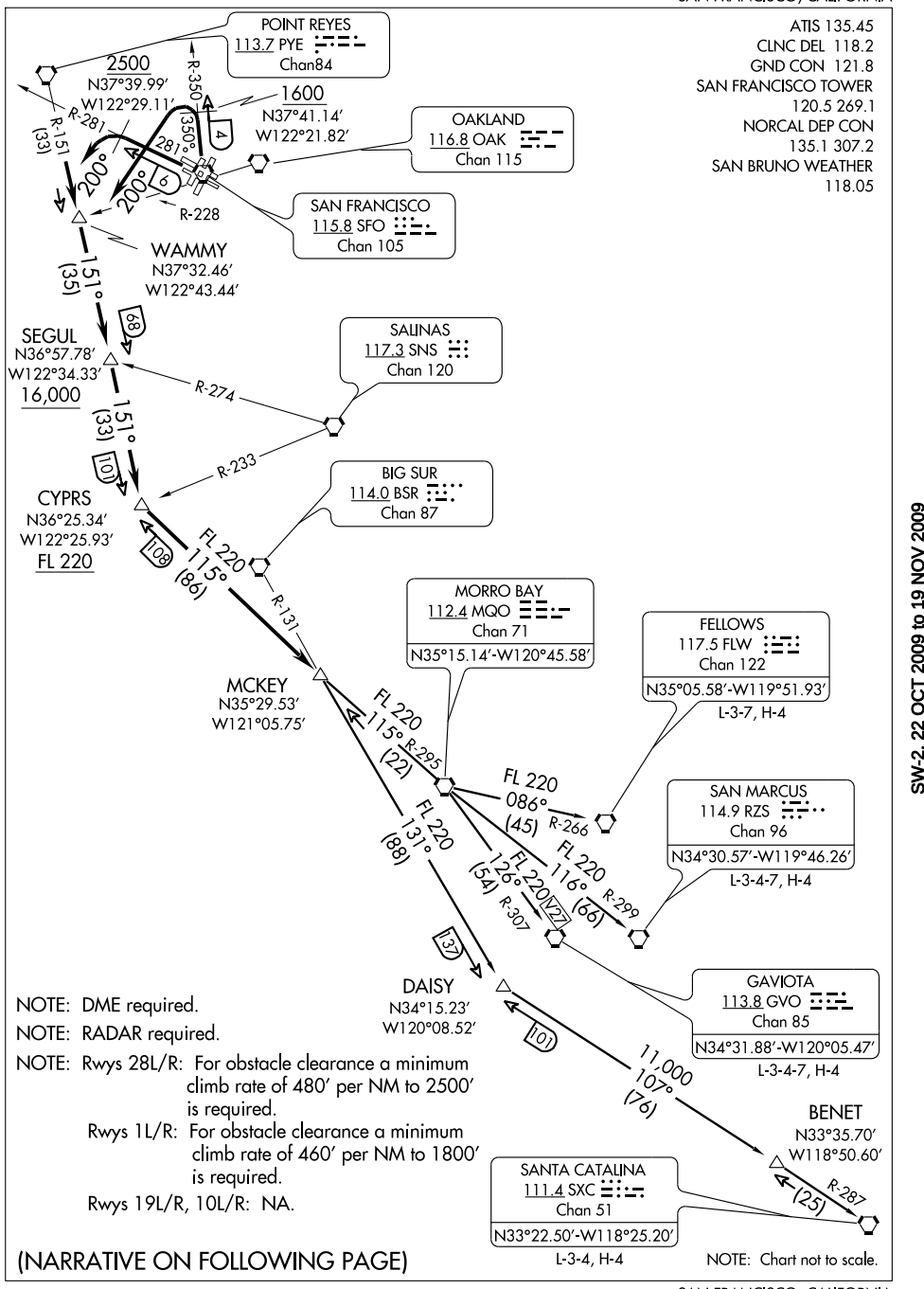
SW-2, 22 OCT 2009 to 19 NOV 2009

(OFFSH5.MCKEY) 09239

OFFSHORE FIVE DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



NOTE: DME required.

NOTE: RADAR required.

NOTE: Rwys 28L/R: For obstacle clearance a minimum climb rate of 480′ per NM to 2500′ is required.
Rwys 1L/R: For obstacle clearance a minimum climb rate of 460′ per NM to 1800′ is required.
Rwys 19L/R, 10L/R: NA.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Intercept and proceed via SFO R-350. Cross SFO R-350 4 DME at or above 1600'. Thence....

TAKE-OFF RUNWAYS 28L/R: Intercept and proceed via SFO R-281. Cross SFO R-281 6 DME at or above 2500'. Thence....

.... Turn left heading 200° to intercept and proceed via PYE R-151 to SEGUL INT. Cross SEGUL INT at or above 16,000'. Then proceed via PYE R-151 to CYPRS INT; cross CYPRS INT at or above FL 220. Then via the MQO R-295 to MCKEY INT, then via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure. When SFO VOR/DME is inoperative, Runway 28 departures expect radar vector to PYE R-151, then resume departure.

FELLOWS TRANSITION (OFFSH5.FLW): From over MCKEY INT via MQO R-295 to MQO VORTAC, then via MQO R-086 and FLW R-266 to FLW VORTAC.

GAVIOTA TRANSITION (OFFSH5.GVO): From over MCKEY INT via MQO R-295 to MQO VORTAC, then via MQO R-126 and GVO R-307 to GVO VORTAC.

SAN MARCUS TRANSITION (OFFSH5.RZS): From over MCKEY INT via MQO R-295 to MQO VORTAC, then via MQO R-116 and RZS R-299 to RZS VORTAC.

SANTA CATALINA TRANSITION (OFFSH5.SXC): From over MCKEY INT via BSR R-131 and SXC R-287 to SXC VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

POINT REYES ONE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA

NORCAL APP CON
133.95 317.6
SAN FRANCISCO TOWER
120.5 269.1
SAN FRANCISCO INTL ATIS
113.7 118.85
SAN CARLOS TOWER★
119.0 326.2
SAN CARLOS ATIS
125.9
PALO ALTO TOWER★
118.6
PALO ALTO ATIS
135.275
MOFFETT FEDERAL AFLD TOWER★
119.55 346.25
MOFFETT FEDERAL AFLD ATIS
124.175 283.0
SAN JOSE TOWER★
124.0 257.6
NORMAN Y. MINETA
SAN JOSE INTL ATIS
126.95
REID-HILLVIEW TOWER★
119.8 RWY 13L/31R
126.1 RWY 13R/31L
REID-HILLVIEW ATIS
125.2

MAXWELL
110.0 MXW
Chan 37
N39°19.06′-W122°13.29′
L-2

MENDOCINO
112.3 ENI
Chan 70
N39°03.19′-W123°16.45′
L-2, H-3

SANTA ROSA
113.0 STS
Chan 77

SACRAMENTO
115.2 SAC
Chan 99
N38°26.62′-W121°33.10′
L-2-3, H-3

POPES
N38°29.16′
W122°20.75′

SCAGGS ISLAND
112.1 SGD
Chan 58

POINT REYES
113.7 PYE
Chan 84
N38°04.79′-W122°52.07′

SAUSALITO
116.2 SAU
Chan 109

SAN FRANCISCO
115.8 SFO
Chan 105

OAKLAND
116.8 OAK
Chan 115

STINS
N37°49.42′
W122°45.40′

SAN FRANCISCO INTL

PALO ALTO AIRPORT OF SANTA CLARA COUNTY

SAN CARLOS

MOFFETT FEDERAL AFLD

NORMAN Y. MINETA SAN JOSE INTL

REID-HILLVIEW OF SANTA CLARA COUNTY

HADLY
N37°24.14′
W122°34.54′

WOODSIDE
113.9 OSI
Chan 86
N37°23.55′-W122°16.88′

6500 184° (80)
6000 146° (61)
5000 208° (35)
5000 257° (38)
V494
R-077
22
R-347
R-005
R-028
R-325
144° (16)
R-243
V27
R-287
144° (27)
43
R-204
076° (14)
R-256

NOTE: SACRAMENTO Transition to be used only when assigned by ATC.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

MAXWELL TRANSITION (MXW.PYE1): From over MXW VORTAC via MXW R-184 and PYE R-005 to PYE VORTAC. Thence....

MENDOCINO TRANSITION (ENI.PYE1): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

SACRAMENTO TRANSITION (SAC. PYE1): From over SAC VORTAC via SAC R-257 and PYE R-028 to PYE VORTAC. Thence....

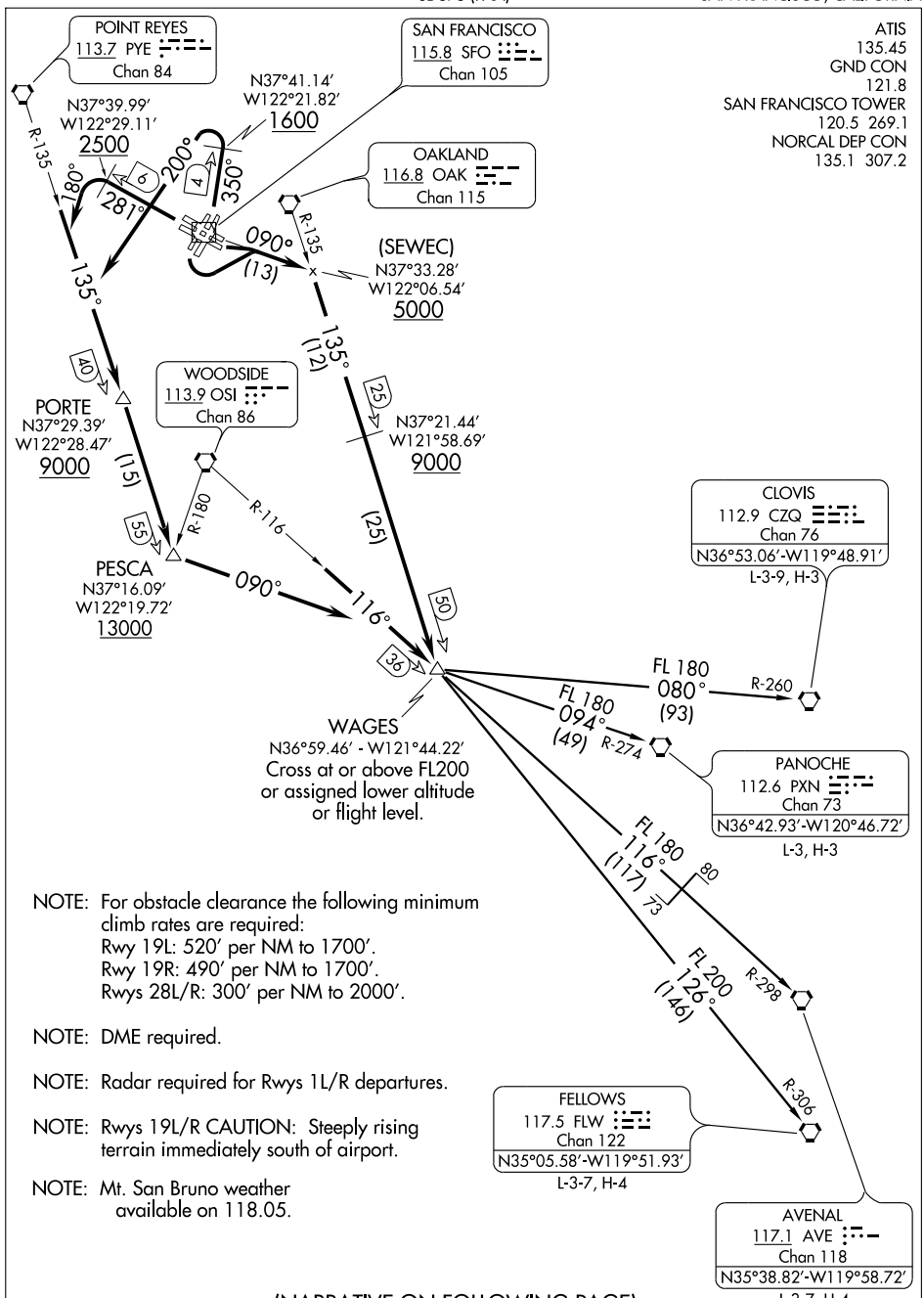
....From over PYE VORTAC via PYE R-144 to HADLY INT, then via OSI R-256 to OSI VORTAC. Expect radar vectors to final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

PORTE THREE DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



NOTE: For obstacle clearance the following minimum climb rates are required:
Rwy 19L: 520′ per NM to 1700′.
Rwy 19R: 490′ per NM to 1700′.
Rwys 28L/R: 300′ per NM to 2000′.

NOTE: DME required.

NOTE: Radar required for Rwys 1L/R departures.

NOTE: Rwys 19L/R CAUTION: Steeply rising terrain immediately south of airport.

NOTE: Mt. San Bruno weather available on 118.05.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Intercept and proceed via SFO R-350. Cross SFO R-350/4 DME fix at or above 1600′. Turn left heading 200° to intercept and proceed via PYE R-135. Cross PORTE DME fix at or above 9000′ and PESCA DME fix at or above 13,000′. Then turn left heading 090° to intercept and proceed via the OSI R-116 to WAGES INT. Cross WAGES INT at or above FL 200 or assigned lower altitude or flight level. Thence via (transition) or (assigned route). Expect clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 10L/R and 19L/R: Turn left and climb via the SFO R-090 to intercept the OAK R-135 at or above 5000′. Proceed via the OAK R-135 to WAGES INT. Cross the OAK R-135/25 DME fix at or above 9000′. Cross WAGES INT at or above FL 200 or assigned lower altitude or flight level. Thence via (transition) or (assigned route). Expect clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 28L/R: Intercept and proceed via the SFO R-281, cross SFO R-281/6 DME fix at or above 2500′, then turn left heading 180° to intercept and proceed via the PYE R-135 to cross PORTE DME fix at or above 9000′ and PESCA DME fix at or above 13,000′. Then turn left heading 090° to intercept and proceed via the OSI R-116 to WAGES INT. Cross WAGES INT at or above FL 200 or assigned lower altitude or flight level. Thence via (transition) or (assigned route). Expect clearance to filed altitude 10 minutes after departure. When SFO VOR/DME is inoperative, Rwy 28 departures expect radar vector to PYE R-135 then resume SID.

AVENAL TRANSITION (PORTE3.AVE): From over WAGES INT via OSI R-116 and AVE R-298 to AVE VORTAC.

CLOVIS TRANSITION (PORTE3.CZQ): From over WAGES INT via CZQ R-260 to CZQ VORTAC.

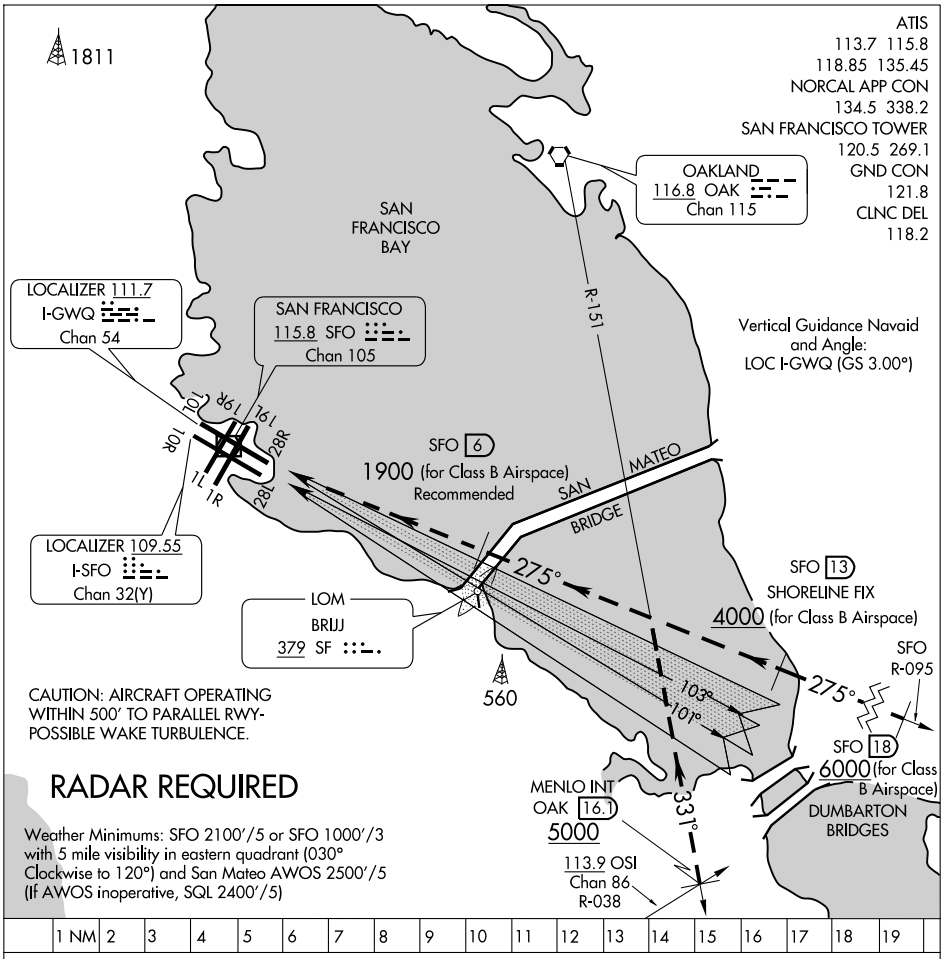
FELLOWS TRANSITION (PORTE3.FLW): From over WAGES INT via FLW R-306 to FLW VORTAC.

PANOCHE TRANSITION (PORTE3.PXN): From over WAGES INT via PXN R-274 to PXN VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

QUIET BRIDGE VISUAL RWYS 28L/R

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



QUIET BRIDGE VISUAL APPROACH RWYS 28L/R

When visual approaches to Runways 28L/R are in progress, arriving aircraft may be vectored into a position for a straight-in visual approach to Runways 28L/R via the SFO VOR R-095.

SFO VOR and DME must be operating.

Aircraft should remain on the SFO R-095 until passing the San Mateo Bridge.

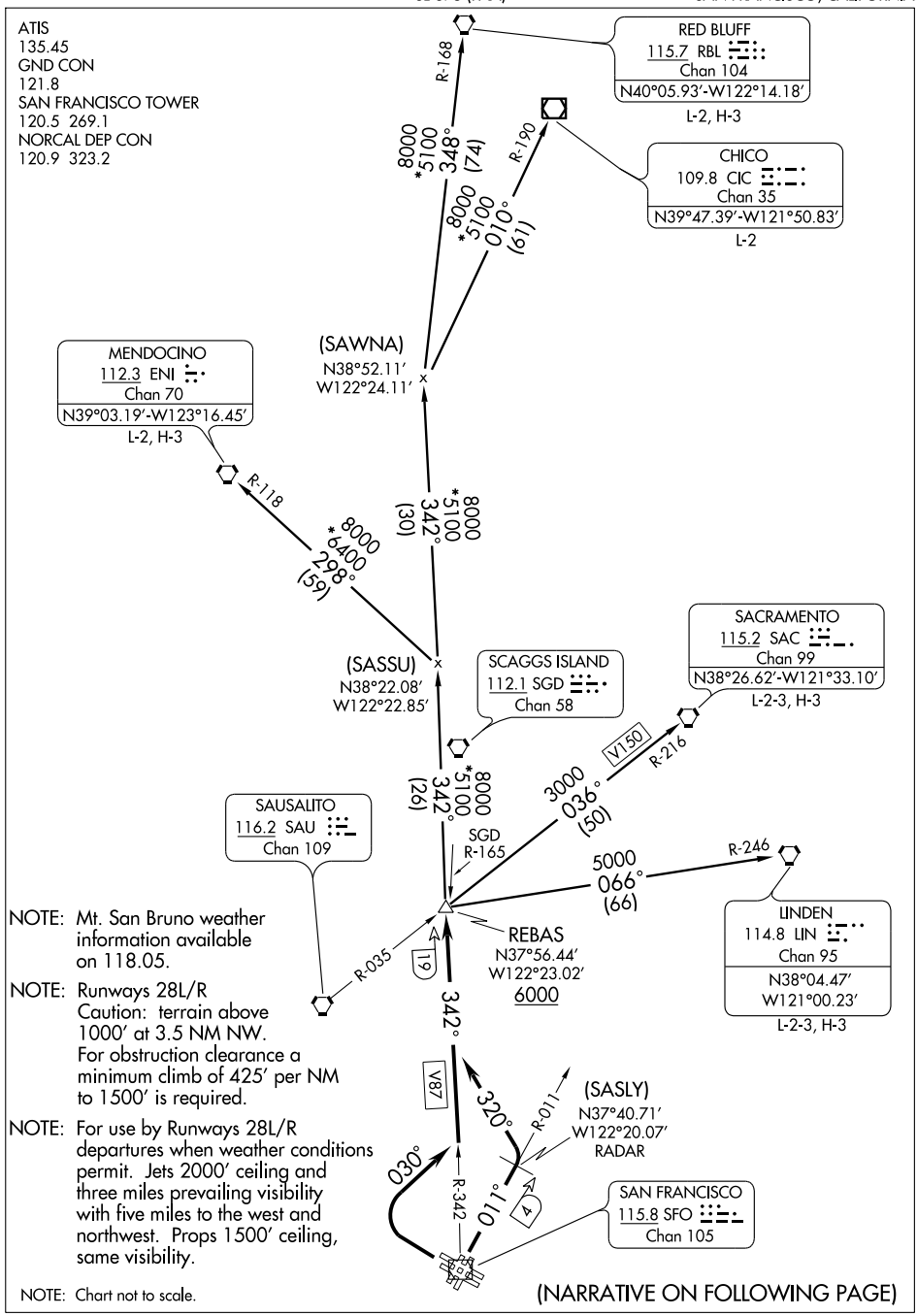
NOTE: Closely spaced parallel visual approaches may be in progress to Runway 28L utilizing I-SFO. In the event of a go-around on Runway 28L, turn left heading 265°, or on Runway 28R, turn right heading 310°, climb and maintain 3000, or as directed by Air Traffic Control.

(CUIT2.REBAS) 09127

QUIET TWO DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via SFO R-011 to the 4 DME/Radar then turn left heading 320° to intercept and proceed via SFO R-342 to cross REBAS INT at or above 6000′. Thence via (transition) or (assigned route). Expect clearances to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 28L/R: Turn right heading 030° to intercept and proceed via the SFO R-342 to REBAS INT. Cross REBAS INT at or above 6000′. Then via (transition) or (assigned route). Maintain VFR conditions until intercepting SFO R-342. Expect clearance to filed altitude 10 minutes after departure.

CHICO TRANSITION (CUIT2.CIC): From over REBAS INT via SFO R-342 and CIC R-190 to CIC VOR/DME.

LINDEN TRANSITION (CUIT2.LIN): From over REBAS INT via LIN R-246 to LIN VORTAC.

MENDOCINO TRANSITION (CUIT2.ENI): From over REBAS INT via SFO R-342 and ENI R-118 to ENI VORTAC.

RED BLUFF TRANSITION (CUIT2.RBL): From over REBAS INT via SFO R-342 and RBL R-168 to RBL VORTAC.

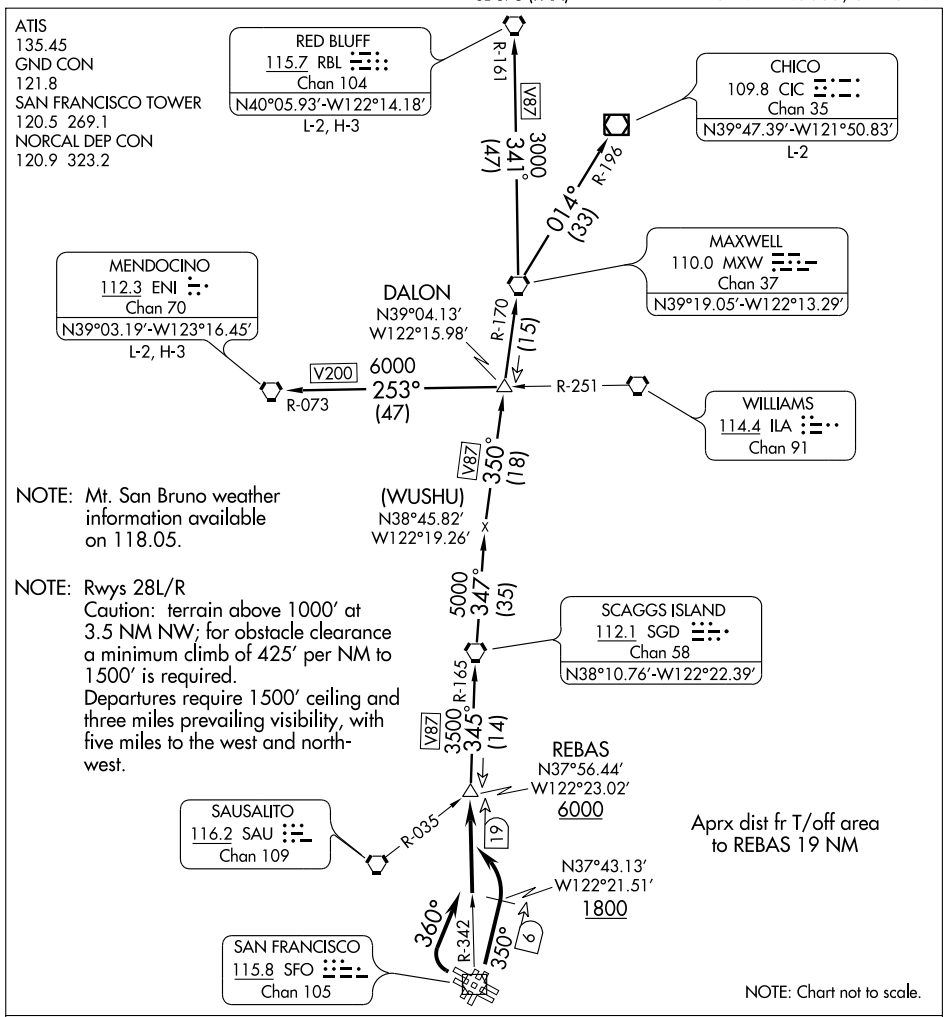
SACRAMENTO TRANSITION (CUIT2.SAC): From over REBAS INT via SAC R-216 to SAC VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

REBAS THREE DEPARTURE (PROP)

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via the SFO R-350 to cross the 6 DME fix at or above 1800', then turn left to intercept and proceed via the SFO R-342, to cross REBAS INT at or above 6000', Thence....

TAKE-OFF RUNWAYS 28L/R: Turn right heading 360° (or as assigned) to intercept and proceed via the SFO R-342 to REBAS INT. Cross REBAS INT at or above 6000'. Thence....

....via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure.

CHICO TRANSITION (REBAS3.CIC): From over REBAS INT via SGD R-165 to SGD VORTAC then SGD R-347 and MXW R-170 to MXW VORTAC. Then via MXW R-014 to CIC VOR/DME.

MENDOCINO TRANSITION (REBAS3.ENI): From over REBAS INT via SGD R-165 to SGD VORTAC, then via SGD R-347 and MXW R-170 to DALON INT, then via ENI R-073 to ENI VORTAC.

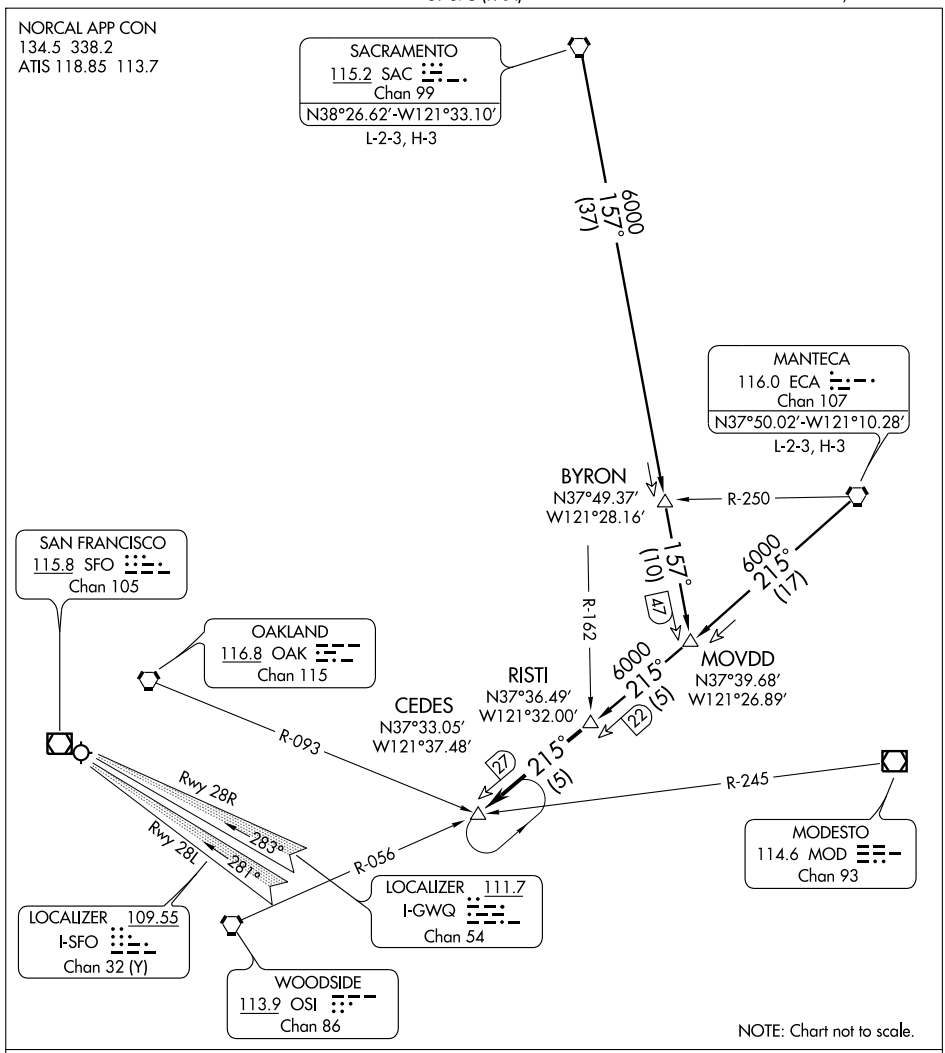
RED BLUFF TRANSITION (REBAS3.RBL): From over REBAS INT via SGD R-165 to SGD VORTAC then via SGD R-347 and MXW R-170 to MXW VORTAC. Then via MXW R-341 and RBL R-161 to RBL VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

RISTI FOUR ARRIVAL

ST-375 (FAA)

SAN FRANCISCO INTL
SAN FRANCISCO, CALIFORNIA



MANTECA TRANSITION (ECA.RISTI4): From over ECA VORTAC via ECA R-215 to RISTI INT. Thence . . . .

SACRAMENTO TRANSITION (SAC.RISTI4): From over SAC VORTAC via SAC R-157 and ECA R-215 to RISTI INT. Thence . . . .

. . . . From over RISTI INT via ECA R-215 to CEDES INT, then via radar vector to San Francisco Intl Airport.

SW-2, 22 OCT 2009 to 19 NOV 2009

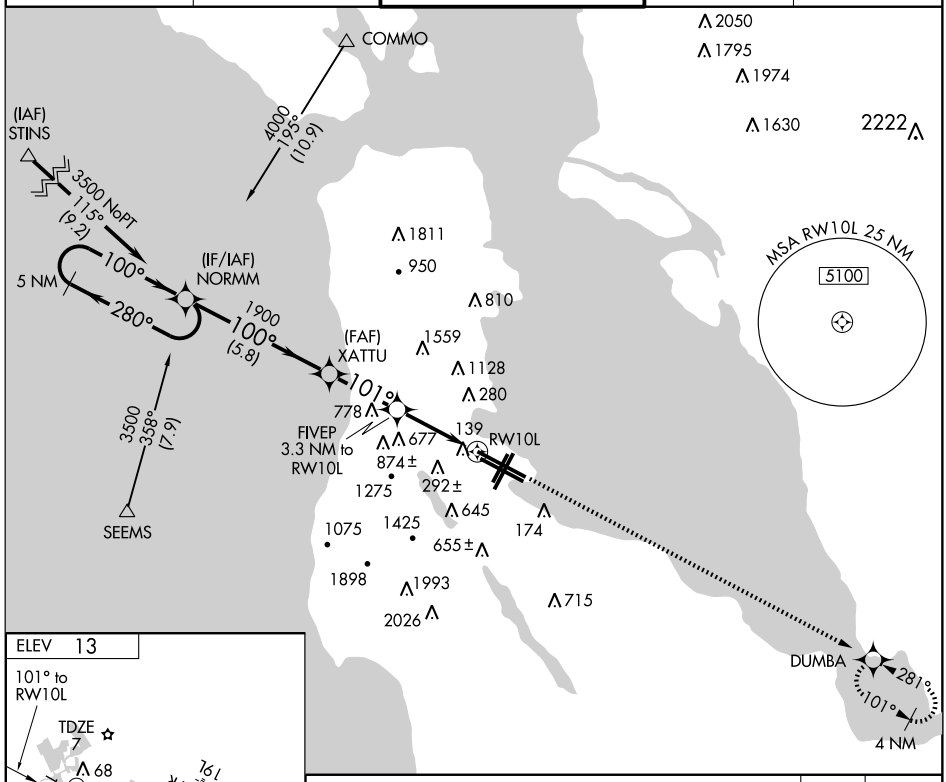
APP CRS	Rwy Idg	11870
101°	TDZE	7
	Apt Elev	13

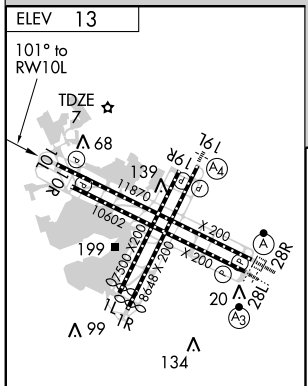
RNAV (GPS) RWY 10L
SAN FRANCISCO INTL (SFO)

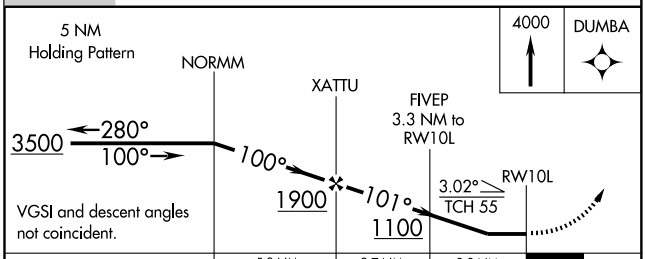
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 4000 direct DUMBA WP and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2







CATEGORY	A	B	C	D
LNAV MDA	940/60	933 (1000-1¼)	940-2¾ 933 (1000-2¾)	940-3 933 (1000-3)
CIRCLING	940-1¼	927 (1000-1¼)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10602
CH 53415	281°	TDZE	13
W28B		Apt Elev	13

RNAV (GPS) RWY 28L

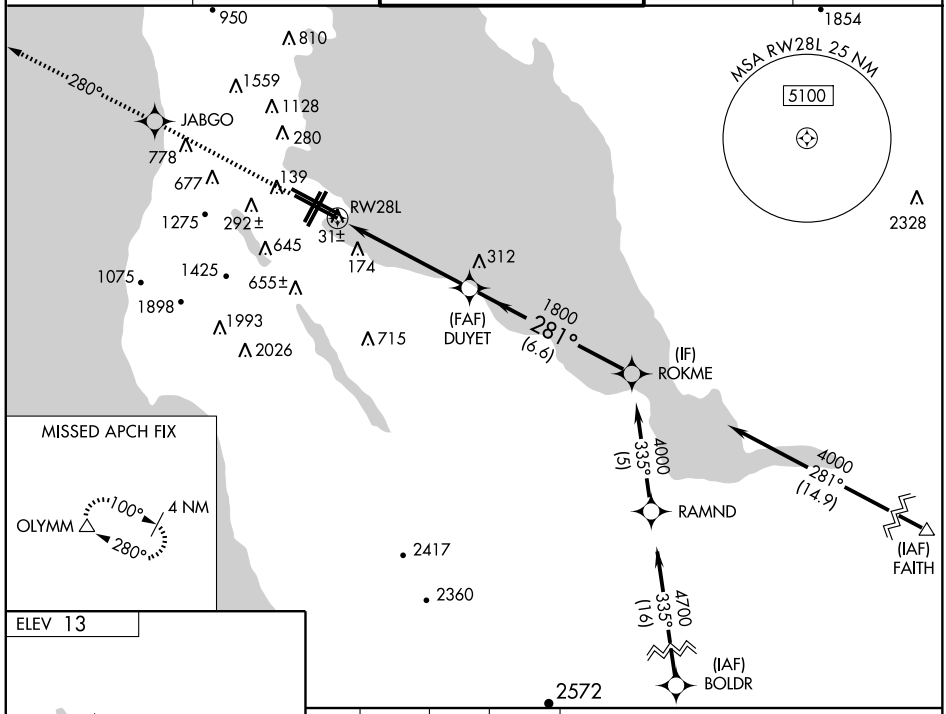
SAN FRANCISCO INTL (SFO)

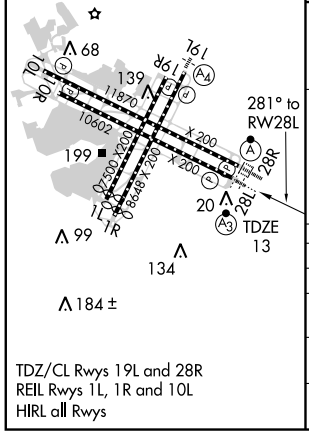
Inoperative table does not apply to LNAV/VNAV all Cats.
For inoperative SSALR, increase LPV all Cats visibility to RVR 5000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).
DME/DME RNP-0.3 NA.

SSALR

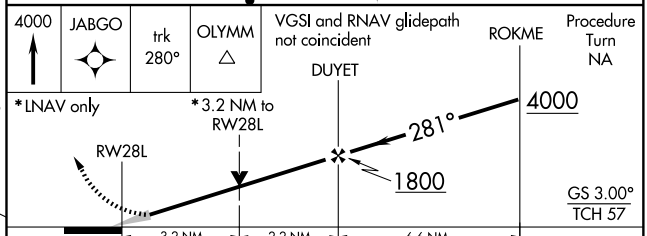
MISSED APPROACH: Climb to 4000 direct JABGO and via track 280° to OLYMM and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2





TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys



CATEGORY	A	B	C	D
LPV DA	287/24 274 (300-½)			
LNAV/VNAV DA	945-4 932 (1000-4)			
LNAV MDA	1120/40 1107 (1200-¾)	1120/50 1107 (1200-1)	1120-2½ 1107 (1200-2½)	
CIRCLING	1120-1¼ 1107 (1200-1¼)	1120-1½ 1107 (1200-1½)	1120-3 1107 (1200-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10602
101°	TDZE	9
	Apt Elev	13

RNAV (GPS) X RWY 10R

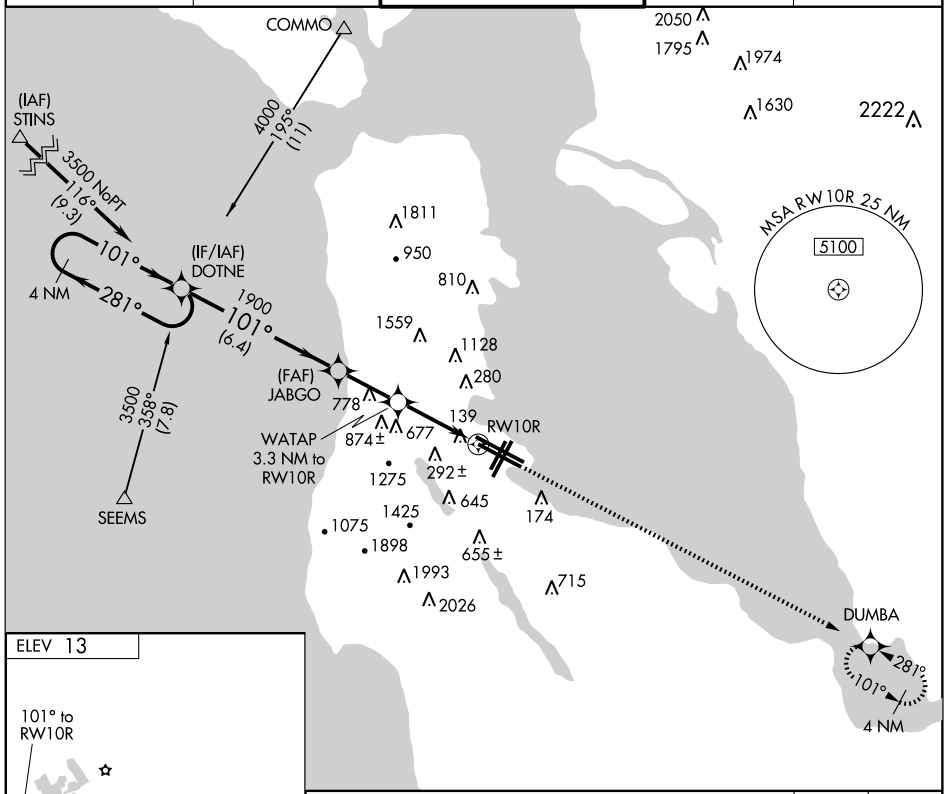
SAN FRANCISCO INTL (SFO)

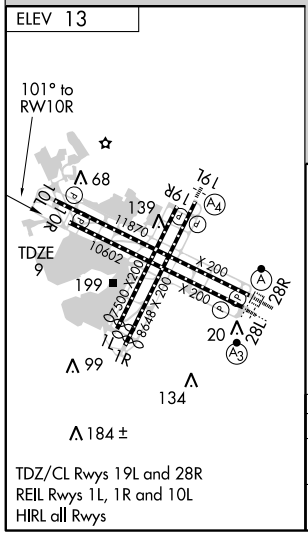
NA

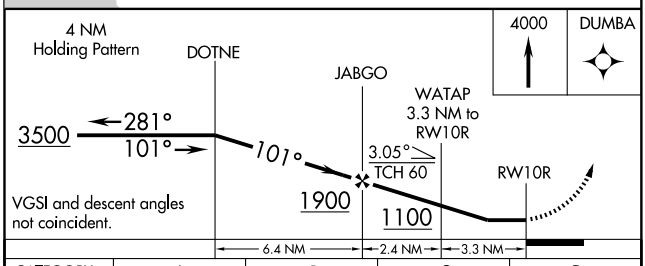
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4000 direct DUMBA and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2







CATEGORY	A	B	C	D
LNAV MDA	980/60 971 (1000-1¼)	980-1½ 971 (1000-1½)	980-3 971 (1000-3)	
CIRCLING	980-1¼ 967 (1000-1¼)	980-1½ 967 (1000-1½)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8648
191°	TDZE	11
	Apt Elev	13

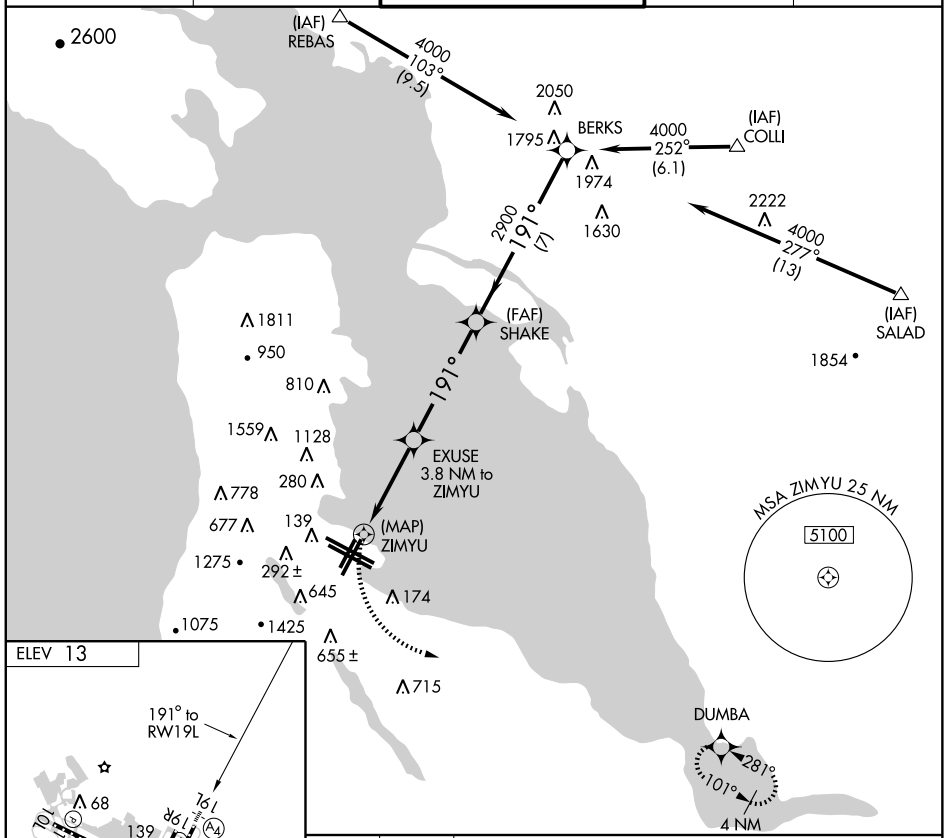
RNAV (GPS) Y RWY 19L
SAN FRANCISCO INTL (SFO)

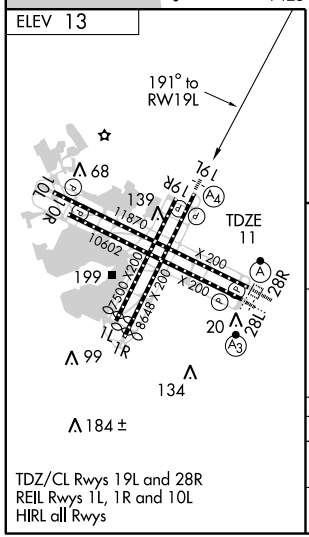
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

SSALS

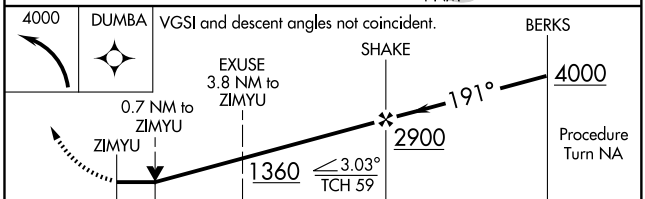
MISSED APPROACH: Climbing left turn to 4000 direct to DUMBA WP and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2





TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys



CATEGORY	A	B	C	D
LNAV MDA	360/40 349 (400-¾)			360/60 349 (400-1¼)
CIRCLING	760-1 747 (800-1)	940-1¼ 927 (1000-1¼)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7500
191°	TDZE	10
	Apt Elev	13

RNAV (GPS) Y RWY 19R

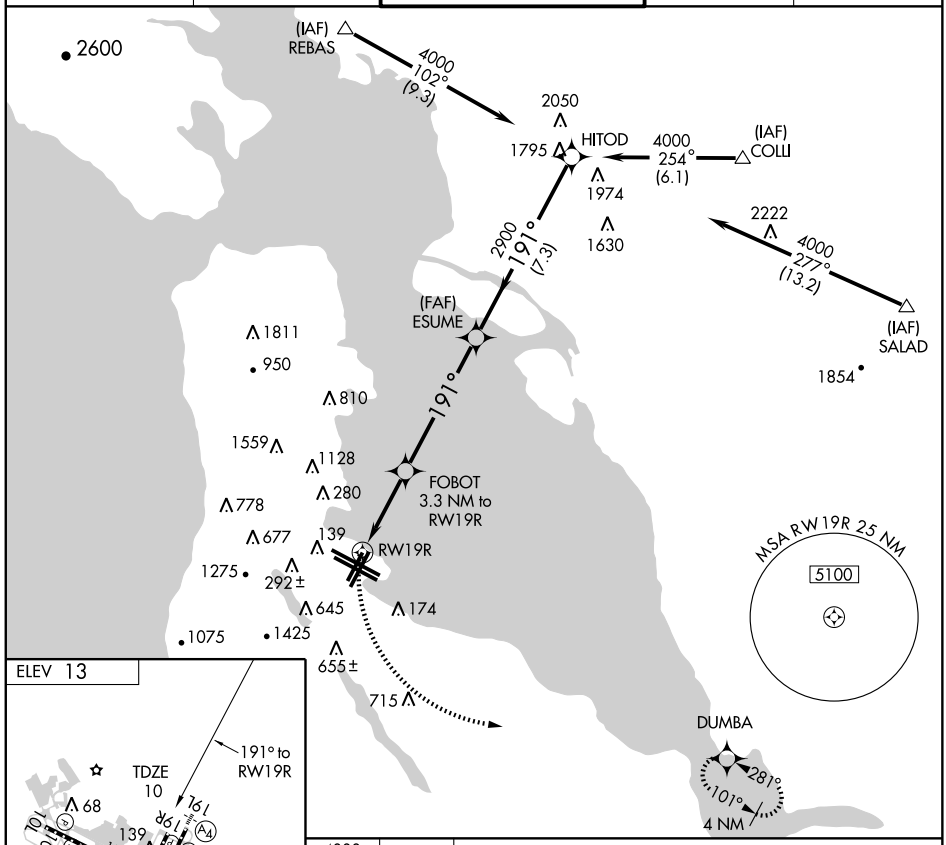
SAN FRANCISCO INTL (SFO)

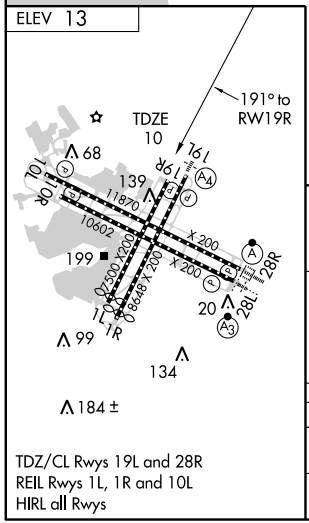
NA

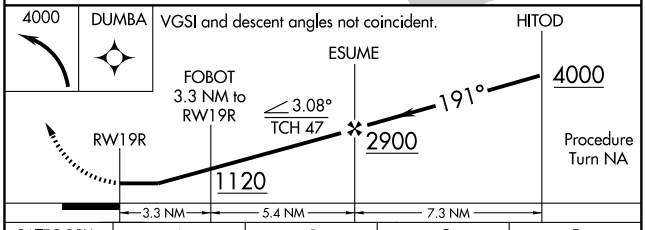
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 4000 direct to DUMBA WP and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2







CATEGORY	A	B	C	D
LNAV MDA	400/50 390 (400-1)			400/60 390 (400-1¼)
CIRCLING	760-1 747 (800-1)	940-1¼ 927 (1000-1¼)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10602
101°	TDZE	9
	Apt Elev	13

RNAV (GPS) Z RWY 10R

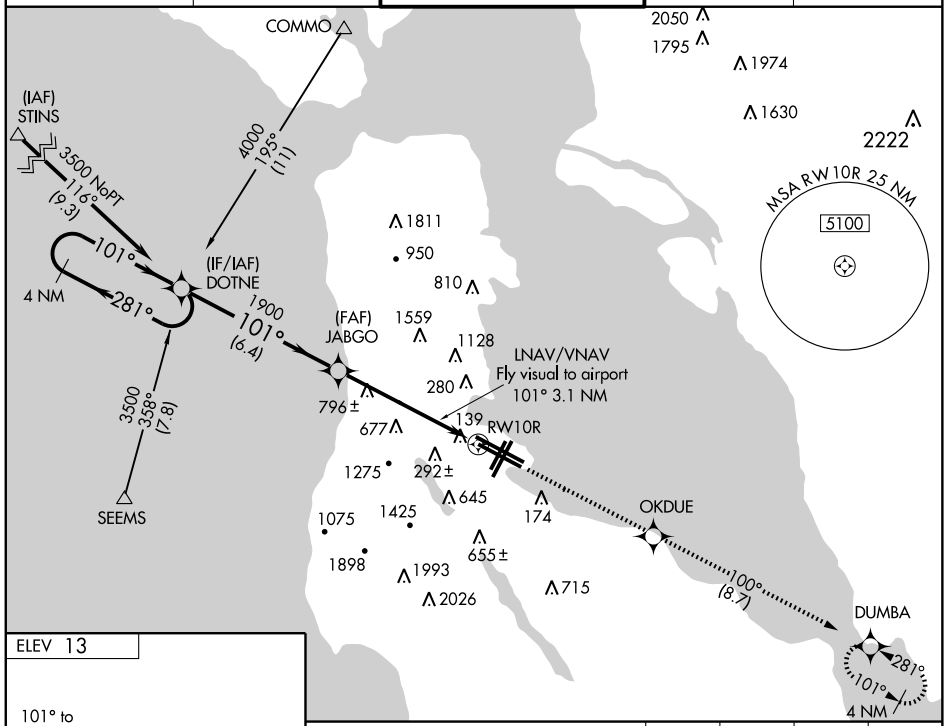
SAN FRANCISCO INTL (SFO)

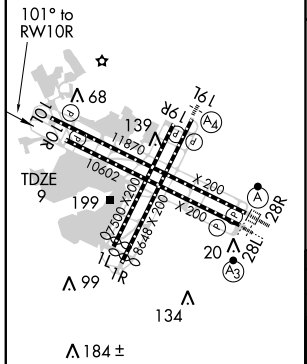
T
ANA
W

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).
LNAV/VNAV: Fly visual to airport 101°- 3.1 NM.

MISSED APPROACH: Climb to 4000 direct OKDUE WP and left turn via 100° track to DUMBA WP and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2




ELEV 13
101° to RW10R
68
139
TDZE 9
199
99
134
184±
19L
19R
10L
10R
1L
1R
28R
28L
20
11870
10602
X 200
X 200
X 200

WAAS	APP CRS	Rwy Idg	8648
CH 58015	191°	TDZE	11
W19A		Apt Elev	13

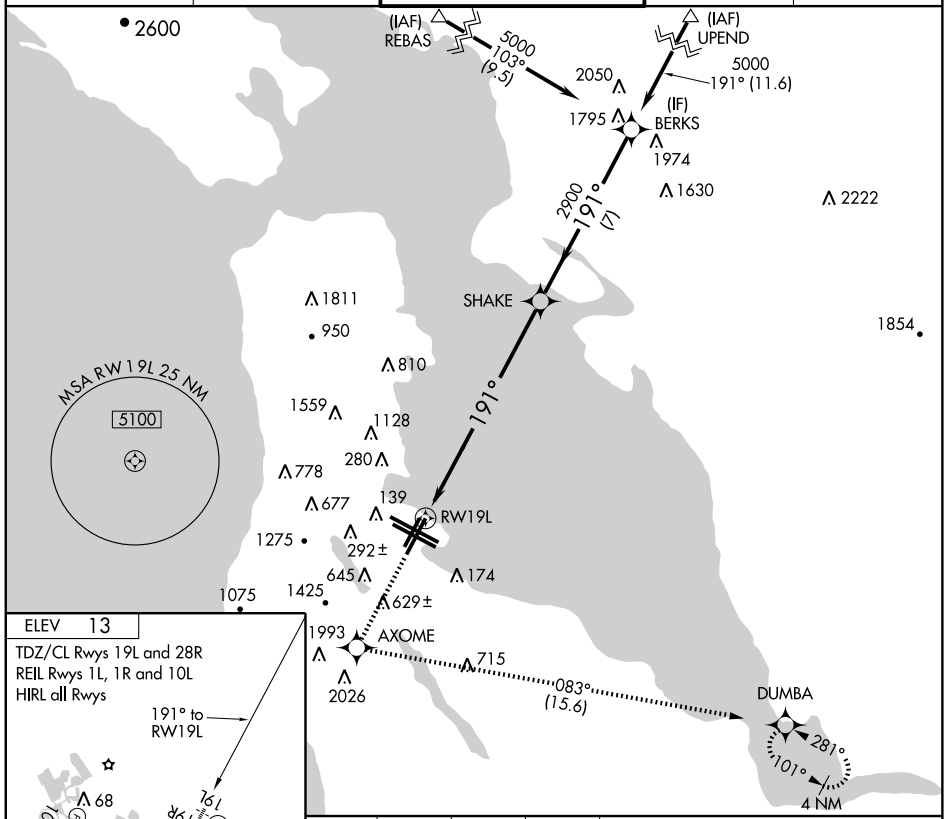
RNAV (GPS) Z RWY 19L
SAN FRANCISCO INTL (SFO)

DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
*Missed approach requires minimum climb of 400 feet per NM to 2900.

SSALS (A4)

MISSED APPROACH: Climb to 4000 direct AXOME and left turn via track 083° to DUMBA and hold, continue climb-in-hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2



ELEV 13
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

CATEGORY	A	B	C	D
LPV DA*	261/40 250 (300-¾)			
LPV DA	1173-5 1162 (1200-5)			

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7500
191°	TDZE	10
	Apt Elev	13

RNAV (GPS) Z RWY 19R

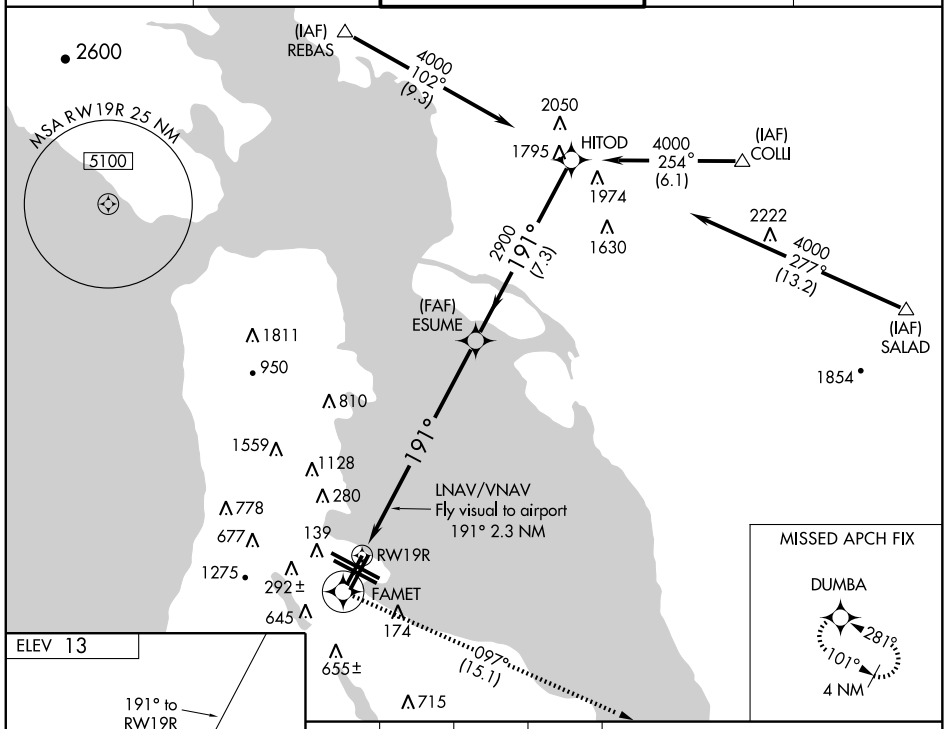
SAN FRANCISCO INTL (SFO)

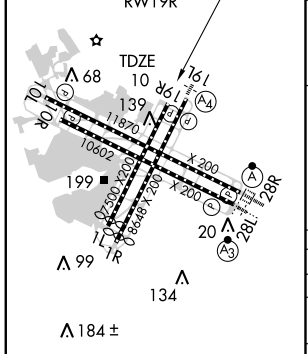
T
A NA
W

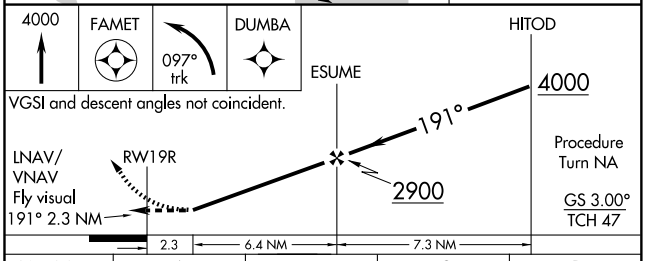
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).
LNAV/VNAV: Fly visual to airport 191° - 2.3 NM.

MISSED APPROACH: Climb to 4000 direct FAMET WP and left turn via 097° track to DUMBA WP and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	800-2 790 (800-2)		800-2¼ 790 (800-2¼)	800-2½ 790 (800-2½)
LNAV MDA	1060/60 1050 (1100-1¼)	1060-1½ 1050 (1100-1½)	1060-3 1050 (1100-3)	
CIRCLING	1060-2 1047 (1100-2)		1060-3 1047 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	11870
CH 81828	281°	TDZE	13
W28A		Apt Elev	13

RNAV (GPS) Z RWY 28R

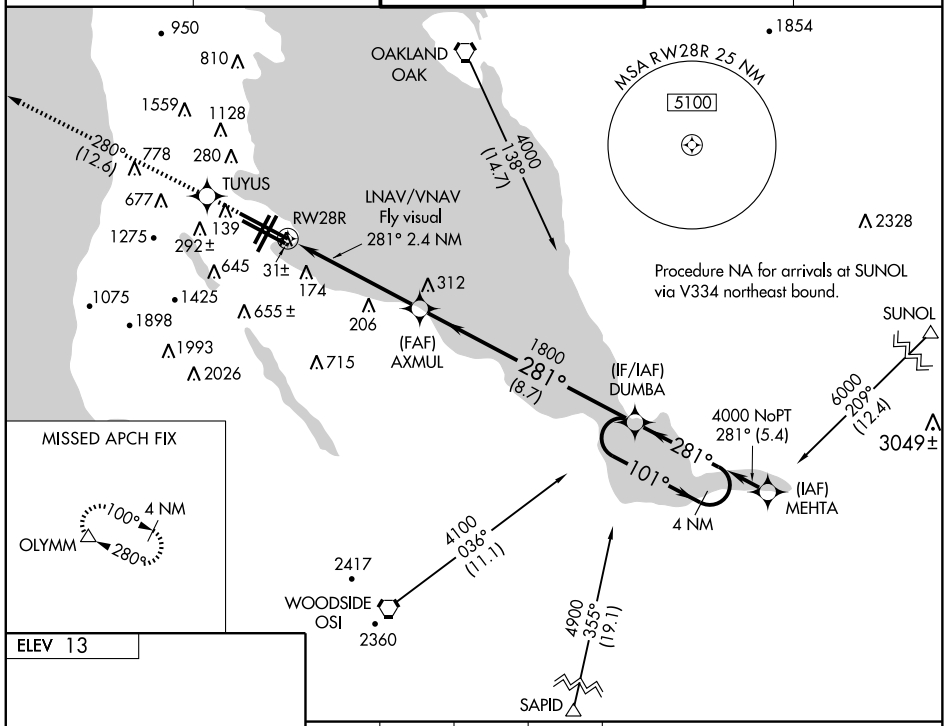
SAN FRANCISCO INTL (SFO)

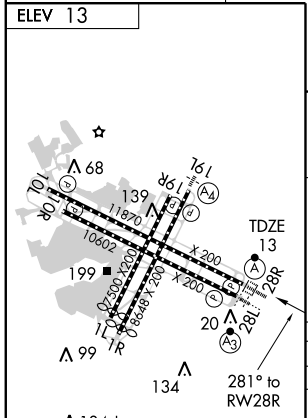
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).
Inoperative table does not apply to LNAV/VNAV.
For inoperative ALSF, increase LPV all Cats visibility to RVR 4000.

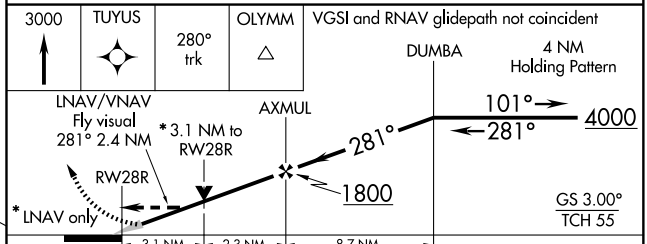
ALSF-2

MISSED APPROACH: Climb to 3000 direct TUYUS and via 280° track to OLYMM and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2







CATEGORY	A	B	C	D
LPV DA	263/24 250 (300-½)			
LNAV/VNAV DA	822-2 809 (900-2)		822-2¼ 809 (900-2¼)	822-2½ 809 (900-2½)
LNAV MDA	1040/40 1027 (1100-¾)	1040/50 1027 (1100-1)	1040-2½ 1027 (1100-2½)	
CIRCLING	1040-1¼ 1027 (1100-1¼)	1040-1½ 1027 (1100-1½)	1040-3 1027 (1100-3)	1160-3 1147 (1200-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10602
101°	TDZE	9
	Apt Elev	13

RNAV (RNP) Y RWY 10R

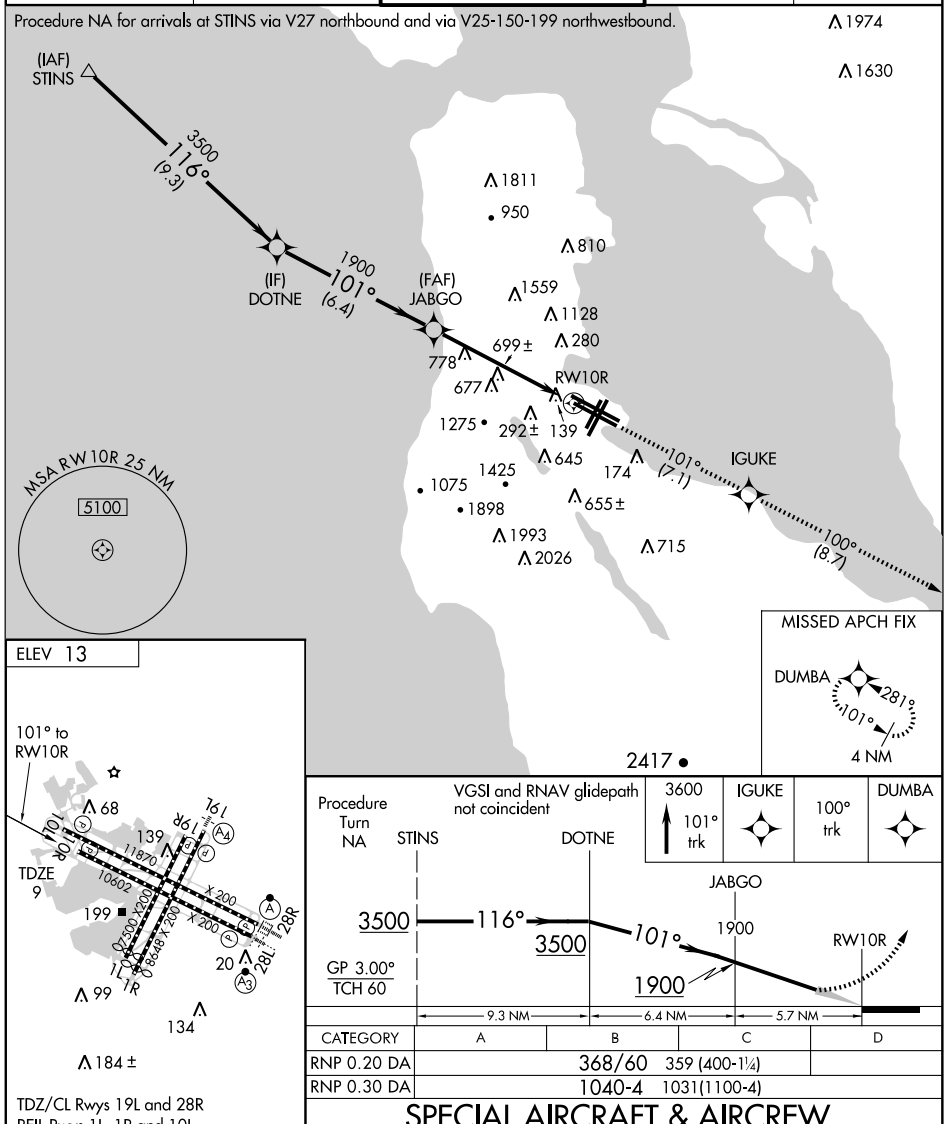
SAN FRANCISCO INTL (SFO)

GPS required.
For uncompensated Baro-VNAV systems, procedure NA below 2° C (36° F) or above 48° C (120° F).

MISSED APPROACH: Climb to 3600 via 101° track to IGUKE and via 100° track to DUMBA and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2

Procedure NA for arrivals at STINS via V27 northbound and via V25-150-199 northwestbound.


(IAF)
STINS
3500
116°
(9.3)
(IF)
DOTNE
1900
101°
(6.4)
(FAF)
JABGO
699±
778
677
RW10R
1275
292±
139
645
174
1425
1075
1898
655±
1993
2026
715
IGUKE
101°
(7.1)
100°
(8.7)
1974
1630
1811
950
810
1559
1128
280
MSA RW10R 25 NM
5100
MISSED APCH FIX
DUMBA
281°
101°
4 NM
2417
ELEV 13
101° to RW10R
68
139
199
TDZE 9
11870
10602
X 200
X 150
X 200
X 200
X 150
X 200
X 150
X 200
X 150

APP CRS	Rwy Idg	11870
281°	TDZE	13
	Apt Elev	13

RNAV (RNP) Y RWY 28R

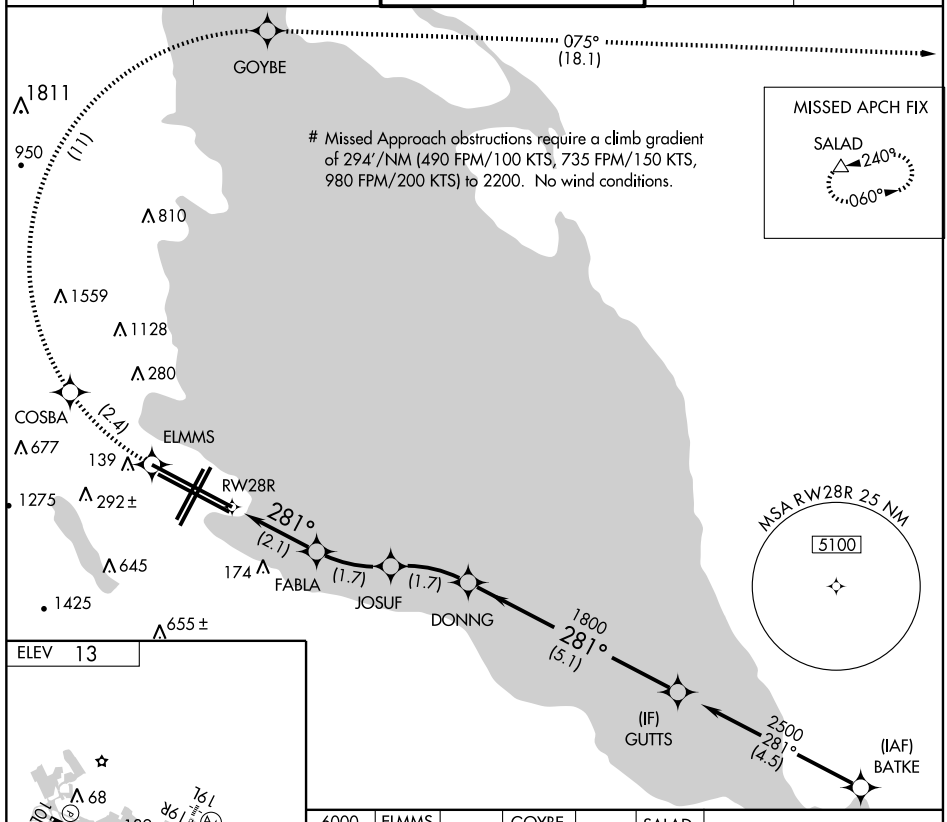
SAN FRANCISCO INTL (SFO)

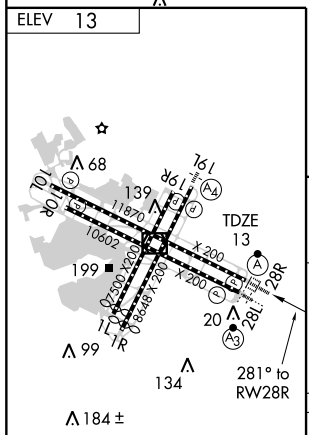
T NA — For uncompensated Baro-VNAV systems, procedure NA below 2°C (36°F) or above 48°C (119°F). For inoperative ALSF increase RNP 0.30 visibility to RVR 5000 all Cats. RF, GPS, and RADAR REQUIRED.

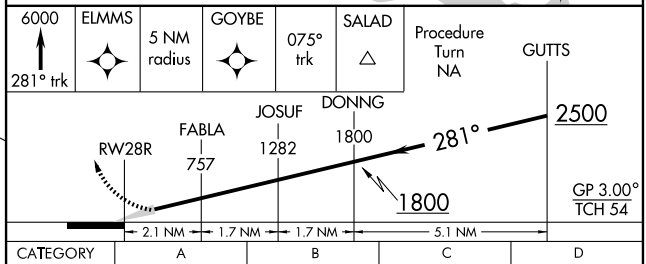
ALSF-2

MISSED APPROACH: Climb to 6000 via 281° track to ELMMS and via 5 NM radius to GOYBE and via 075° track to SALAD and hold. #

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2







CATEGORY	A	B	C	D
RNP 0.30 DA	328/32	315 (400-⅝)		

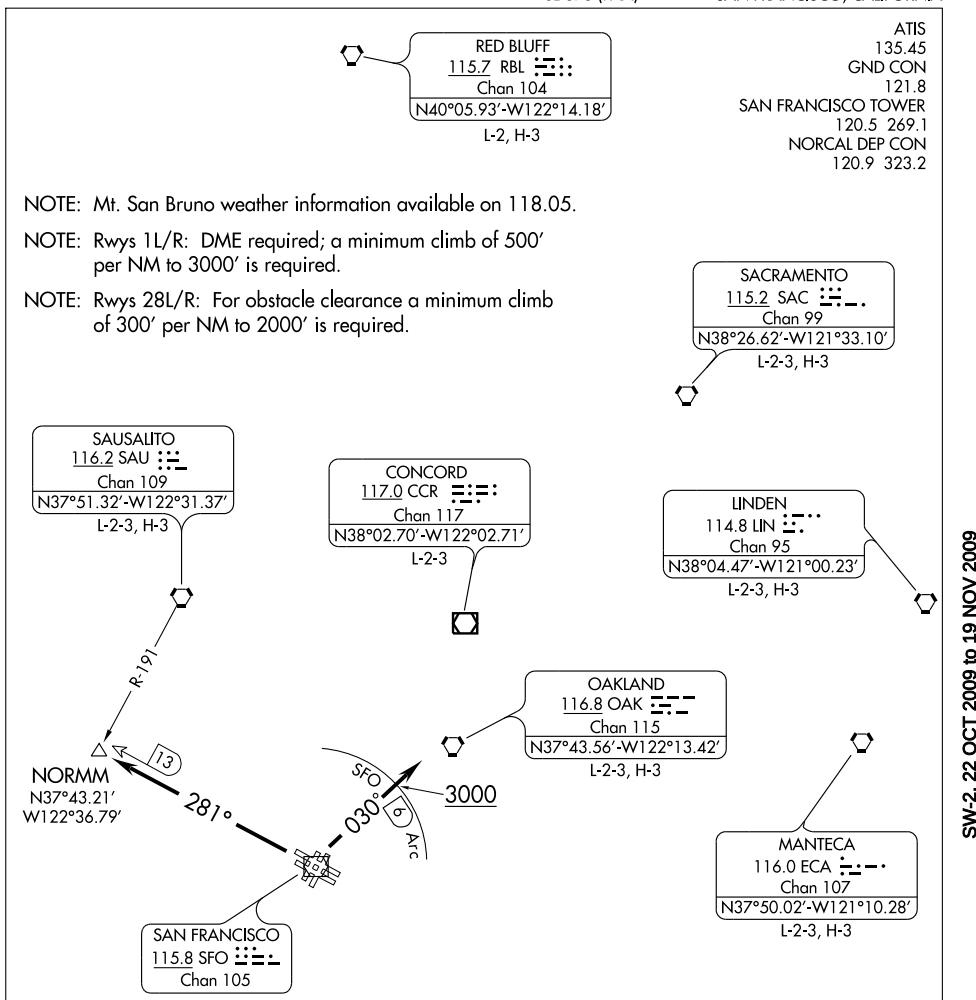
SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN FRANCISCO EIGHT DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



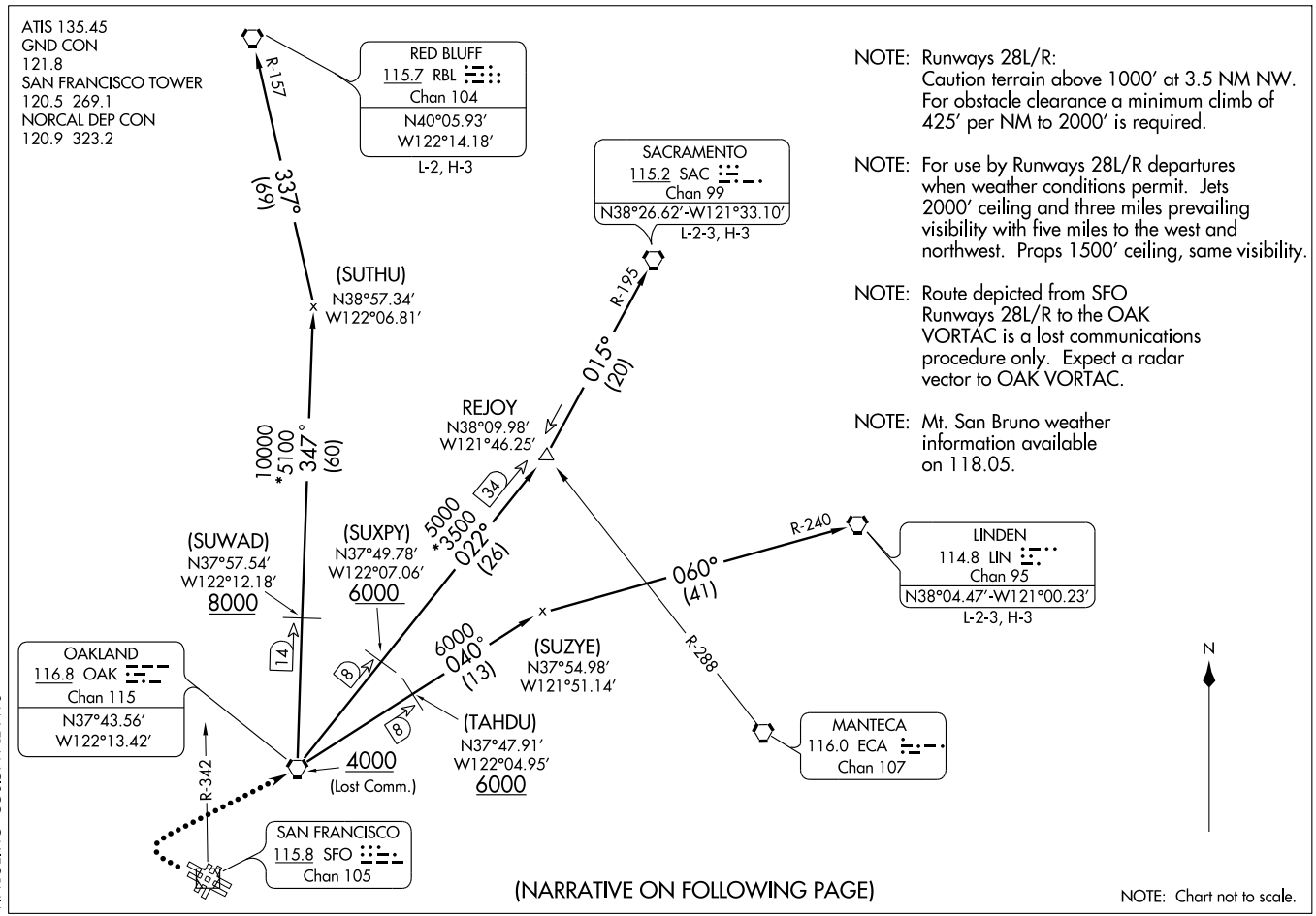
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via heading 030° or as assigned for vector to assigned route/fix. Expect further clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 28L/R: Climb via SFO R-281 to NORMM INT; expect vector to assigned route/fix after NORMM INT. Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:
All runways: If not in contact with departure control after reaching 3000', continue climb to filed altitude and proceed direct to assigned route/fix.

SW-2, 22 OCT 2009 to 19 NOV 2009



(SHOR1.OAK) 09127

SHORELINE ONE DEPARTURE

SL-375 (FAA)

SAN FRANCISCO INTL (SFO)

SAN FRANCISCO, CALIFORNIA

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 28L/R: Turn right heading 040° or as assigned, for vector to OAK VORTAC. Then via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:
Take-off runways 28L/R: If not in contact with departure control one minute after crossing the SFO R-342, proceed direct to OAK VORTAC. Cross OAK VORTAC at or above 4000′.

LINDEN TRANSITION (SHOR1.LIN): Climb via OAK R-040 and LIN R-240 to LIN VORTAC. Cross the OAK R-040 8 DME fix at or above 6000′. Thence via (assigned route).

RED BLUFF TRANSITION (SHOR1.RBL): Climb via OAK R-347 and RBL R-157 to RBL VORTAC. Cross the OAK R-347 14 DME fix at or above 8000′. Maintain (assigned altitude) or (flight level). Thence via (assigned route).

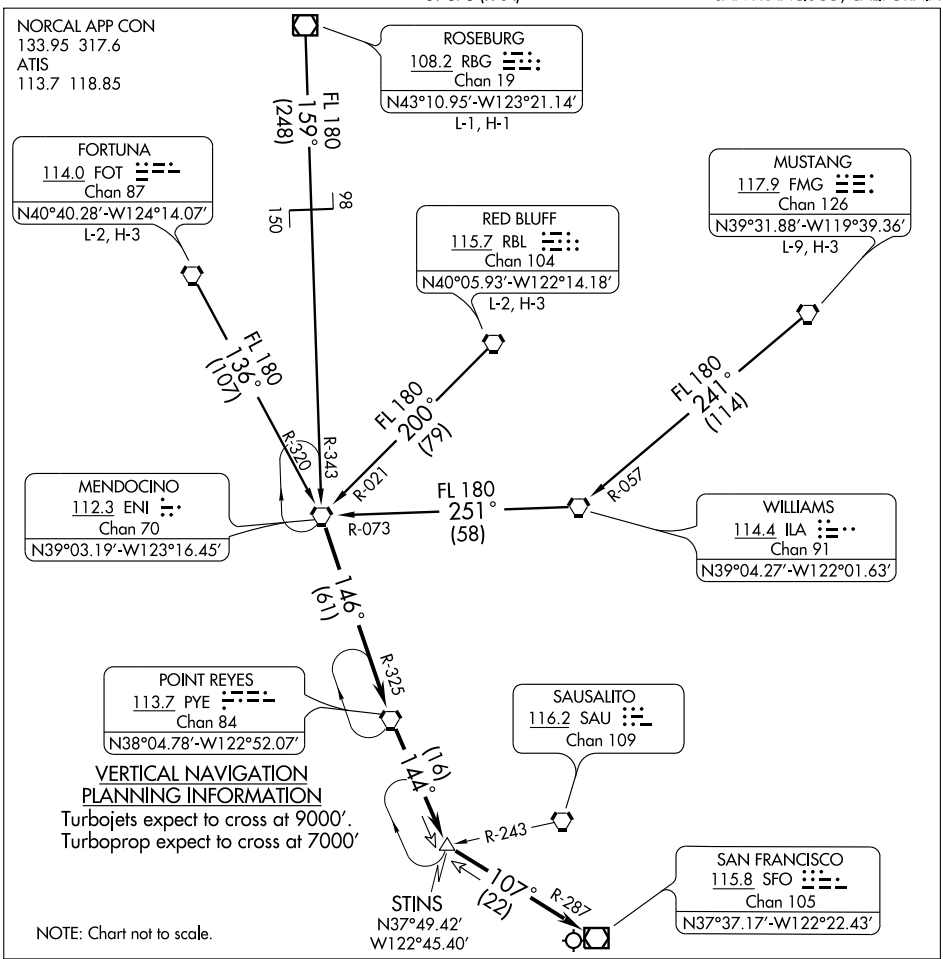
SACRAMENTO TRANSITION (SHOR1.SAC): Climb via OAK R-022 and SAC R-195 to SAC VORTAC. Cross the OAK R-022 8 DME fix at or above 6000′. Maintain (assigned altitude) or (flight level). Thence via (assigned route).

SW-2, 22 OCT 2009 to 19 NOV 2009

STINS ONE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO INTL
SAN FRANCISCO, CALIFORNIA



FORTUNA TRANSITION (FOT.STINS1): From over FOT VORTAC via FOT R-136 and ENI R-320 to ENI VORTAC. Thence....

MUSTANG TRANSITION (FMG.STINS1): From over FMG VORTAC via FMG R-241 and ILA R-057 to ILA VORTAC, then via ILA R-251 and ENI R-073 to ENI VORTAC. Thence....

RED BLUFF TRANSITION (RBL.STINS1): From over RBL VORTAC via RBL R-200 and ENI R-021 to ENI VORTAC. Thence....

ROSEBURG TRANSITION (RBG.STINS1): From over RBG VOR/DME via RBG R-159 and ENI R-343 to ENI VORTAC. Thence....

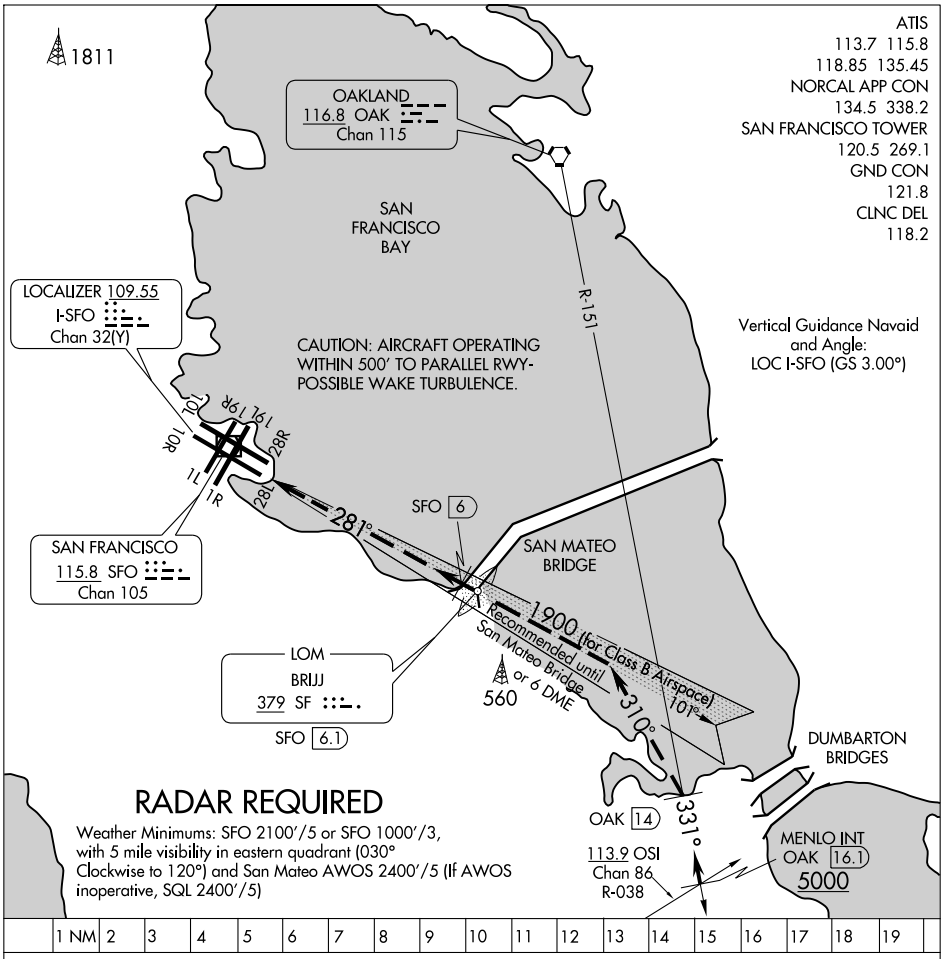
.... From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC, thence via PYE R-144 to STINS INT, thence via SFO R-287 to SFO VOR/DME. Expect vector to final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

TIPP TOE VISUAL RWY 28L

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



RADAR REQUIRED

Weather Minimums: SFO 2100'/5 or SFO 1000'/3, with 5 mile visibility in eastern quadrant (030° Clockwise to 120°) and San Mateo AWOS 2400'/5 (If AWOS inoperative, SQL 2400'/5)

TIPP TOE VISUAL APPROACH RUNWAY 28L

When visual approaches to Runway 28L are in progress, arriving aircraft may be cleared for a visual approach via the OAK VOR R-151 and I-SFO localizer.

The OAK VOR and DME and I-SFO must be operating.

Aircraft should cross the OAK R-151/16.1 DME (Menlo Int) at or above 5000 and the San Mateo Bridge at or above 1900.

NOTE: Closely spaced parallel visual approaches may be in progress to Runway 28R utilizing the SFO R-095. In the event of a go-around on Runway 28L, turn left heading 265°, climb and maintain 3000, or as directed by Air Traffic Control.

VOR/DME SFO	APP CRS	Rwy Idg	N/A
115.8	101°	TDZE	N/A
Chan 105		Apt Elev	13

VOR or GPS-B
SAN FRANCISCO INTL (SFO)

MISSED APPROACH: Climb to 2100 via SFO R-101 to BRIJJ Int/LOM and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2

IAF SAUSALITO 116.2 SAU Chan 109

OAKLAND 116.8 OAK Chan 115

SAN FRANCISCO 115.8 SFO Chan 105

LOM BRIJJ 379 SF

SFO 6.1

NORMM INT SFO 12.9

WESLA INT SFO 5.7

SQUIG SFO 3

3000 191° (9.2) R-153 R-191 R-281 1700 101° (7.2) R-174 R-101 281° 101°

MSA SFO 25 NM 10 NM 5100 3500 4500 120° 230° 360°

ELEV 13

101° to SFO VOR/DME

2100 SFO R-101 SF 379

Procedure Turn NA

7.2 NM 2.7 NM 3 NM

CATEGORY	A	B	C	D
CIRCLING	1080-1¼ 1067 (1100-1¼)	1080-1½ 1067 (1100-1½)	1080-3 1067 (1100-3)	1260-3 1247 (1300-3)
DME MINIMA				
CIRCLING	760-1 747 (800-1)	940-1¼ 927 (1000-1¼)	1040-3 1027 (1100-3)	1260-3 1247 (1300-3)

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

SW-2, 22 OCT 2009 to 19 NOV 2009

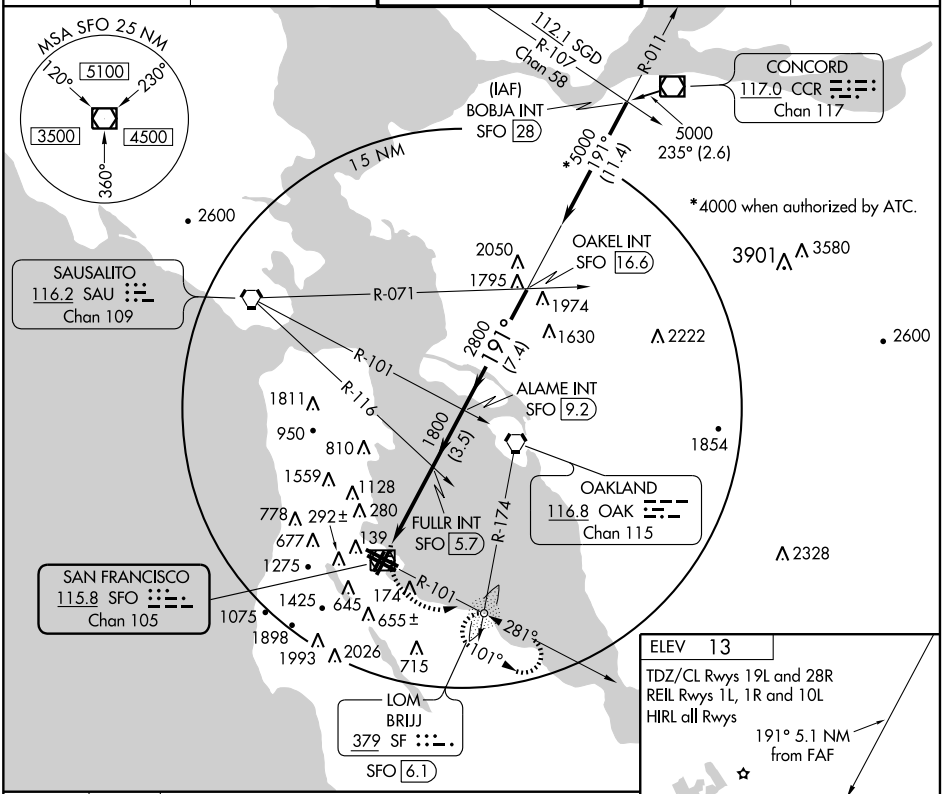
VOR/DME SFO	APP CRS	Rwy Idg	8648
115.8	191°	TDZE	11
Chan 105		Apt Elev	13

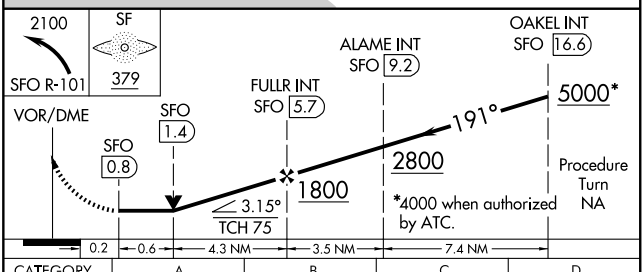
VOR RWY 19L
SAN FRANCISCO INTL (SFO)

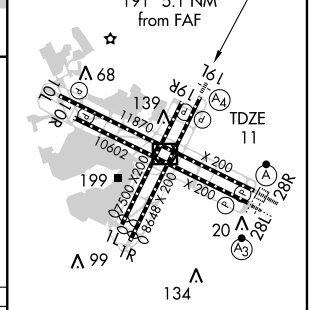
SSALS (A4)

MISSED APPROACH: Climbing left turn to 2100 via SFO R-101 to BRIJJ INT/LOM and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2







CATEGORY	A	B	C	D
S-19L	340/40 329 (400-¾)			340/50 329 (400-1)
CIRCLING	760-1 747 (800-1)	940-1¼ 927 (1000-1¼)	1040-3 1027 (1100-3)	1260-3 1247 (1300-3)

FAF to MAP 4.9 NM

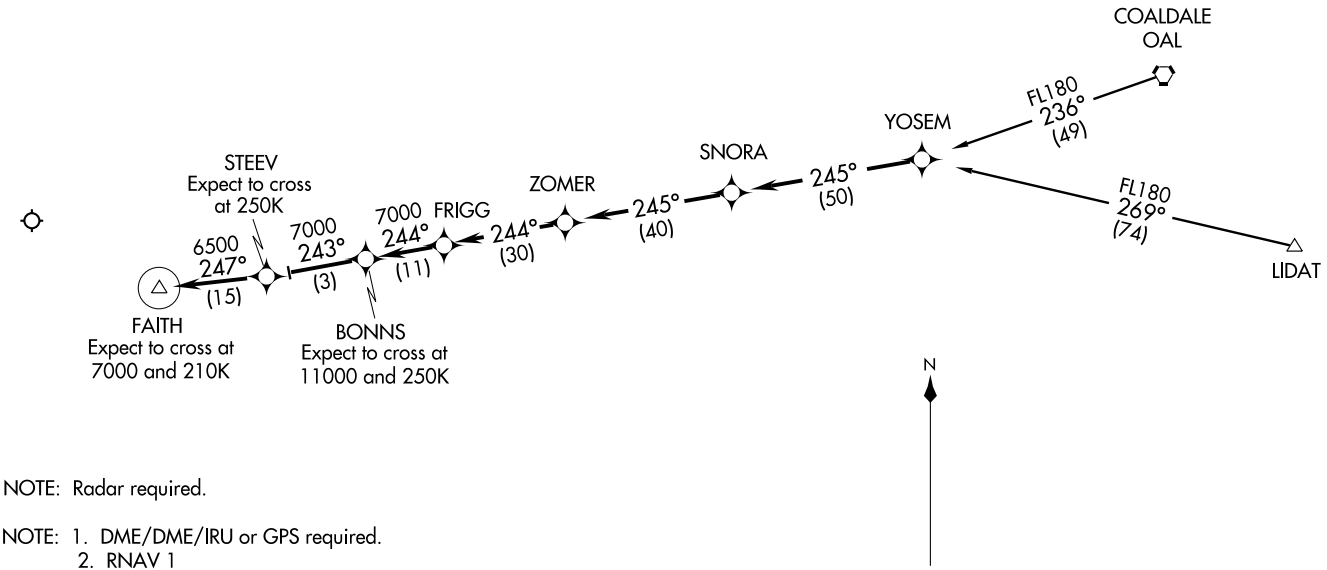
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

SW-2, 22 OCT 2009 to 19 NOV 2009

COALDALE TRANSITION (OAL.YOSEM1)
LIDAT TRANSITION (LIDAT.YOSEM1)

From YOSEM via 245° track to SNORA, thence as depicted to FAITH. Expect radar vectors to final approach course.

ATIS
113.7 118.85
NORCAL APP CON
128.325 254.3



NOTE: Radar required.

NOTE: 1. DME/DME/IRU or GPS required.
2. RNAV 1

NOTE: Chart not to scale.

YOSEM ONE ARRIVAL (RNAV)

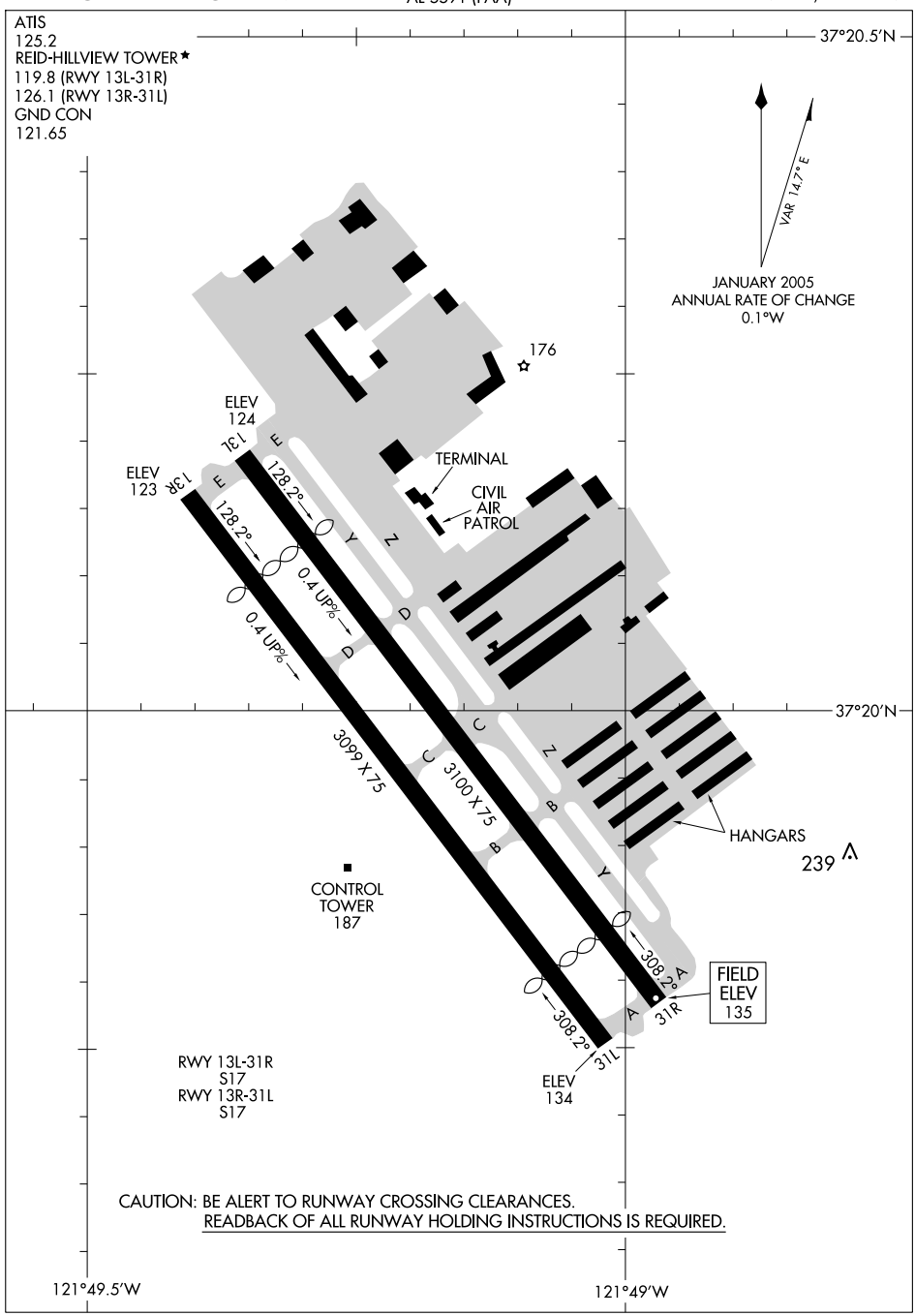
(YOSEM.YOSEM1) 08101

ST-375 (FAA)

SAN FRANCISCO INTL
SAN FRANCISCO, CALIFORNIA

AIRPORT DIAGRAM

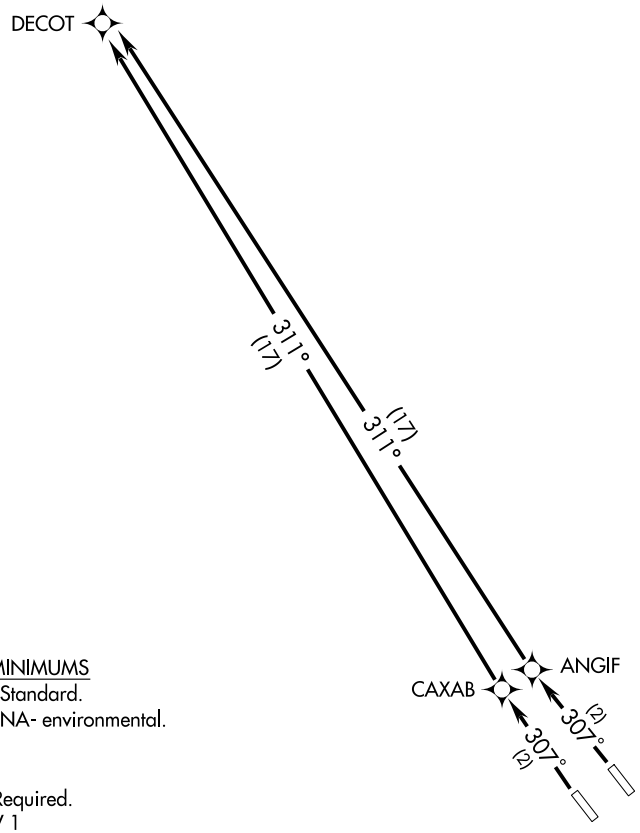
SAN JOSE/REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)
AL-5591 (FAA)
SAN JOSE, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

DECOT ONE DEPARTURE (RNAV) (OBSTACLE) SL-5591 (FAA)

NORCAL DEP CON
121.3 270.35



TAKE-OFF MINIMUMS
Rwy 31L/R: Standard.
Rwy 13L/R: NA- environmental.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Rwy 31L/R: Trees 1070 feet from departure end of runway, 500 feet right and left of centerline, 173 and 169 feet MSL.

NOTE: Rwy 31R: Light 125 feet from departure end of runway, 370 feet right of centerline, 159 MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 31L: Climb to 4000 via 307° course to CAXAB WP and 311° track to DECOT WP. Then via assigned route.

TAKE-OFF RUNWAY 31R: Climb to 4000 via 307° course to ANGIF WP and 311° track to DECOT WP. Then via assigned route.

TAKE-OFF RWY 13L/13R: NA.

SW-2, 22 OCT 2009 to 19 NOV 2009

POINT REYES ONE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA

NORCAL APP CON
133.95 317.6
SAN FRANCISCO TOWER
120.5 269.1
SAN FRANCISCO INTL ATIS
113.7 118.85
SAN CARLOS TOWER★
119.0 326.2
SAN CARLOS ATIS
125.9
PALO ALTO TOWER★
118.6
PALO ALTO ATIS
135.275
MOFFETT FEDERAL AFLD TOWER★
119.55 346.25
MOFFETT FEDERAL AFLD ATIS
124.175 283.0
SAN JOSE TOWER★
124.0 257.6
NORMAN Y. MINETA
SAN JOSE INTL ATIS
126.95
REID-HILLVIEW TOWER★
119.8 RWY 13L/31R
126.1 RWY 13R/31L
REID-HILLVIEW ATIS
125.2

MAXWELL
110.0 MXW
Chan 37
N39°19.06′-W122°13.29′
L-2

MENDOCINO
112.3 ENI
Chan 70
N39°03.19′-W123°16.45′
L-2, H-3

SANTA ROSA
113.0 STS
Chan 77

SACRAMENTO
115.2 SAC
Chan 99
N38°26.62′-W121°33.10′
L-2-3, H-3

POPES
N38°29.16′
W122°20.75′

SCAGGS ISLAND
112.1 SGD
Chan 58

POINT REYES
113.7 PYE
Chan 84
N38°04.79′-W122°52.07′

SAUSALITO
116.2 SAU
Chan 109

SAN FRANCISCO
115.8 SFO
Chan 105

OAKLAND
116.8 OAK
Chan 115

STINS
N37°49.42′
W122°45.40′

SAN FRANCISCO INTL

PALO ALTO AIRPORT OF SANTA CLARA COUNTY

SAN CARLOS

MOFFETT FEDERAL AFLD

NORMAN Y. MINETA SAN JOSE INTL

REID-HILLVIEW OF SANTA CLARA COUNTY

HADLY
N37°24.14′
W122°34.54′

WOODSIDE
113.9 OSI
Chan 86
N37°23.55′-W122°16.88′

6500 184° (80)
6000 146° (61)
5000 208° (35)
5000 257° (38)
V494
R-077
22
R-347
R-005
R-028
R-325
144° (16)
R-243
V27
R-287
144° (27)
43
R-204
076° (14)
R-256

NOTE: SACRAMENTO Transition to be used only when assigned by ATC.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

MAXWELL TRANSITION (MXW.PYE1): From over MXW VORTAC via MXW R-184 and PYE R-005 to PYE VORTAC. Thence....

MENDOCINO TRANSITION (ENI.PYE1): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

SACRAMENTO TRANSITION (SAC. PYE1): From over SAC VORTAC via SAC R-257 and PYE R-028 to PYE VORTAC. Thence....

....From over PYE VORTAC via PYE R-144 to HADLY INT, then via OSI R-256 to OSI VORTAC. Expect radar vectors to final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	2690
307°	TDZE	131
	Apt Elev	133

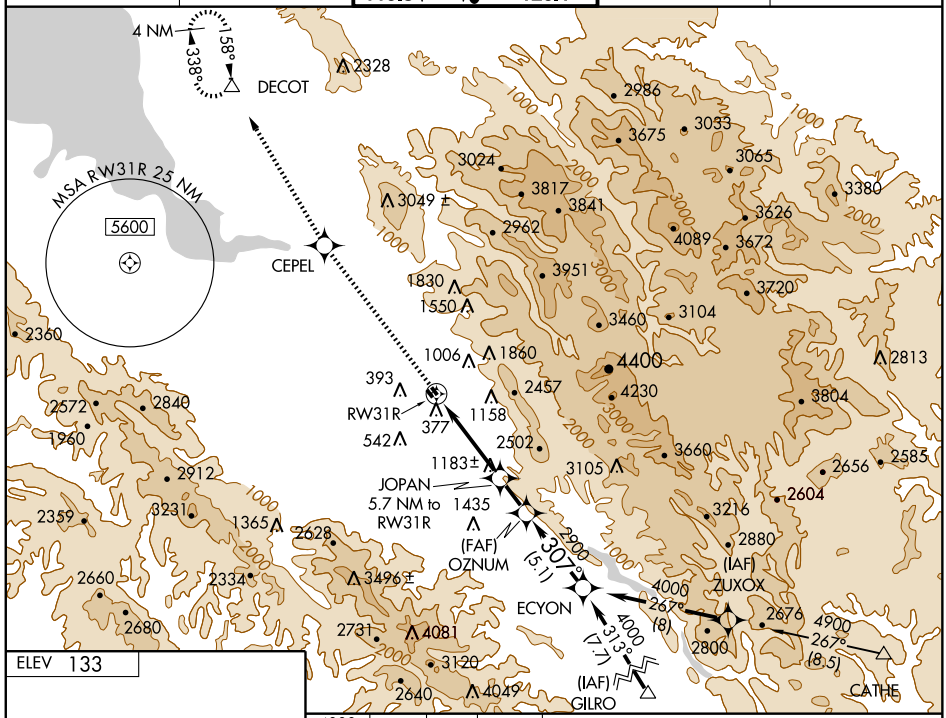
RNAV (GPS) RWY 31R

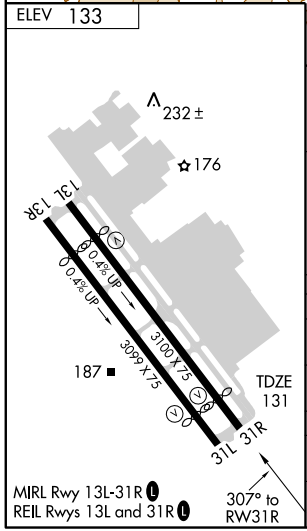
SAN JOSE/REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

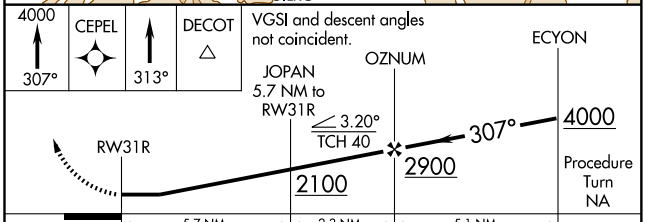
When control tower closed, use San Jose Intl altimeter setting.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
Circling east of Rwy 13L-31R at night not authorized.

MISSED APPROACH: Climb to 4000 via 307° course to CEPEL WP and 313° course to DECOT WP and hold.

ATIS	NORCAL APP CON	REID-HILLVIEW TOWER★ (Rwy 13L-31R) (Rwy 13R-31L)	GND CON	UNICOM
125.2	120.1 290.25	119.8 (CTAF) L 126.1	121.65	122.95







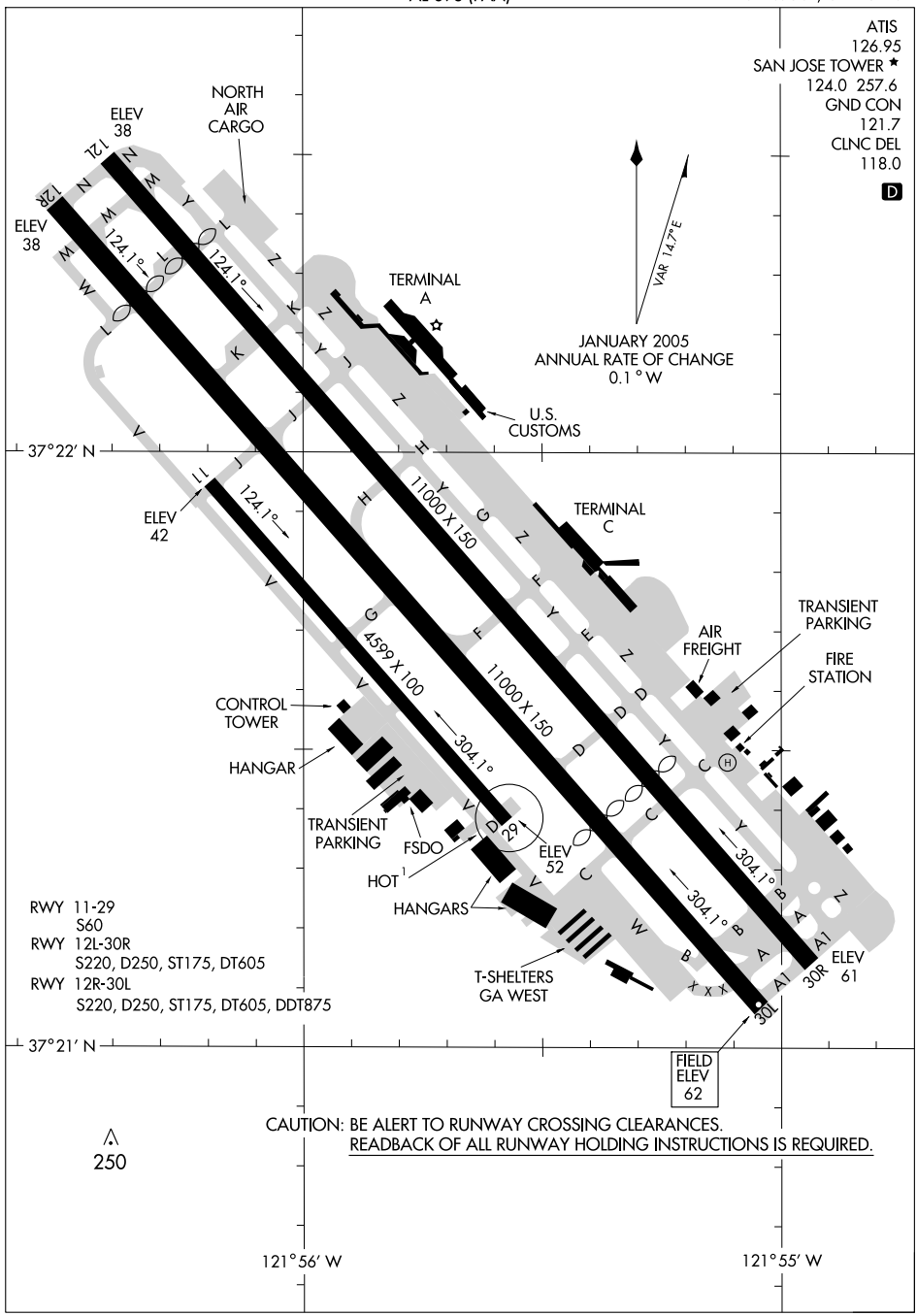
CATEGORY	A	B	C	D
LNAV MDA	1440-1¼ 1309 (1400-1¼)	1440-1½ 1309 (1400-1½)	NA	
CIRCLING	1440-1¼ 1307 (1400-1¼)	1440-1½ 1307 (1400-1½)	NA	
SAN JOSE INTL ALTIMETER SETTING MINIMUMS				
LNAV MDA	1460-1¼ 1329 (1400-1¼)	1460-1½ 1329 (1400-1½)	NA	
CIRCLING	1460-1¼ 1327 (1400-1¼)	1460-1½ 1327 (1400-1½)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

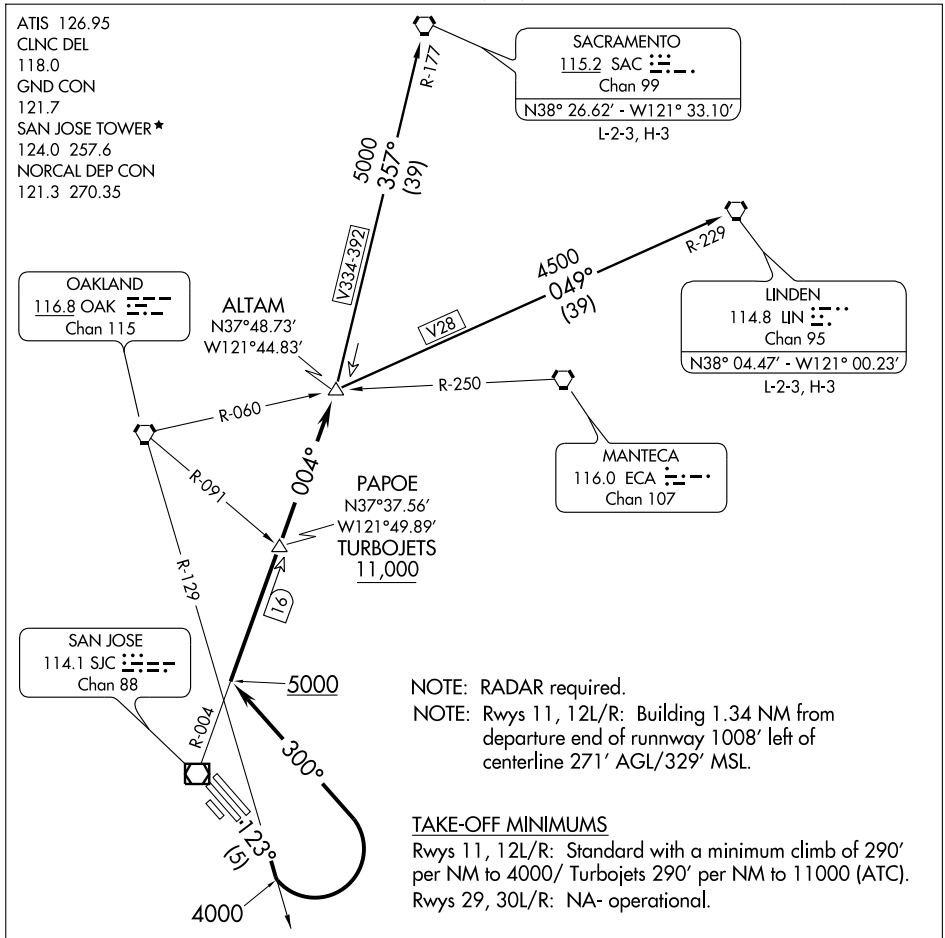
SAN JOSE/ NORMAN Y. MINETA SAN JOSE INTL (SJC)
AL-693 (FAA)
SAN JOSE, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

ALTAM SEVEN DEPARTURE

SAN JOSE/ NORMAN Y. MINETA SAN JOSE INTL (SJC)
SL-693 (FAA)
SAN JOSE, CALIFORNIA



NOTE: RADAR required.

NOTE: Rwys 11, 12L/R: Building 1.34 NM from departure end of runnway 1008′ left of centerline 271′ AGL/329′ MSL.

TAKE-OFF MINIMUMS

Rwys 11, 12L/R: Standard with a minimum climb of 290′ per NM to 4000/ Turbojets 290′ per NM to 11000 (ATC).

Rwys 29, 30L/R: NA- operational.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11, 12L/R: Climb via heading 123° to intercept and proceed via OAK R-129 to 4000′, then turn left heading 300° to intercept SJC R-004 at or above 5000′. Proceed via SJC R-004 to ALTAM INT. Turbojets cross PAPOE INT/SJC 16 DME at or above 11,000′. Then via (transition) or (assigned route). Aircraft filing FL240 and above expect further clearance to filed altitude 10 minutes after departure.

TAKE-OFF RUNWAYS 29, 30L/R: Not Authorized.

LINDEN TRANSITION (ALTAM7.LIN) : From over ALTAM INT via LIN R-229 to LIN VORTAC.

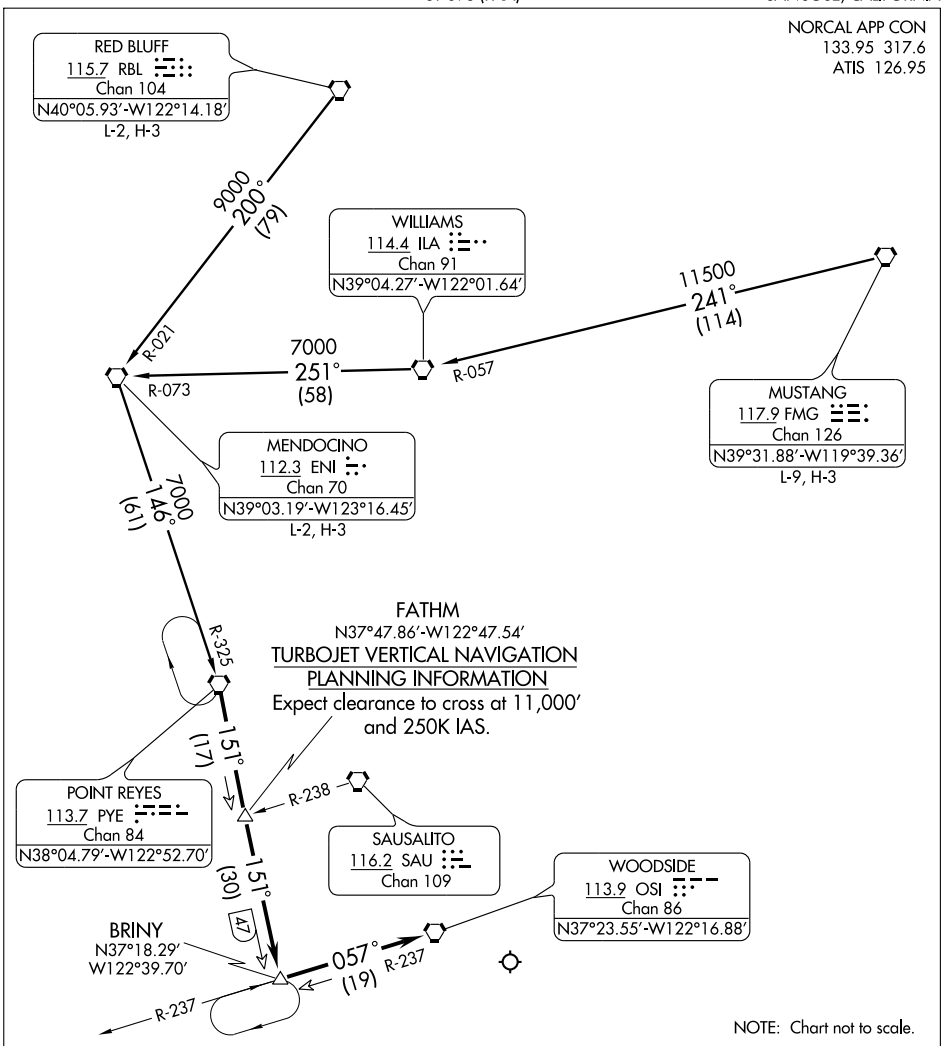
SACRAMENTO TRANSITION (ALTAM7.SAC) : From over ALTAM INT via SAC R-177 to SAC VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

BRINY ONE ARRIVAL

ST-693 (FAA)

NORMAN Y. MINETA SAN JOSE INTL
SAN JOSE, CALIFORNIA



MENDOCINO TRANSITION (ENI.BRINY1): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC. Thence . . . .

MUSTANG TRANSITION (FMG.BRINY1): From over FMG VORTAC via FMG R-241 to ILA VORTAC then via ILA R-251 to ENI VORTAC, then via ENI R-146 to PYE VORTAC. Thence . . . .

RED BLUFF TRANSITION (RBL.BRINY1): From over RBL VORTAC via RBL R-200 and ENI R-146 to PYE VORTAC. Thence . . . .

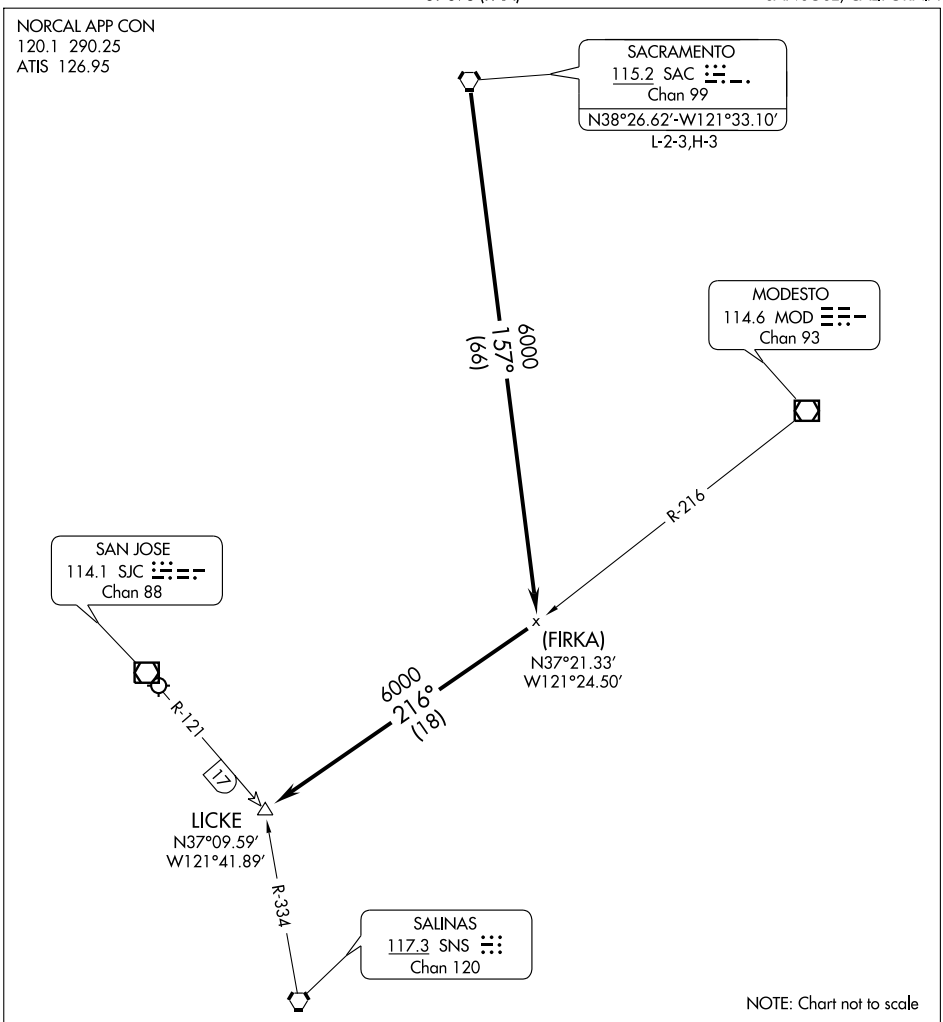
. . . . From over PYE VORTAC via PYE R-151 to BRINY INT/DME, then via OSI R-237 to OSI VORTAC. Expect radar vectors to Rwy 12R final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

CAPITOL THREE ARRIVAL

ST-693 (FAA)

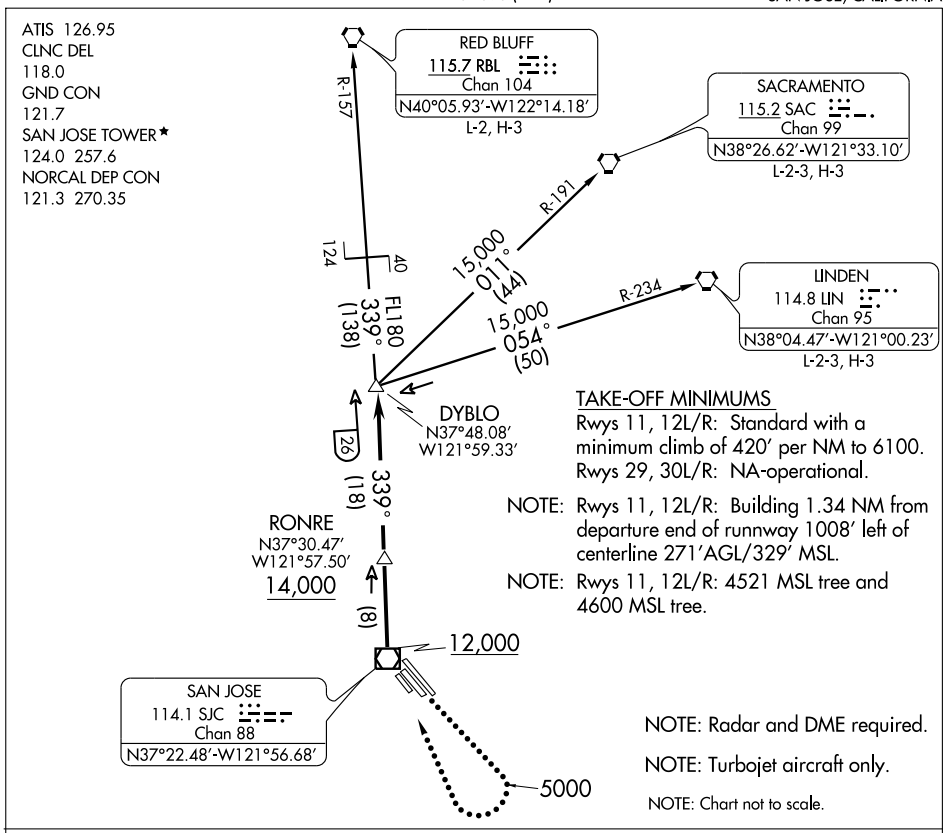
NORMAN Y. MINETA SAN JOSE INTL
SAN JOSE, CALIFORNIA



From over SAC VORTAC via SAC R-157 to intercept and proceed via MOD R-216 to LICKE INT. Then via radar vector to San Jose Intl Airport.

SW-2, 22 OCT 2009 to 19 NOV 2009

DANVILLE TWO DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 29, 30L/R: NA.

TAKE-OFF RUNWAYS 11, 12L/R: Climb via runway heading for vector to SJC VOR/DME, then via SJC R-339 to DYBLO INT, thence via (transition) or (assigned route). Cross SJC VOR/DME at or above 12,000'. Cross RONRE/8 DME at or above14,000', maintain assigned altitude. Aircraft filing FL240 and above expect further clearance to filed altitude after passing SJC VOR/DME.

LOST COMMUNICATIONS:

Runways 11, 12L/R: If not in contact with departure control after reaching 5000', turn right direct SJC VOR/DME thence via SJC VOR/DME R-339 to DYBLO INT, thence via (transition) or (assigned route). Cross SJC VOR/DME at or above 12,000', cross RONRE/8 DME at or above 14,000', then climb to filed altitude.

LINDEN TRANSITION (DANV2.LIN): From over DYBLO INT via LIN R-234 to LIN VORTAC.

RED BLUFF TRANSITION (DANV2.RBL): From over DYBLO INT via SJC R-339 and RBL R-157 to RBL VORTAC.

SACRAMENTO TRANSITION (DANV2.SAC): From over DYBLO INT via SAC R-191 to SAC VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

EL NIDO FIVE ARRIVAL

COALDALE TRANSITION (OAL.HYP5): From over OAL VORTAC via OAL R-216 and HYP R-067 to HYP VOR/DME. Thence . . . .

MUSTANG TRANSITION (FMG.HYP5): From over FMG VORTAC via FMG R-167 and CZQ R-348 to ELCAP INT, then via HYP R-032 to HYP VOR/DME. Thence . . . .

. . . . From over HYP VOR/DME via HYP R-240 to PAPEE DME fix, then via HYP R-240 to TORCH DME fix, thence via SJC R-121 to GILRO INT. Expect the ILS Rwy 30L Approach.

For Rwy 12 Operations: Expect radar vectors to final approach course.

N

MUSTANG
117.9 FMG
Chan 126
N39°31.88'-W119°39.36'
L-9, H-3

FL180
*13600
167°
(111)

COALDALE
117.7 OAL
Chan 124
N38°00.20'-W117°46.23'
L-9, H-3

65
94

ELCAP
N37°41.17'
W119°46.10'

TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at or below FL 240.

FL210
216°
(61)

TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at or below 12000', and to cross 25 NM southeast of SJC VOR/DME at 8000'.

SAN JOSE
114.1 SJC
Chan 88

R-121

27

EL NIDO
114.2 HYP
Chan 89
N37°13.17'-W120°24.01'

FL180
212°
(41)

48

R-032

FL180
247°
(49)

CANDA
N37°23.38'
W118°47.03'

GILRO
N37°02.77'
W121°34.11'

32

301°
(5)

PAPEE
N37°08.38'
W120°46.17'

54

240°
(18)

R-067

12000
247°
(29)

KNOLS
N37°17.17' - W119°47.50'

TURBOJET VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at or below FL 240.

240°
(37)

TORCH
N36°58.77'
W121°29.56'

R-348

R-345

R-347

SALINAS
117.3 SNS
Chan 120

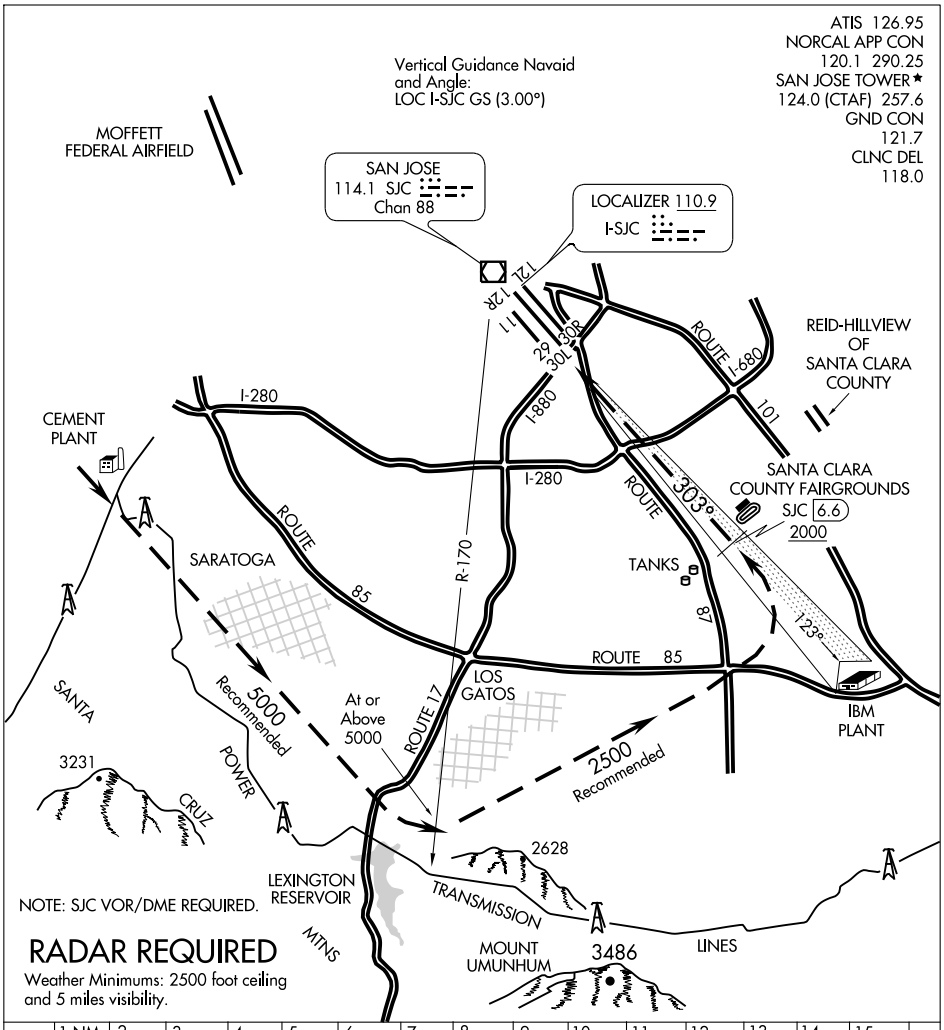
PANOCHE
112.6 PXN
Chan 73

CLOVIS
112.9 CZQ
Chan 76

NOTE: Chart not to scale.

FAIRGROUNDS VISUAL RWYS 30L/R

SAN JOSE, CALIFORNIA



FAIRGROUNDS VISUAL APPROACH RUNWAYS 30L/R

Turbo-jet aircraft from the west-northwest may be vectored in the vicinity of the Cement Plant for a Fairgrounds Visual Approach.
Aircraft should turn base no closer than SJC R-170. Aircraft should turn final no closer than 6.6 DME at or above 2,000′ for noise abatement.

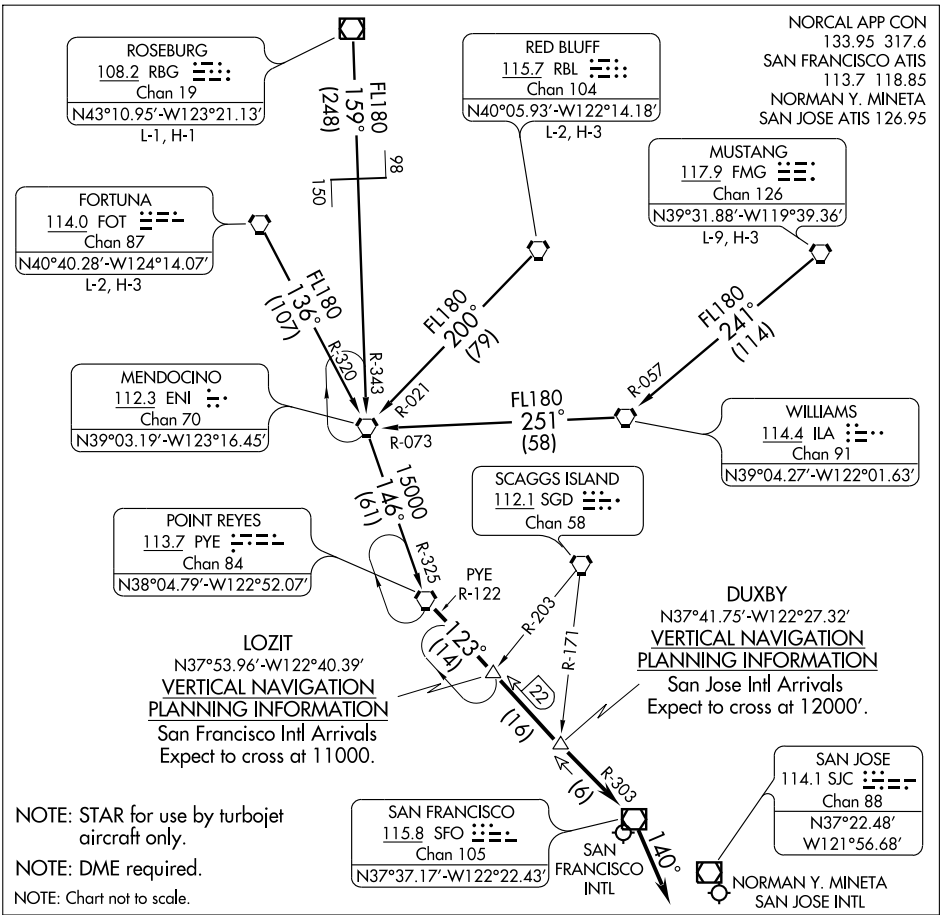
NOTE: Closely spaced parallel visual approaches may be in progress to Runways 30L/R. In the event of a go-around on Runway 30L, proceed straight-ahead heading 300°, or on Runway 30R, turn right heading 120°, climb and maintain 4,000, or as directed by ATC.

(PYE.GOLDN5) 08101

GOLDEN GATE FIVE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA



FORTUNA TRANSITION (FOT.GOLDN5): From over FOT VORTAC via FOT R-136 and ENI R-320 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

MUSTANG TRANSITION (FMG.GOLDN5): From over FMG VORTAC via FMG R-241 and ILA R-057 to ILA VORTAC, then via ILA R-251 and ENI R-073 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

RED BLUFF TRANSITION (RBL.GOLDN5): From over RBL VORTAC via RBL R-200 and ENI R-021 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

ROSEBURG TRANSITION (RBG.GOLDN5): From over RBG VOR/DME via RBG R-159 and ENI R-343 to ENI VORTAC, then via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

....From over PYE VORTAC via SFO R-303 to SFO VOR/DME, then via heading 140° (MEA 6000). Expect vectors to final approach course.

LOST COMMUNICATIONS: San Jose Intl: After SFO VOR/DME proceed direct SJC VOR/DME. (MEA 6000).

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE, CALIFORNIA AL-693 (FAA)

ILS or LOC/DME RWY 30L

LOC I-SJC	APP CRS	Rwy Idg 30L	Rwy Idg 30R	Rwy Idg 29
110.9	303°	7605	7479	4599
Chan 46		TDZE 57	TDZE 55	TDZE 52
		Apt Elev 62	Apt Elev 62	Apt Elev 62

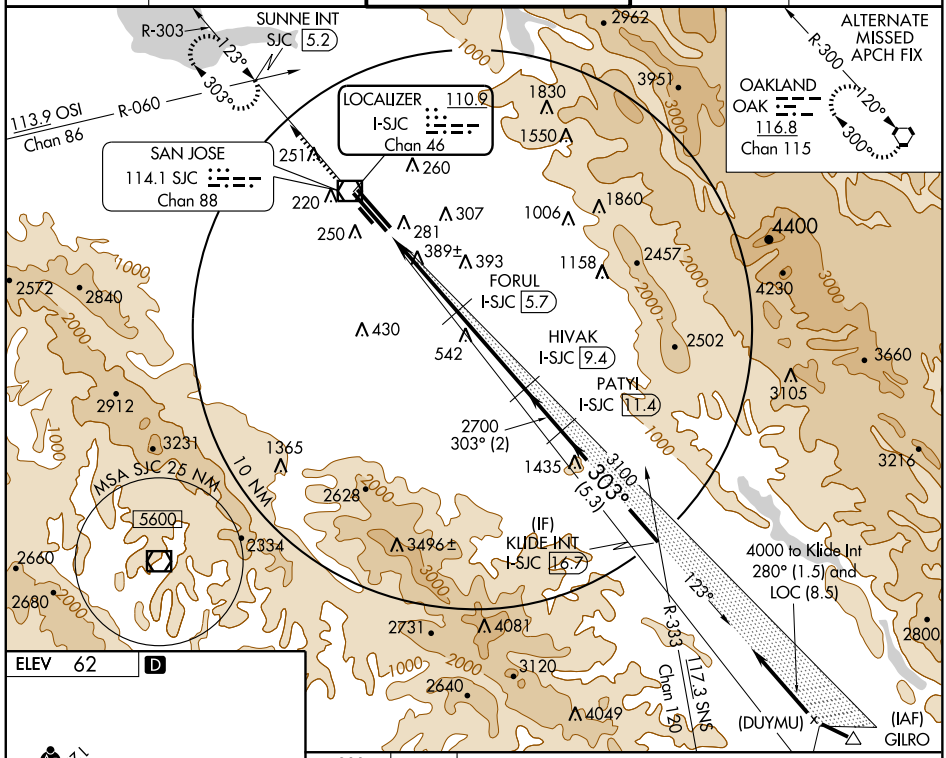
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

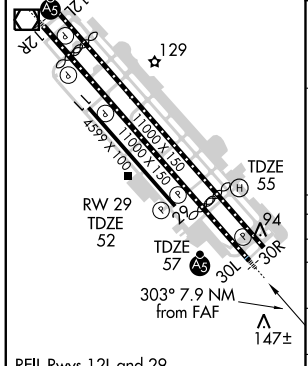
T A DME required.
* RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR Rwy 30L

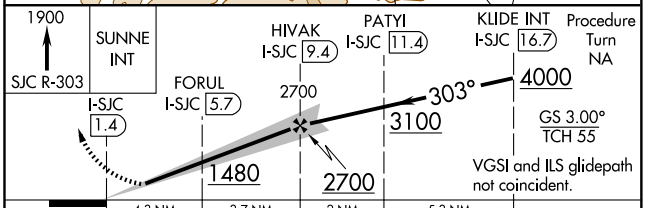
MISSED APPROACH: Climb to 1900 via the SJC R-303 to SUNNE Int and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER *	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0





REIL Rwys 12L and 29
MIRL Rwy 11-29 L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
S-ILS 30L	*257/24 200 (200-½)			
S-LOC 30L	640/24 583 (600-½)		640/50 583 (600-1)	640/60 583 (600-1¼)
SIDESTEP RWY 29	640-1 588 (600-1)		640-1½ 588 (600-1½)	640-2 588 (600-2)
SIDESTEP RWY 30R	640-1 585 (600-1)		640-1½ 585 (600-1½)	640-2 585 (600-2)
CIRCLING	NA			

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE, CALIFORNIA AL-693 (FAA)

ILS or LOC RWY 12R

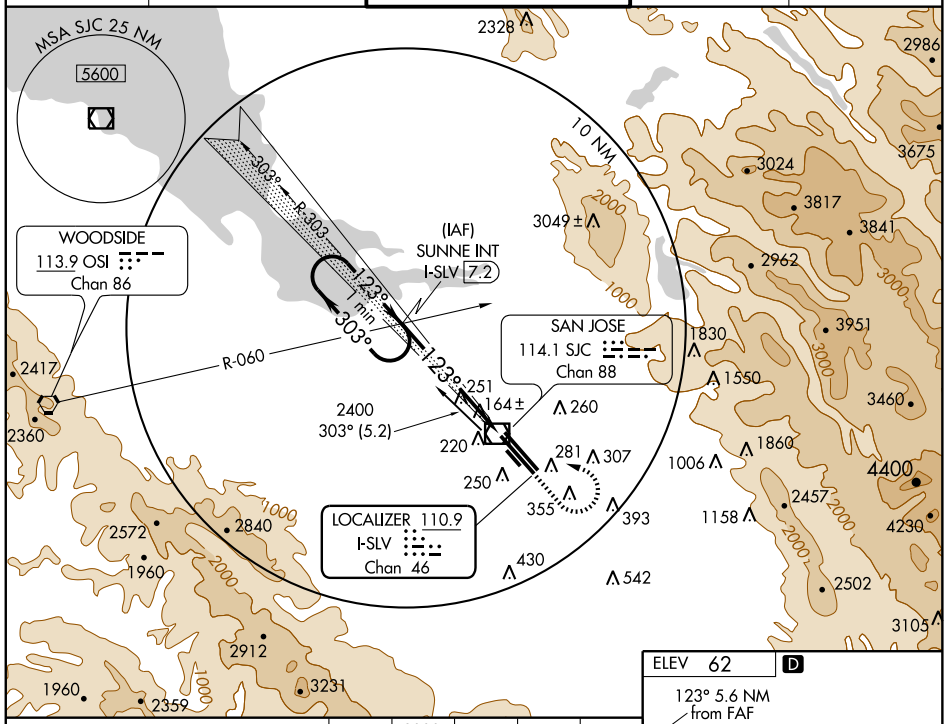
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

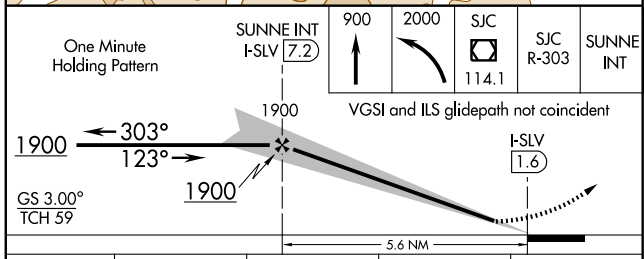
LOC I-SLV	APP CRS	Rwy Idg 12R	Rwy Idg 12L	Rwy Idg 11
110.9	123°	8584	8810	4599
Chan 46		TDZE 46	TDZE 44	TDZE 49
		Apt Elev 62	Apt Elev 62	Apt Elev 62

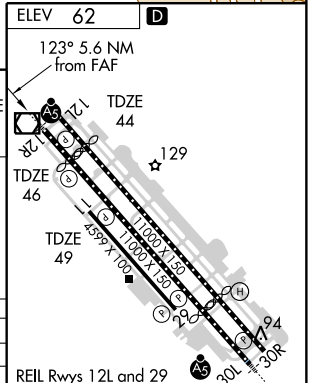
MALSR Rwy 12R

MISSED APPROACH: Climb to 900 then climbing left turn to 2000 direct SJC VOR/DME and R-303 to SUNNE Int and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0







CATEGORY	A	B	C	D
S-ILS 12R	258-½ 212 (200-½)			
S-LOC 12R	420-½ 374 (400-½)			420-¾ 374 (400-¾)
SIDESTEP RWY 12L	420-1 376 (400-1)		420-1½ 376 (400-1½)	420-2 376 (400-2)
SIDESTEP RWY 11	480-1 431 (500-1)		480-1½ 431 (500-1½)	480-2 431 (500-2)
CIRCLING	NA			

FAF to MAP 5.6 NM

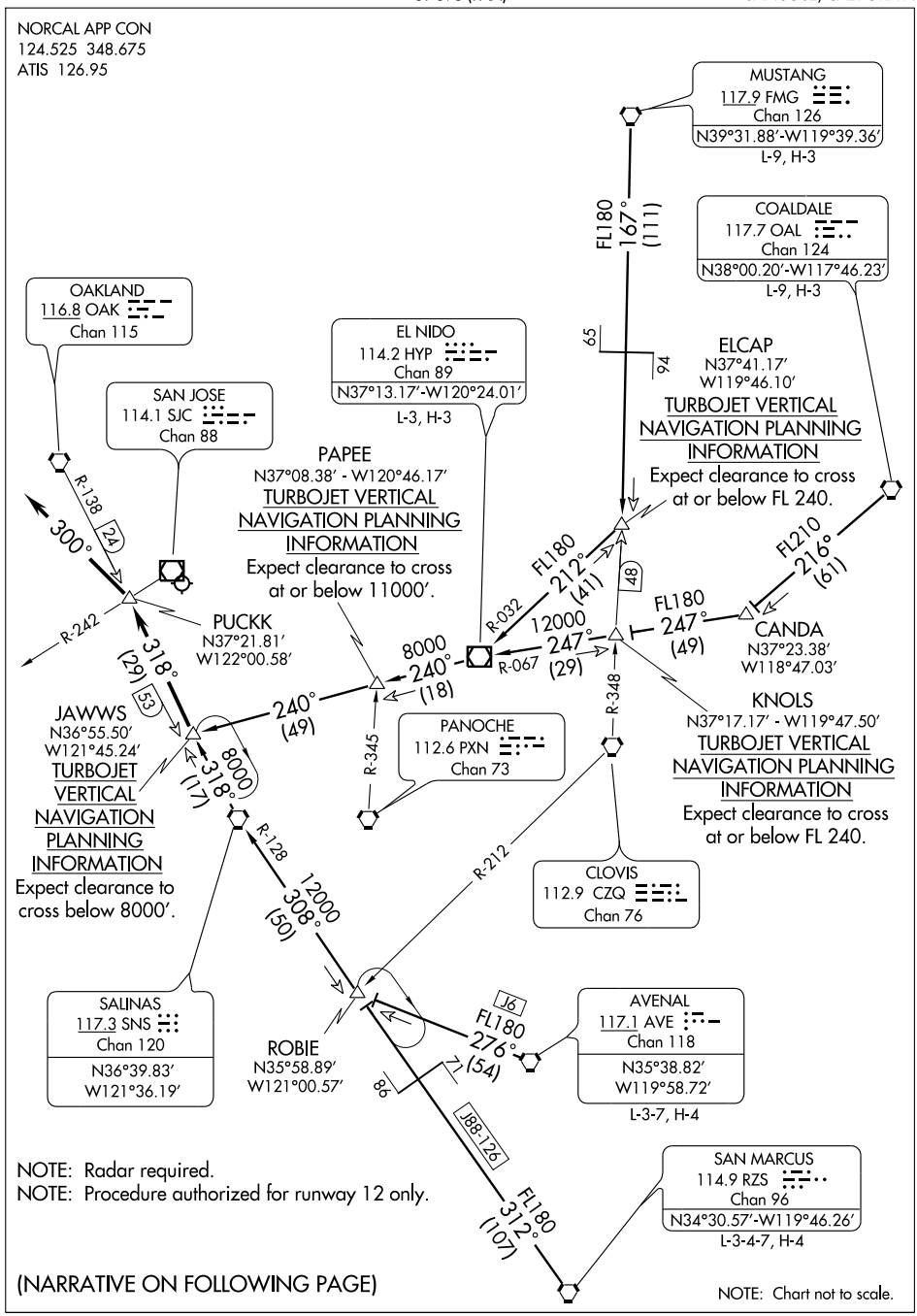
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

SW-2, 22 OCT 2009 to 19 NOV 2009

JAWWS TWO ARRIVAL

ST-693 (FAA)

NORMAN Y. MINETA SAN JOSE INTL
SAN JOSE, CALIFORNIA



JAWWS TWO ARRIVAL

ARRIVAL DESCRIPTION

AVENAL TRANSTION (AVE.JAWWS2): From over AVE VORTAC via AVE R-276 to ROBIE INT, then via SNS R-128 to SNS VORTAC, then via SNS R-318 to JAWWS INT. Thence . . . .

COALDALE TRANSITION (OAL.JAWWS2): From over OAL VORTAC via OAL R-216 and HYP R-067 to HYP VOR/DME, then via HYP R-240 to JAWWS INT. Thence . . . .

EL NIDO TRANSITION (HYP.JAWWS2): From over HYP VOR/DME via HYP R-240 to PAPEE INT then via HYP R-240 to JAWWS INT. Thence . . . .

MUSTANG TRANSITION (FMG.JAWWS2): From over FMG VORTAC via FMG R-167 to ELCAP INT, then via HYP R-032 to HYP VOR/DME, then via HYP R-240 to JAWWS INT. Thence . . . .

SAN MARCUS TRANSITION (RZS.JAWWS2): From over RZS VORTAC via RZS R-312 and SNS R-128 to SNS VORTAC, then via SNS R-318 to JAWWS INT. Thence . . . .

. . . . From over JAWWS INT via OAK R-138 to PUCKK INT, thence via heading 300°, expect radar vectors to final approach course.

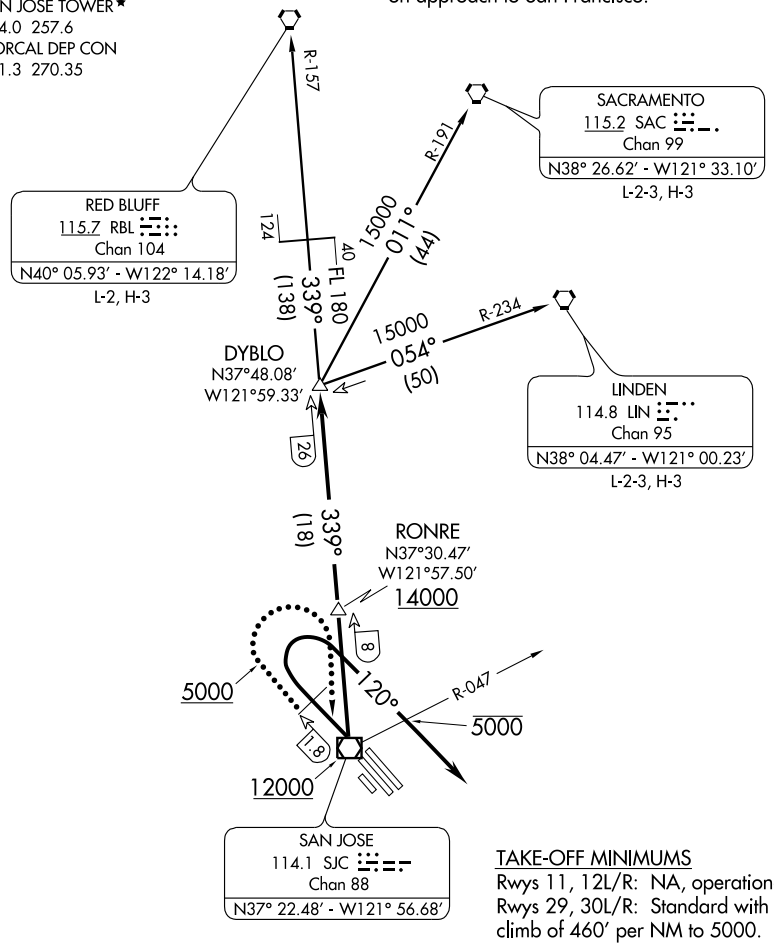
LOST COMMUNICATIONS: In the event of lost communications proceed direct to SJC VOR/DME and execute runway 12R ILS approach.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOUPE ONE DEPARTURE

ATIS 126.95
CLNC DEL
118.0
GND CON
121.7
SAN JOSE TOWER ★
124.0 257.6
NORCAL DEP CON
121.3 270.35

ALERT: SJC R-047 5000′ crossing restriction protects aircraft descending on approach to San Francisco.



TAKE-OFF MINIMUMS
Rwys 11, 12L/R: NA, operational.
Rwys 29, 30L/R: Standard with a minimum climb of 460′ per NM to 5000.

NOTE: Rwy 29, tree 2254′ from departure end of runway 113′ left of centerline 63′ AGL 102′ MSL.
NOTE: Rwy 30L, pole 1739′ from departure end of runway 743′ left of centerline 55′ AGL/91′ MSL.
NOTE: Rwy 30R, pole 963′ from departure end of runway 133′ right of centerline 49′ AGL/85′ MSL.
NOTE: Rwys 29, 30L/R, 3043 MSL tower.

NOTE: Radar and DME Required.
NOTE: Turbojet aircraft only.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS11, 12L: NA.

TAKE-OFF RUNWAYS 29, 30L/R: Climb runway heading at SJC 1.8 DME northwest of SJC VOR/DME turn right heading 120°, maintain 5000, for radar vectors to SJC VOR/DME, then via SJC R-339 to DYBLO INT, Thence....

....via (transition) or (assigned route). Cross SJC R-047 at or below 5000, cross SJC VOR/DME at or above 12000, cross RONRE/8 DME at or above 14000, maintain assigned altitude. Aircraft filing FL240 and above expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:
Runways 29, 30L/R: If not in contact with departure control after reaching 5000' turn right direct SJC VOR/DME thence via SJC VOR/DME R-339 to DYBLO INT, thence via (transition) or (assigned route). Cross SJC VOR/DME at or above 12000, cross RONRE/8 DME at or above 14000, then climb to filed altitude.

LINDEN TRANSITION (LOUPE1.LIN): From over DYBLO INT via LIN R-234 to LIN VORTAC.

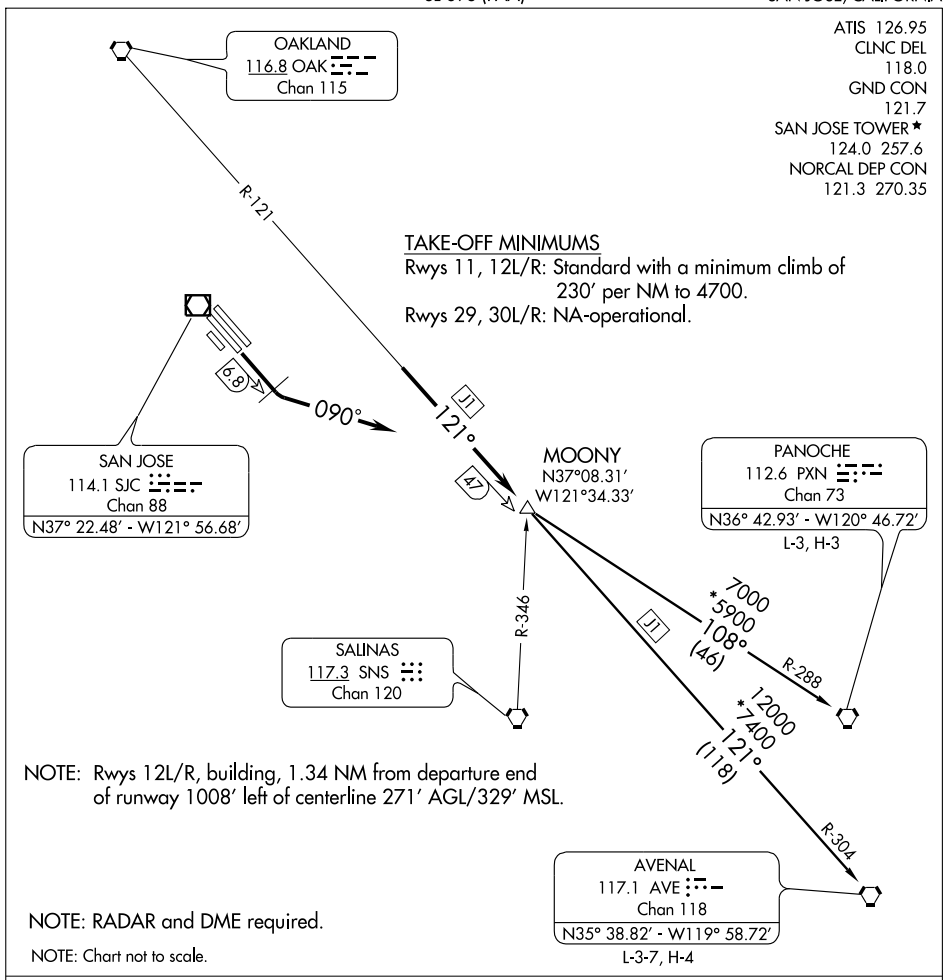
RED BLUFF TRANSITION (LOUPE1.RBL): From over DYBLO INT via SJC R-339 and RBL R-157 to RBL VORTAC.

SACRAMENTO TRANSITION (LOUPE1.SAC): From over DYBLO INT via SAC R-191 to SAC VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

MOONY TWO DEPARTURE

SAN JOSE/ NORMAN Y. MINETA SAN JOSE INTL (SJC)
SL-693 (FAA)
SAN JOSE, CALIFORNIA



NOTE: Rwys 12L/R, building, 1.34 NM from departure end of runway 1008' left of centerline 271' AGL/329' MSL.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 29, 30L/R: NA.

TAKE-OFF RUNWAYS 11, 12L/R: Climb runway heading upon leaving 3000 and not prior to SJC 6.8 DME southeast of SJC VOR/DME, turn left heading 090° to intercept and proceed via OAK R-121 to MOONY INT/OAK 47 DME. Thence....

....via (transition) or (assigned route). Aircraft filing FL240 or above expect further clearance to filed altitude ten minutes after departure.

AVENAL TRANSITION (MOONY2.AVE) : From over MOONY INT via OAK R-121 and AVE R-304 to AVE VORTAC.

PANOCHE TRANSITION (MOONY2.PXN) : From over MOONY INT via PXN R-288 to PXN VORTAC.

POINT REYES ONE ARRIVAL

ST-375 (FAA)

SAN FRANCISCO, CALIFORNIA

NORCAL APP CON
133.95 317.6
SAN FRANCISCO TOWER
120.5 269.1
SAN FRANCISCO INTL ATIS
113.7 118.85
SAN CARLOS TOWER★
119.0 326.2
SAN CARLOS ATIS
125.9
PALO ALTO TOWER★
118.6
PALO ALTO ATIS
135.275
MOFFETT FEDERAL AFLD TOWER★
119.55 346.25
MOFFETT FEDERAL AFLD ATIS
124.175 283.0
SAN JOSE TOWER★
124.0 257.6
NORMAN Y. MINETA
SAN JOSE INTL ATIS
126.95
REID-HILLVIEW TOWER★
119.8 RWY 13L/31R
126.1 RWY 13R/31L
REID-HILLVIEW ATIS
125.2

MAXWELL
110.0 MXW
Chan 37
N39°19.06′-W122°13.29′
L-2

MENDOCINO
112.3 ENI
Chan 70
N39°03.19′-W123°16.45′
L-2, H-3

SANTA ROSA
113.0 STS
Chan 77

SACRAMENTO
115.2 SAC
Chan 99
N38°26.62′-W121°33.10′
L-2-3, H-3

POPES
N38°29.16′
W122°20.75′

SCAGGS ISLAND
112.1 SGD
Chan 58

POINT REYES
113.7 PYE
Chan 84
N38°04.79′-W122°52.07′

SAUSALITO
116.2 SAU
Chan 109

SAN FRANCISCO
115.8 SFO
Chan 105

OAKLAND
116.8 OAK
Chan 115

STINS
N37°49.42′
W122°45.40′

SAN FRANCISCO INTL

PALO ALTO AIRPORT OF SANTA CLARA COUNTY

SAN CARLOS

MOFFETT FEDERAL AFLD

NORMAN Y. MINETA SAN JOSE INTL

REID-HILLVIEW OF SANTA CLARA COUNTY

HADLY
N37°24.14′
W122°34.54′

WOODSIDE
113.9 OSI
Chan 86
N37°23.55′-W122°16.88′

6500 184° (80)
6000 146° (61)
5000 208° (35)
5000 257° (38)
V494
R-077
22
R-347
R-005
R-028
R-325
144° (16)
R-243
V27
R-287
144° (27)
43
R-204
076° (14)
R-256

NOTE: SACRAMENTO Transition to be used only when assigned by ATC.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-2, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

MAXWELL TRANSITION (MXW.PYE1): From over MXW VORTAC via MXW R-184 and PYE R-005 to PYE VORTAC. Thence....

MENDOCINO TRANSITION (ENI.PYE1): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VORTAC. Thence....

SACRAMENTO TRANSITION (SAC. PYE1): From over SAC VORTAC via SAC R-257 and PYE R-028 to PYE VORTAC. Thence....

....From over PYE VORTAC via PYE R-144 to HADLY INT, then via OSI R-256 to OSI VORTAC. Expect radar vectors to final approach course.

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4599
123°	TDZE	49
	Apt Elev	62

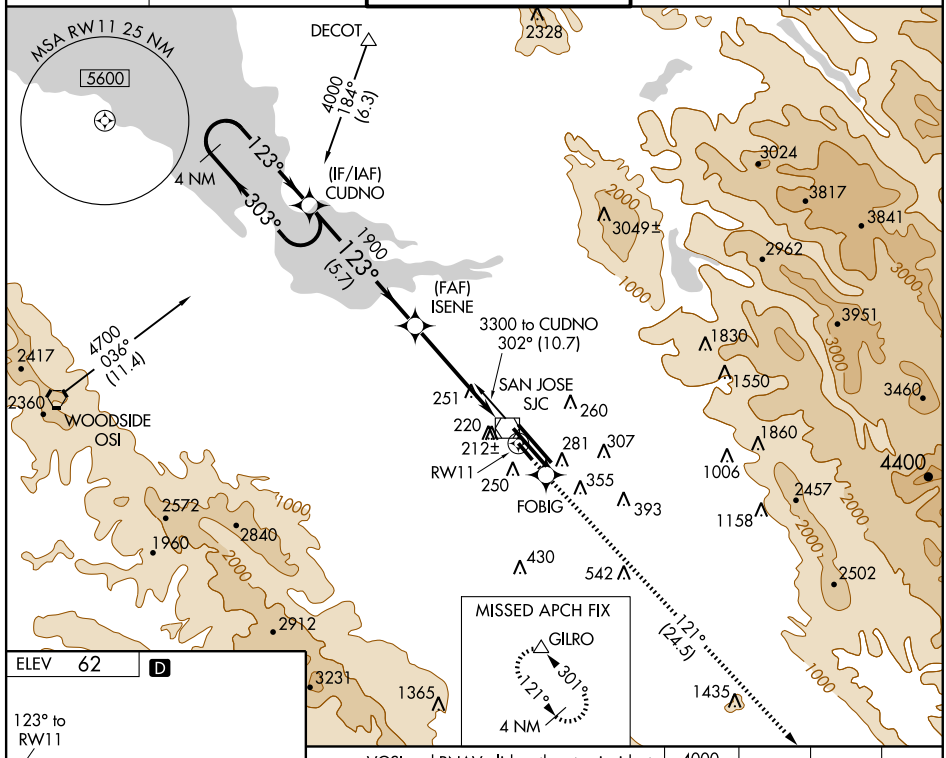
RNAV (GPS) RWY 11

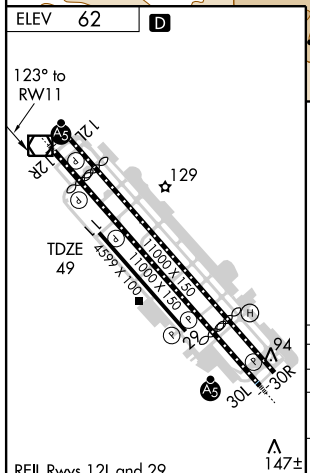
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

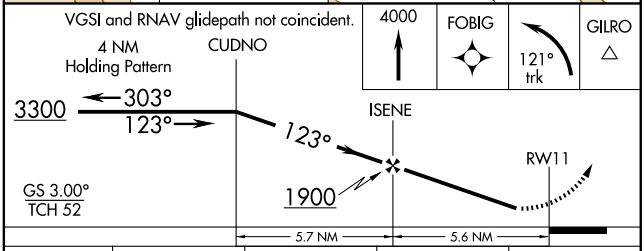
DME/DME RNP- 0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).

MISSED APPROACH: Climb to 4000 direct FOBIG WP and left turn via 121° track to GILRO WP and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	516-1¾ 467 (500-1¾)			
LNAV MDA	520-1 471 (500-1)		520-1¼ 471 (500-1¼)	520-1½ 471 (500-1½)
CIRCLING	640-1 578 (600-1)	680-1 618 (700-1)	720-1¾ 658 (700-1¾)	720-2 658 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE, CALIFORNIA

AL-693 (FAA)

WAAS	APP CRS	Rwy Idg	8810
CH 69501	123°	TDZE	44
W12B		Apt Elev	62

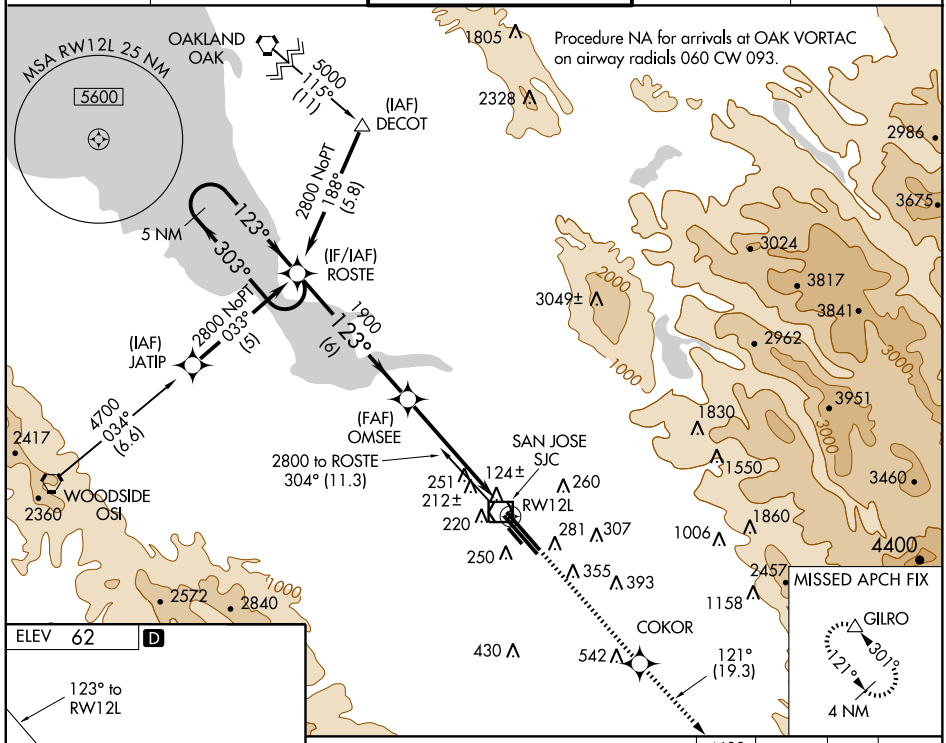
RNAV (GPS) RWY 12L

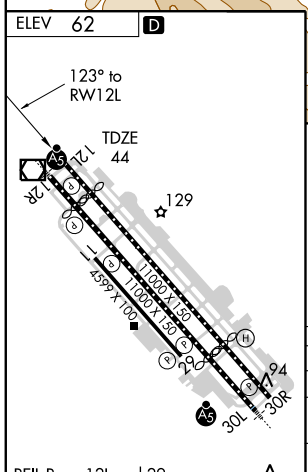
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

Visibility reduction by helicopters NA.
DME/DME RNP- 0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).

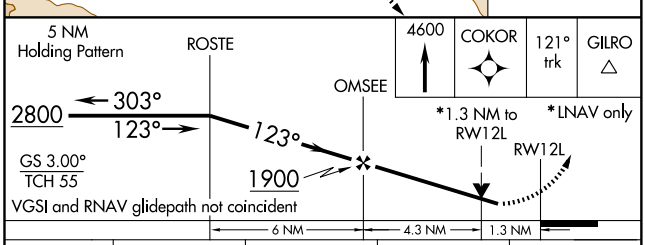
MISSED APPROACH: Climb to 4600 direct COKOR and via 121° track to GILRO and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0





REIL Rwys 12L and 29
MIRL Rwy 11-29 L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
LPV DA	351-1 307 (300-1)			
LNAV/VNAV DA	508-1¾ 464 (500-1¾)			
LNAV MDA	520-1 476 (500-1)		520-1¼ 476 (500-1¼)	520-1½ 476 (500-1½)
CIRCLING	640-1 578 (600-1)	680-1 618 (700-1)	720-1¾ 658 (700-1¾)	720-2 658 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4599
303°	TDZE	52
	Apt Elev	62

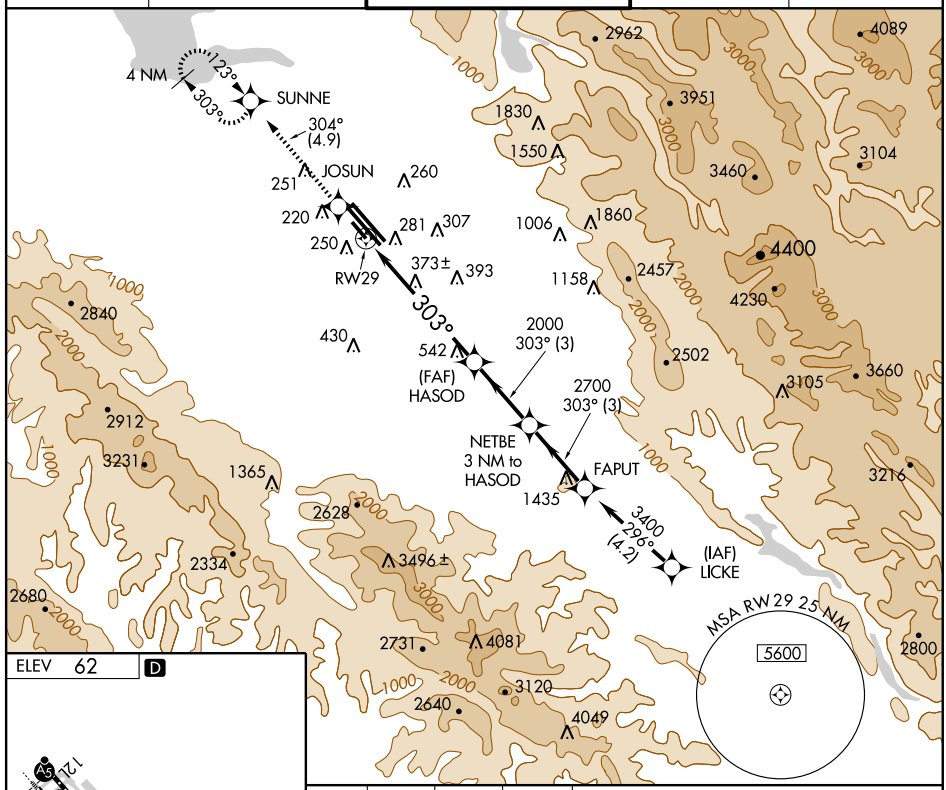
RNAV (GPS) RWY 29

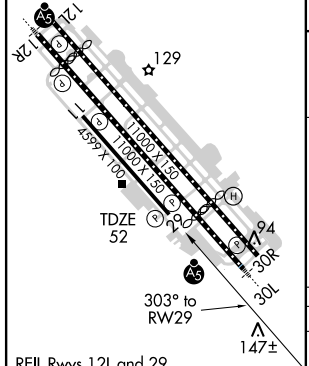
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

DME/DME RNP- 0.3 NA.

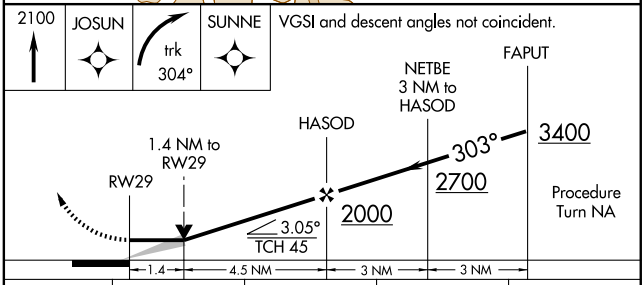
MISSED APPROACH: Climb to 2100 direct JOSUN WP and right turn via 304° track to SUNNE WP and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0





REIL Rwys 12L and 29
MIRL Rwy 11-29 L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
LNAV MDA	640-1 588 (600-1)		640-1½ 588 (600-1½)	640-1¾ 588 (600-1¾)
CIRCLING	640-1 578 (600-1)	680-1 618 (700-1)	720-1½ 658 (700-1½)	720-2 658 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 72901 W30B	APP CRS 303°	Rwy Idg 7479 TDZE 55 Apt Elev 62

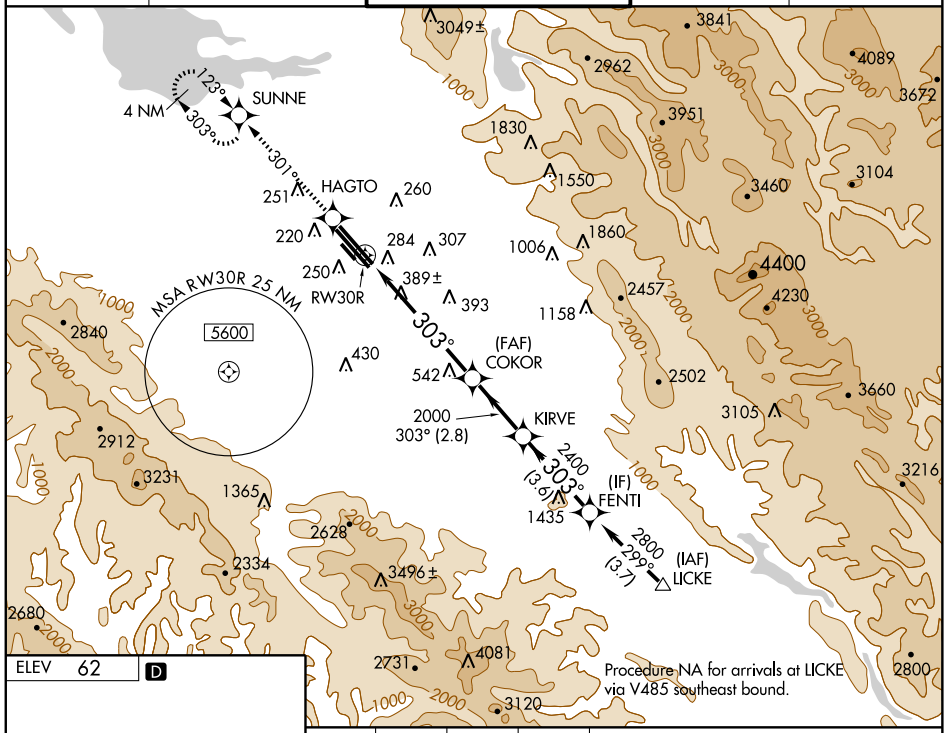
RNAV (GPS) RWY 30R

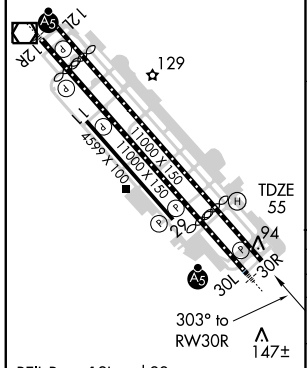
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

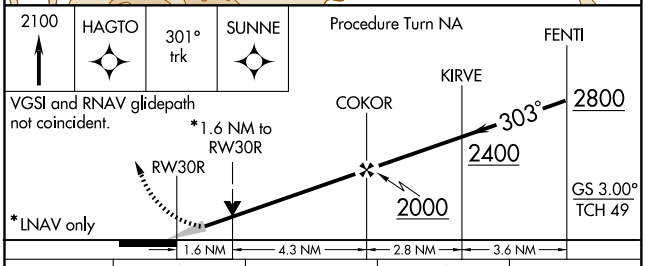
Visibility reduction by helicopters NA. DME/DME RNP -0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).

MISSED APPROACH: Climb to 2100 direct HAGTO and via 301° track to SUNNE and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0







CATEGORY	A	B	C	D
LPV DA	367-1 312 (400-1)			
LNAV/VNAV DA	654-2 599 (600-2)			
LNAV MDA	640-1 585 (600-1)		640-1½ 585 (600-1½)	640-1¾ 585 (600-1¾)
CIRCLING	640-1 578 (600-1)	680-1 618 (700-1)	720-1¾ 658 (700-1¾)	720-2 658 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE, CALIFORNIA AL-693 (FAA)

RNAV (GPS) Y RWY 12R

WAAS CH 90106 W12A	APP CRS 123°	Rwy Idg 12R 8584 TDZE 46 Apt Elev 62	Rwy Idg 12L 8810 TDZE 44 Apt Elev 62	Rwy Idg 11 4599 TDZE 49 Apt Elev 62

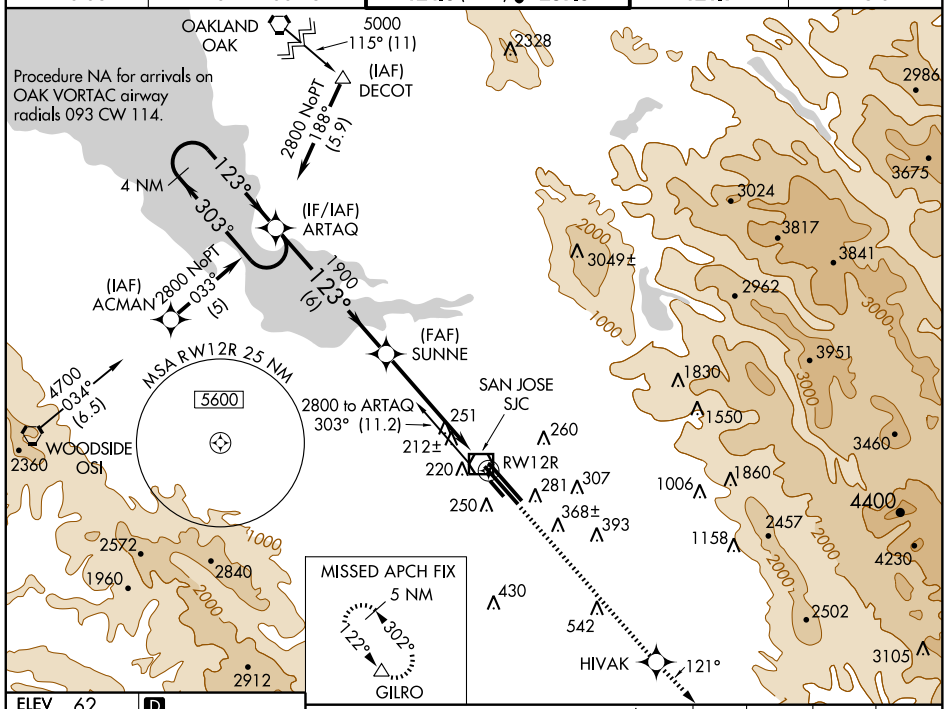
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

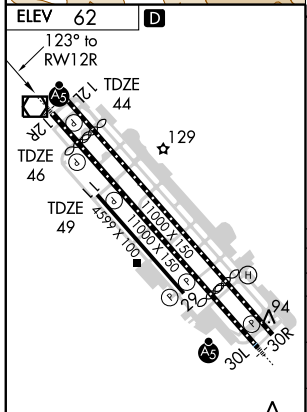
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP -0.3 NA.

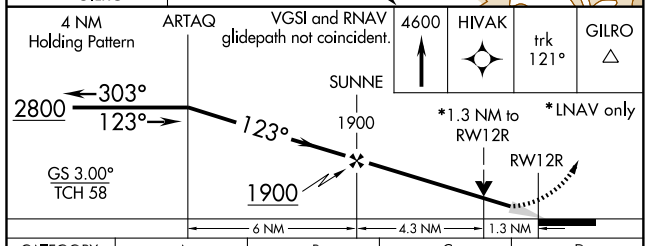
MALSR Rwy 12R

MISSED APPROACH: Climb to 4600 direct HIVAK and via track 121° to GILRO and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0







CATEGORY	A	B	C	D
LPV DA	298-½ 252 (300-½)			
LNAV/VNAV DA	482-1 436 (500-1)			
LNAV MDA	520-½ 474 (500-½)		520-¾ 474 (500-¾)	520-1 474 (500-1)
SIDESTEP 12L	520-1 476 (500-1)		520-1½ 476 (500-1½)	520-2 476 (500-2)
SIDESTEP 11	520-1 471 (500-1)		520-1½ 471 (500-1½)	520-2 471 (500-2)
CIRCLING	NA			

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE, CALIFORNIA AL-693 (FAA)

RNAV (GPS) Y RWY 30L

WAAS	APP CRS	Rwy Idg 30L	7605	Rwy Idg 30R	7479	Rwy Idg 29	4599
CH 97306	303°	TDZE	57	TDZE	55	TDZE	52
W30A		Apt Elev	62	Apt Elev	62	Apt Elev	62

SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP -0.3 NA.

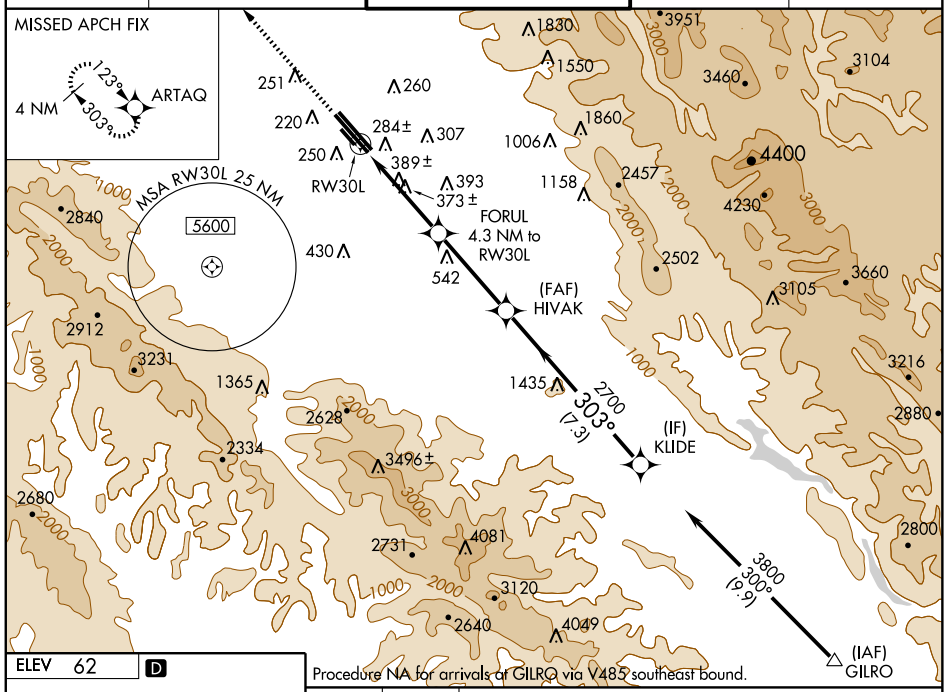
MALSR Rwy 30L (A5)

MISSED APPROACH: Climb to 2800 direct ARTAQ and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0

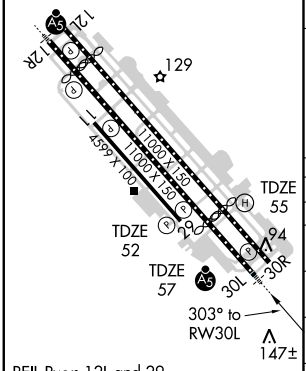
MISSED APCH FIX

4 NM 123° 303° ARTAQ

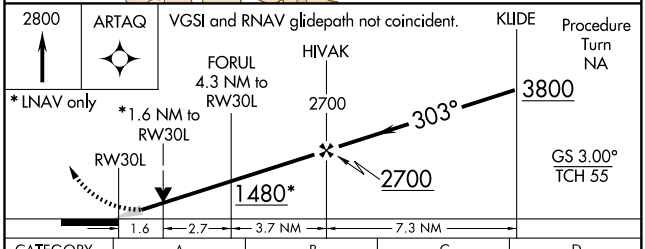


Procedure NA for arrivals at GILRO via V485 southeast bound.

ELEV 62 D



REIL Rwys 12L and 29
MIRL Rwy 11-29 L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
LPV DA	334/24 277 (300-½)			
LNAV/VNAV DA	586/60 529 (600-1¼)			
LNAV MDA	640/24 583 (600-½)		640/50 583 (600-1)	640/60 583 (600-1¼)
SIDESTEP 30R	640-1 585 (600-1)		640-1½ 585 (600-1½)	640-2 585 (600-2)
SIDESTEP 29	640-1 588 (600-1)		640-1½ 588 (600-1½)	640-2 588 (600-2)
CIRCLING	NA			

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8584
123°	TDZE	46
	Apt Elev	62

RNAV (RNP) Z RWY 12R

SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

T NA — GPS required. For uncompensated Baro-VNAV systems, procedure NA below 0°C (32°F) or above 48°C (119°F). For inoperative MALSR, increase RNP 0.30 visibility to 1¼ mile all Cats.

MALSR

MISSED APPROACH: Climb to 4600 via 123° trackto HIVAK and via 121° track to GILRO and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0

Procedure NA for arrivals on OAK VORTAC airway radials 093 CW 114.

OAKLAND OAK

2800 139° (13.9)

(IF) ARTAQ

1900 123° (6)

(FAF) SUNNE

MSA RW12R 25 NM 5600

123° (9.1)

HIVAK

1435 121° (17.2)

MISSED APCH FIX 5 NM 302° 122° GILRO

RW12R

ELEV 62 D

123° to RW12R

TDZE 46

129

11000 X 150

4599 X 100

147±

REIL Rwys 12L and 29
MIRL Rwy 11-29 L
HIRL Rwys 12L-30R and 12R-30L L

ARTAQ — VGSI and RNAV glidepath not coincident. — SUNNE — HIVAK — GILRO

2800

Procedure Turn NA

GP 3.00° TCH 58

4600 | 123° track | 121° track

1900

123°

1900

RW12R

6 NM | 5.6 NM

CATEGORY	A	B	C	D
RNP 0.30 DA	439-1	393 (400-1)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7605
303°	TDZE	46
	Apt Elev	62

RNAV (RNP) Z RWY 30L

SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

NA — GPS required. For uncompensated Baro-VNAV systems, procedure NA below 0°C (32°F) or above 48°C (119°F). For inoperative MALSR increase RNP 0.30 visibility to 1¾ mile all Cats.

MALSR

MISSED APPROACH: Climb to 2800 via 303° track to ARTAQ and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0

MISSED APCH FIX

4 NM 123° ARTAQ 303°

303° (12.8)

MSA RW30L 25 NM

5600

RW30L

(FAF) HIVAK

2700 303° (7.3)

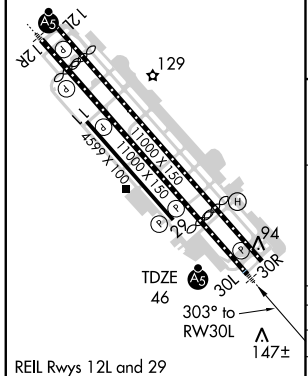
(IF) KLIDE

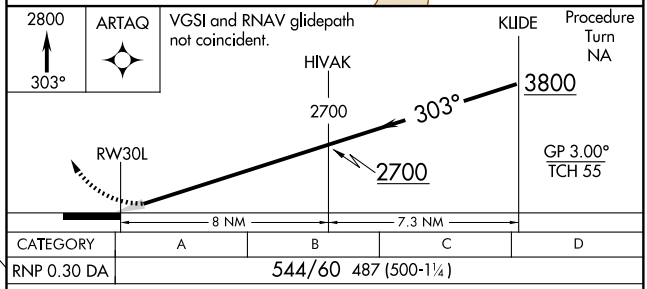
3800 300° (9.9)

(IAF) GILRO

Procedure NA for arrivals at GILRO via V485 southeast bound.

ELEV 62 D





CATEGORY	A	B	C	D
RNP 0.30 DA	544/60 487 (500-1¼)			

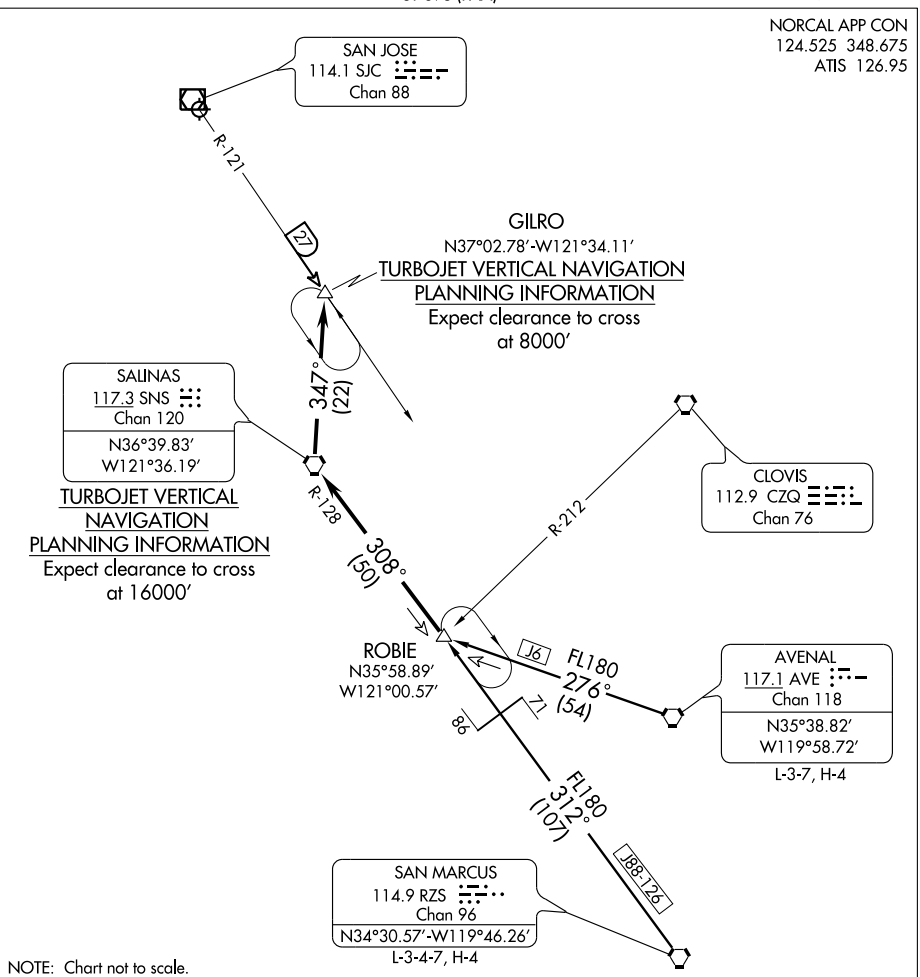
SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-2, 22 OCT 2009 to 19 NOV 2009

ROBIE TWO ARRIVAL

ST-693 (FAA)

NORMAN Y. MINETA SAN JOSE INTL
SAN JOSE, CALIFORNIA



AVENAL TRANSITION (AVE.ROBIE2): From over AVE VORTAC via AVE R-276 to ROBIE INT. Thence . . . .

SAN MARCUS TRANSITION (RZS.ROBIE2): From over RZS VORTAC via RZS R-312 to ROBIE INT. Thence . . . .

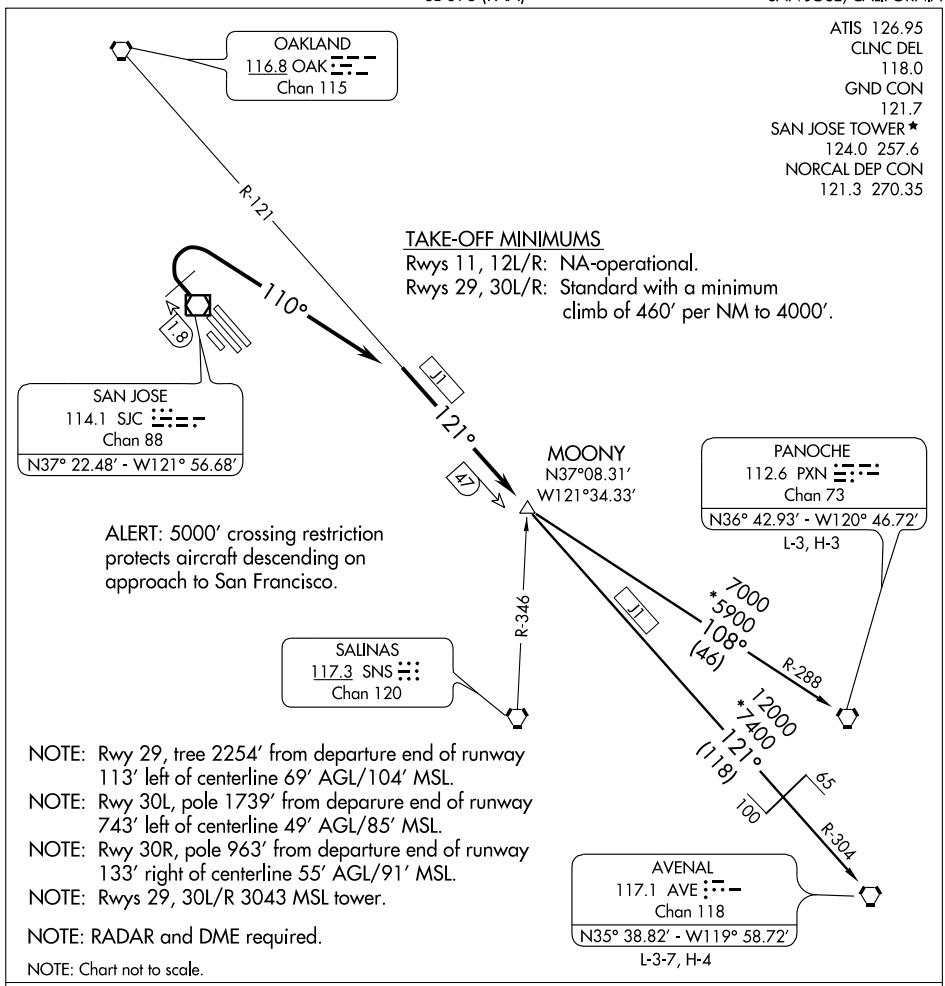
. . . . From over ROBIE INT via SNS R-128 to SNS VORTAC. Then via SNS R-347 to GILRO INT/DME fix. Expect the ILS Rwy 30L approach.

For Rwy 12 operations: Expect routing via SNS direct SJC VOR/DME and radar vectors to the final approach course. Expect clearance to cross SNS at 16000 and cross 25 NM SE SJC at 8000'.

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE NINE DEPARTURE

SAN JOSE/ NORMAN Y. MINETA SAN JOSE INTL (SJC)
SL-693 (FAA)
SAN JOSE, CALIFORNIA



NOTE: Rwy 29, tree 2254′ from departure end of runway 113′ left of centerline 69′ AGL/104′ MSL.
NOTE: Rwy 30L, pole 1739′ from deparure end of runway 743′ left of centerline 49′ AGL/85′ MSL.
NOTE: Rwy 30R, pole 963′ from departure end of runway 133′ right of centerline 55′ AGL/91′ MSL.
NOTE: Rwys 29, 30L/R 3043 MSL tower.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11, 12L/R: NA

TAKE-OFF RUNWAYS 29, 30L/R: Climb via runway heading to SJC 1.8 DME northwest of SJC VOR/DME. Then turn right heading 110° to intercept and proceed via OAK R-121 to MOONY INT. Thence....

.... via (transition) or (assigned route). Maintain 5000, expect clearance to filed altitude ten minutes after departure.

AVENAL TRANSITION (SJC9.AVE): From over MOONY INT via OAK R-121 and AVE R-304 to AVE VORTAC.

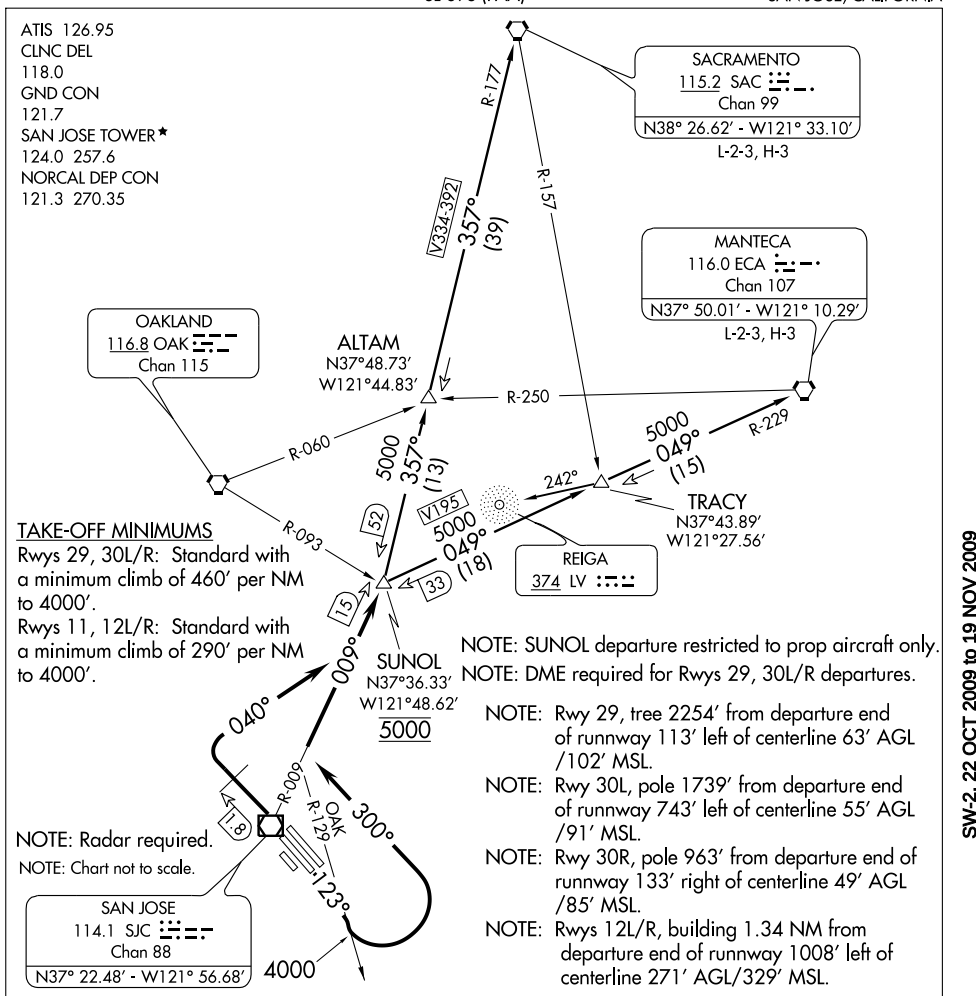
PANOCHE TRANSITION (SJC9.PXN): From over MOONY INT via PXN R-288 to PXN VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

(SUNOL6.SUNOL) 09127

SUNOL SIX DEPARTURE

SAN JOSE/ NORMAN Y. MINETA SAN JOSE INTL (SJC)
SL-693 (FAA)
SAN JOSE, CALIFORNIA



TAKE-OFF MINIMUMS
Rwys 29, 30L/R: Standard with a minimum climb of 460′ per NM to 4000′.
Rwys 11, 12L/R: Standard with a minimum climb of 290′ per NM to 4000′.

NOTE: SUNOL departure restricted to prop aircraft only.
NOTE: DME required for Rwys 29, 30L/R departures.

NOTE: Rwy 29, tree 2254′ from departure end of runnway 113′ left of centerline 63′ AGL /102′ MSL.

NOTE: Rwy 30L, pole 1739′ from departure end of runnway 743′ left of centerline 55′ AGL /91′ MSL.

NOTE: Rwy 30R, pole 963′ from departure end of runnway 133′ right of centerline 49′ AGL /85′ MSL.

NOTE: Rwys 12L/R, building 1.34 NM from departure end of runnway 1008′ left of centerline 271′ AGL/329′ MSL.

NOTE: Radar required.
NOTE: Chart not to scale.

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11, 12L/R: Climb via heading 123° to intercept and proceed via OAK R-129 to 4000. Then turn left heading 300° for radar vectors to intercept and proceed via SJC R-009 to SUNOL INT. Thence....

TAKE-OFF RUNWAYS 29, 30L/R: Climb runway heading at SJC 1.8 DME northwest of SJC VOR/DME, turn right heading 040° to intercept and proceed via SJC R-009 to SUNOL INT. Thence....

...Cross SUNOL INT at 5000′, then via (transition) or (assigned route).

MANTECA TRANSITION (SUNOL6.ECA): From over SUNOL INT via ECA R-229 to ECA VORTAC.

SACRAMENTO TRANSITION (SUNOL6.SAC): From over SUNOL INT via SAC R-177 to SAC VORTAC.

SAN JOSE, CALIFORNIA — AL-693 (FAA)

VOR/DME RWY 30L

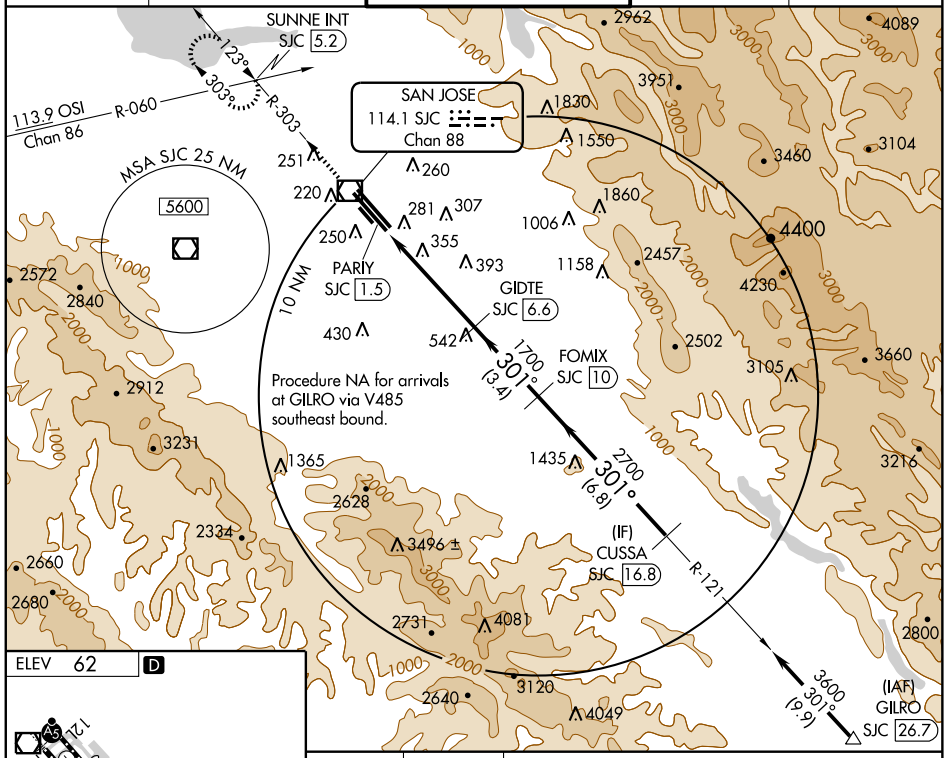
VOR/DME SJC	APP CRS	Rwy Idg 30L 7605	Rwy Idg 30R 7479	Rwy Idg 29 4599
114.1 Chan 88	301°	TDZE 57	TDZE 55	TDZE 52
		Apt Elev 62	Apt Elev 62	Apt Elev 62

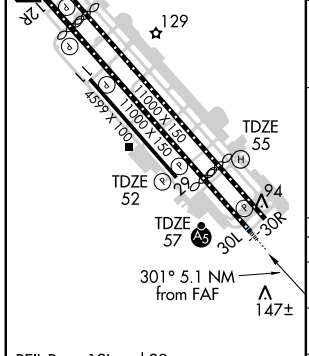
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

MALSR Rwy 30L

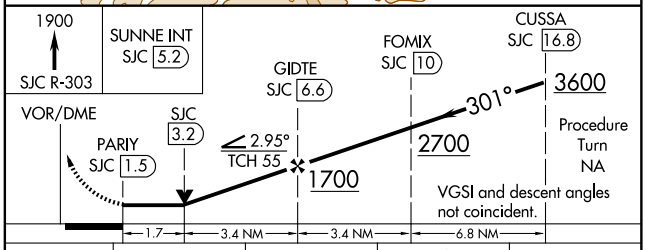
MISSED APPROACH: Climb to 1900 via SJC VOR/DME R-303 to SUNNE Int/SJC 5.2 DME and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0





REIL Rwys 12L and 29
MIRL Rwy 11-29 L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
S-30L	660/24	603 (600-½)	660/60 603 (600-1¼)	660-1½ 603 (600-1½)
SIDESTEP RWY 29	660-1	608 (600-1)	660-1¾ 608 (600-1¾)	660-2 608 (600-2)
SIDESTEP RWY 30R	660-1	605 (600-1)	660-1¾ 605 (600-1¾)	660-2 605 (600-2)
CIRCLING	NA			

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE, CALIFORNIA

AL-693 (FAA)

VOR/DME SJC	APP CRS	Rwy Idg	7479
114.1	298°	TDZE	53
Chan 88		Apt Elev	59

VOR/DME RWY 30R

SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

MISSED APPROACH: Climb to 2100 via SJC VOR/DME R-303 to SUNNE INT/SJC 5 DME and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0

SUNNE INT SJC 5

R-303

123°

303°

10 NM

113.9 OSI

R-061

Chan 86

CISUN SJC 1.5

SAN JOSE

114.1 SJC

Chan 88

FASIK SJC 6.6

298° (3.4)

HARNA SJC 10

298° (6.8)

FINOR SJC 16.8

R-118

MSA SJC 25 NM

5600

4300 to Finor

343° (2.5) and

298° (8.1)

(IAF)

GILRO

3049±

3841

3626

2962

4089

3672

3951

3720

1830

1550

3104

3460

1860

1006

4400

4230

2457

1158

2502

3660

3105

2912

3231

1365

2628

3216

2880

2334

3496±

2731

4081

3120

2640

4049

2676

2800

1435

430

542

251

220

260

281

307

355

393

250

ELEV 59

D

TDZE 53

94

12L

30R

30L

12R

129

11000 X 150

4599 X 100

298° 5.1 NM from FAF

147±

REIL Rwys 12L and 29

MIRL Rwy 11-29 L

HIRL Rwys 12L-30R and 12R-30L L

2100

SJC R-303

SUNNE INT

VGSI and descent angles not coincident

VOR/DME

SJC 3.2

CISUN SJC 1.5

3.30°

TCH 69

FASIK SJC 6.6

HARNA SJC 10

FINOR SJC 16.8

4300

298°

2600

1900

Procedure Turn NA

1.7 NM | 3.4 NM | 3.4 NM | 6.8 NM

CATEGORY	A	B	C	D
S-30R	660-1 607 (700-1)		660-1¾ 607 (700-1¾)	660-2 607 (700-2)
CIRCLING	660-1 601 (700-1)	680-1 621 (700-1)	680-1¾ 621 (700-1¾)	680-2 621 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

SAN JOSE, CALIFORNIA AL-693 (FAA)

VOR RWY 12R

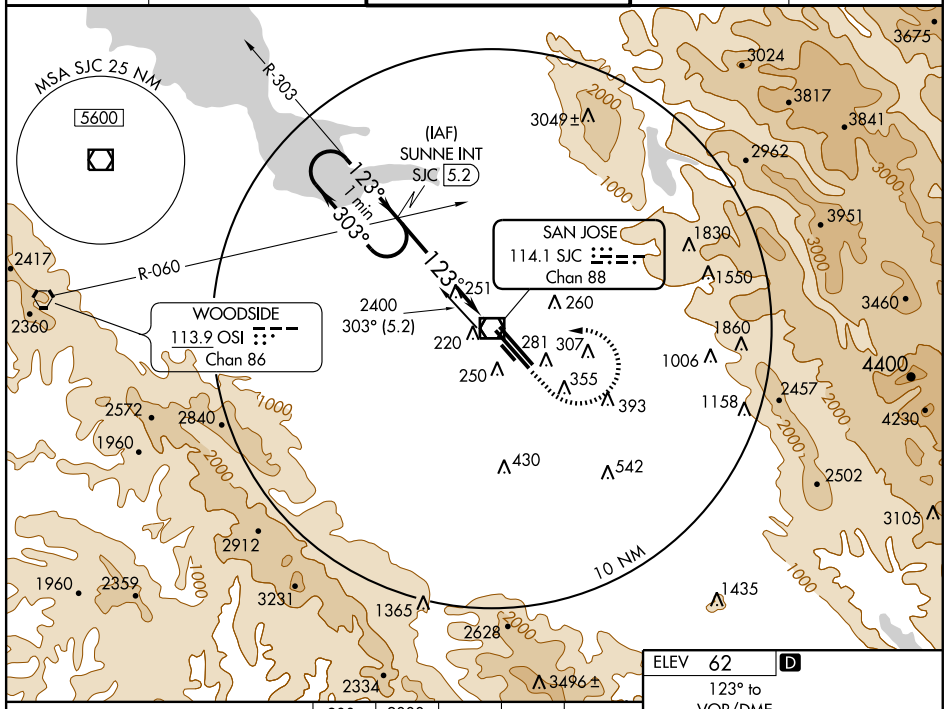
SAN JOSE / NORMAN Y. MINETA SAN JOSE INTL (SJC)

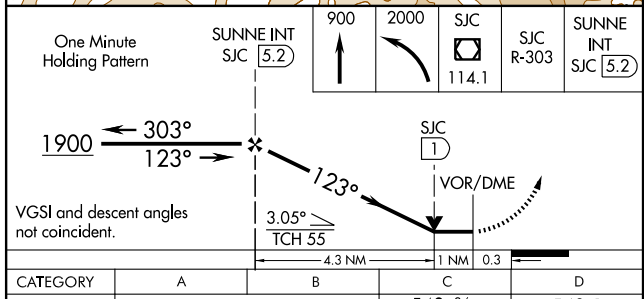
VOR/DME SJC	APP CRS	Rwy Idg 12R	Rwy Idg 12L	Rwy Idg 11
114.1	123°	8584	8810	4599
Chan 88		TDZE 46	TDZE 44	TDZE 49
		Apt Elev 62	Apt Elev 62	Apt Elev 62

MALSR Rwy 12R

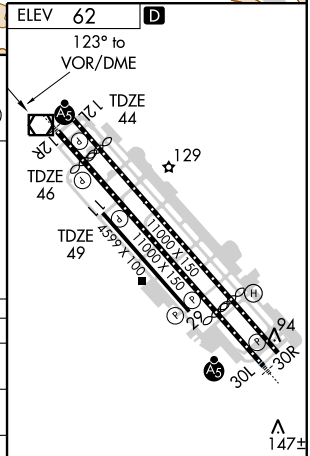
MISSED APPROACH: Climb to 900, then climbing left turn to 2000, direct SJC VOR/DME and R-303 to SUNNE Int/SJC 5.2 DME and hold.

ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0



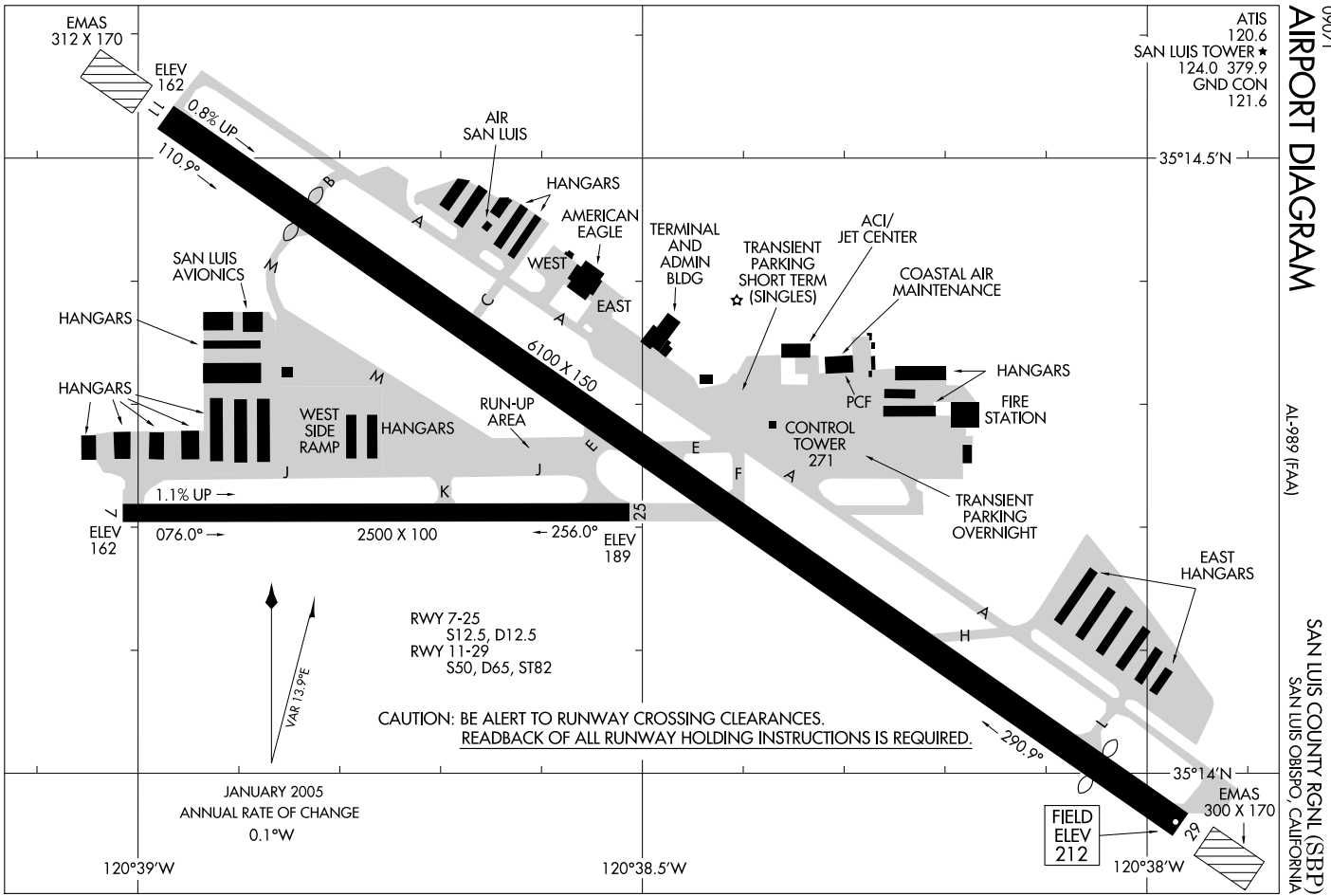


CATEGORY	A	B	C	D
S-12R	540-½ 494 (500-½)		540-¾ 494 (500-¾)	540-1 494 (500-1)
SIDESTEP RWY 12L	540-1 496 (500-1)		540-2 496 (500-2)	
SIDESTEP RWY 11	540-1 491 (500-1)		540-2 491 (500-2)	
CIRCLING	640-1 578 (600-1)	680-1 618 (700-1)	720-1¾ 658 (700-1¾)	720-2 658 (700-2)



REIL Rwys 12L and 29
MIRL Rwy 11-29 L
HIRL Rwys 12L-30R and 12R-30L L

SW-2, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

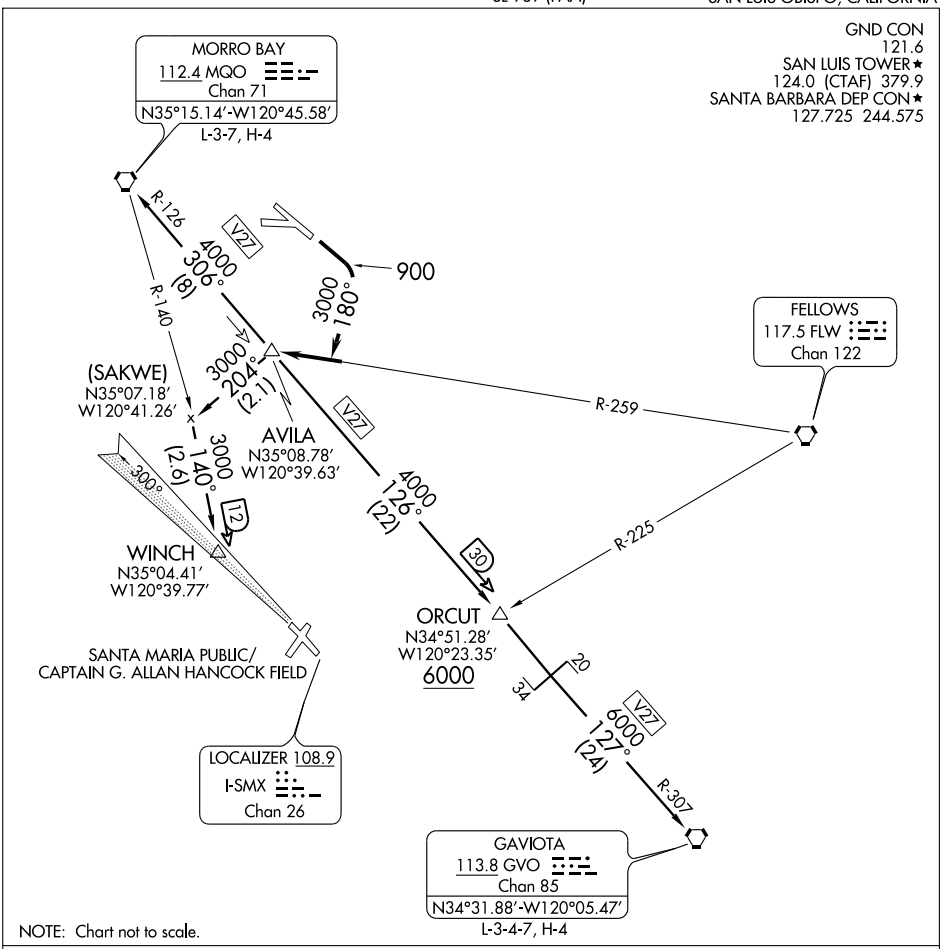
09001

AL-989 (FAA)

SAN LUIS COUNTY RGNL (SBP)

SAN LUIS OBISPO, CALIFORNIA

AVILA THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Maintain runway heading to 900', then climbing right turn to 3000' or assigned altitude, heading 180° to intercept FLW R-259 to AVILA INT, then via (transition) or (assigned route).

GAVIOTA TRANSITION (AVILA3.GVO): From over AVILA INT via V27 to GVO VORTAC.

MORRO BAY TRANSITION (AVILA3.MQO): From over AVILA INT via V27 to MQO VORTAC.

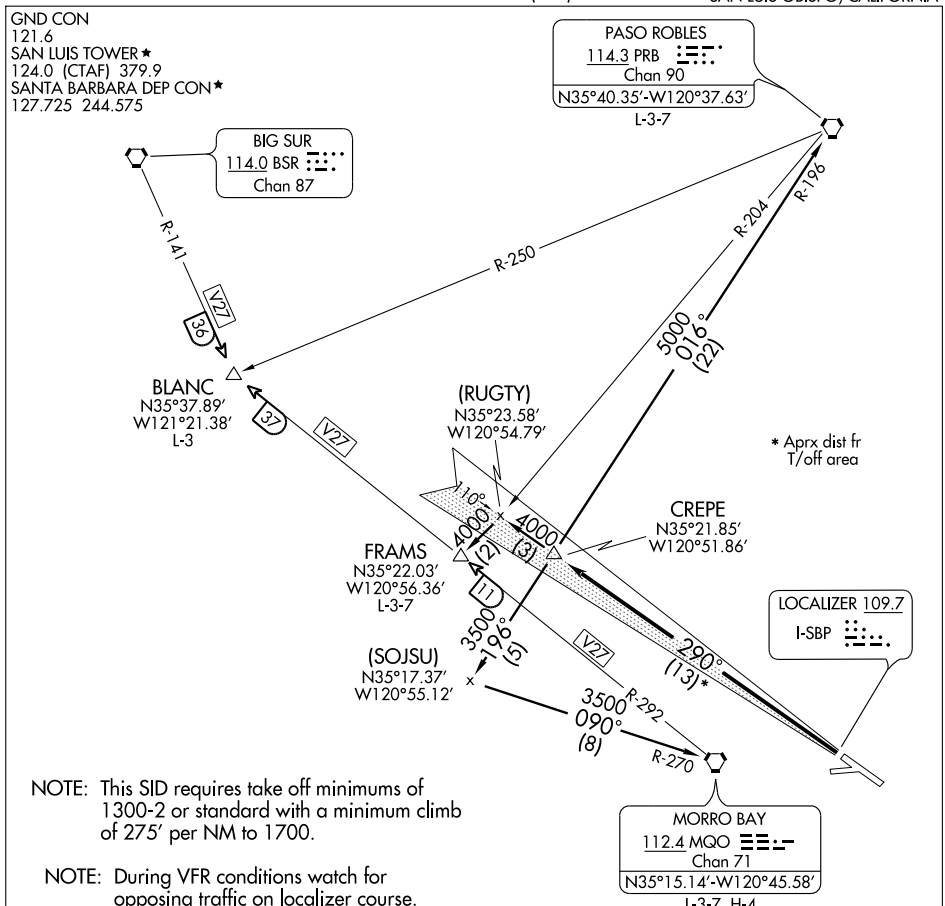
WINCH TRANSITION (AVILA3.WINCH): From over AVILA INT via heading 204° 2.1 NM, to intercept MQO R-140 to WINCH INT 2.6 NM.

SW-3, 22 OCT 2009 to 19 NOV 2009

CREPE THREE DEPARTURE

SL-989 (FAA)

SAN LUIS COUNTY RGNL (SBP)
SAN LUIS OBISPO, CALIFORNIA



NOTE: This SID requires take off minimums of 1300-2 or standard with a minimum climb of 275' per NM to 1700.

NOTE: During VFR conditions watch for opposing traffic on localizer course.

NOTE: This procedure applicable to Runway 29 departures only.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 29: Climb via San Luis Obispo localizer I-SBP west course to CREPE INT; thence via (transition) or (assigned route).

FRAMS TRANSITION (CREPE3.FRAMS): From over CREPE INT via I-SBP LOC west course and PRB R-204 to FRAMS INT.

MORRO BAY TRANSITION (CREPE3.MQO): From over CREPE INT via PRB R-196 and MQO R-270 to MQO VORTAC.

PASO ROBLES TRANSITION (CREPE3.PRB): From over CREPE INT via PRB R-196 to PRB VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN LUIS OBISPO, CALIFORNIA

AL-989 (FAA)

LOC I-SBP	APP CRS	Rwy Idg	5300
109.7	110°	TDZE	195
		Apt Elev	209

ILS RWY 11

SAN LUIS COUNTY RGNL (SBP)

Circling NA north of Rwy 11-29.

MALSR

MISSED APPROACH: Climb to 1200, then climbing right turn to 3000 via heading 175° and MQO R-126 to MQO VORTAC and hold.

ATIS	SANTA BARBARA APP CON★	SAN LUIS TOWER★	GND CON	UNICOM
120.6	127.725 244.575	124.0 (CTAF) 379.9	121.6	122.95

PASO ROBLES 114.3 PRB Chan 90

4000 (NoPT) 196° (2.2)

4000 NoPT to Crepe Int 048° (2.2) and LOC (2.1)

(IAF) FRAMS MQO 11.2

(IAF) OXUNE PRB 19.7

(IAF) CREPE

DOBRA OM/INT

MORRO BAY 112.4 MQO Chan 71

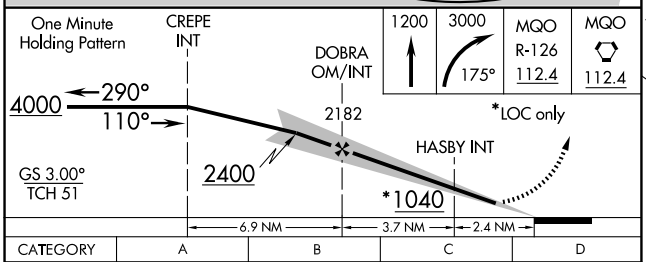
HASBY INT

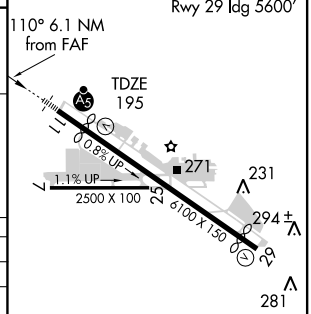
LOCALIZER 109.7 I-SBP

MSA MQO 25 NM: 200°–020° 4700 / 5300 / 3100 / 3700; 110°–290°

10 NM

1940 2761 2935 1985 2832 2868 3198 1271 1417 989 863 451 579 567± 1409 1819 755 1500 1000 2000 4000





CATEGORY	A	B	C	D
S-ILS 11	395- ½ 200 (200-½)			
S-LOC 11	1040- ½ 845 (900-½)	1040-¾ 845 (900-¾)	1040-2 845 (900-2)	1040-2¼ 845 (900-2¼)
CIRCLING	1040-1 831 (900-1)	1040-1¼ 831 (900-1¼)	1120-2¾ 911 (1000-2¾)	1220-3 1011 (1100-3)
HASBY INT MINIMUMS				
S-LOC 11	540- ½ 345 (400-½)			540- ¾ 345 (400-¾)
CIRCLING	840-1 631 (700-1)	920-1 711 (800-1)	1120-2¾ 911 (1000-2¾)	1220-3 1011 (1100-3)

HIRL Rwy 11-29
REIL Rwy 29

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN LUIS OBISPO, CALIFORNIA

AL-989 (FAA)

RNAV (GPS) RWY 11

SAN LUIS COUNTY RGNL (SBP)

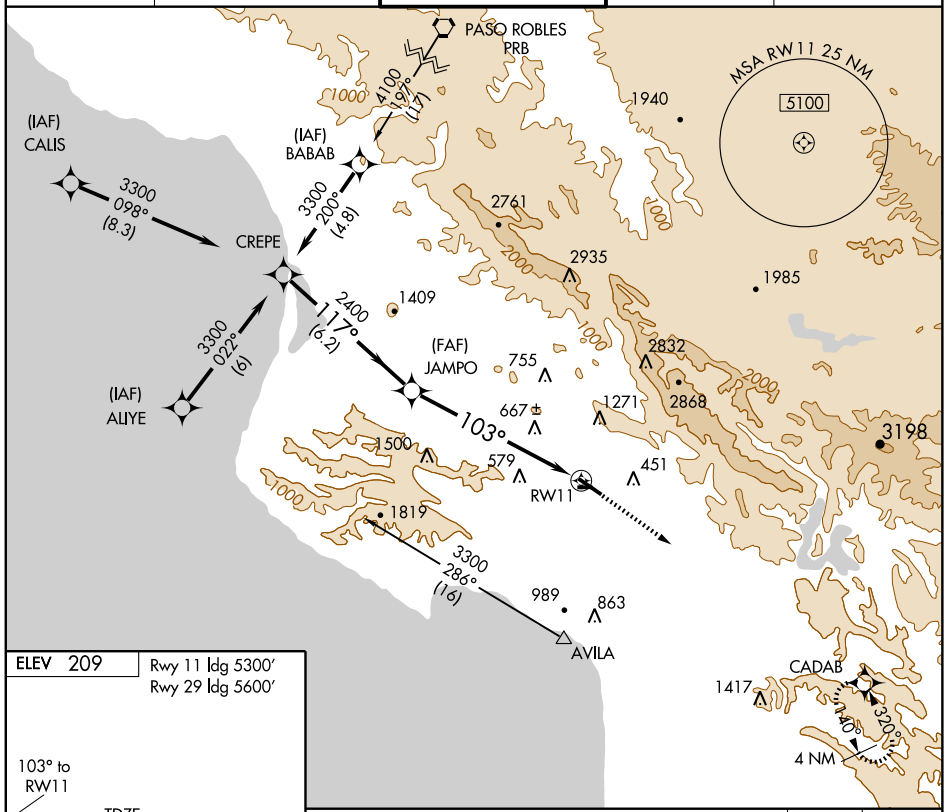
APP CRS	Rwy Idg	5300
103°	TDZE	195
	Apt Elev	209

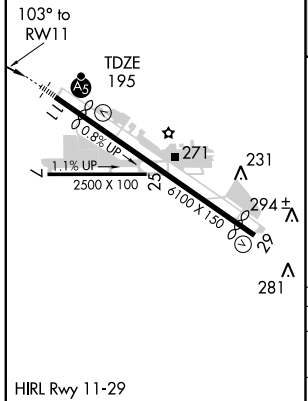
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
NA Circling NA north of Rwy 11-29.
Inoperative table does not apply to LNAV Cat A.

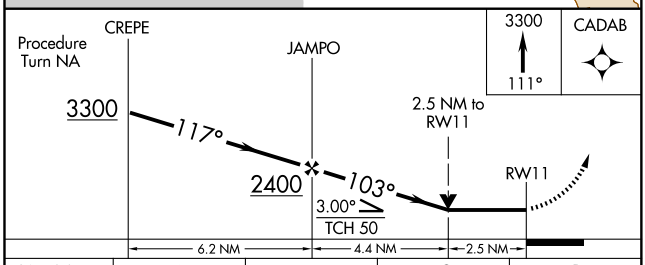
MALSR

MISSED APPROACH: Climb to 3300 via 111° course to CADAB WP and hold.

ATIS	SANTA BARBARA APP CON★	SAN LUIS TOWER★	GND CON	UNICOM
120.6	127.725 244.575	124.0 (CTAF) 379.9	121.6	122.95







CATEGORY	A	B	C	D
LNAV MDA	1000-1 805 (800-1)	1000-1¼ 805 (800-1¼)	1000-2¼ 805 (800-2¼)	1000-2½ 805 (800-2½)
CIRCLING	1000-1 791 (800-1)	1040-1¼ 831 (900-1¼)	1100-2¾ 891 (900-2¾)	1220-3 1011 (1100-3)

HIRL Rwy 11-29
REIL Rwy 29

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN LUIS OBISPO, CALIFORNIA

APP CRS	Rwy Idg	5600
290°	TDZE	209
	Apt Elev	209

AL-989 (FAA)

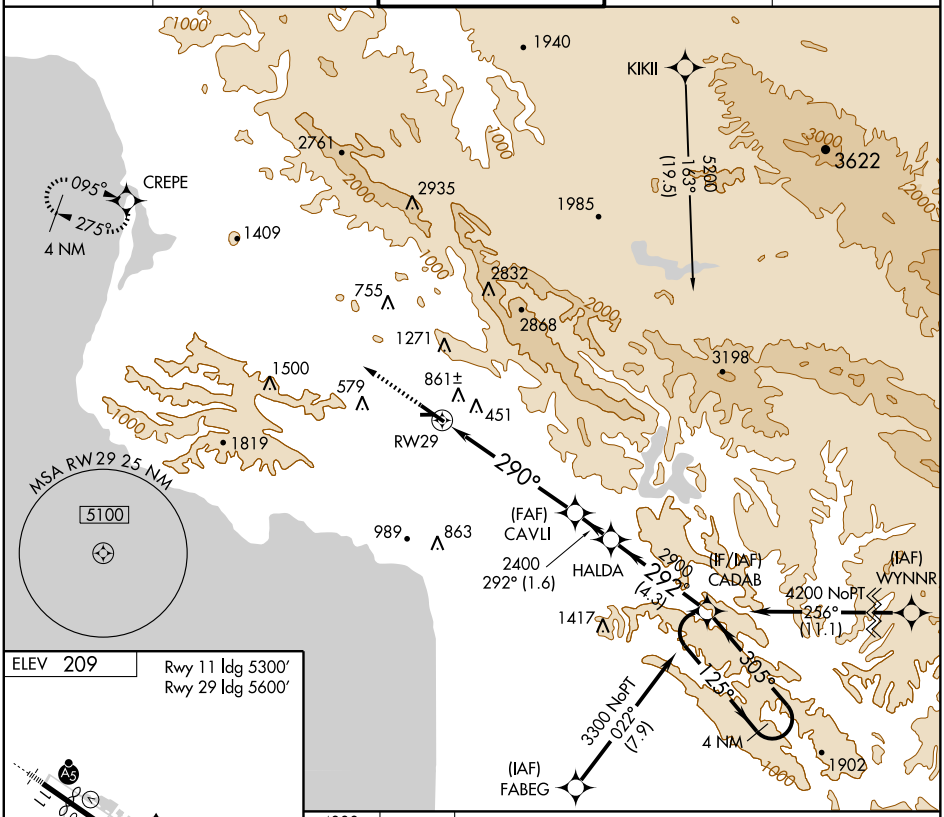
RNAV (GPS) RWY 29

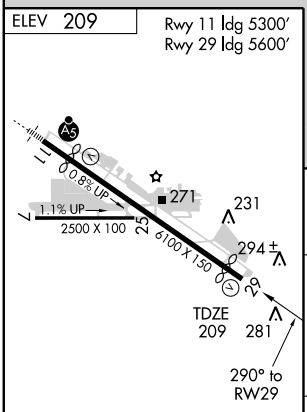
SAN LUIS COUNTY RGNL (SBP)

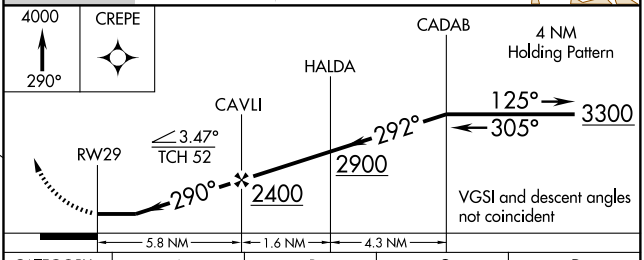
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
NA Circling NA north of Rwy 11-29.

MISSED APPROACH: Climb to 4000 via 290° course to CREPE WP and hold.

ATIS	SANTA BARBARA APP CON★	SAN LUIS TOWER★	GND CON	UNICOM
120.6	127.725 244.575	124.0 (CTAF) L 379.9	121.6	122.95







CATEGORY	A	B	C	D
LNAV MDA	1040-1 831 (900-1)	1040-1¼ 831 (900-1¼)	1040-2½ 831 (900-2½)	1040-2¾ 831 (900-2¾)
CIRCLING	1180-1¼ 971 (1000-1¼)	1180-1½ 971 (1000-1½)	1180-3 971 (1000-3)	1220-3 1011 (1100-3)

HIRL Rwy 11-29
REIL Rwy 29

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC MQO 112.4 Chan 71	APP CRS 084°	Rwy Idg N/A TDZE N/A Apt Elev 209

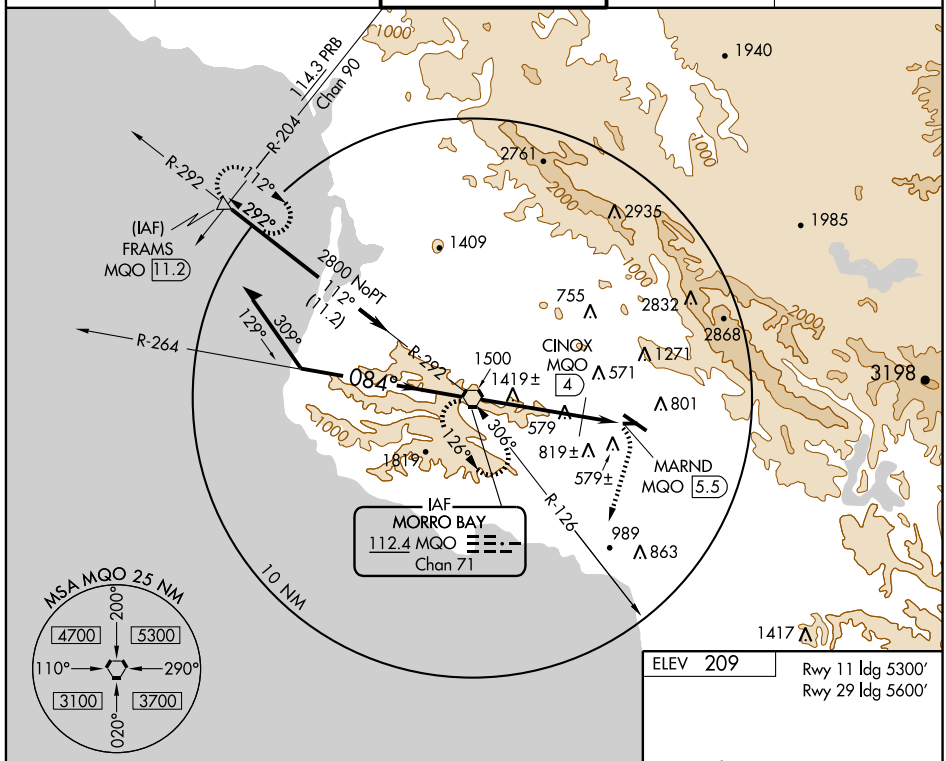
VOR or TACAN-A

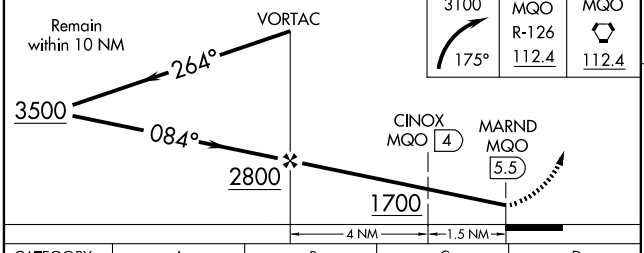
SAN LUIS COUNTY RGNL (SBP)

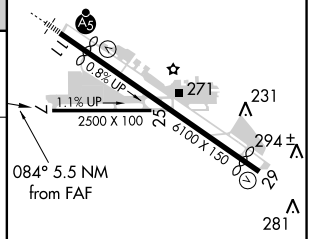
T A — Circling NA north of Rwy 11-29.

MISSED APPROACH: Climbing right turn to 3100 via heading 175° and MQO R-126 to MQO VORTAC and hold. (TACAN Aircraft continue climb to 4000 via MQO R-292 to FRAMS 11.2 DME and hold east, right turns, 292° inbound.)

ATIS	SANTA BARBARA APP CON ★	SAN LUIS TOWER ★	GND CON	UNICOM
120.6	127.725 244.575	124.0 (CTAF) L 379.9	121.6	122.95







CATEGORY	A	B	C	D
CIRCLING	1700-1¼ 1491 (1500-1¼)	1700-1½ 1491 (1500-1½)	1700-3	1491 (1500-3)

HIRL Rwy 11-29
REIL Rwy 29

TACAN OR DME MINIMA

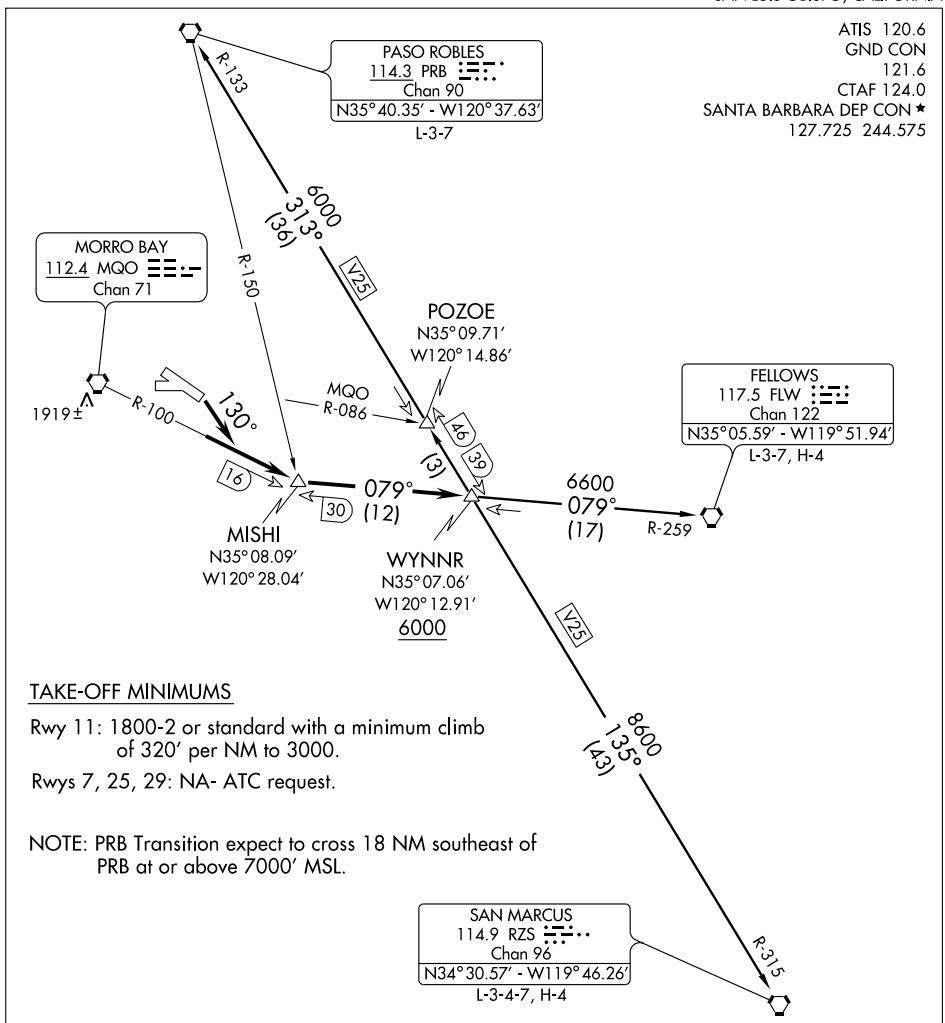
CIRCLING	1120-1¼ 911 (1000-1¼)	1160-2¾ 951 (1000-2¾)	1280-3 1071 (1100-3)

FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

SW-3, 22 OCT 2009 to 19 NOV 2009

WYNNR TWO DEPARTURE



TAKE-OFF MINIMUMS

Rwy 11: 1800-2 or standard with a minimum climb of 320′ per NM to 3000.

Rwys 7, 25, 29: NA- ATC request.

NOTE: PRB Transition expect to cross 18 NM southeast of PRB at or above 7000′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Turn right heading 130° to intercept and proceed via MQO R-100 to MISHI INT, then via FLW R-259 to WYNNR INT. Thence via (transition) or assigned route.

FELLOWS TRANSITION (WYNNR2.FLW): From over WYNNR INT via FLW R-259 to FLW VORTAC.

PASO ROBLES TRANSITION (WYNNR2.PRB): From over WYNNR INT via PRB R-133 to PRB VORTAC.

SAN MARCUS TRANSITION (WYNNR2.RZS): From over WYNNR INT via RZS R-315 to RZS VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

SAN MARTIN, CALIFORNIA

AL-9260 (FAA)

APP CRS	Rwy Idg	3100
321°	TDZE	280
	Apt Elev	281

GPS RWY 32

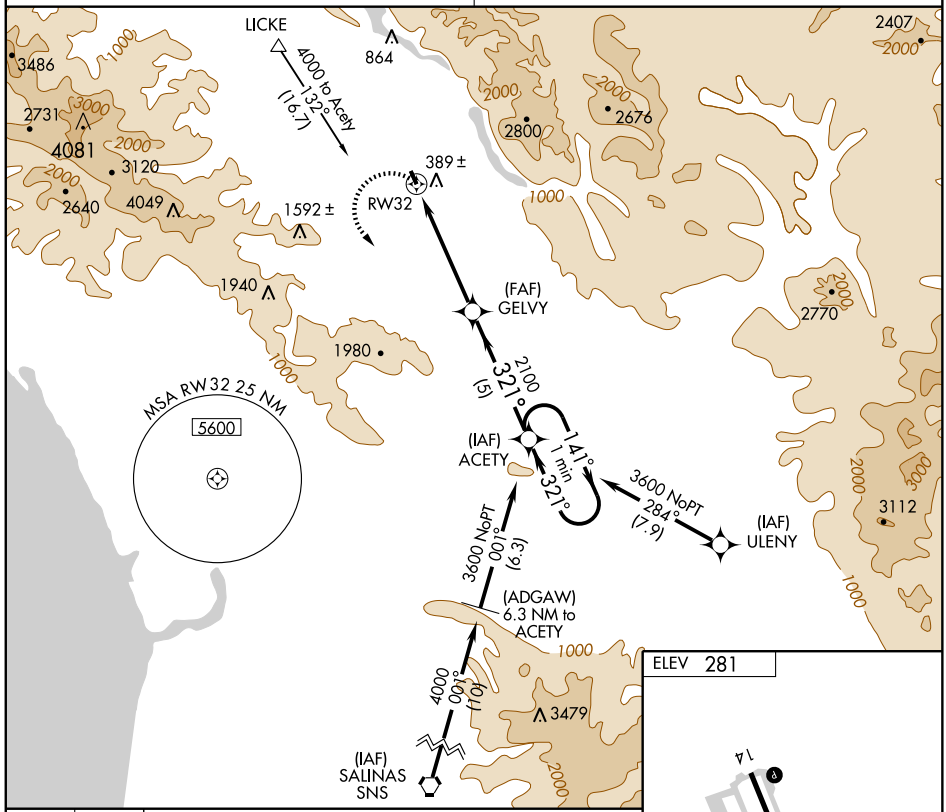
SAN MARTIN/SOUTH COUNTY ARPT OF SANTA CLARA COUNTY (E16)

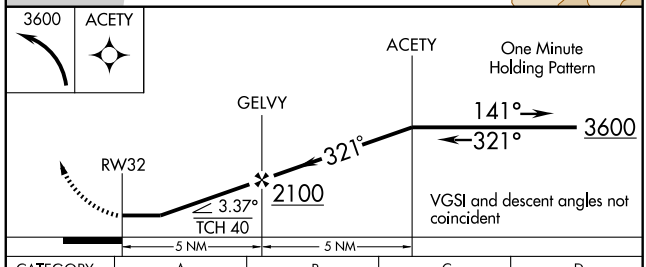
Circling not authorized west of Rwy 14-32.
Use Norman Y. Mineta San Jose Intl altimeter setting.

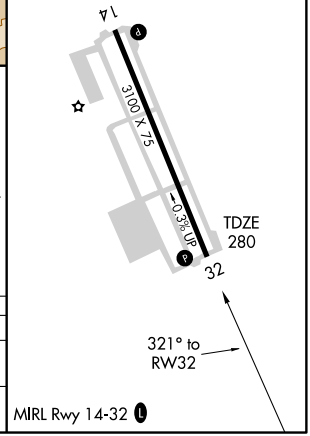
MISSED APPROACH: Climbing left turn to 3600 direct ACETY WP and hold.

NORCAL APP CON
124.525 348.675

UNICOM
122.7 (CTAF) L

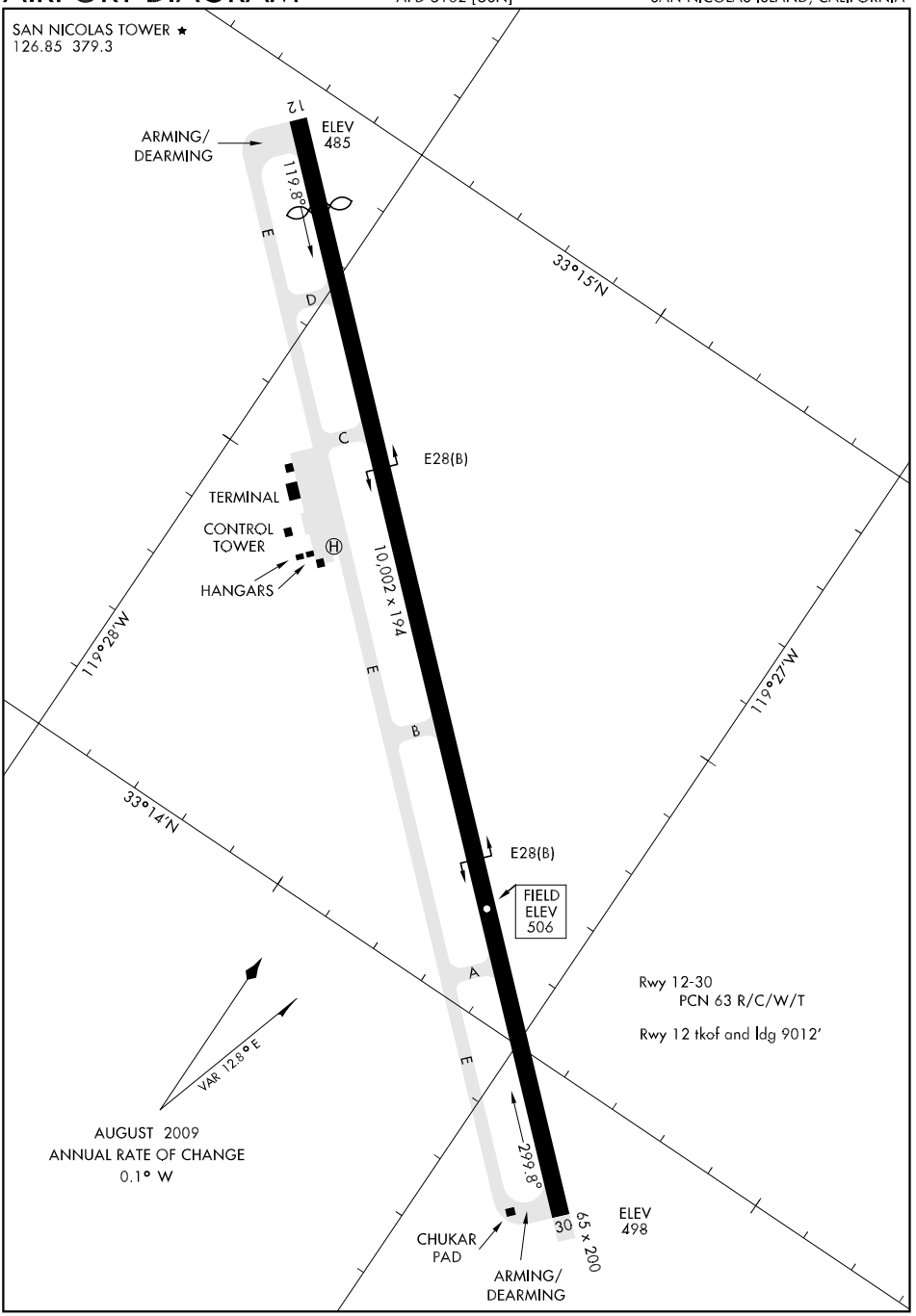






CATEGORY	A	B	C	D
S-32	1320-1¼ 1040 (1100-1¼)	1320-1½ 1040 (1100-1½)	NA	
CIRCLING	1320-1¼ 1039 (1100-1¼)	1320-1½ 1039 (1100-1½)	NA	

SW-2, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

ILS Y or LOC/DME RWY 30

LOC I-NSI 109.7	APCH CRS 299°	Rwy ldg 10,002 TDZE 506 Arpt Elev 506

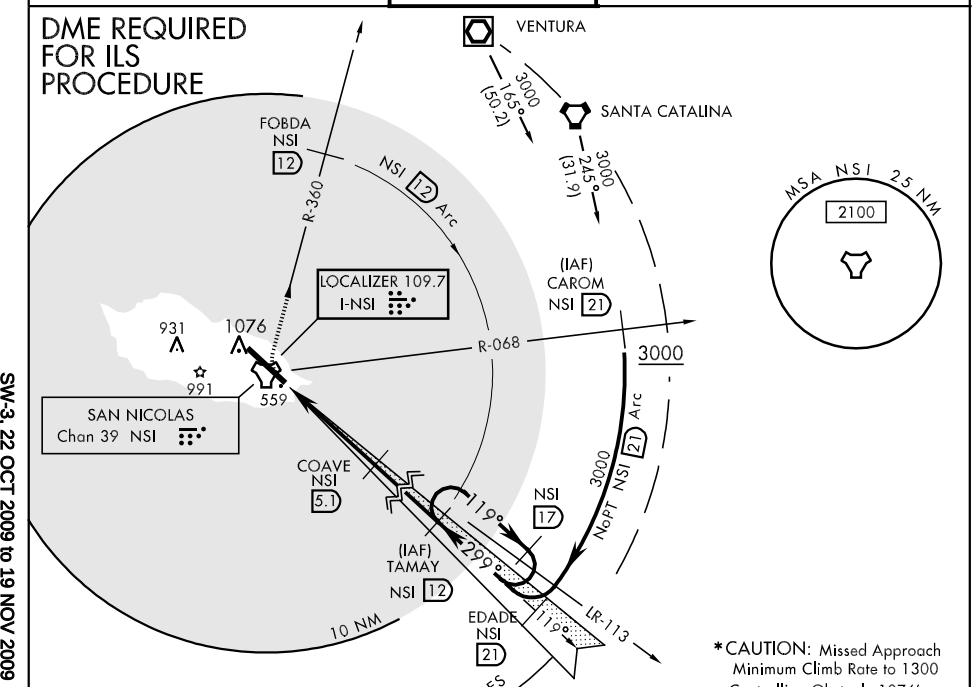
AL-5162 [USN] SAN NICOLAS ISLAND NOLF (NSI)

**Circling not authorized W of Rwy 12-30.

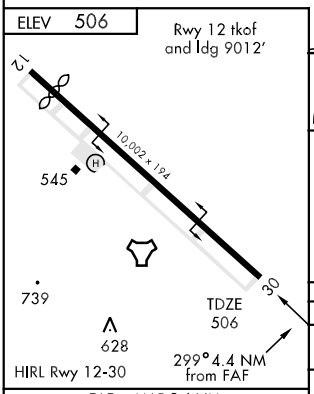
*MISSED APPROACH: Climbing right turn to 3000, intcp NSI R-360 to FOBDA, then arc E on NSI 12 mile arc to TAMAY and hold.

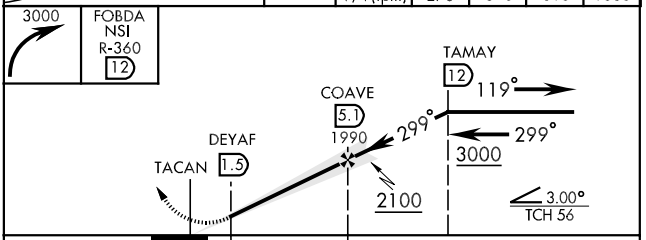
SAN NICOLAS TOWER * 126.85 379.3

DME REQUIRED FOR ILS PROCEDURE



	Knots	60	120	180	240
ILS	V/V(fpm)	240	480	720	960
LOC	V/V(fpm)	270	540	810	1080





CATEGORY	A	B	C	D	E
S-ILS 30		706-¾	200	(200-¾)	
S-LOC 30		760-1	254	(300-1)	
CIRCLING**	860-1 354 (400-1)	960-1 454 (500-1)	960-1½ 454 (500-1½)	1060-2 554 (600-2)	

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

SW-3, 22 OCT 2009 to 19 NOV 2009

ILS Z or RNAV (GPS) RWY 30

APCH CRS	Rwy ldg 10,002
299°	TDZE 506
	Arpt Elev 506

AL-5162 [USN] SAN NICOLAS ISLAND NOLF (NSI)

**Circling not authorized W of Rwy 12-30.

*MISSED APPROACH: Climb to 2000 via crs 299° to FEGAV, then climbing rgt turn to 3000 via crs 028° to FOBDA, then turn rgt via crs 103° to CAROM, then turn rgt via crs 215° to TAMAY and hold.

SAN NICOLAS TOWER ★
126.85 379.3

GPS REQUIRED FOR ILS PROCEDURE

VENTURA
108.2 VTU
Chan 19

3000
165°
(50.2)

FOBDA

*CAUTION: Missed Approach Minimum Climb Rate to 1300 (ILS), 1400(RNAV)

	Knots	60	120	180	240
ILS	V/V(fpm)	230	460	690	920
RNAV	V/V(fpm)	360	720	1080	1440

Controlling Obstacle 1076'

FEGAV

LOCALIZER 109.7
I-NSI

931
1076'
991

RW30

(IAF)
CAROM

3000
245°
(31.9)

SANTA CATALINA
111.4 SXC
Chan 51

3000
215°
(15.9)

(FAF)
HILER

2100
299°
(6.6)
119°

TAMAY

119°
299°
6 NM

MSA RW30 25 NM
2100

EMERG SAFE ALT 100 NM 10,900

ELEV 506

Rwy 12 tkof and ldg 9012'

12
10,002 x 194
545
H
TDZE 506
30
739
559'
628
299° to RW30

HIRL Rwy 12-30

2000	FEGAV	3000	FOBDA
hdg 299°		crs 028°	

TAMAY
CAROM
HILER
299°
215°
3000
3000
RW30
2100
GS 3.00°
TCH 56
4.8 NM
6.6 NM
15.9 NM

CATEGORY	A	B	C	D	E
S-ILS 30	706-¾ 200 (200-¾)				
LNAV MDA	880-1 374 (400-1)			880-1¼ 374 (400-1¼)	880-1½ 374 (400-1½)
CIRCLING **	880-1 374 (400-1)	960-1 454 (500-1)	960-1½ 454 (500-1½)	1060-2 554 (600-2)	

ILS Z or RNAV (GPS) RWY 30

SW-3, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 30

TACAN	APCH CRS	Rwy ldg	10,002
Chan 39	289°	TDZE	506
		Arpt Elev	506

AL-5162 [USN] SAN NICOLAS ISLAND NOLF (NSI)

**Circling not authorized W of Rwy 12-30.

* MISSED APPROACH: Climbing right turn to 3000, intcp the NSI R-360 to FOBDA and hold.

SAN NICOLAS TOWER *
126.85 379.3

IAF
FOBDA
NSI 12 DME
N33° 25.72′
W119° 23.79′

NSI 18

3000

180°

360°

NSI 12 Arc

R-360

VENTURA
108.2 VTU
Chan 19

3000
165°
(50.2)

SANTA CATALINA
111.4 SXC
Chan 51

*CAUTION: CAT E Missed Approach
Minimum Climb Rate to 1300

Knots	60	120	180	240
V/V(fpm)	250	500	750	1000

Controlling Obstacle 1076′

LAVAY
NSI
12

3000
245°
(31.9)

1076

931

991

559

R-068

248°

ZAMER
NSI
5

289°

IAF
CAROM
NSI 21 DME
N33° 16.63′
W119° 02.64′

SAN NICOLAS
Chan 39 NSI
N33° 14.10′ W119° 27.50′

MSA NSI 25 NM
2100

WOKIL
NSI
12

R-109

10 NM

EMERG SAFE ALT 100 NM 10,900

ELEV 506

Rwy 12 tkof
and ldg 9012′

12

10,002 x 194

545

H

739

628

TDZE
506

30

289° to
TACAN

HIRL Rwy 12-30

3000
NSI
R-360

FOBDA
NSI
12

WOKIL
R-109
12

LAVAY
R-068
12

CAROM
R-068
21

ZAMER
5

248°
3000

3000

TACAN ZAPSU
1.5

289°

2600

1800

2.83°
TCH 50

12 Arc

3.5 NM

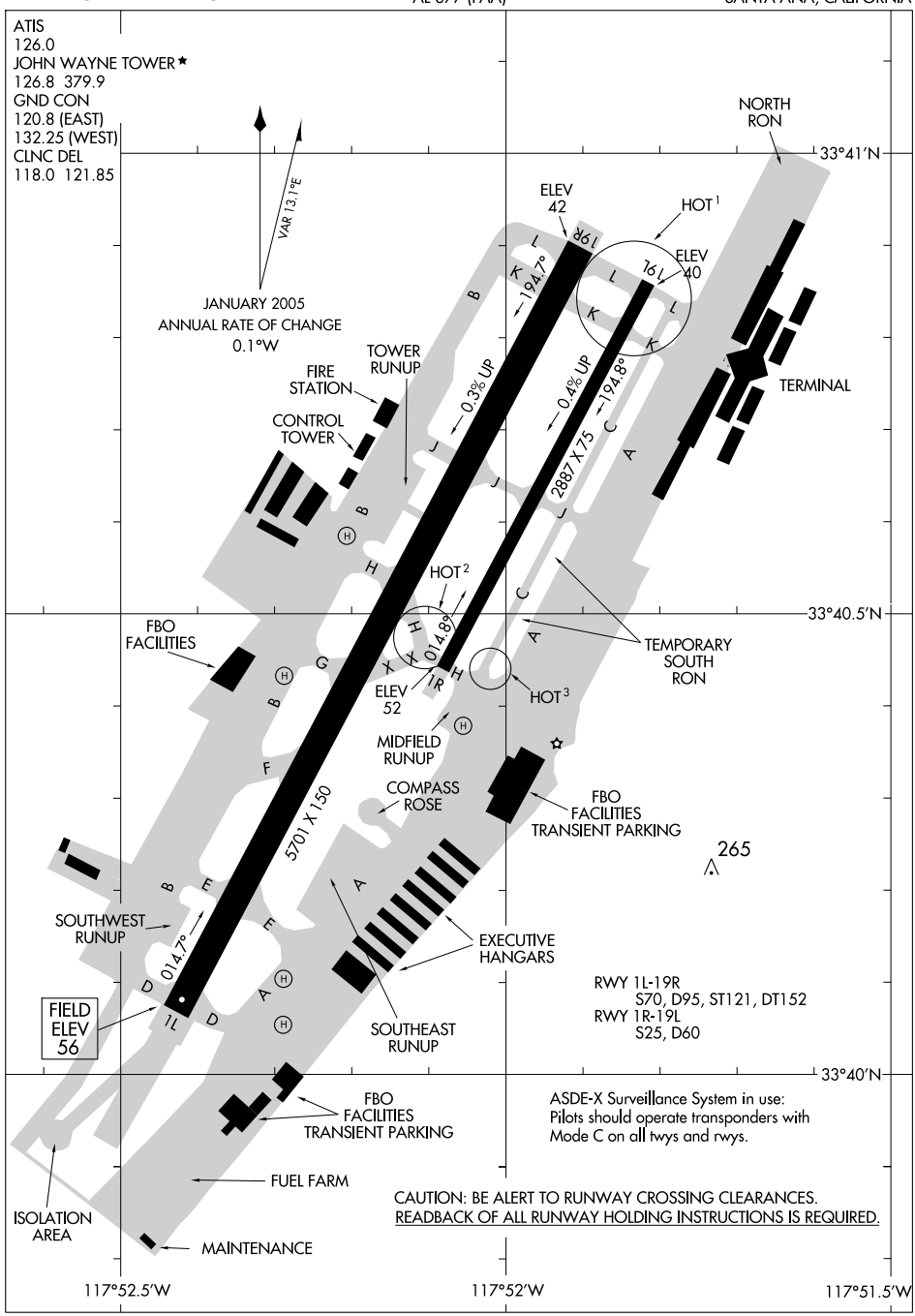
CATEGORY	A	B	C	D	E
S-30	820-1 314 (400-1)				
CIRCLING **	860-1 354 (400-1)	960-1 454 (500-1)	960-1½ 454 (500-1½)	1060-2 554 (600-2)	

SW-3, 22 OCT 2009 to 19 NOV 2009

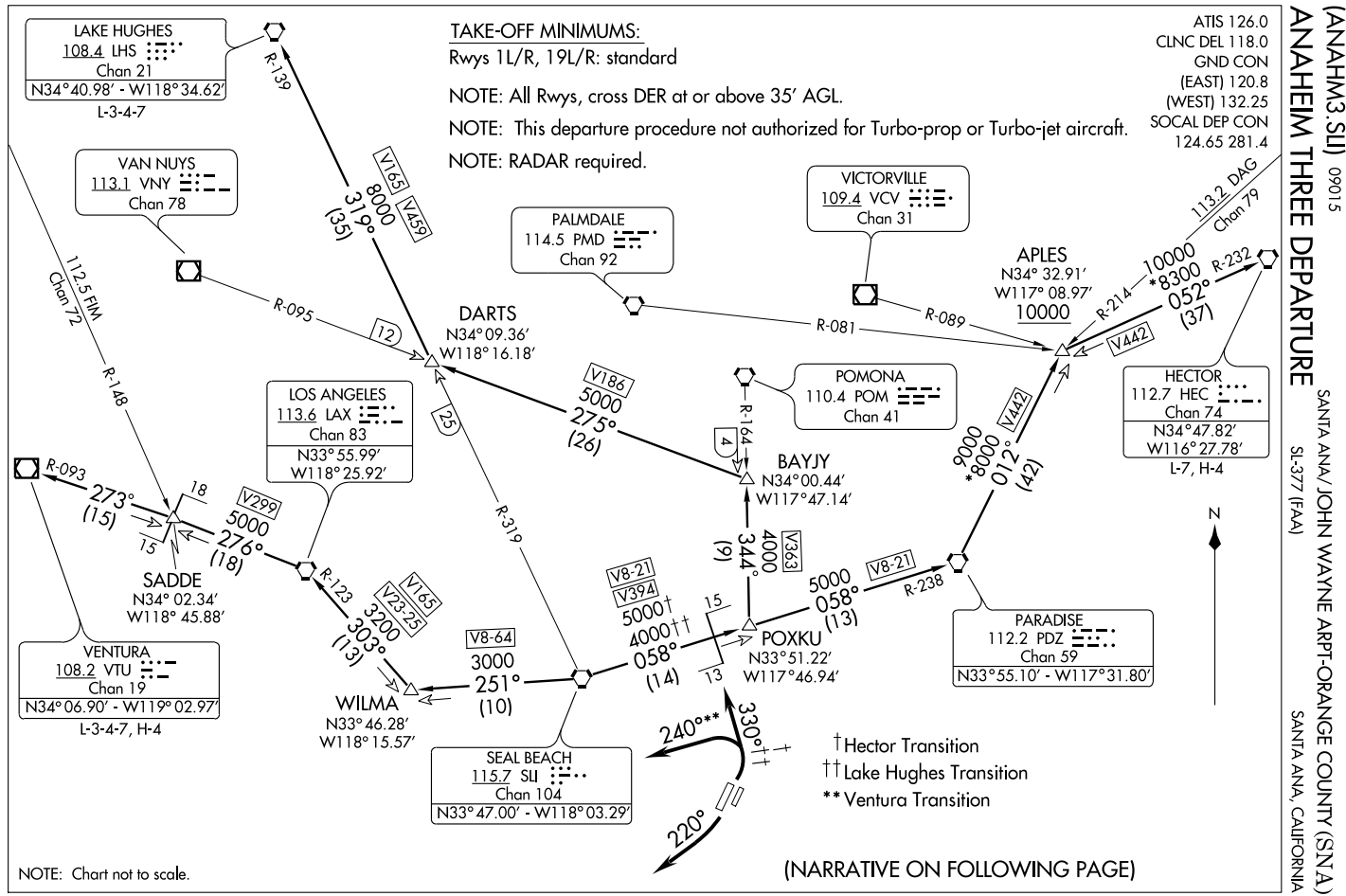
09295

AIRPORT DIAGRAM

SANTA ANA/JOHN WAYNE ARPT-ORANGE COUNTY (SNA)
AL-377 (FAA)
SANTA ANA, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009


ANAHEIM THREE DEPARTURE (ANAHM3.SLI) 09015
SANTA ANA/JOHN WAYNE ARPT-ORANGE COUNTY (SNA)
SL-377 (FAA)
SANTA ANA, CALIFORNIA
ATIS 126.0
CLNC DEL 118.0
GND CON
(EAST) 120.8
(WEST) 132.25
SOCAL DEP CON
124.65 281.4
TAKE-OFF MINIMUMS:
Rwys 1L/R, 19L/R: standard
NOTE: All Rwys, cross DER at or above 35' AGL.
NOTE: This departure procedure not authorized for Turbo-prop or Turbo-jet aircraft.
NOTE: RADAR required.
LAKE HUGHES
108.4 LHS
Chan 21
N34°40.98' - W118°34.62'
L-3-4-7
VAN NUYS
113.1 VNY
Chan 78
PALMDALE
114.5 PMD
Chan 92
VICTORVILLE
109.4 VCV
Chan 31
113.2 DAG
Chan 79
APLES
N34° 32.91'
W117° 08.97'
10000
DARTS
N34°09.36'
W118°16.18'
POMONA
110.4 POM
Chan 41
LOS ANGELES
113.6 LAX
Chan 83
N33°55.99'
W118°25.92'
HECTOR
112.7 HEC
Chan 74
N34°47.82'
W116°27.78'
L-7, H-4
BAYJY
N34°00.44'
W117°47.14'
SADDE
N34° 02.34'
W118° 45.88'
PARADISE
112.2 PDZ
Chan 59
N33°55.10' - W117°31.80'
POXKU
N33°51.22'
W117°46.94'
WILMA
N33°46.28'
W118°15.57'
VENTURA
108.2 VTU
Chan 19
N34°06.90' - W119°02.97'
L-3-4-7, H-4
SEAL BEACH
115.7 SLI
Chan 104
N33°47.00' - W118°03.29'
R-139
V165
V459
319°
8000
(35)
112.5 FIM
Chan 72
R-095
12
R-148
R-081
R-089
R-214
R-232
V442
10000
*8300
052°
(37)
V186
5000
275°
(26)
25
R-319
R-164
4
9000
*8000
012°
(42)
R-093
273°
(15)
18
15
V299
5000
276°
(18)
R-123
V165
V23-25
3200
303°
(13)
V8-64
3000
251°
(10)
V394
5000†
4000††
058°
(14)
V363
4000
344°
(9)
V8-21
5000
058°
(13)
R-238
240°**
330°††
220°
†Hector Transition
††Lake Hughes Transition
** Ventura Transition
N
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 19L/R: Turn right heading 220° for radar vectors to SLI VORTAC. Thence....

TAKE-OFF RUNWAYS 1L/R:

HECTOR or LAKE HUGHES TRANSITION: Turn left heading 330° for radar vectors to SLI VORTAC. Thence....

VENTURA TRANSITION: Turn left heading 240° for radar vectors to LAX VORTAC. Thence....

....via (transition) or (assigned route). Maintain 2000 feet. Expect clearance to filed altitude 10 minutes after departure.

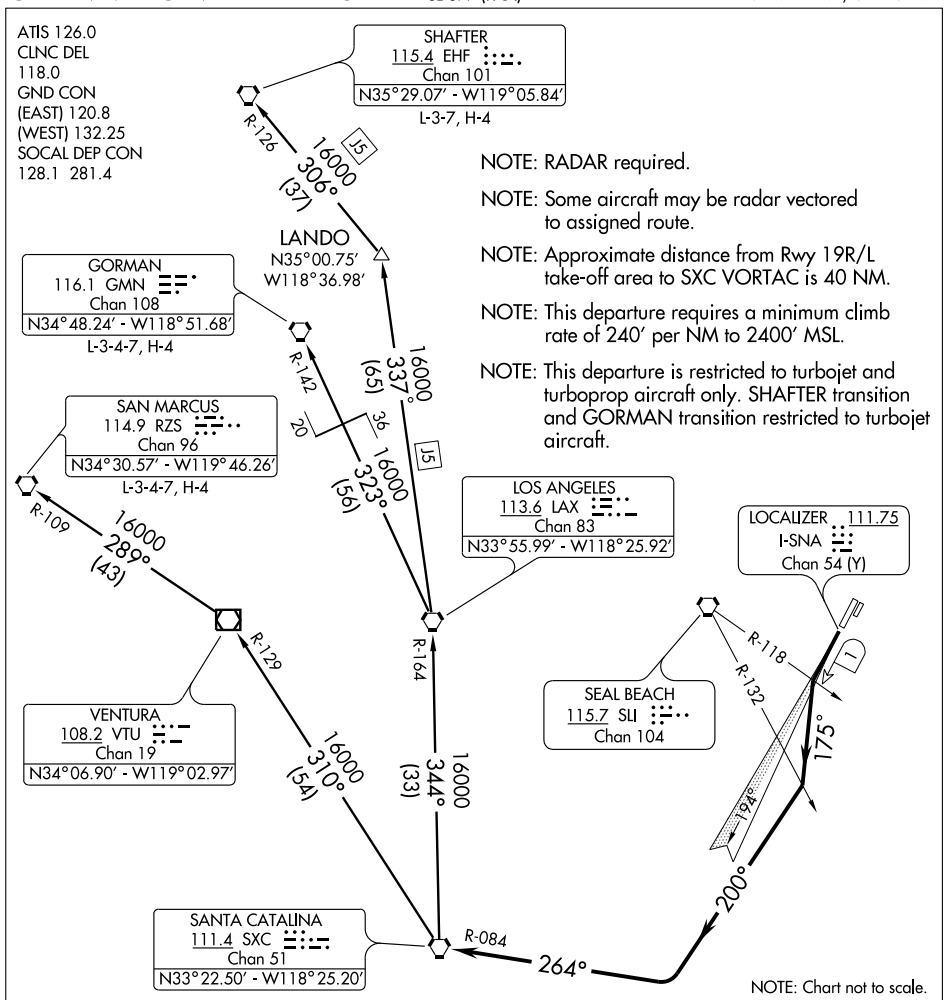
HECTOR TRANSITION (ANAHM3.HEC): From over SLI VORTAC via SLI R-058 and PDZ R-238 to PDZ VORTAC, then via PDZ R-012 and HEC R-232 to HEC VORTAC.

LAKE HUGHES TRANSITION (ANAHM3.LHS): From over SLI VORTAC via SLI R-058 and PDZ R-238 to POXKU INT, then via POM R-164 to BAYJY INT, then via VNY R-095 to DARTS INT. Thence via SLI R-319 and LHS R-139 to LHS VORTAC.

VENTURA TRANSITION (ANAHM3.VTU): From over SLI VORTAC via SLI R-251 to WILMA INT, then via LAX R-123 to LAX VORTAC, then via LAX R-276 and VTU R-093 to VTU VOR/DME.

SW-3, 22 OCT 2009 to 19 NOV 2009

CHANNEL ONE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 19L/R: Maintain runway heading or I-SNA localizer south course to I-SNA 1 DME fix or SLI R-118, turn left heading 175°, cross SLI R-132 then turn right heading 200°, intercept and proceed via SXC R-084 to SXC VORTAC, thence via (transition) or (assigned route). Expect filed altitude ten minutes after departure.

GORMAN TRANSITION (CHANL1.GMN): From over SXC VORTAC via SXC R-344 and LAX R-164 to LAX VORTAC, then via LAX R-323 and GMN R-142 to GMN VORTAC.

SAN MARCUS TRANSITION (CHANL1.RZS): From over SXC VORTAC via SXC R-310 and VTU R-129 to VTU VOR/DME, then via VTU R-289 and RZS R-109 to RZS VORTAC.

SHAFTER TRANSITION (CHANL1.EHF): From over SXC VORTAC via SXC R-344 and LAX R-164 to LAX VORTAC, then via LAX R-337 to LANDO INT and EHF R-126 to EHF VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS 126.0
CLNC DEL
118.0
GND CON
120.8 (EAST)
132.25 (WEST)
SOCAL DEP CON
128.1 281.4

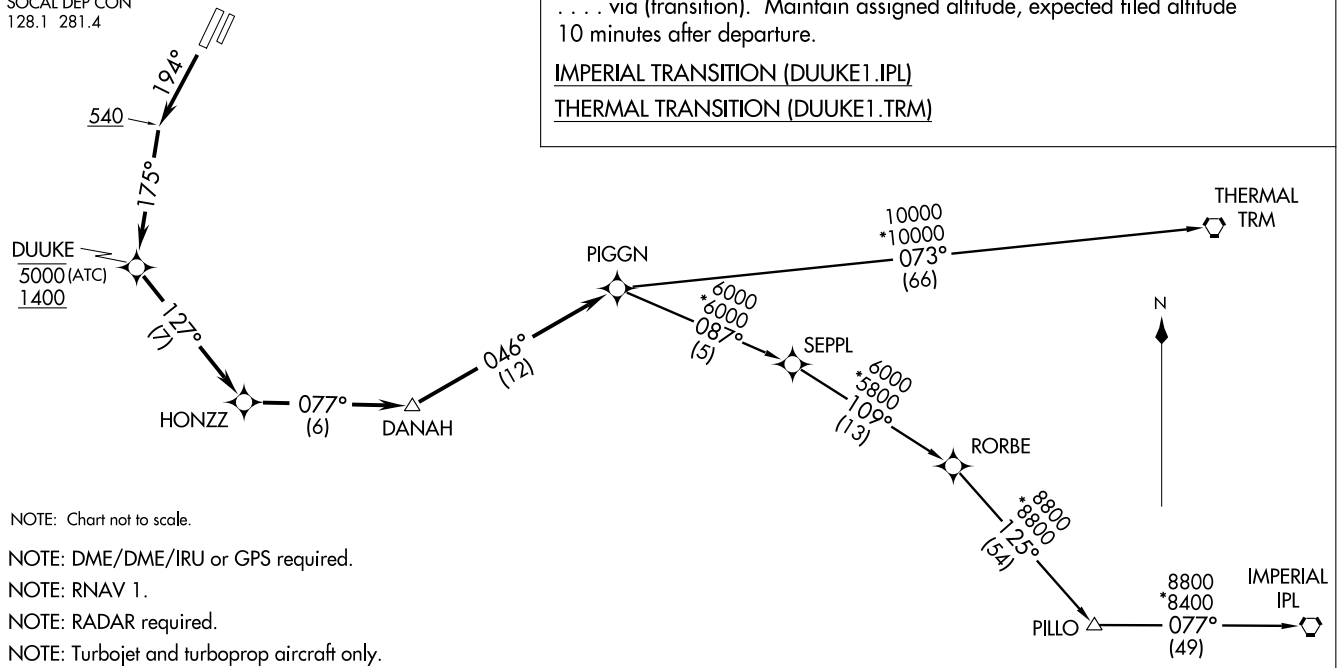
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 19R: Climb heading 194° to at or above 540, then intercept 175° course to DUUKE, then via depicted route to PIGGN, thence . . . .

. . . . via (transition). Maintain assigned altitude, expected filed altitude 10 minutes after departure.

IMPERIAL TRANSITION (DUUKE1.IPL)

THERMAL TRANSITION (DUUKE1.TRM)



NOTE: Chart not to scale.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: Turbojet and turboprop aircraft only.

NOTE: Aircraft may be vectored to DANAH or PIGGN.

TAKE-OFF MINIMUMS

Rwys 1L/R and 19L: NA - ATC.

Rwy 19R: Standard, ATC climb of 365′ per NM to 540.

TAKE-OFF OBSTACLE NOTES

RWY 19R: Windsock on hangar 536′ from DER, 605′ left of centerline, 44′ AGL/92′ MSL.
Multiple trees beginning 289′ from DER, 500′ right of centerline, up to 52′ AGL/108′ MSL.
Light poles beginning 204′ from DER, 490′ right of centerline, up to 35′ AGL/85′ MSL.
Tree 1574′ from DER, 765′ left of centerline, 59′ feet AGL/113′ MSL.

EL TORO ONE DEPARTURE

ATIS 126.0
CLNC DEL 118.0
GND CON
(EAST) 120.8
(WEST) 132.25
JOHN WAYNE TOWER ★
126.8 379.9
SOCAL DEP CON
128.1 281.4

NOTE: Restricted to turbojet and turboprop aircraft only.

NOTE: RADAR required.

N

PARADISE
112.2 PDZ
Chan 59

RIVERSIDE
112.4 RAL

PALM SPRINGS
115.5 PSP
Chan 102

TAKE-OFF OBSTACLE NOTES
Rwy 1L, Multiple trees and poles beginning 95′ from DER, 491′ left of centerline, up to 93′ AGL/127′ MSL. Obstruction light and trees beginning 497′ from DER, 626′ right of centerline, up to 100′ AGL/134′ MSL.

014°
R-332
R-194
R-180
R-160
R-135
R-211
R-182
R-138

MANBY
N33°39.04′
W117°38.60′

PUNIE
N33°36.00′
W117°18.47′

TEYKI
N33°41.31′
W116°51.31′

CORLA
N33°38.32′
W116°16.76′

12000 *3600 095° (5)
12000 *5500 (5)
12000 *6800 (8)
12000 *5500 061° (5)
12000 *7200 061° (23)
13100 083° (10)
13100 *11100 (8)
13100 *7500 (11)
13100 *3800 (6) R-263

EL TORO
117.2 ELB
Chan 119
N33°40.56′
W117°43.87′

14000 *3300 165° (18)

MISIE
N33°37.40′
W117°32.92′

BOLDE
N33°34.87′
W117°24.20′
12000 (ATC)

12000 *6800 095° (7)

JARDO
N33°32.48′
W117°16.02′

HAPPE
N33°40.30′
W116°39.40′

BALDI
N33°39.47′
W116°29.86′

THERMAL
116.2 TRM
Chan 109
N33°37.69′
W116°09.61′
L-4, H-4

R-061
R-323

SUBMR
N33°22.29′
W117°43.48′

14000 *2300 102° (17)

12000 *4400 135° (24)

BONDO
N33°11.66′
W117°01.64′

JULIAN
114.0 JLI
Chan 87

R-282
R-083

SANTA CATALINA
111.4 SXC
Chan 51

OCEANSIDE
115.3 OCN
Chan 100
N33°14.44′ - W117°25.06′
L-4, H-4

MISSION BAY
117.8 MZB
Chan 125

12000 *6400 135° (29)

R-108

TAKE-OFF MINIMUMS
14000 (ATC)
Rwys 1R, 19L, 19R, NA- ATC.
Rwy 1L, Standard with minimum climb of 385′ per NM to 5600. ATC climb of 450′ per NM to 12000 (THERMAL and IMPERIAL Transitions), ATC climb of 385′ per NM to 10100 (OCEANSIDE Transition).

R-076

WODON
N32°46.51′
W116°44.44′

12000 076° (42)
J2
12000 078° (20)
R-258

GWIRE
N32°45.52′
W115°54.38′

IMPERIAL
115.9 IPL
Chan 106
N32°44.93′ - W115°30.51′
L-4, H-4

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L: Climb heading 014° for vectors to ELB VOR/DME, then via (transition) or (assigned route). Expect filed altitude ten minutes after departure.

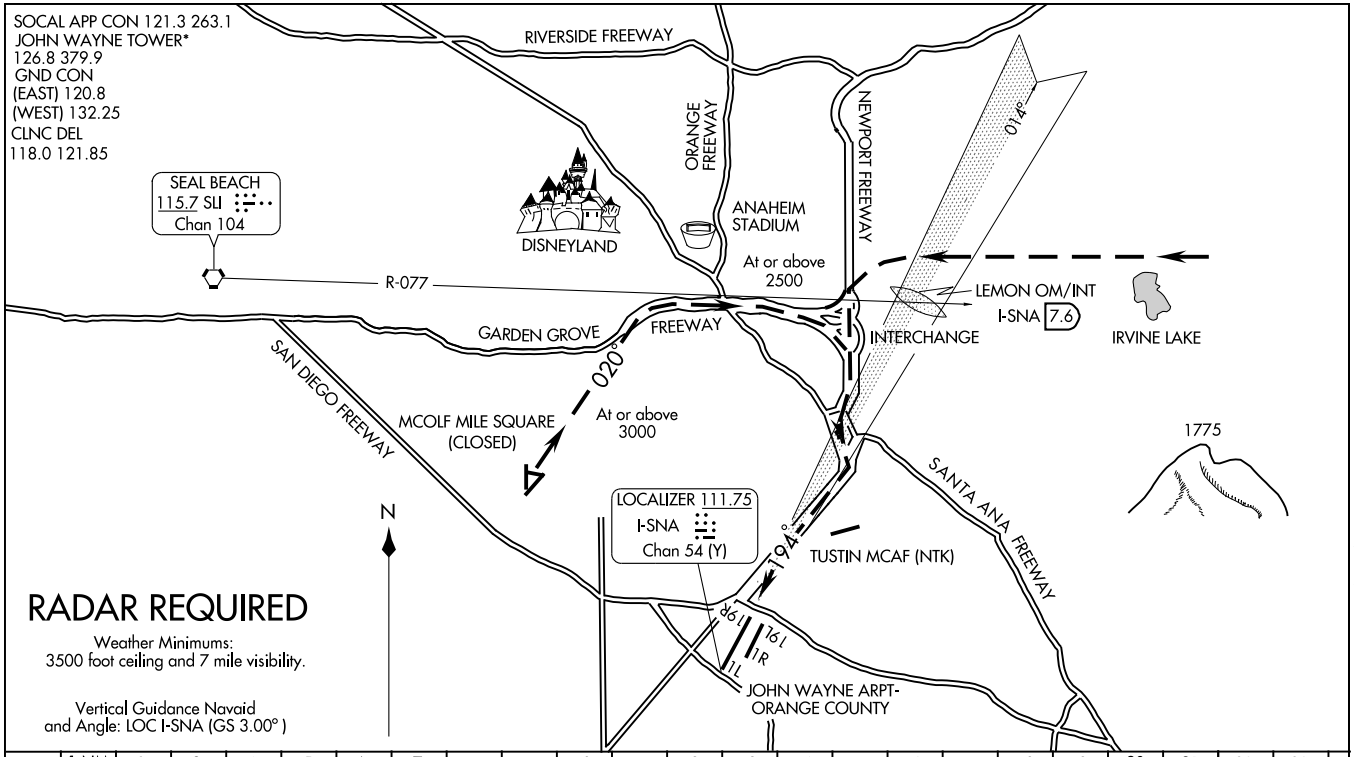
LOST COMMUNICATIONS: If not in contact with departure control by ELB R-332, turn right direct ELB VOR/DME, climb to 7000 and proceed via assigned transition or route. Climb to filed altitude ten minutes after departure.

IMPERIAL TRANSITION (ELB1.IPL): From over ELB VOR/DME via ELB R-095 to JARDO INT, then via PDZ R-135 to WODON INT, then via MZB R-076 and IPL R-258 to GWIRE INT, then via IPL R-258 to IPL VORTAC.

OCEANSIDE TRANSITION (ELB1.OCN): From over ELB VOR/DME via ELB R-165 to SUBMR, then via OCN R-282 to OCN VORTAC.

THERMAL TRANSITION (ELB1.TRM): From over ELB VOR/DME via ELB R-095 to BOLDE INT, then via SXC R-061 to TEYKI INT, then via TRM R-263 to TRM VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009



FREEWAY VISUAL RWY 19R

AL-377 (FAA)

SANTA ANA, CALIFORNIA

FREEWAY VISUAL RWY 19R

PROCEDURE NOT AUTHORIZED AT NIGHT

SANTA ANA, CALIFORNIA

AL-377 (FAA)

ILS or LOC RWY 19R

SANTA ANA/JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

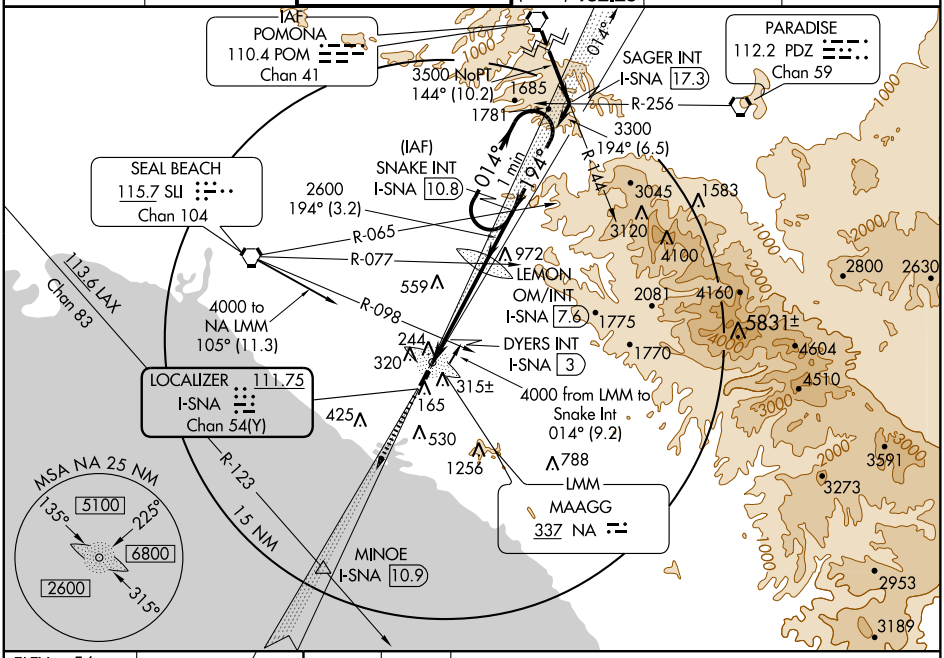
LOC/DME I-SNA	APP CRS	Rwy Idg	5701
111.75	194°	TDZE	55
Chan 54(Y)		Apt Elev	56

* RVR 1800 authorized with the use of FD or AP or HUD to DA

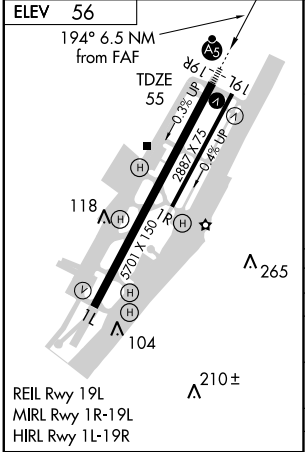
MALSR

MISSED APPROACH: Climb to 3000 via I-SNA south course to MINOE Int/I-SNA 10.9 DME.

ATIS	SOCAL APP CON	JOHN WAYNE TOWER*	GND CON	CLNC DEL	UNICOM
126.0	121.3 263.1	126.8 (CTAF) 379.9	(EAST) 120.8 (WEST) 132.25	118.0 121.85	122.95

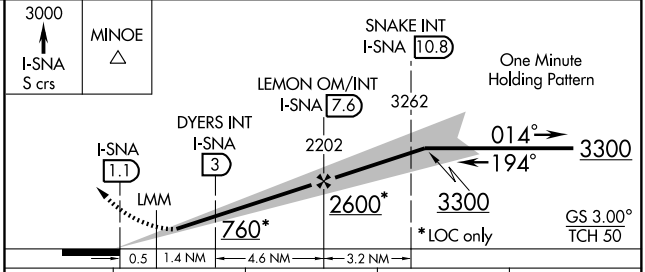


SW-3, 22 OCT 2009 to 19 NOV 2009

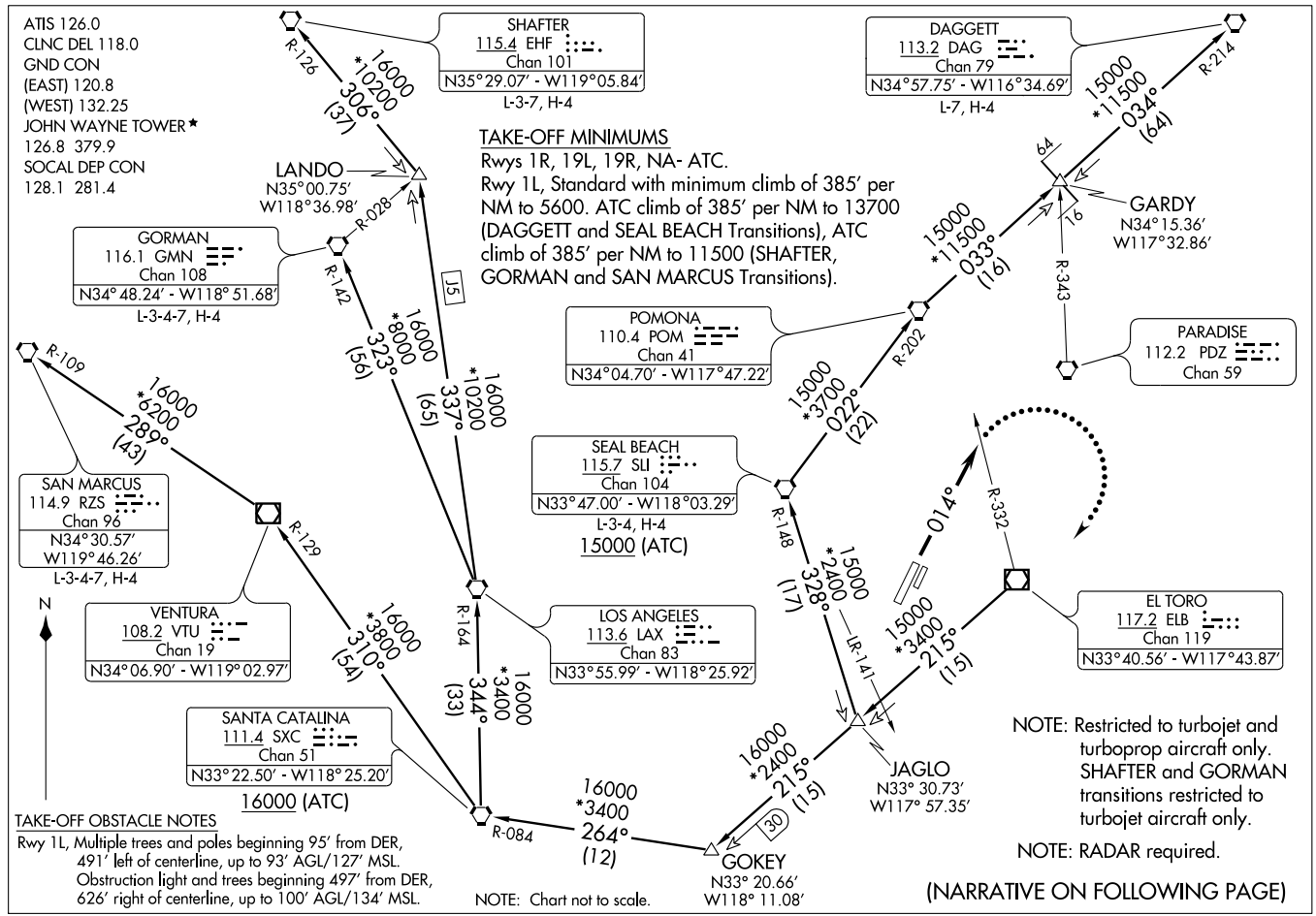


REIL Rwy 19L
MIRL Rwy 1R-19L
HIRL Rwy 1L-19R

FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10



CATEGORY	A	B	C	D
S-ILS 19R	*255/24 200 (200-½)			
S-LOC 19R	760/24 705 (800-½)		760-1½ 705 (800-1½)	760-1¾ 705 (800-1¾)
CIRCLING	760-1 704 (800-1)		760-2 704 (800-2)	760-2¼ 704 (800-2¼)
DYERS FIX MINIMUMS				
S-LOC 19R	440/24 385 (400-½)			440/40 385 (400-¾)
CIRCLING	660-1 604 (700-1)		660-1¾ 604 (700-1¾)	660-2 604 (700-2)


ATIS 126.0
CLNC DEL 118.0
GND CON
(EAST) 120.8
(WEST) 132.25
JOHN WAYNE TOWER ★
126.8 379.9
SOCAL DEP CON
128.1 281.4
SHAFTER
115.4 EHF
Chan 101
N35°29.07' - W119°05.84'
L-3-7, H-4
DAGGETT
113.2 DAG
Chan 79
N34°57.75' - W116°34.69'
L-7, H-4
LANDO
N35°00.75'
W118°36.98'
GORMAN
116.1 GMN
Chan 108
N34° 48.24' - W118° 51.68'
L-3-4-7, H-4
GARDY
N34°15.36'
W117°32.86'
PARADISE
112.2 PDZ
Chan 59
POMONA
110.4 POM
Chan 41
N34°04.70' - W117°47.22'
SEAL BEACH
115.7 SLI
Chan 104
N33°47.00' - W118°03.29'
L-3-4, H-4
15000 (ATC)
SAN MARCUS
114.9 RZS
Chan 96
N34°30.57'
W119°46.26'
L-3-4-7, H-4
VENTURA
108.2 VTU
Chan 19
N34°06.90' - W119°02.97'
LOS ANGELES
113.6 LAX
Chan 83
N33°55.99' - W118°25.92'
EL TORO
117.2 ELB
Chan 119
N33°40.56' - W117°43.87'
SANTA CATALINA
111.4 SXC
Chan 51
N33°22.50' - W118°25.20'
16000 (ATC)
JAGLO
N33° 30.73'
W117° 57.35'
GOKEY
N33° 20.66'
W118° 11.08'
TAKE-OFF MINIMUMS
Rwys 1R, 19L, 19R, NA- ATC.
Rwy 1L, Standard with minimum climb of 385' per NM to 5600. ATC climb of 385' per NM to 13700 (DAGGETT and SEAL BEACH Transitions), ATC climb of 385' per NM to 11500 (SHAFTER, GORMAN and SAN MARCUS Transitions).
TAKE-OFF OBSTACLE NOTES
Rwy 1L, Multiple trees and poles beginning 95' from DER, 491' left of centerline, up to 93' AGL/127' MSL. Obstruction light and trees beginning 497' from DER, 626' right of centerline, up to 100' AGL/134' MSL.
NOTE: Chart not to scale.
NOTE: Restricted to turbojet and turboprop aircraft only. SHAFTER and GORMAN transitions restricted to turbojet aircraft only.
NOTE: RADAR required.
(NARRATIVE ON FOLLOWING PAGE)
N
R-126
*10200 306° (37)
R-214
*11500 034° (64)
R-028
R-142
*8000 323° (56)
J5
*10200 337° (65)
R-109
*6200 289° (43)
R-129
*3800 310° (54)
R-164
*3400 344° (33)
R-084
*3400 264° (12)
30
*2400 215° (15)
R-148
*2400 328° (17)
IR-141
*3400 215° (15)
R-332
014°
*11500 033° (16)
R-343
R-202
*3700 022° (22)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L: Climb heading 014° for vectors to ELB R-215, then via (transition) or (assigned route). Expect filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control by ELB R-332, turn right direct ELB VOR/DME, climb to 7000 and proceed via assigned transition or route. Climb to filed altitude ten minutes after departure.

DAGGETT TRANSITION (IRV1.DAG): From over ELB VOR/DME via ELB R-215 to JAGLO INT, then via SLI R-148 to SLI VORTAC, then via SLI R-022 and POM R-202 to POM VORTAC, then via POM R-033 to GARDY INT, then via DAG R-214 to DAG VORTAC.

GORMAN TRANSITION (IRV1.GMN): From over ELB VOR/DME via ELB R-215 to GOKEY INT, then via SXC R-084 to SXC VORTAC, then via SXC R-344 and LAX R-164 to LAX VORTAC, then via LAX R-323 and GMN R-142 to GMN VORTAC.

SAN MARCUS TRANSITION (IRV1.RZS): From over ELB VOR/DME via ELB R-215 to GOKEY INT, then via SXC R-084 to SXC VORTAC, then via SXC R-310 and VTU R-129 to VTU VOR/DME, then via VTU R-289 and RZS R-109 to RZS VORTAC.

SEAL BEACH TRANSITION (IRV1.SLI): From over ELB VOR/DME via ELB R-215 to JAGLO INT, then via SLI R-148 to SLI VORTAC.

SHAFTER TRANSITION (IRV1.EHF): From over ELB VOR/DME via ELB R-215 to GOKEY INT, then via SXC R-084 to SXC VORTAC, then via SXC R-344 and LAX R-164 to LAX VORTAC, then via LAX R-337 to LANDO INT, then via EHF R-126 to EHF VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

KAYOH FOUR ARRIVAL

SOCAL APP CON
133.85 346.35
FULLERTON MUNI ATIS
125.05
LONG BEACH ATIS
127.75
ORANGE COUNTY ATIS
126.0
TORRANCE MUNI ATIS
125.6

HECTOR TRANSITION (HEC.KAYOH4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to DAWNA INT, then via HDF R-353 to HDF VOR then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

PALM SPRINGS TRANSITION (PSP.KAYOH4): From over PSP VORTAC via PSP R-260 to BANDS INT, then via HDF R-054 to HDF VOR, then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

....From over KAYOH INT via SLI R-075 to SLI VORTAC.

Expect radar vectors to final approach course.

HECTOR
112.7 HEC
Chan 74
N34°47.82′
W116°27.78′
L-7, H-4

V8-21-283-587
10,500
211°
(46)

31
44

DAWNA
N34°15.90′-W117°06.78′
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojet: Expect clearance to cross at 13,000′.
Non-Turbojet: Expect clearance to cross at 12,000′.

PARADISE
112.2 PDZ
Chan 59

29

R-030

V283-587
10,500
173°
(29)

POMONA
110.4 POM
Chan 41

KAYOH
N33°46.82′
W117°35.41′
VERTICAL NAVIGATION PLANNING INFORMATION

210K

FULLERTON MUNI

LONG BEACH (DAUGHERTY FIELD)

R-164

R-185

R-154

R-353

V283-372

8000
257°
(16)

V372
8000
234°
(18)

13,000
260°
(21)

V16-370-372

R-054

ZAMPERINI FIELD

R-075 4000
(14)

6000
255°
(9)

19
23
24
(5)

LOS ALAMITOS AAF

JOGIT
N33°46.91′
W117°46.85′

BANDS
N33°53.38′-W116°50.97′
VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at 14,000′.

JOHN WAYNE ARPT-ORANGE COUNTY

DEJAY
N33°46.77′
W117°29.86′

HOMELAND
113.4 HDF
N33°46.58′-W117°11.12′

R-021

SEAL BEACH
115.7 SLI
Chan 104
N33°47.00′-W118°03.29′

VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or above 8000′.

N

PALM SPRINGS
115.5 PSP
Chan 102
N33°52.20′-W116°25.79′
L-4, H-4

OCEANSIDE
115.3 OCN
Chan 100

NOTE: Chart not to scale.

SANTA ANA, CALIFORNIA AL-377 (FAA)

LDA RWY 19R

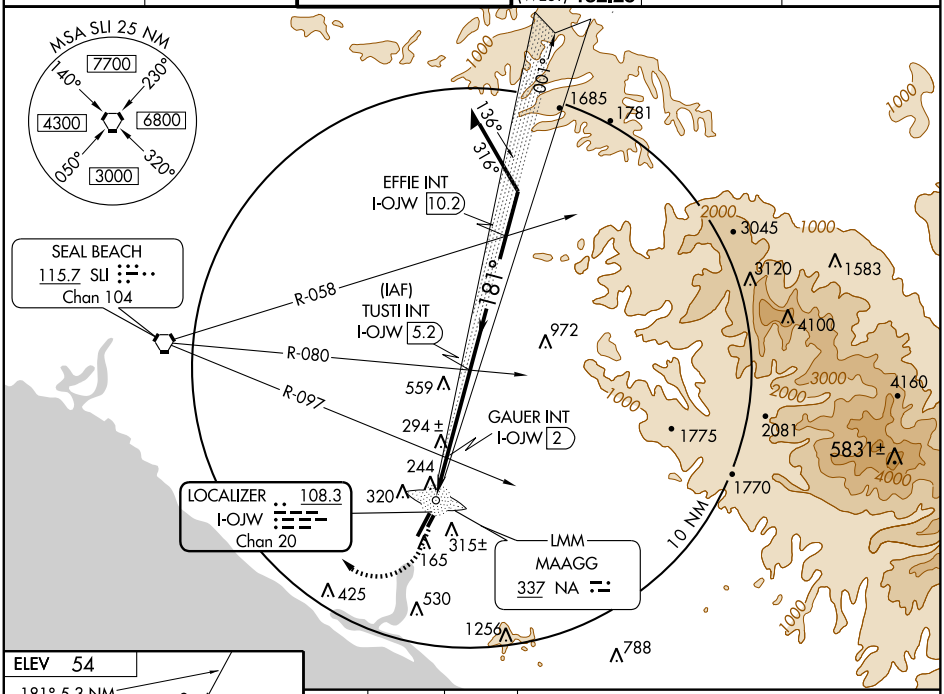
SANTA ANA/JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

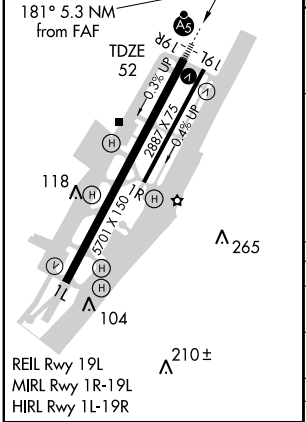
LOC/DME I-OJW	APP CRS	Rwy Idg	5701
108.3	181°	TDZE	52
Chan 20		Apt Elev	54

MALSR

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct SLI VORTAC.

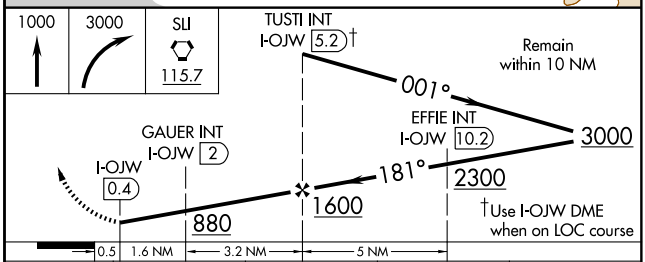
ATIS	SOCAL APP CON	JOHN WAYNE TOWER ★	GND CON	CLNC DEL	UNICOM
126.0	121.3 263.1	126.8 (CTAF) Ⓛ 379.9	(EAST) 120.8 (WEST) 132.25	118.0 121.85	122.95





REIL Rwy 19L
MIRL Rwy 1R-19L
HIRL Rwy 1L-19R

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36



CATEGORY	A	B	C	D
S-19R	880/24 828 (900-½)	880/40 828 (900-¾)	880-2 828 (900-2)	880-2¼ 828 (900-2¼)
CIRCLING	880-1 826 (900-1)	880-1¼ 826 (900-1¼)	880-2½ 826 (900-2½)	880-2¾ 826 (900-2¾)
GAUER FIX MINIMUMS				
S-19R	480/24 428 (500-½)		480/40 428 (500-¾)	480/50 428 (500-1)
CIRCLING	660-1 606 (700-1)		660-1¾ 606 (700-1¾)	660-2 606 (700-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

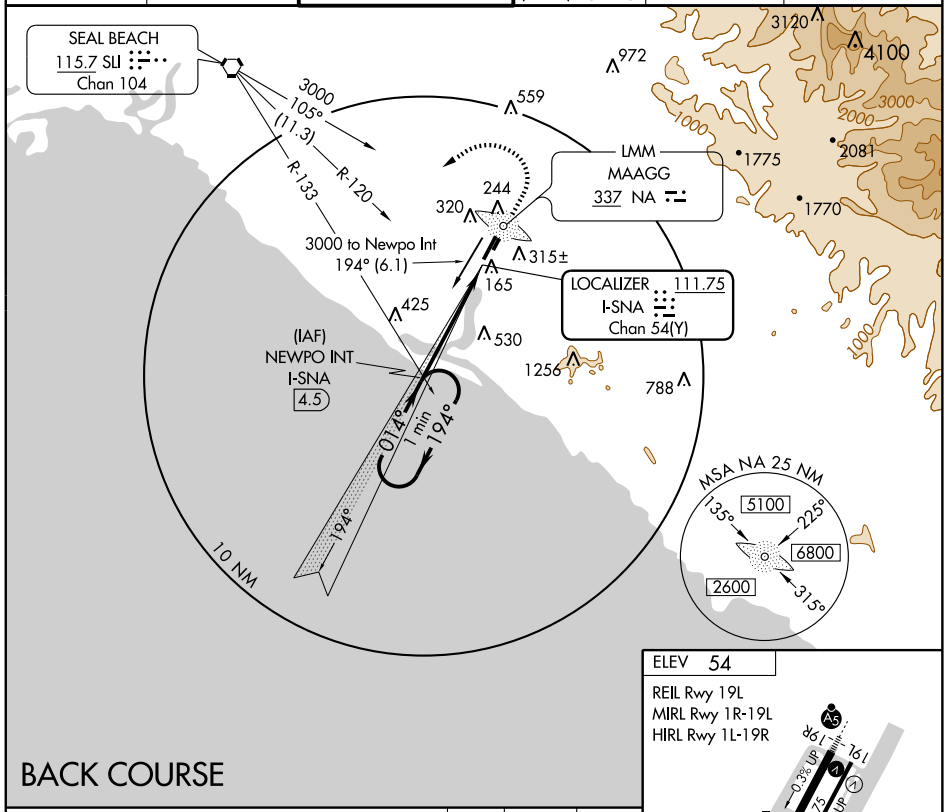
LOC/DME I-SNA	APP CRS	Rwy Idg	5701
111.75	014°	TDZE	54
Chan 54 (Y)		Apt Elev	54

LOC BC RWY 1L

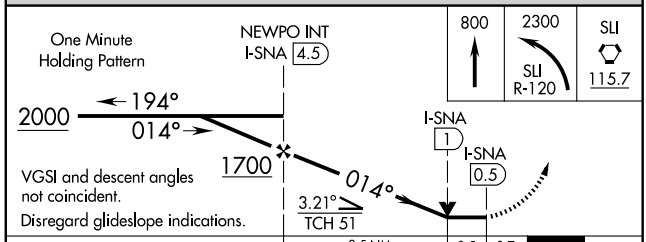
SANTA ANA/JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

MISSED APPROACH: Climb to 800, then climbing left turn to 2300 via SLI R-120 to SLI VORTAC.

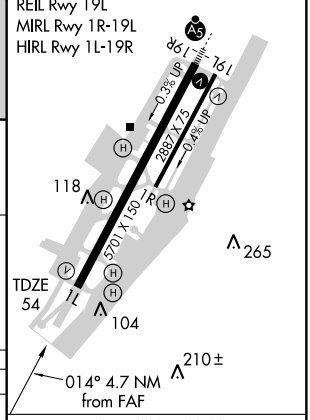
ATIS	SOCAL APP CON	JOHN WAYNE TOWER★	GND CON	CLNC DEL	UNICOM
126.0	121.3 263.1	126.8 (CTAF) L 379.9	(EAST) 120.8 (WEST) 132.25	118.0 121.85	122.95



BACK COURSE



CATEGORY	A	B	C	D
S-1L	480-1	426 (500-1)	480-1¼	426 (500-1¼)
CIRCLING	660-1	606 (700-1)	660-1¾ 606 (700-1¾)	660-2 606 (700-2)

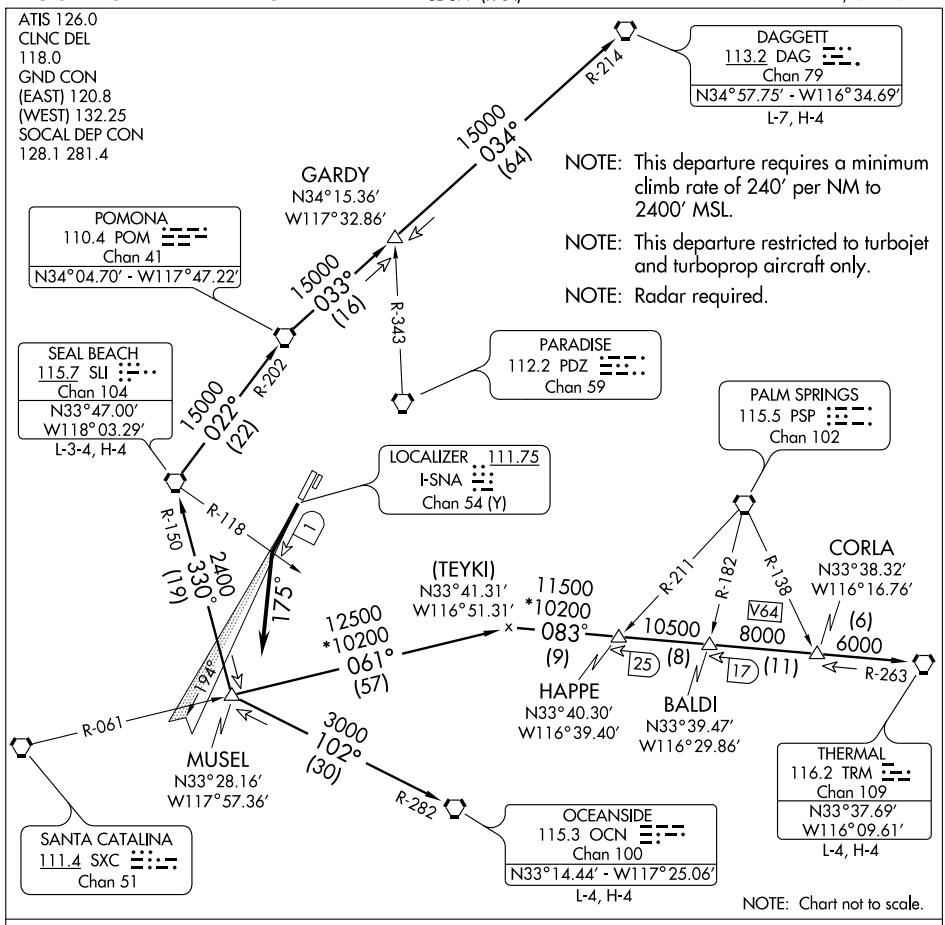


FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

SW-3, 22 OCT 2009 to 19 NOV 2009

MUSEL SIX DEPARTURE

SANTA ANA/JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)
SL-377 (FAA)
SANTA ANA, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 19L/R: Maintain runway heading or I-SNA localizer south course to I-SNA 1 DME fix or SLI R-118, turn left heading 175° for radar vectors to MUSEL INT, then via (transition) or (assigned route). Expect filed altitude ten minutes after departure.

DAGGETT TRANSITION (MUSEL6.DAG): From over MUSEL INT via SLI R-150 to SLI VORTAC, then via SLI R-022 and POM R-202 to POM VORTAC, then via POM R-033 and DAG R-214 to DAG VORTAC.

OCEANSIDE TRANSITION (MUSEL6.OCN): From over MUSEL INT via OCN R-282 to OCN VORTAC.

SEAL BEACH TRANSITION (MUSEL6.SLI): From over MUSEL INT via SLI R-150 to SLI VORTAC.

THERMAL TRANSITION (MUSEL6.TRM): From over MUSEL INT via SXC R-061 and TRM R-263 to TRM VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

LMM NA	APP CRS	Rwy Idg	5701
337	181°	TDZE	52
		Apt Elev	54

NDB RWY 19R

SANTA ANA/ JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

MALSR

MISSED APPROACH: Climb to 1000 via heading 190°, then climbing right turn to 3000 direct SLI VORTAC.

ATIS	SOCAL APP CON	JOHN WAYNE TOWER★	GND CON	CLNC DEL	UNICOM
126.0	121.3 263.1	126.8 (CTAF) L 379.9	(EAST) 120.8 (WEST) 132.25	118.0 121.85	122.95

MSA NA 25 NM
135° 225° 315°
5100
6800
2600

IAF
POMONA
110.4 POM
Chan 41

3000 NoPT
270° (14)
R-170
10 NM
1685
1781
001° 1 min 181°
(IAF)
OLLIE

SEAL BEACH
115.7 SLI
Chan 104

R-058
R-071
R-081
R-096
2500
181° (3.1)
CATTE INT
972
2000
181° (2)
559
HENNY INT
LEOTA INT
RADAR
244
320
315±
165
425
530
1256

3045
3120
1583
4100
4160
1775
2081
1770
5831±

LMM
MAAGG
337 NA

ELEV 54
181° 5.1 NM from FAF
TDZE 52
19R
19L
0.3% UP
0.4% UP
2887 X 75
5701 X 150
118
265
104
210±

REIL Rwy 19L
MIRL Rwy 1R-19L
HIRL Rwy 1L-19R

Knots	60	90	120	150	180
Min:Sec					

1000
190°
3000
SLI
115.7

One Minute Holding Pattern
OLLIE INT
CATTE INT
HENNY INT
LEOTA INT RADAR
LMM
001°
181°
3000
2500
2000
920
0.5 1.8 NM 2.9 NM 2 NM 3.1 NM

CATEGORY	A	B	C	D
S-19R	640/40	588 (600-¾)	640/50 588 (600-1)	640-1½ 588 (600-1½)
CIRCLING	640-1	586 (600-1)	640-1½ 586 (600-1½)	640-2 586 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5701
014°	TDZE	54
	Apt Elev	54

RNAV (GPS) RWY 1L

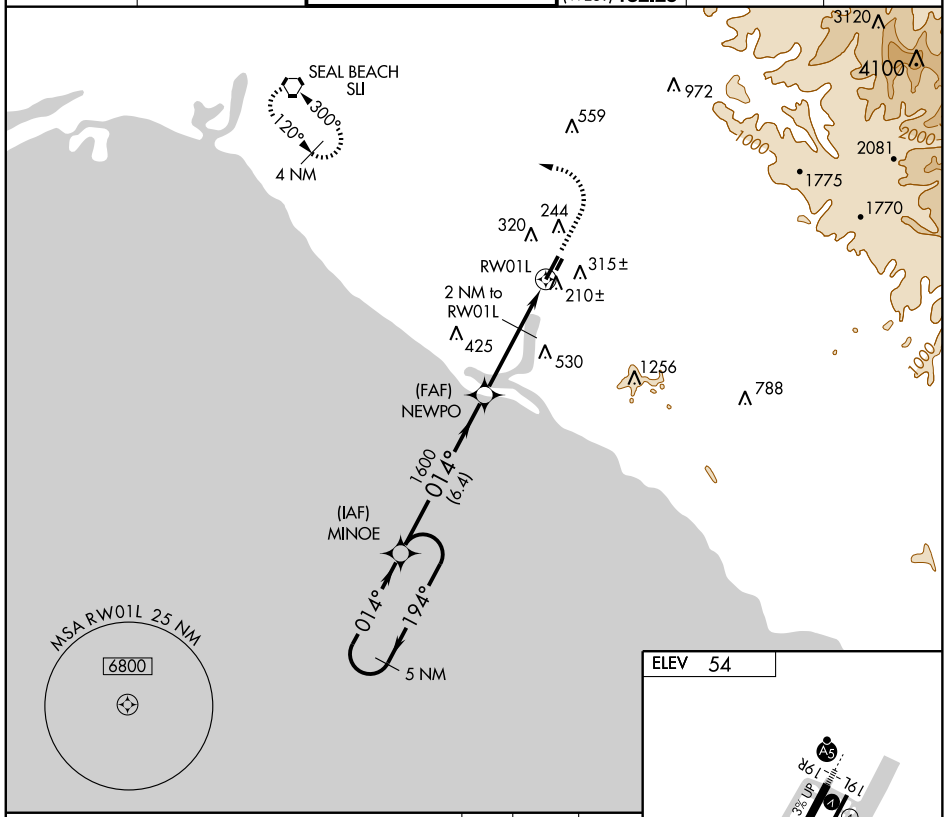
SANTA ANA/JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

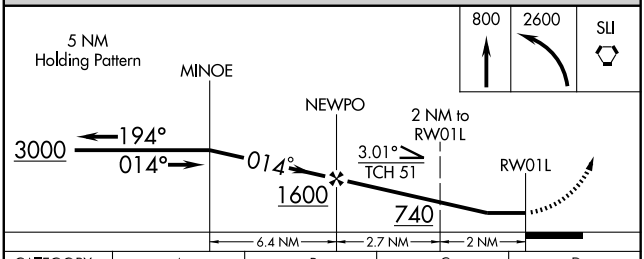
T ANA

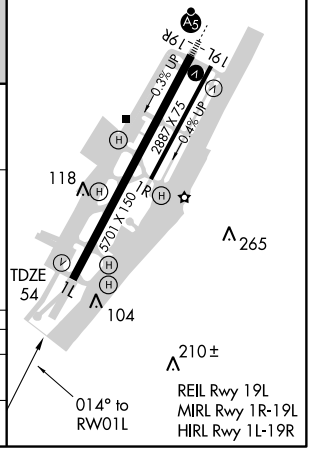
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 800 then climbing left turn to 2600 direct SLI VORTAC and hold.

ATIS	SOCAL APP CON	JOHN WAYNE TOWER ★	GND CON	CLNC DEL	UNICOM
126.0	121.3 263.1	126.8 (CTAF) Ⓛ 379.9	(EAST) 120.8 (WEST) 132.25	118.0 121.85	122.95







CATEGORY	A	B	C	D
LNAV MDA	520-1	466 (500-1)	520-1¼ 466 (500-1¼)	520-1½ 466 (500-1½)
CIRCLING	640-1	586 (600-1)	640-1½ 586 (600-1½)	640-2 586 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	5701
CH 99502	194°	TDZE	55
W19A		Apt Elev	56

RNAV (GPS) RWY 19R

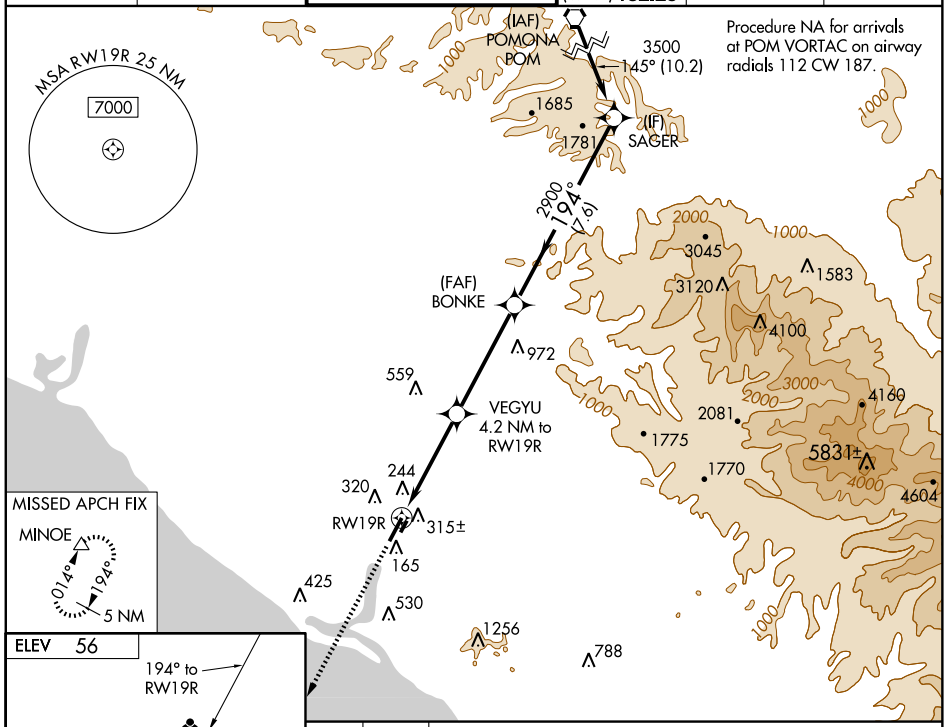
SANTA ANA/JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

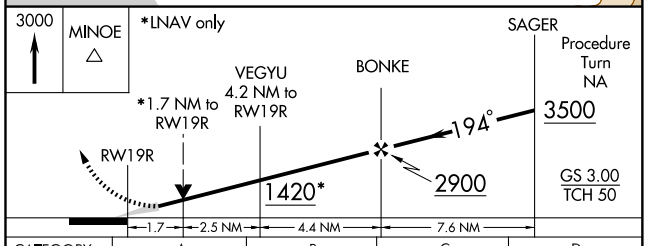
For inoperative MALSR, increase LPV all Cats visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (121°F). DME/DME RNP- 0.3 NA.

MALSR

MISSED APPROACH: Climb to 3000 direct MINOE and hold.

ATIS	SOCAL APP CON	JOHN WAYNE TOWER ★	GND CON	CLNC DEL	UNICOM
126.0	121.3 263.1	126.8 (CTAF) L 379.9	(EAST) 120.8 (WEST) 132.25	118.0 121.85	122.95

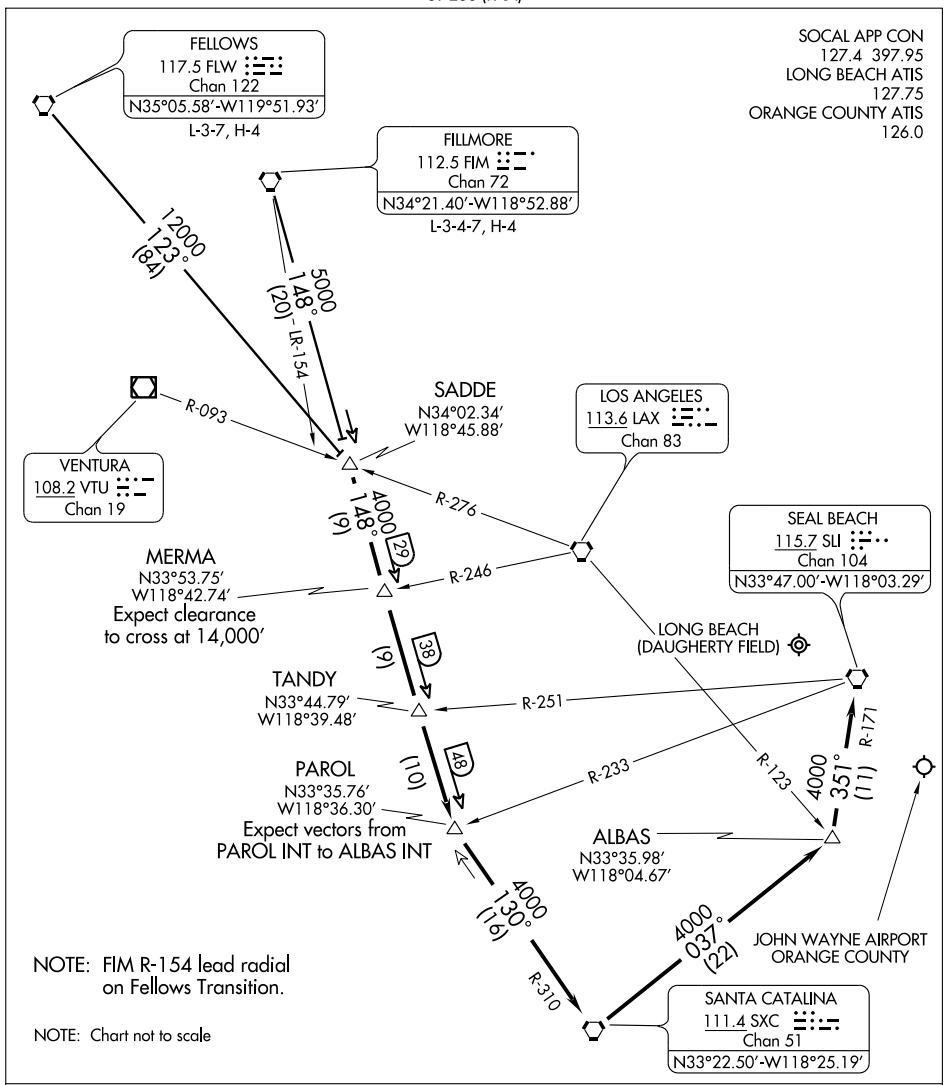




CATEGORY	A	B	C	D
LPV DA	338/24 283 (300-½)			
LNAV/VNAV DA	683/1¾ 628 (700-1¾)			
LNAV MDA	620/24 565 (600-½)		620/50 565 (600-1)	620/60 565 (600-1¼)
CIRCLING	640-1 584 (600-1)		640-1½ 584 (600-1½)	640-2 584 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

TANDY THREE ARRIVAL

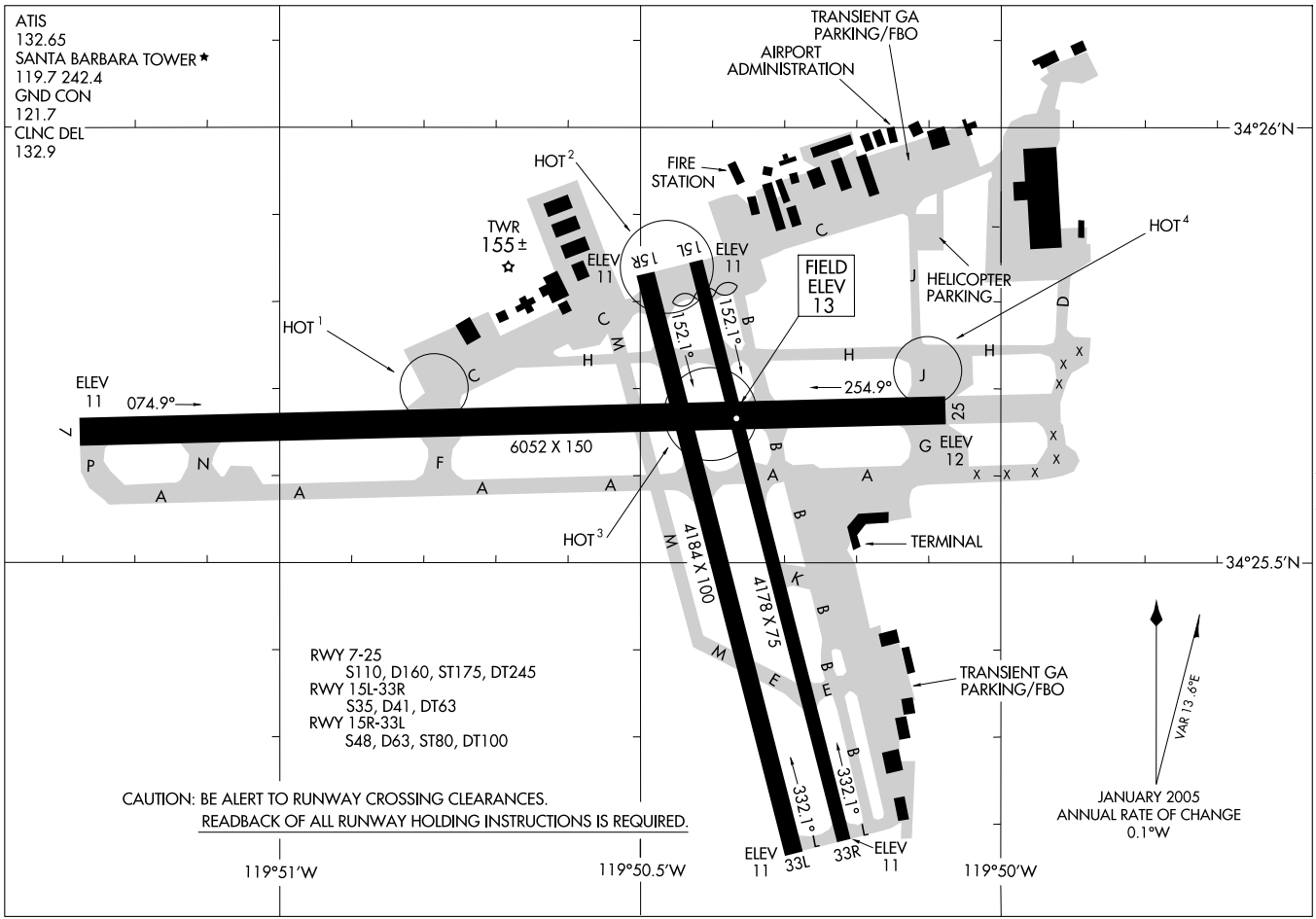


FELLOWS TRANSITION (FLW.TANDY3): From over FLW VORTAC via FLW R-123 to SADDE INT. Thence....

FILLMORE TRANSITION (FIM.TANDY3): From over FIM VORTAC via FIM R-148 to SADDE INT. Thence....

....From over SADDE INT via FIM R-148 to PAROL INT. From over PAROL INT via SXC R-310 to SXC VORTAC. Then from over SXC VORTAC via SXC R-037 and SLI R-171 to SLI VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

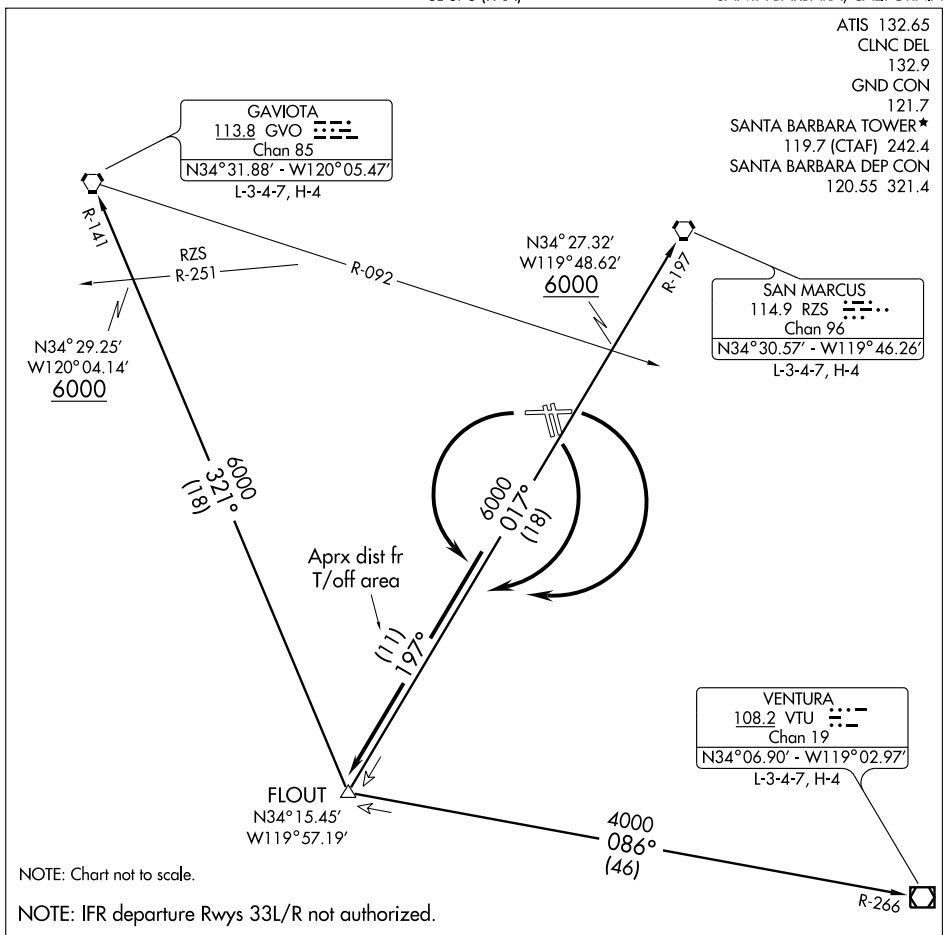
AL-378 (FAA)

SANTA BARBARA MUNI (SBA)
SANTA BARBARA, CALIFORNIA

FLOUT FIVE DEPARTURE

SL-378 (FAA)

SANTA BARBARA MUNI (SBA)
SANTA BARBARA, CALIFORNIA



NOTE: IFR departure Rwys 33L/R not authorized.

SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7 and 15L/R: Turn right, thence. . . .

TAKE-OFF RUNWAY 25: Turn left, thence. . . .

. . . .intercept and proceed via RZS R-197 to FLOUT INT. Thence via (transition or assigned route.)

GAVIOTA TRANSITION (FLOUT5.GVO): From over FLOUT INT via GVO R-141 to GVO VORTAC. Cross RZS R-251 at or above 6000'.

SAN MARCUS TRANSITION (FLOUT5.RZS): From over FLOUT INT via RZS R-197 to RZS VORTAC. Cross GVO R-092 at or above 6000'.

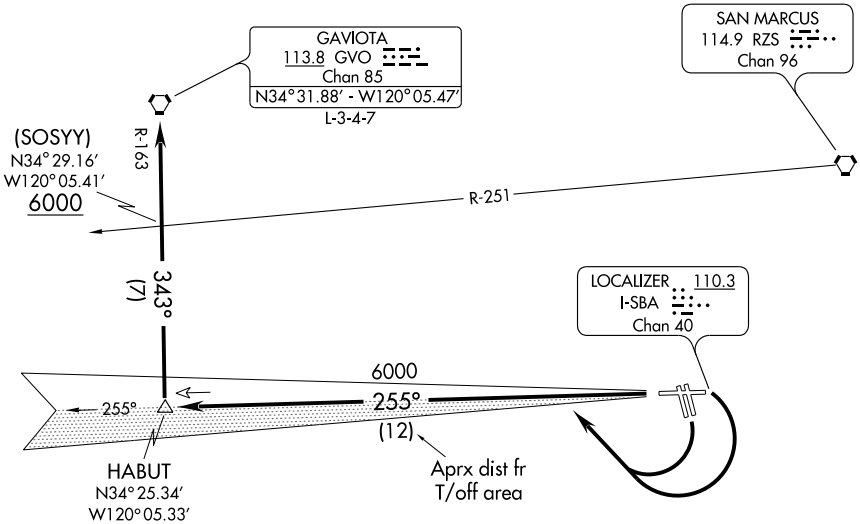
VENTURA TRANSITION (FLOUT5.VTU): From over FLOUT INT via VTU R-266 to VTU VOR/DME.

HABUT FOUR DEPARTURE

SL-378 (FAA)

SANTA BARBARA MUNI (SBA)
SANTA BARBARA, CALIFORNIA

ATIS 132.65
CLNC DEL
132.9
GND CON
121.7
SANTA BARBARA TOWER★
119.7 (CTAF) 242.4
SANTA BARBARA DEP CON
120.55 321.4



NOTE: IFR departure Rwys 33L/R not authorized.

NOTE: Minimum (ATC) climb of 385' per NM to 6000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7 and 15L/R: Turn right, intercept I-SBA west course to HABUT INT, thence via GVO R-163 to GVO VORTAC. Cross RZS R-251 at or above 6000'.

TAKE-OFF RUNWAY 25: Intercept I-SBA west course to HABUT INT, thence via GVO R-163 to GVO VORTAC. Cross RZS R-251 at or above 6000'.

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SBA	APP CRS	Rwy Idg 6052
110.3	075°	TDZE 13
Chan 40		Apt Elev 13

ILS or LOC RWY 7

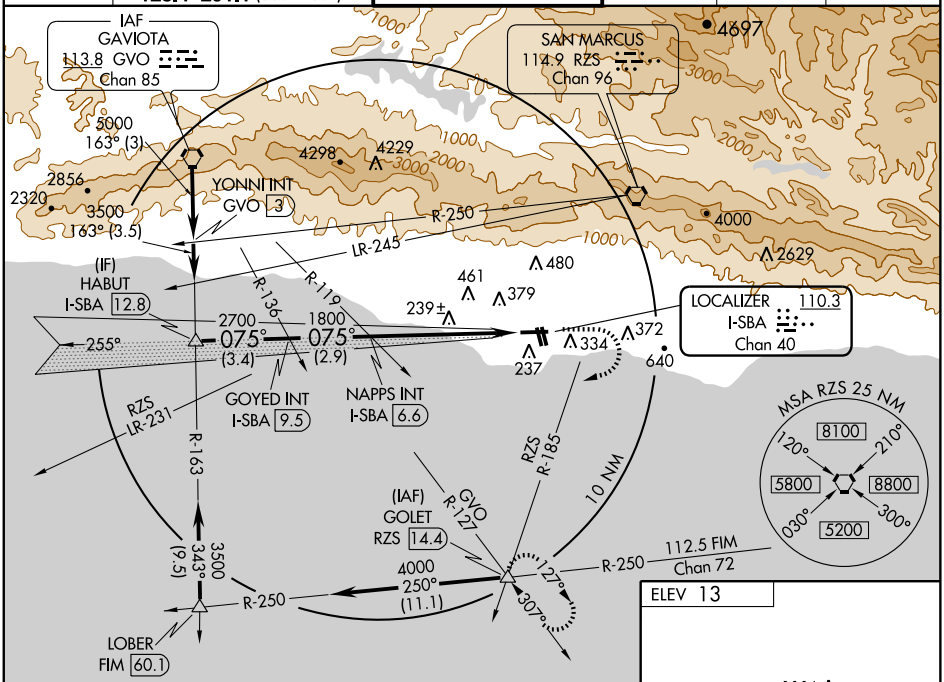
SANTA BARBARA MUNI (SBA)

When local altimeter setting not received, use Oxnard altimeter setting and increase all DAs/MDAs 100 feet, and S-LOC Cat. C visibility to RVR 5000, Cat. D visibility to RVR 6000. Increase Circling Cat. A visibility ¼ mile, Cat. C visibility ½ mile.
For inoperative MALSR when using Oxnard altimeter setting, increase S-ILS 7 all Cats. visibility to RVR 5000.
*RVR 1800 authorized with the use of FD or AP or HUD to DA.

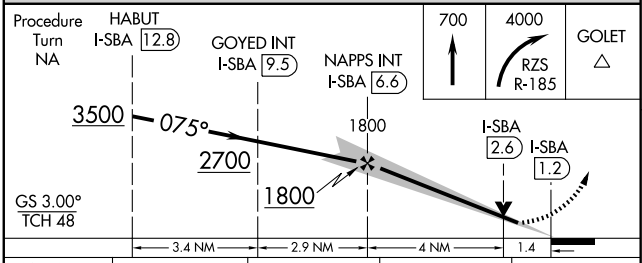
MALSR

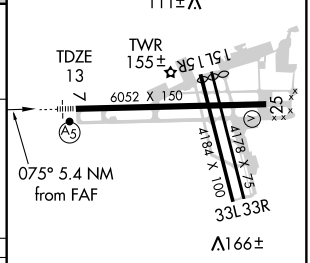
MISSED APPROACH: Climb to 700 then climbing right turn to 4000 via RZS VORTAC R-185 to GOLET INT/RZS 14.4 DME and hold, continue climb-in-hold to 4000.

ATIS	SANTA BARBARA APP CON	SANTA BARBARA TOWER*	GND CON	CLNC DEL	UNICOM
132.65	120.55 321.4 (151°-329°) 125.4 291.1 (330°-150°)	119.7 (CTAF) 242.4	121.7	132.9	122.95



ELEV 13





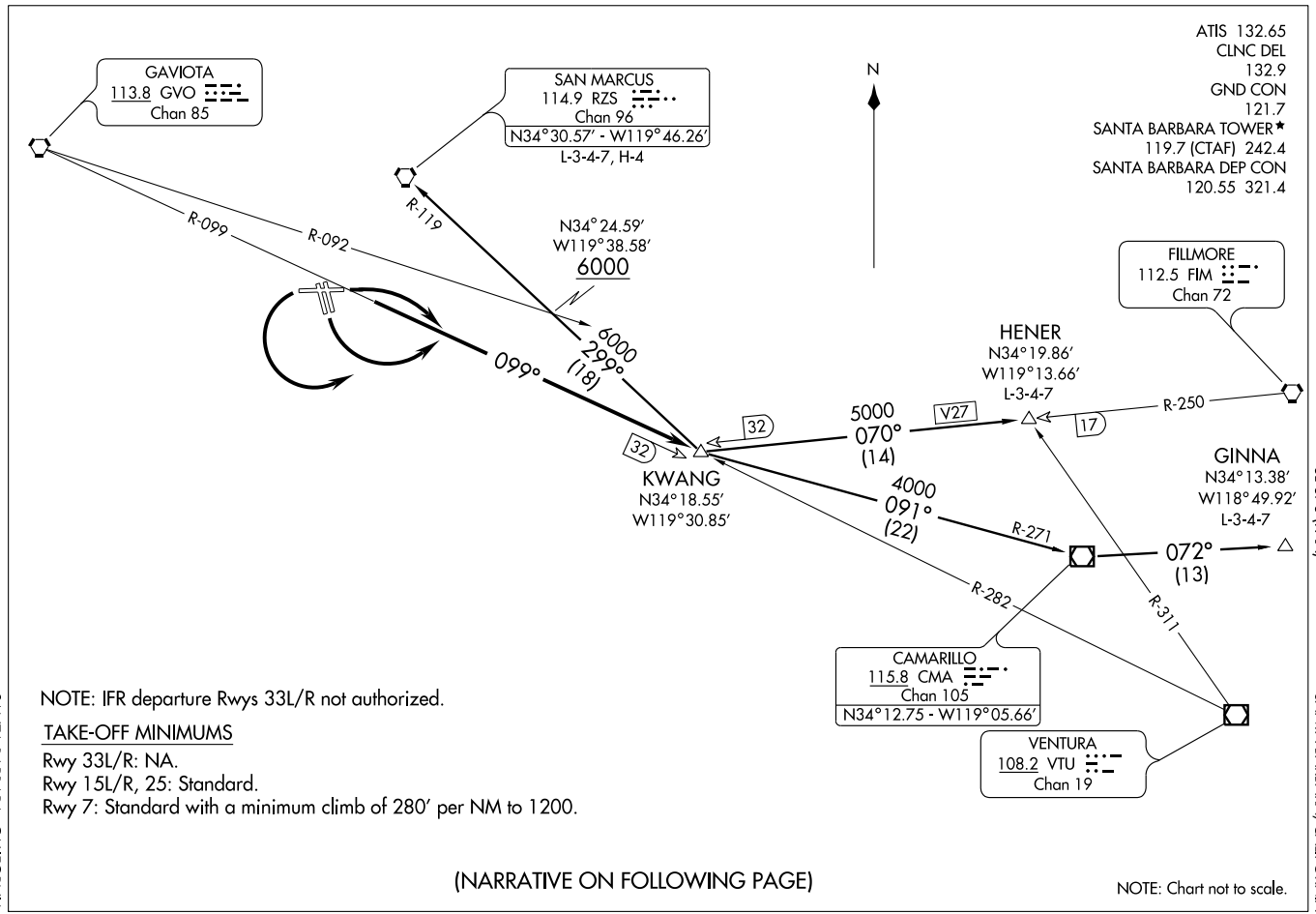
CATEGORY	A	B	C	D
S-ILS 7	*213/24 200 (200-½)			
S-LOC 7	500/24 487 (500-½)		500/40 487 (500-¾)	500/50 487 (500-1)
CIRCLING	800-1 787 (800-1)	800-1¼ 787 (800-1¼)	800-2¼ 787 (800-2¼)	1000-3 987 (1000-3)

HIRL Rwy 7-25
MIRL Rwy 15R-33L
REIL Rwys 15R and 25

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

SW-3, 22 OCT 2009 to 19 NOV 2009

KWANG FIVE DEPARTURE



NOTE: IFR departure Rwys 33L/R not authorized.

TAKE-OFF MINIMUMS

Rwy 33L/R: NA.
Rwy 15L/R, 25: Standard.
Rwy 7: Standard with a minimum climb of 280′ per NM to 1200.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Climbing right turn to intercept GVO VORTAC R-099 to KWANG INT thence. . . .

TAKE-OFF RUNWAYS 15L/R and 25: Climbing left turn to intercept GVO VORTAC R-099 to KWANG INT thence. . . .

. . . .via (transition) or (assigned route).

HENER TRANSITION (KWANG5.HENER): From over KWANG INT via FIM R-250 to HENER INT.

SAN MARCUS TRANSITION (KWANG5.RZS): From over KWANG INT via RZS R-119 to RZS VORTAC. Cross GVO R-092 at or above 6000'.

GINNA TRANSITION (KWANG5.GINNA): From over KWANG INT via CMA R-271 to CMA VOR/DME then via CMA R-072 to GINNA.

TAKE-OFF OBSTACLE NOTES

Rwy 7: OL on DME antenna, road, and numerous trees beginning 350' from DER, 101' right of centerline, up to 55' AGL/74' MSL. Antennas, poles, tower, and numerous trees beginning 194' from DER, 11' left of centerline, up to 79' AGL 98' MSL.
Rwy 15L: Numerous trees beginning 1242' from DER, 119' right of centerline, up to 100' AGL/159' MSL.
Rwy 15R: Sign and numerous trees beginning 29' from DER, 94' right of centerline, up to 100' AGL/159' MSL. Tree 1325' from DER, 243' left of centerline, 19' AGL/59' MSL.
Rwy 25: Trees beginning 1999' from DER, 793' right of centerline, up to 67' AGL/86' MSL.

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS		
CH 78306	074°	Rwy Idg	6052
W07A		TDZE	13
		Apt Elev	14

RNAV (GPS) RWY 7

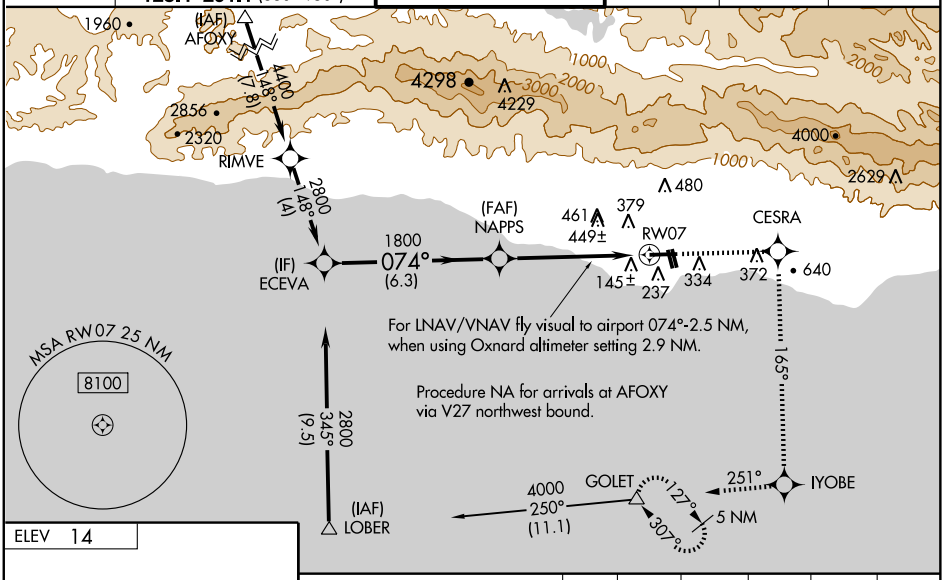
SANTA BARBARA MUNI (SBA)

DME/DME RNP -0.3 NA. Inoperative table does not apply to LNAV/VNAV. For inoperative MALSR when using Oxnard altimeter setting, increase LPV all Cats. visibility to 1½ , and LNAV Cat. C to 1¾ , Cat. D to 2. For inoperative MALSR, increase LPV all Cats. visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). Baro-VNAV NA when using Oxnard altimeter setting. When local altimeter setting not received, use Oxnard altimeter setting and increase all DAs/MDAs 100 feet, and increase, LNAV/VNAV visibility Cat. C and D ¼ mile, LNAV Cat. C to RVR 6000, Cat. D ¼ mile, Circling Cat. A visibility ¼ mile, Cat. C visibility ½ mile. VDP NA when using Oxnard altimeter setting.

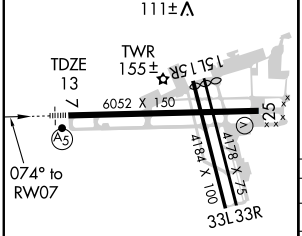
MALSR

MISSED APPROACH: Climb to 4000 direct CESRA and right turn via 165° track to IYOBE and right turn via 251° track to GOLET and hold, continue climb-in-hold to 4000.

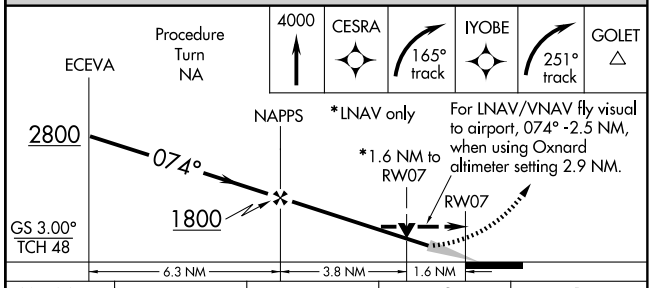
ATIS	SANTA BARBARA APP CON	SANTA BARBARA TOWER*	GND CON	CLNC DEL	UNICOM
132.65	120.55 321.4 (151°-329°) 125.4 291.1 (330°-150°)	119.7 (CTAF) L 242.4	121.7	132.9	122.95



ELEV 14



HIRL Rwy 7-25
MIRL Rwy 15R-33L L
REIL Rwys 15R and 25



CATEGORY	A	B	C	D
LPV DA	380/40 367 (400-¾)			
LNAV/VNAV DA	866-2 853 (900-2)		866-2½ 853 (900-2½)	866-2¾ 853 (900-2¾)
LNAV MDA	560/24 547 (600-½)		560/50 547 (600-1)	560/60 547 (600-1¼)
CIRCLING	800-1 786 (800-1)	800-1¼ 786 (800-1¼)	800-2¼ 786 (800-2¼)	1000-3 986 (1000-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

ATIS 132.65
CLNC DEL 132.9
GND CON 121.7
SANTA BARBARA TOWER ★ 119.7 (CTAF) 242.4
SANTA BARBARA DEP CON 120.55 321.4

PRIEST
110.0 ROM
N36°08.42′-W120°39.90′
L-3

BIG SUR
114.0 BSR
Chan 87
N36°10.88′
W121°38.53′
L-3, H-4

PASO ROBLES
114.3 PRB
Chan 90
N35°40.35′
W120°37.63′
L-3-7, H-4

AVENAL
117.1 AVE
Chan 118
N35°38.82′-W119°58.72′
L-3-7, H-4

SHAFTER
115.4 EHF
Chan 101
N35°29.07′ - W119°05.84′
L-3-7, H-4

FELLOWS
117.5 FLW
Chan 122
N35°05.59′-W119°51.93′
L-3-7, H-4

MORRO BAY
112.4 MQO
Chan 71
N35°15.14′
W120°45.57′
L-3-7, H-4

GAVIOTA
113.8 GVO
Chan 85
N34°31.88′-W120°05.47′
L-3-4-7, H-4

SAN MARCUS
114.9 RZS
Chan 96
N34°30.57′-W119°46.26′
L-3-4-7, H-4

GORMAN
116.1 GMN
Chan 108
N34°48.24′-W118°51.68′
L-3-4-7, H-4

LAKE HUGHES
108.4 LHS
Chan 21
N34°40.98′
W118°34.62′
L-3-4-7

FILLMORE
112.5 FIM
Chan 72
N34°21.40′-W118°52.88′
L-3-4-7, H-4

PALMDALE
114.5 PMD
Chan 92
N34°37.88′
W118°03.83′
L-3-4-7, H-4

VAN NUYS
113.1 VNY
Chan 78
N34°13.41′
W118°29.50′
L-3-4-7, H-4

R-2534A
R-2534B

HABUT
N34°25.34′
W120°05.33′
L-3-4-7

255° 075° 500
200° 120°
152° 500
200°

DEANO
N34°19.00′
W119°24.99′
L-3-4-7

KWANG
N34°18.55′
W119°30.85′
L-3-4-7

HENER
N34°19.86′
W119°13.66′
L-3-4-7

CAMARILLO
115.8 CMA
Chan 105
N34°12.75 - W119°05.66′
L-3-4-7, H-4

VENTURA
108.2 VTU
Chan 19
N34°06.90′ - W119°02.97′
L-3-4-7, H-4

SANTA CATALINA
111.4 SXC
Chan 51
N33°22.50′
W118°25.19′
L-3-4, H-4

TAKE-OFF MINIMUMS
Rwys 15L, 15R, 25: Standard.
Rwy 7: 1100-3, or standard with a minimum climb of 260′ per NM to 1100.
Rwys 33L, 33R: NA-ATC.

NOTE: This DP to be used only when assigned by ATC.

NOTE: RADAR REQUIRED

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SANTA BARBARA MUNI (SBA)
SANTA BARBARA, CALIFORNIA

SANTA BARBARA TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

SOUTH OR EAST ROUTE OF FLIGHT:

TAKE-OFF RUNWAY 7: Climb heading 075° to 500, then climbing right turn via heading 120°. Thence....

TAKE-OFF RUNWAYS 15L/15R: Climb heading 152°. Thence....

TAKE-OFF RUNWAY 25: Climb heading 255°. Thence....

....via radar vectors, maintain 3000. Expect further clearance to filed altitude 5 minutes after departure.

NORTH OR WEST ROUTE OF FLIGHT:

TAKE-OFF RUNWAY 7: Climb heading 075° to 500, then climbing right turn via heading 200°. Thence....

TAKE-OFF RUNWAYS 15L/15R: Climb heading 152° to 500, then climbing right turn via heading 200°. Thence....

TAKE-OFF RUNWAY 25: Climb heading 255°. Thence....

....via radar vectors, maintain 3000. Expect further clearance to filed altitude 5 minutes after departure.

TAKE-OFF OBSTACLE NOTES

Rwy 7: OL on lighted windsock, buildings, and multiple trees beginning 207′ from DER, 244′ left of centerline, up to 20′ AGL/98′ MSL.
Light poles and multiple trees beginning 938′ from DER, 587′ right of centerline, up to 20′ AGL/74′ MSL.

Rwy 15L: Multiple trees beginning 1289′ from DER, 115′ right of centerline, up to 20′ AGL/65′ MSL.

Rwy 15R: Trees 1325′ from DER, 246′ left of centerline, 20′ AGL/59′ MSL.
Trees 1287′ from DER, 352′ right of centerline, 20′ AGL/65′ MSL.

Rwy 25: Multiple trees beginning 118′ from DER, 272′ left of centerline, up to 20′ AGL/127′ MSL.
Multiple trees beginning 1354′ from DER, 791′ right of centerline, up to 40′ AGL/105′ MSL.

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC GVO	APP CRS	Rwy Idg 6052
113.8	279°	TDZE 10
Chan 85		Apt Elev 10

VOR or GPS RWY 25

SANTA BARBARA MUNI (SBA)

MISSED APPROACH: Climbing left turn to 4000 via heading 205° and GVO R-127 to GOLET Int and hold.

ATIS	SANTA BARBARA APP CON	SANTA BARBARA TOWER★	GND CON	CLNC DEL	UNICOM
132.65	120.55 321.4 (151°-329°) 125.4 291.1 (330°-150°)	119.7 (CTAF) Ⓛ 242.4	121.7	132.9	122.95

GAVIOTA
113.8 GVO
Chan 85

SAN MARCUS
114.9 RZS
Chan 96

4697 5080 4298 4229 4000 2629 4864 480 461 379 237 372 334 640

6000 to Zacks Int 099° (20.7)

R-099 R-127 R-185 R-145 R-250 279° 144° 324° 127° 307°

(MARNS) 6000 145° (8)

(IAF) ZACKS INT GVO 20.7

(IAF) KWANG GVO 31.6

2100 NoPT 279° (10.9)

GVO R-099

112.5 FIM Chan 72

GOLET GVO 18.7

MSA GVO 25 NM
140° 8000 4600 360°

10 NM

ELEV 10

111±

279° 6.5 NM from FAF

TWR 155±

6052 X 150

4184 X 100

4178 X 75

33L 33R

TDZE 10

166±

HIRL Rwy 7-25
MIRL Rwy 15R-33L Ⓛ
REIL Rwys 15R and 25

4000 205°	GVO R-127 113.6	GOLET △

ZACKS INT GVO 20.7

099° 3000

279° 2100

2.96° TCH 45

(MARNS) GVO 14.7

Remain within 10 NM

0.5 6 NM

FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

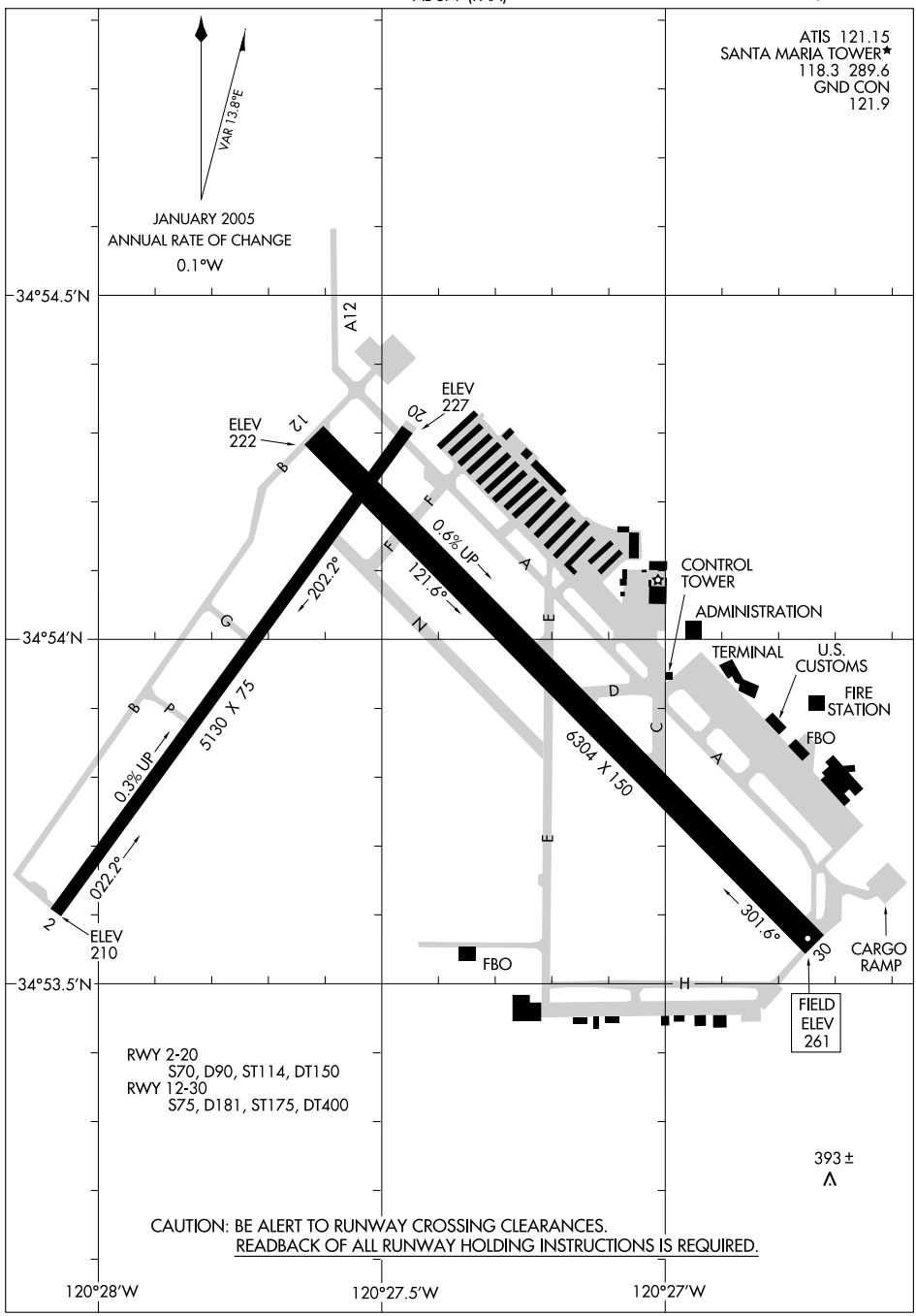
CATEGORY	A	B	C	D
S-25	920-1¼	910 (1000-1¼)	920-2¾ 910 (1000-2¾)	920-3 910 (1000-3)
CIRCLING	920-1¼	910 (1000-1¼)	920-2¾ 910 (1000-2¾)	960-3 950 (1000-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

07074

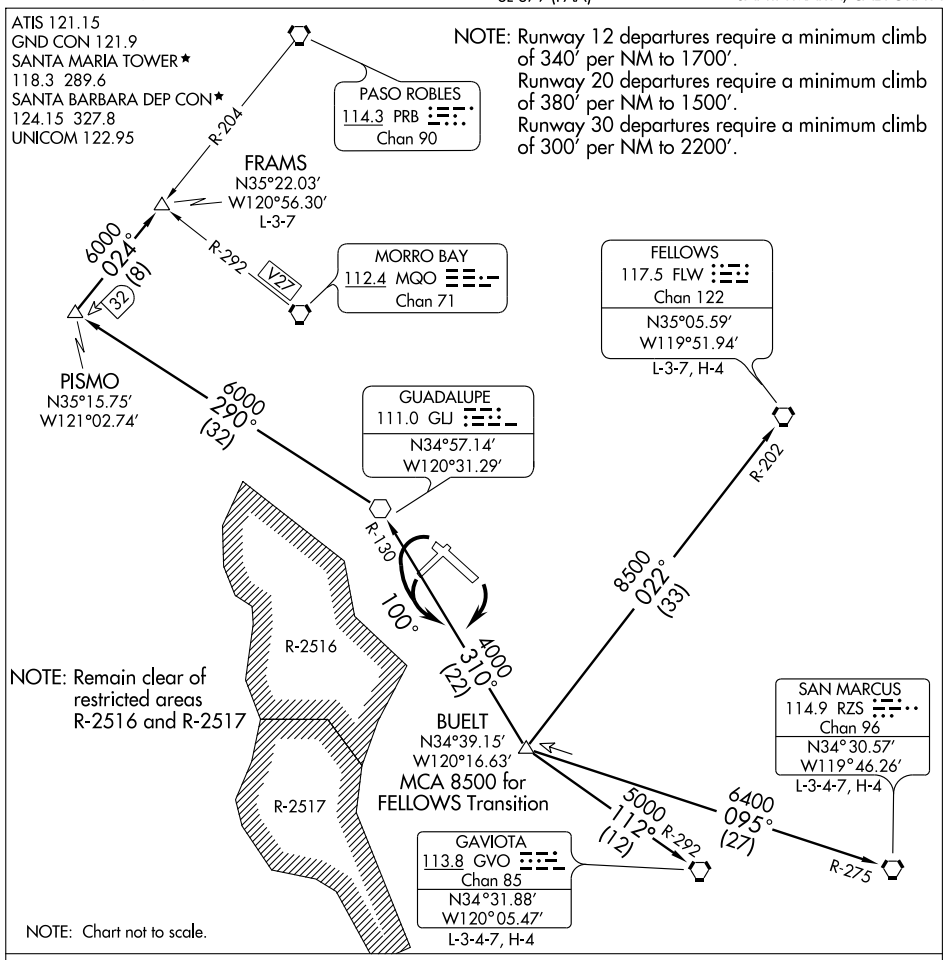
AIRPORT DIAGRAM

SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)
AL-379 (FAA)
SANTA MARIA, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

BUELT ONE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 12: Climbing right turn to intercept and proceed via GLJ R-130 to BUELT INT, thence via (assigned route) or (transition).

TAKE-OFF RUNWAYS 20 and 30: Climbing left turn via heading 100° to intercept and proceed via GLJ R-130 to BUELT INT, thence via (assigned route) or (transition).

FELLOWS TRANSITION (BUELT1.FLW): From over BUELT INT via FLW R-202 to FLW VORTAC.

FRAMS TRANSITION (BUELT1.FRAMS): From over BUELT INT via GLJ R-130 to GLJ VOR, thence via GLJ R-290 to PISMO INT, thence via PRB R-204 to FRAMS INT.

GAVIOTA TRANSITION (BUELT1.GVO): From over BUELT INT via GVO R-292 to GVO VORTAC.

SAN MARCUS TRANSITION (BUELT1.RZS): From over BUELT INT via RZS R-275 to RZS VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

SANTA MARIA, CALIFORNIA AL-379 (FAA)

LOC/DME I-SMX	APP CRS	Rwy Idg 6304
108.9	120°	TDZE 240
Chan 26		Apt Elev 261

ILS or LOC RWY 12

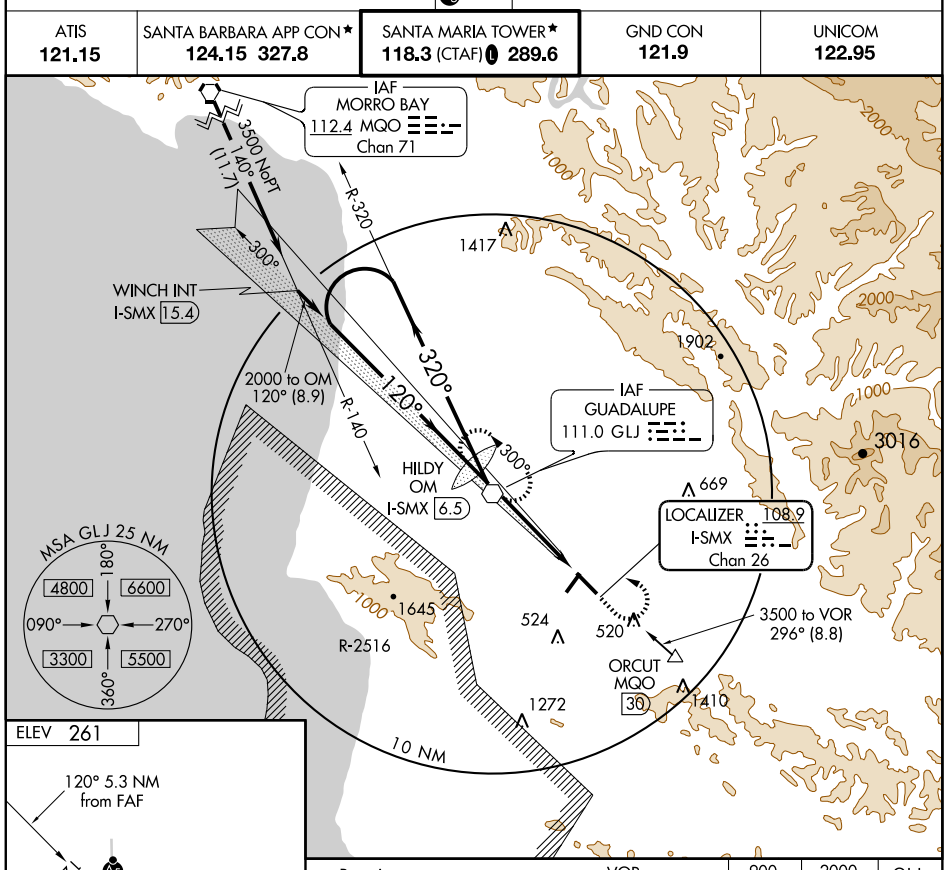
SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)

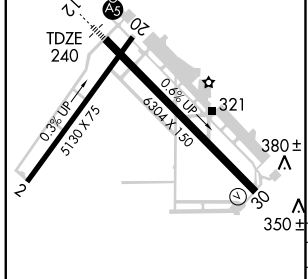
T A * RVR 1800 authorized with the use of FD or AP or HUD to DA.

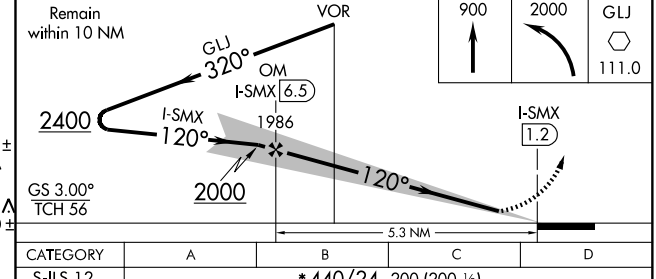
MALSR

MISSED APPROACH: Climb to 900, then climbing left turn to 2000 direct GLJ VOR and hold.

ATIS	SANTA BARBARA APP CON*	SANTA MARIA TOWER*	GND CON	UNICOM
121.15	124.15 327.8	118.3 (CTAF) L 289.6	121.9	122.95







HIRL Rwy 12-30

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-ILS 12	*440/24 200 (200-½)			
S-LOC 12	680/24 440 (500-½)		680/40 440 (500-¾)	680/50 440 (500-1)
CIRCLING	820-1 559 (600-1)	840-1 579 (600-1)	860-1½ 599 (600-1½)	1320-3 1059 (1100-3)

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SMX	APP CRS	Rwy Idg N/A
108.9 Chan 26	300°	TDZE N/A
		Apt Elev 261

LOC/DME BC-A

SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)

MISSED APPROACH: Climb to 2000 direct GLJ VOR and hold.

ATIS	SANTA BARBARA APP CON★	SANTA MARIA TOWER★	GND CON	UNICOM
121.15	124.15 327.8	118.3 (CTAF) 289.6	121.9	122.95

GUADALUPE 111.0 GLJ

R-300 120° 300°

LOCALIZER 108.9 I-SMX Chan 26

PATER I-SMX 2

CAMCO I-SMX 5.8

KOAKS I-SMX 11.6

RZS 29

MADOO RZS 14.9

IAF SAN MARCUS 114.9 RZS Chan 96

R-2516

10 NM

MSA GLJ 25 NM

180° 4800 6600 090° 270° 3300 5500 360°

R-286 120° 286° (14.1) 6000 286° (14.9)

669 524 595± 1410 1272 1645 3016 3388 3726 4911 4341 4528 1984 4298 4229

1000 2000 3000 4000

BACK COURSE

ELEV 261

0.3% UP 5130 X 75

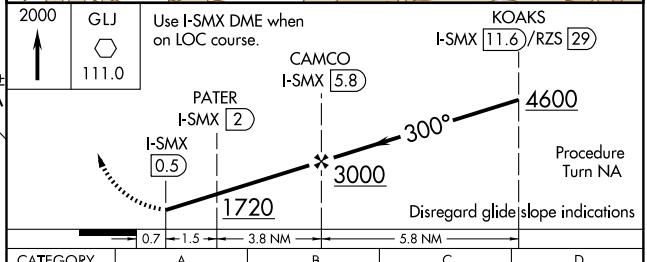
0.5% UP 6304 X 150

321 380± 350± 30

300° 6 NM from FAF

2000	GLJ 111.0

Use I-SMX DME when on LOC course.



CATEGORY	A	B	C	D
CIRCLING	1100-1 839 (900-1)	1100-1¼ 839 (900-1¼)	1100-2½ 839 (900-2½)	1320-3 1059 (1100-3)

HIRL Rwy 12-30

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6304
121°	TDZE	240
	Apt Elev	261

RNAV (GPS) RWY 12

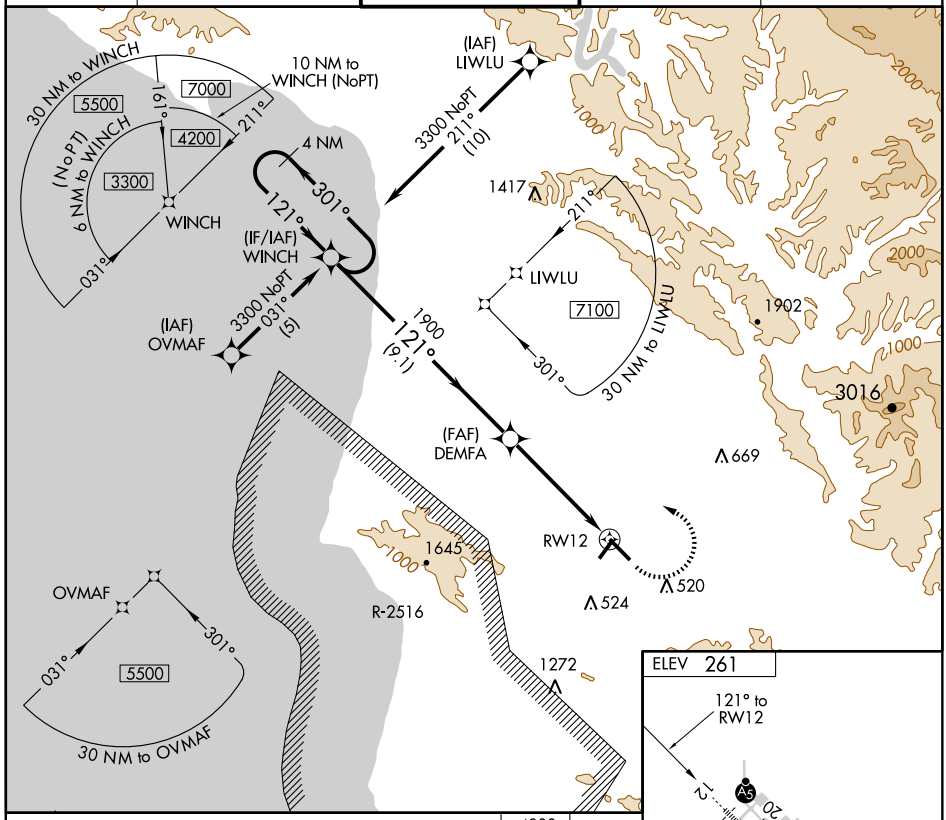
SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)

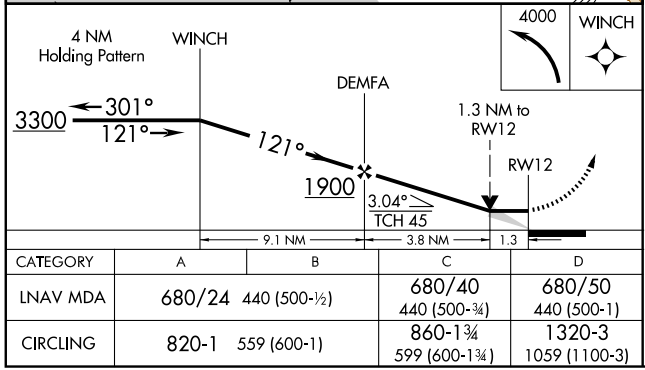
DME/DME RNP-0.3 NA.

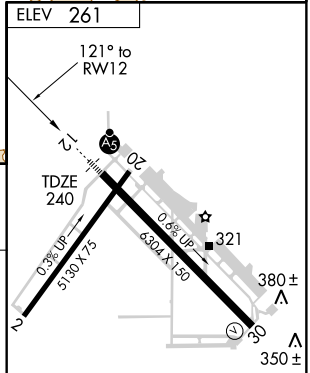
MALSR

MISSED APPROACH: Climbing left turn to 4000 direct WINCH WP and hold.

ATIS	SANTA BARBARA APP CON★	SANTA MARIA TOWER★	GND CON	UNICOM
121.15	124.15 327.8	118.3 (CTAF) L 289.6	121.9	122.95







CATEGORY	A	B	C	D
LNAV MDA	680/24	440 (500-½)	680/40 440 (500-¾)	680/50 440 (500-1)
CIRCLING	820-1	559 (600-1)	860-1¾ 599 (600-1¾)	1320-3 1059 (1100-3)

HIRL Rwy 12-30

SW-3, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6304
316°	TDZE	261
	Apt Elev	261

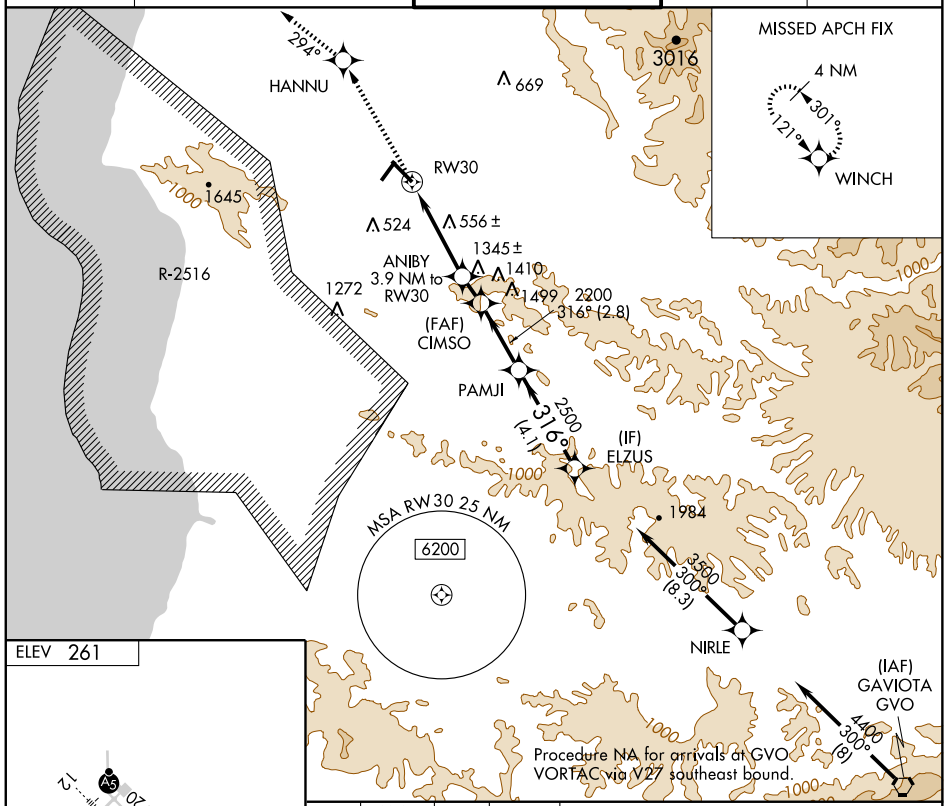
RNAV (GPS) RWY 30

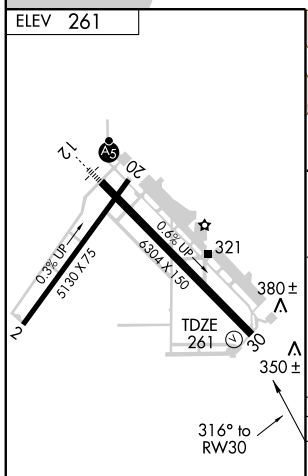
SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)

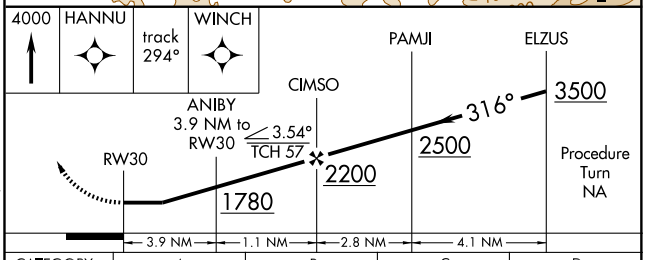
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Vandenburg altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 4000 direct HANNU and via track 294° to WINCH and hold.

ATIS	SANTA BARBARA APP CON ★	SANTA MARIA TOWER ★	GND CON	UNICOM
121.15	124.15 327.8	118.3 (CTAF) L 289.6	121.9	122.95







CATEGORY	A	B	C	D
LNAV MDA	1600-1¼ (1400-1¼) 1339	1600-1½ (1400-1½) 1339	1600-3 (1400-3) 1339	NA
CIRCLING	1600-1¼ (1400-1¼) 1339	1600-1½ (1400-1½) 1339	1600-3 (1400-3) 1339	NA

HIRL Rwy 12-30

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR GLJ	APP CRS	Rwy Idg	6304
111.0	117°	TDZE	240
		Apt Elev	261

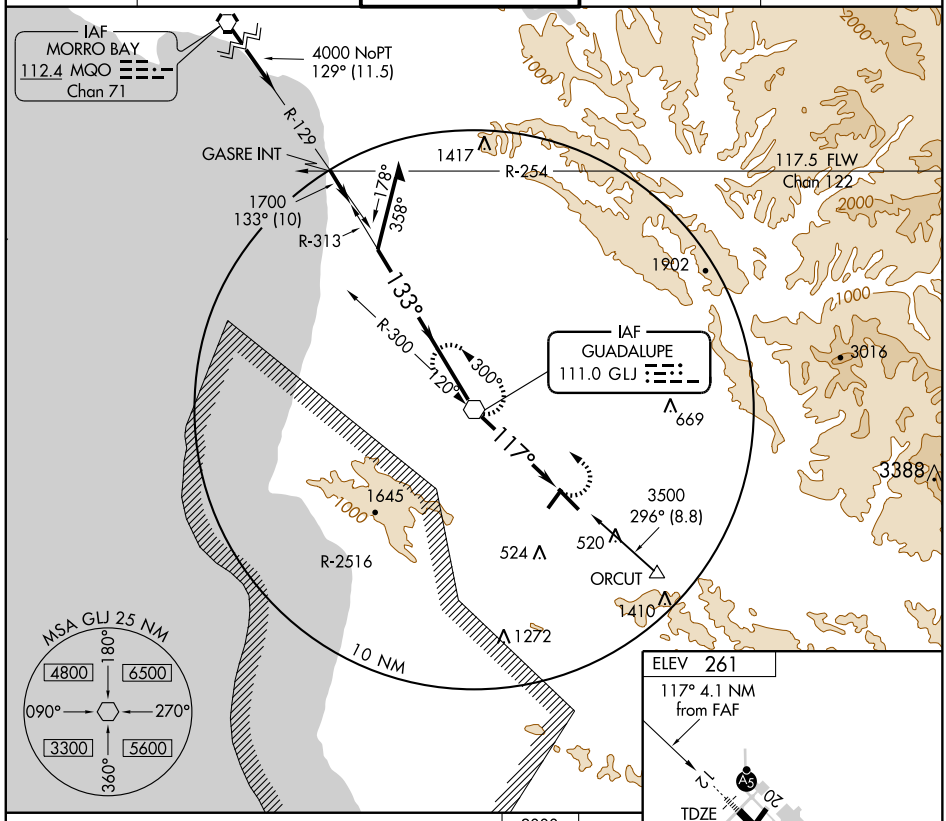
VOR RWY 12

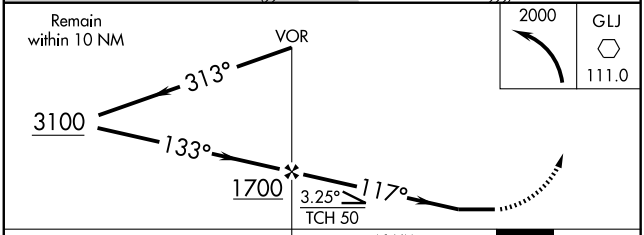
SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)

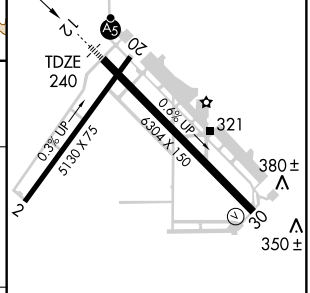
MALSR

MISSED APPROACH: Climbing left turn to 2000 direct GLJ VOR and hold.

ATIS	SANTA BARBARA APP CON★	SANTA MARIA TOWER★	GND CON	UNICOM
121.15	124.15 327.8	118.3 (CTAF) L 289.6	121.9	122.95







CATEGORY	A	B	C	D
S-12	680/24	440 (500-½)	680/40	680/50
			440 (500-¾)	440 (500-1)
CIRCLING	820-1	559 (600-1)	860-1¾	1320-3
			599 (600-1¾)	1059 (1100-3)

HIRL Rwy 12-30

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

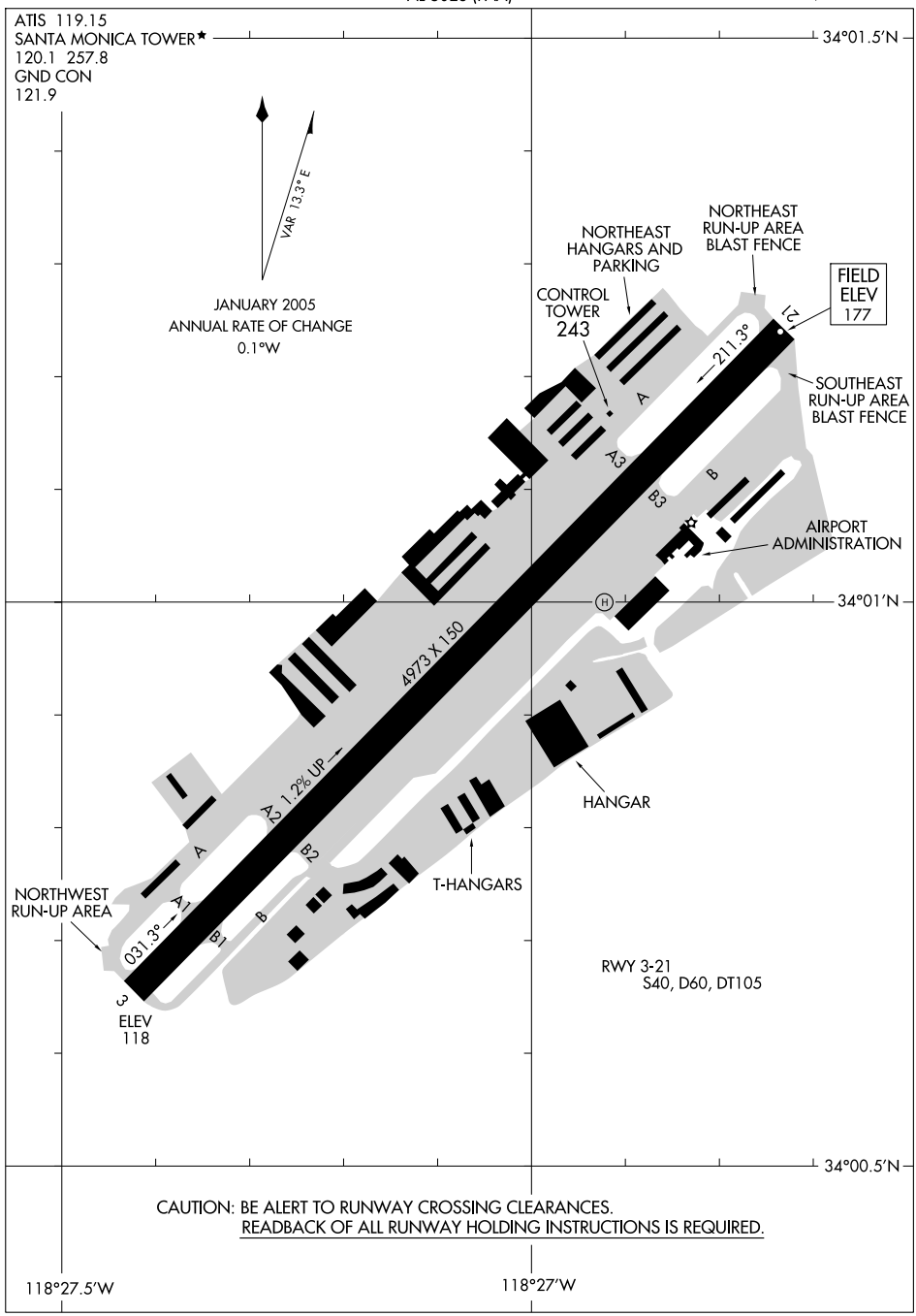
SW-3, 22 OCT 2009 to 19 NOV 2009

06327

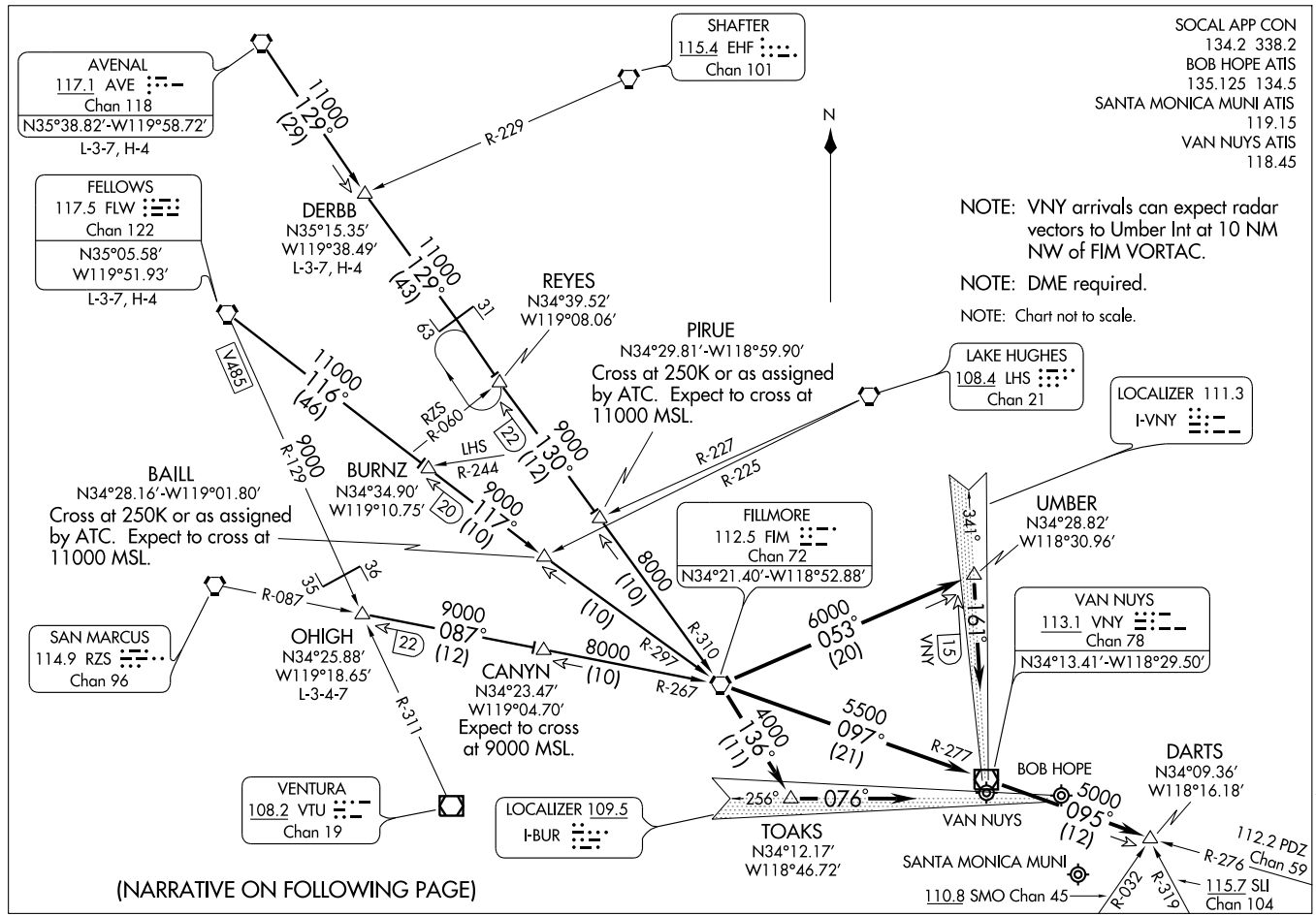
AIRPORT DIAGRAM

AL-5023 (FAA)

SANTA MONICA MUNI (SMO)
SANTA MONICA, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009


(FIM.FERN5) 08269
FERNANDO FIVE ARRIVAL
ST-67 (FAA)
BURBANK, CALIFORNIA
SOCAL APP CON
134.2 338.2
BOB HOPE ATIS
135.125 134.5
SANTA MONICA MUNI ATIS
119.15
VAN NUYS ATIS
118.45
NOTE: VNY arrivals can expect radar vectors to Umber Int at 10 NM NW of FIM VORTAC.
NOTE: DME required.
NOTE: Chart not to scale.
N
AVENAL
117.1 AVE
Chan 118
N35°38.82'-W119°58.72'
L-3-7, H-4
SHAFTER
115.4 EHF
Chan 101
FELLOWS
117.5 FLW
Chan 122
N35°05.58'
W119°51.93'
L-3-7, H-4
DERBB
N35°15.35'
W119°38.49'
L-3-7, H-4
REYES
N34°39.52'
W119°08.06'
PIRUE
N34°29.81'-W118°59.90'
Cross at 250K or as assigned by ATC. Expect to cross at 11000 MSL.
LAKE HUGHES
108.4 LHS
Chan 21
LOCALIZER 111.3
I-VNY
BAILL
N34°28.16'-W119°01.80'
Cross at 250K or as assigned by ATC. Expect to cross at 11000 MSL.
BURNZ
N34°34.90'
W119°10.75'
FILLMORE
112.5 FIM
Chan 72
N34°21.40'-W118°52.88'
UMBER
N34°28.82'
W118°30.96'
VAN NUYS
113.1 VNY
Chan 78
N34°13.41'-W118°29.50'
SAN MARCUS
114.9 RZS
Chan 96
OHIGH
N34°25.88'
W119°18.65'
L-3-4-7
CANYN
N34°23.47'
W119°04.70'
Expect to cross at 9000 MSL.
VENTURA
108.2 VTU
Chan 19
LOCALIZER 109.5
I-BUR
TOAKS
N34°12.17'
W118°46.72'
BOB HOPE
VAN NUYS
DARTS
N34°09.36'
W118°16.18'
SANTA MONICA MUNI
110.8 SMO Chan 45
112.2 PDZ
Chan 59
115.7 SLI
Chan 104
11000 129° (29)
11000 129° (43)
11000 116° (46)
9000 130° (112)
9000 117° (110)
8000 (10)
9000 087° (12)
8000 (10)
6000 053° (20)
5500 097° (21)
4000 136° (111)
5000 095° (12)
R-229
R-227
R-225
R-129
R-244
R-087
R-297
R-310
R-267
R-311
R-277
R-276
R-032
R-319
V485
RZS R-080
LHS
341°
161°
256°
076°
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

AVENAL TRANSITION (AVE.FERN5): From over AVE VORTAC via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

DERBB TRANSITION (DERBB.FERN5): From over DERBB INT via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

FELLOWS TRANSITION (FLW.FERN5): From over FLW VORTAC via FLW R-116 and FIM R-297 to FIM VORTAC. Thence....

OHIGH TRANSITION (OHIGH.FERN5): From over OHIGH INT via FIM R-267 to FIM VORTAC. Thence....

....From over FIM VORTAC:

LANDING BOB HOPE: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect ILS RWY 8.

LANDING SANTA MONICA MUNI: Via FIM R-097 and VNY R-277 to VNY VOR/DME; then via VNY R-095 to DARTS INT. Expect VOR-A approach.

LANDING VAN NUYS RWY 16: Via FIM R-053 to UMBER INT, then via I-VNY localizer. Expect ILS RWY 16R.

LANDING VAN NUYS RWY 34: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect LDA-C; circle to land RWY 34L.

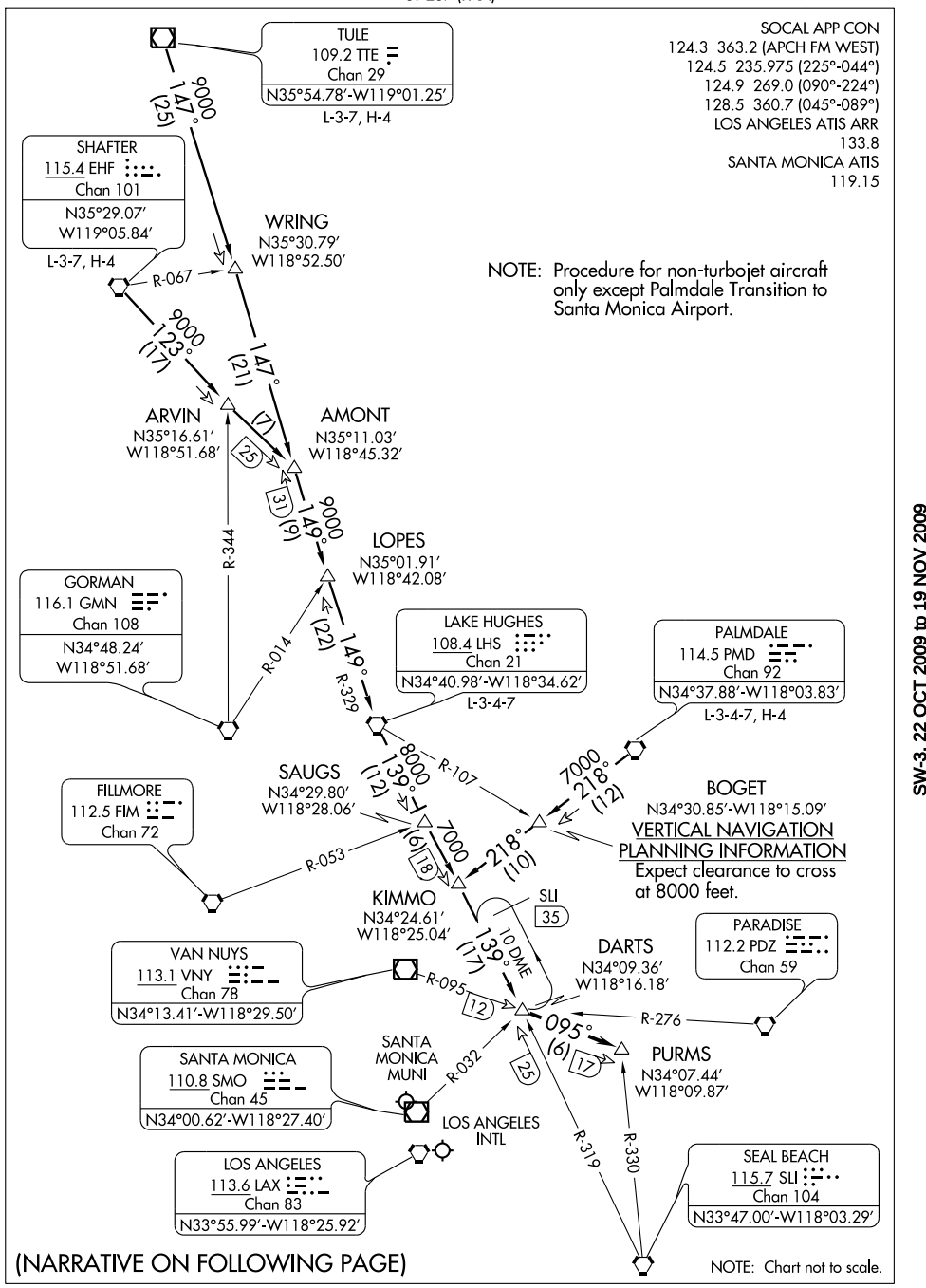
SW-3, 22 OCT 2009 to 19 NOV 2009

(DARTS.KIMMO2) 09239

KIMMO TWO ARRIVAL

ST-237 (FAA)

LOS ANGELES, CALIFORNIA



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-3, 22 OCT 2009 to 19 NOV 2009

KIMMO TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

LAKE HUGHES TRANSITION (LHS.KIMMO2): From over LHS VORTAC via LHS R-139 to DARTS INT. Thence....
PALMDALE TRANSITION (PMD.KIMMO2): From over PMD VORTAC via PMD R-218 to KIMMO INT, then via LHS R-139 to DARTS INT. Thence....
SHAFTER TRANSITION (EHF.KIMMO2): From over EHF VORTAC via EHF R-123 and LHS R-329 to LHS VORTAC, then via LHS R-139 to DARTS INT. Thence....
TULE TRANSITION (TTE.KIMMO2): From over TTE VOR/DME via TTE R-147 and LHS R-329 to LHS VORTAC, then via LHS R-139 to DARTS INT. Thence....

....LANDING LOS ANGELES INTL: From over DARTS INT via VNY R-095 to PURMS INT. Expect radar vectors to final approach course.
....LANDING SANTA MONICA MUNI: From over DARTS INT expect radar vectors to final approach course.

SW-3, 22 OCT 2009 to 19 NOV 2009

PEER ONE DEPARTURE (RNAV)

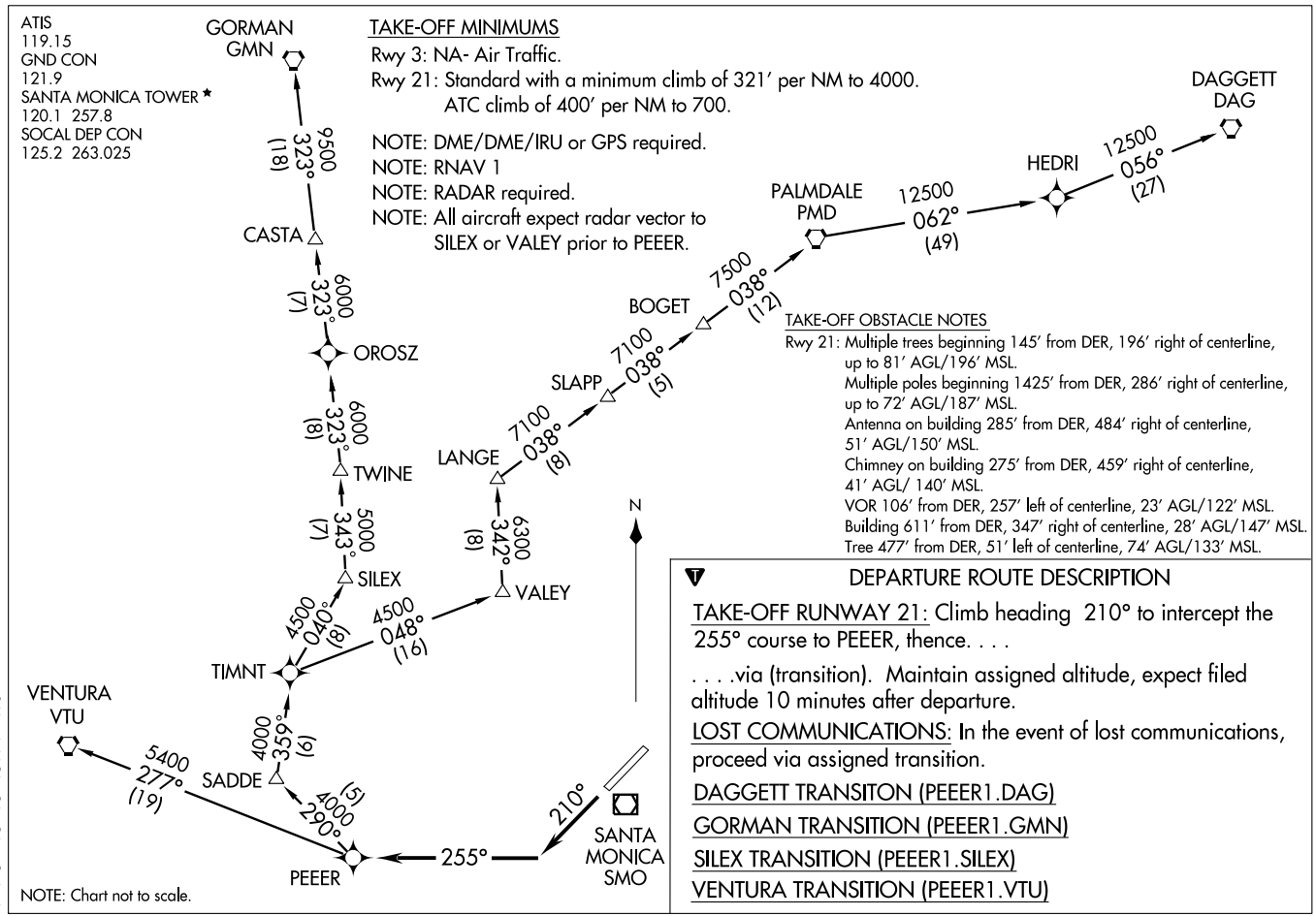
ATIS
119.15
GND CON
121.9
SANTA MONICA TOWER ★
120.1 257.8
SOCAL DEP CON
125.2 263.025

TAKE-OFF MINIMUMS

Rwy 3: NA- Air Traffic.

Rwy 21: Standard with a minimum climb of 321′ per NM to 4000.
ATC climb of 400′ per NM to 700.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1
NOTE: RADAR required.
NOTE: All aircraft expect radar vector to SILEX or VALEY prior to PEEER.



NOTE: Chart not to scale.

TAKE-OFF OBSTACLE NOTES

Rwy 21: Multiple trees beginning 145′ from DER, 196′ right of centerline, up to 81′ AGL/196′ MSL.
Multiple poles beginning 1425′ from DER, 286′ right of centerline, up to 72′ AGL/187′ MSL.
Antenna on building 285′ from DER, 484′ right of centerline, 51′ AGL/150′ MSL.
Chimney on building 275′ from DER, 459′ right of centerline, 41′ AGL/ 140′ MSL.
VOR 106′ from DER, 257′ left of centerline, 23′ AGL/122′ MSL.
Building 611′ from DER, 347′ right of centerline, 28′ AGL/147′ MSL.
Tree 477′ from DER, 51′ left of centerline, 74′ AGL/133′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 21: Climb heading 210° to intercept the 255° course to PEEER, thence. . . .

. . . .via (transition). Maintain assigned altitude, expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: In the event of lost communications, proceed via assigned transition.

DAGGETT TRANSITON (PEEER1.DAG)

GORMAN TRANSITION (PEEER1.GMN)

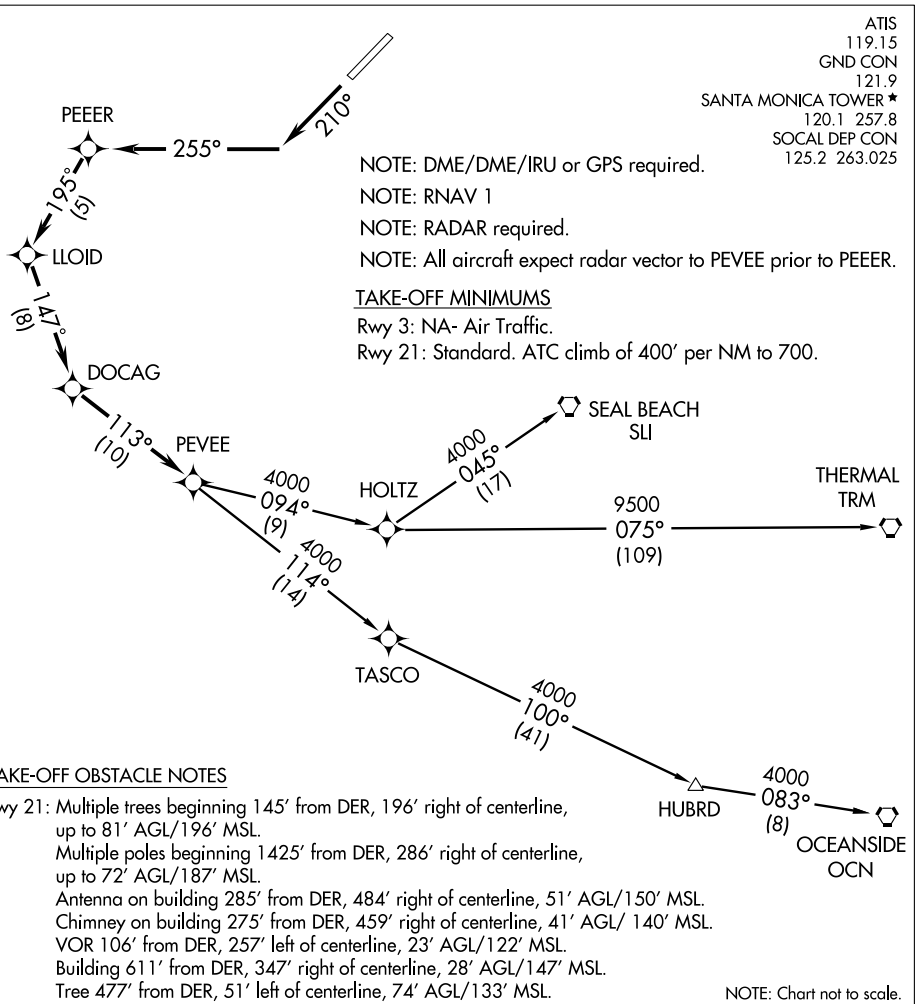
SILEX TRANSITION (PEEER1.SILEX)

VENTURA TRANSITION (PEEER1.VTU)

PEVEE ONE DEPARTURE (RNAV)

SL-5023 (FAA)

SANTA MONICA MUNI (SMO)
SANTA MONICA, CALIFORNIA



TAKE-OFF OBSTACLE NOTES

Rwy 21: Multiple trees beginning 145′ from DER, 196′ right of centerline, up to 81′ AGL/196′ MSL.
Multiple poles beginning 1425′ from DER, 286′ right of centerline, up to 72′ AGL/187′ MSL.
Antenna on building 285′ from DER, 484′ right of centerline, 51′ AGL/150′ MSL.
Chimney on building 275′ from DER, 459′ right of centerline, 41′ AGL/ 140′ MSL.
VOR 106′ from DER, 257′ left of centerline, 23′ AGL/122′ MSL.
Building 611′ from DER, 347′ right of centerline, 28′ AGL/147′ MSL.
Tree 477′ from DER, 51′ left of centerline, 74′ AGL/133′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 21: Climb heading 210° to intercept the 255° course to PEEER, then via depicted route to PEVEE, thence. . . .

. . . .via (transition). Maintain assigned altitude, expect altitude 10 minutes after departure.

LOST COMMUNICATIONS: In the event of lost communications, proceed via assigned transition.

OCEANSIDE TRANSITION (PEVEE1.OCN)

SEAL BEACH TRANSITION (PEVEE1.SLI)

THERMAL TRANSITION (PEVEE1.TRM)

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME SMO	APP CRS	Rwy Idg	N/A
110.8	212°	TDZE	N/A
Chan 45		Apt Elev	177

VOR or GPS-A

SANTA MONICA MUNI (SMO)

Circling not authorized Northwest of Rwy 3-21.

MISSED APPROACH: Climb to 4300 via SMO R-250 and FIM R-148 to SADDE Int and hold, continue climb-in-hold to 4300.

ATIS	SOCAL APP CON	SANTA MONICA TOWER*	GND CON	UNICOM
119.15	128.5 235.975	120.1 (CTAF) L 257.8	121.9	122.95

VAN NUYS 113.1 VNY Chan 78

DARTS SMO 12.8

CULVE SMO 2.4 RADAR

BEVEY INT SMO 6.7 RADAR

SADDE FIM 19.9

SANTA MONICA 110.8 SMO Chan 45

LOS ANGELES 113.6 LAX Chan 83

108.2 VTU Chan 18

115.7 SLI Chan 104

15 NM

MSA SMO 25 NM: 7800 (080°–250°) 4100

ELEV 177

211±

243

225

212° to VOR/DME

4973 X 150

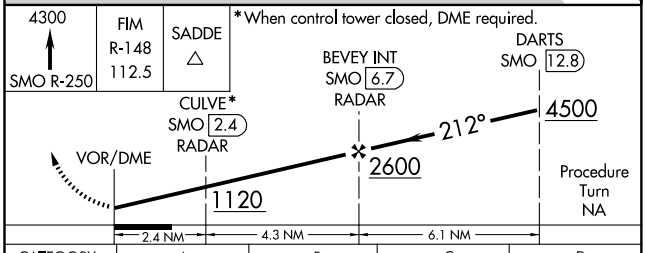
1.2% UP

175

MIRL Rwy 3-21 L

REIL Rwys 3 and 21 L

*When control tower closed, DME required.

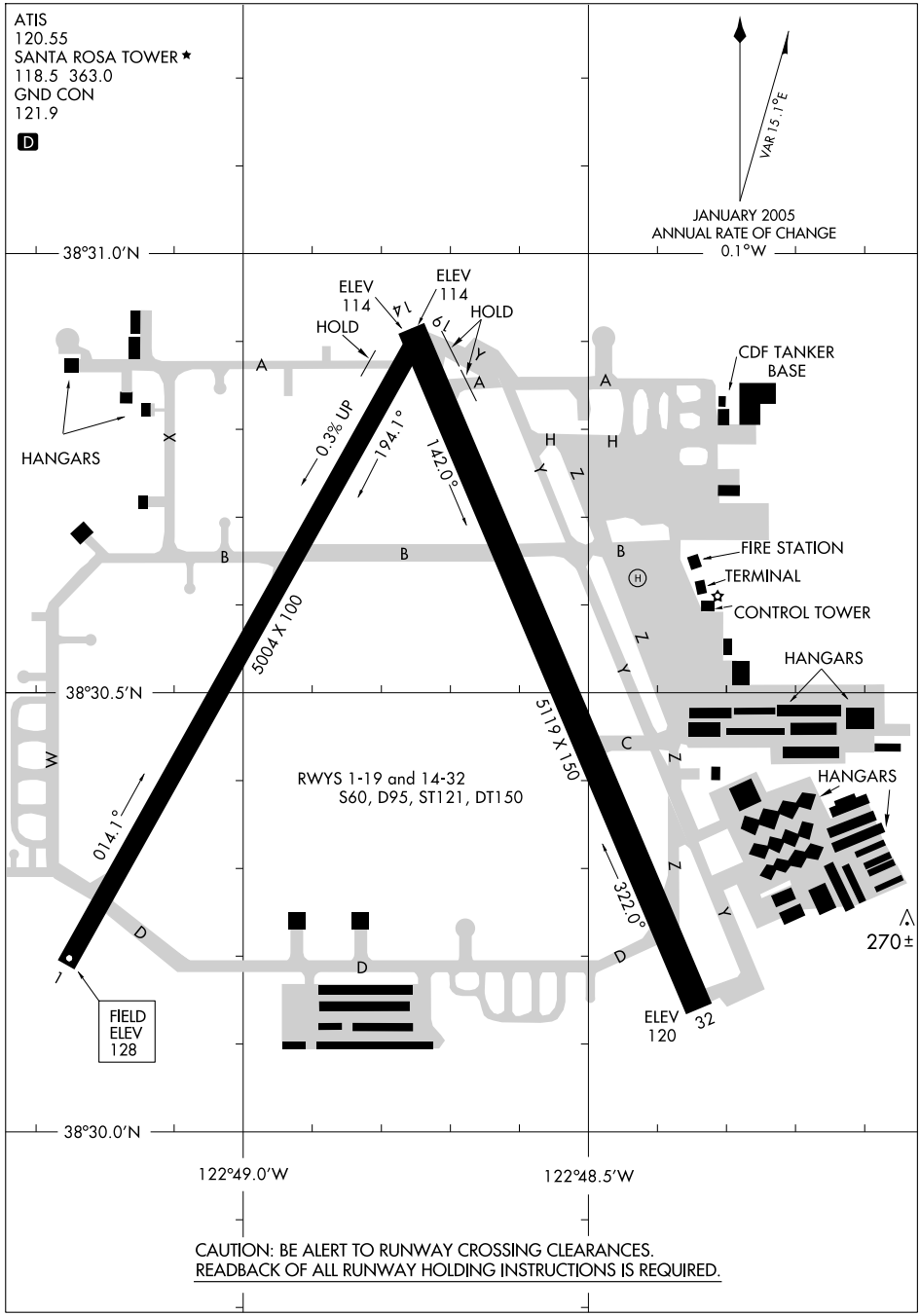


CATEGORY	A	B	C	D
CIRCLING	1120-1¼ 943 (1000-1¼)		1120-2¾ 943 (1000-2¾)	1120-3 943 (1000-3)
CULVE DME/RADAR MINIMA*				
CIRCLING	680-1 503 (600-1)		680-1½ 503 (600-1½)	740-2 563 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)
AL-696 (FAA)
SANTA ROSA, CALIFORNIA

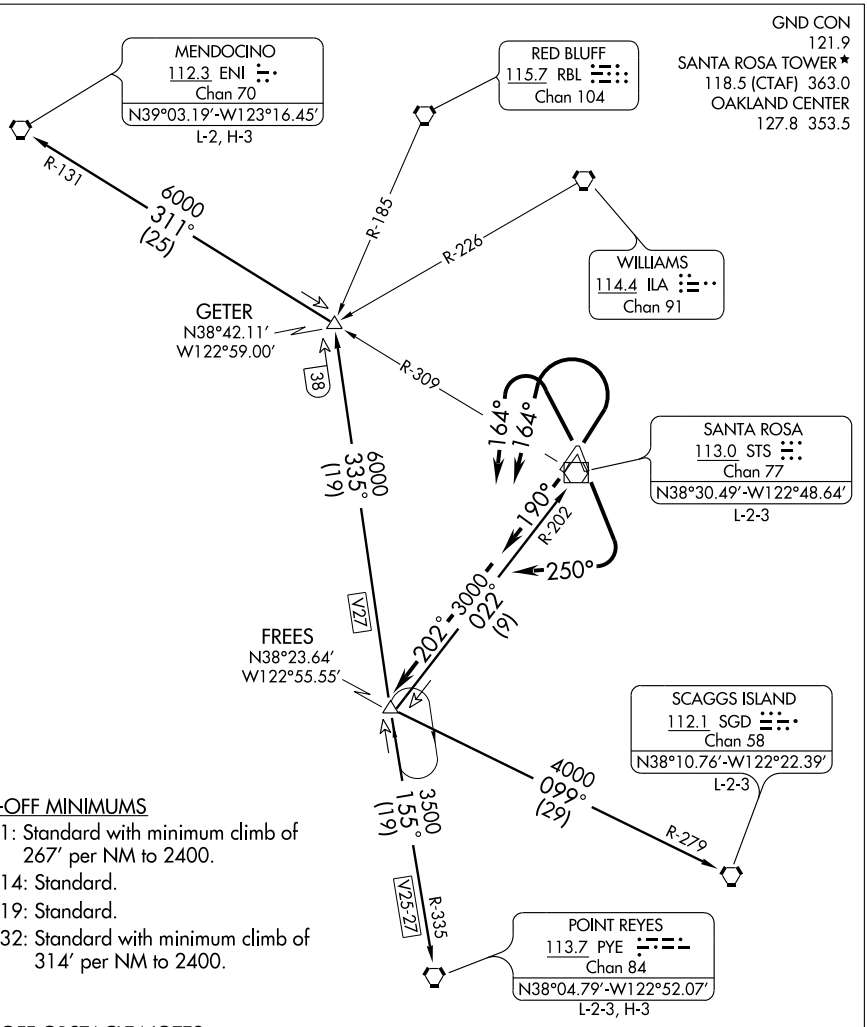


CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-2, 22 OCT 2009 to 19 NOV 2009

FREES SIX DEPARTURE

SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)
SL-696 (FAA)
SANTA ROSA, CALIFORNIA



TAKE-OFF MINIMUMS

Rwy 1: Standard with minimum climb of 267′ per NM to 2400.
Rwy 14: Standard.
Rwy 19: Standard.
Rwy 32: Standard with minimum climb of 314′ per NM to 2400.

TAKE-OFF OBSTACLE NOTES

Rwy 1: Tree 739′ from DER, 525′ left of centerline, 40′ AGL/141′ MSL.
Rwy 14: Multiple trees beginning 321′ from DER, 421′ left of centerline, up to 73′ AGL/172′ MSL.
Tree 2113′ from DER, 721′ right of centerline, 77′ AGL/176′ MSL.
Rwy 19: Posts 39′ from DER, 259′ right of centerline, 7′ AGL/126′ MSL.
Multiple trees beginning 1482′ from DER, 461′ right of centerline, up to 100′ AGL/253′ MSL.
Multiple trees beginning 1666′ from DER, 58′ left of centerline, up to 55′ AGL/257′ MSL.
Rwy 32: Windsock 39′ from DER, 341′ left of centerline, 25′ AGL/133′ MSL.
Multiple trees beginning 2419′ from DER, 167′ left of centerline, up to 50′ AGL/216′ MSL.
Multiple trees beginning 810′ from DER, 87′ right of centerline, up to 50′ AGL/205′ MSL.

NOTE: Chart not to scale.

(Continued on next page)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1 and 32: Turn left heading 164°. Thence....

TAKE-OFF RUNWAY 14: Turn right heading 250°. Thence....

TAKE-OFF RUNWAY 19: Climb on heading 190°. Thence....

....Intercept and climb via STS R-202 to FREES INT, cross FREES INT at or above MEA for route of flight, or continue climb in FREES INT holding pattern to MEA for route of flight then via (transition) or (assigned route).

MENDOCINO TRANSITION (FREES6.ENI): From over FREES INT via PYE R-335 and ENI R-131 to ENI VORTAC.

POINT REYES TRANSITION (FREES6.PYE): From over FREES INT via PYE R-335 to PYE VORTAC.

SANTA ROSA TRANSITION (FREES6.STS): From over FREES INT via STS R-202 to STS VOR/DME.

SCAGGS ISLAND TRANSITION (FREES6.SGD): From over FREES INT via SGD R-279 to SGD VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

LOC I-STS	APP CRS	Rwy Idg	5119
109.3	321°	TDZE	122
		Apt Elev	128

ILS or LOC RWY 32

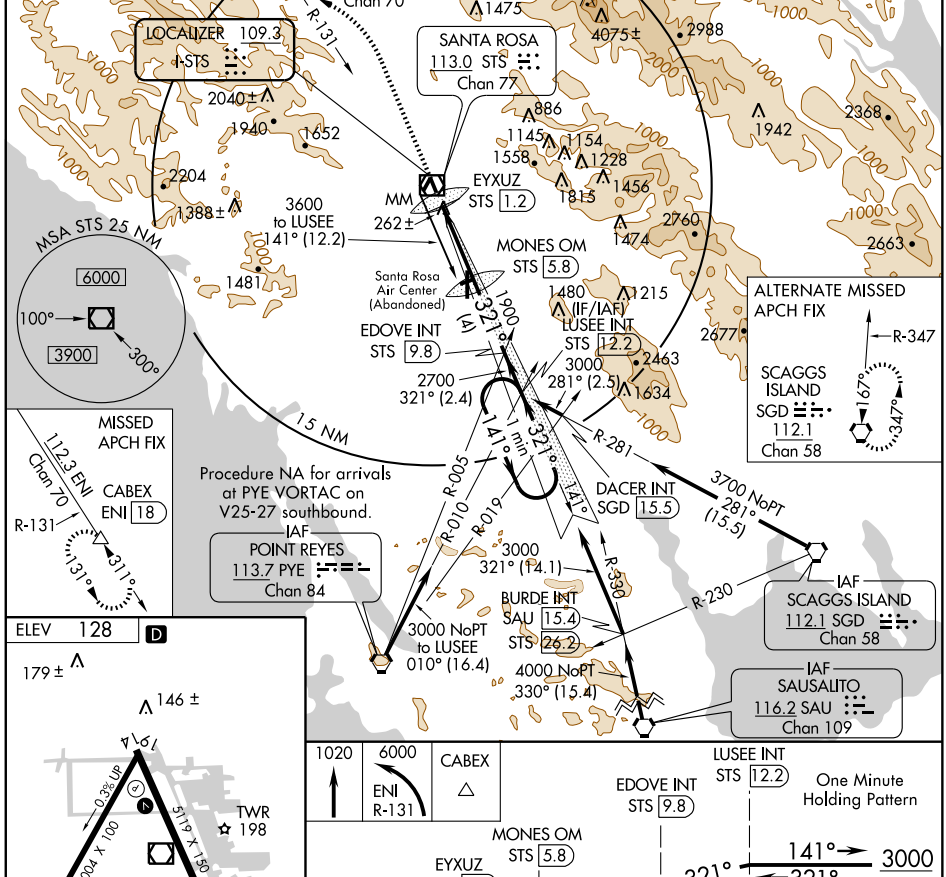
SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)

DME required.
*RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 1020 then climbing left turn to 6000 via ENI VORTAC R-131 to CABEX/ENI 18 DME and hold, continue climb-in-hold to 6000.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER*	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95



FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
S-ILS 32	*322/24	200 (200-½)		
S-LOC 32	540/24	418 (500-½)	540/40	418 (500-¾)
CIRCLING	620-1 492 (500-1)	680-1 552 (600-1)	740-1¾ 612 (700-1¾)	740-2 612 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

SANTA ROSA, CALIFORNIA

AL-696 (FAA)

APP CRS	Rwy Idg	5119
141°	TDZE	121
	Apt Elev	128

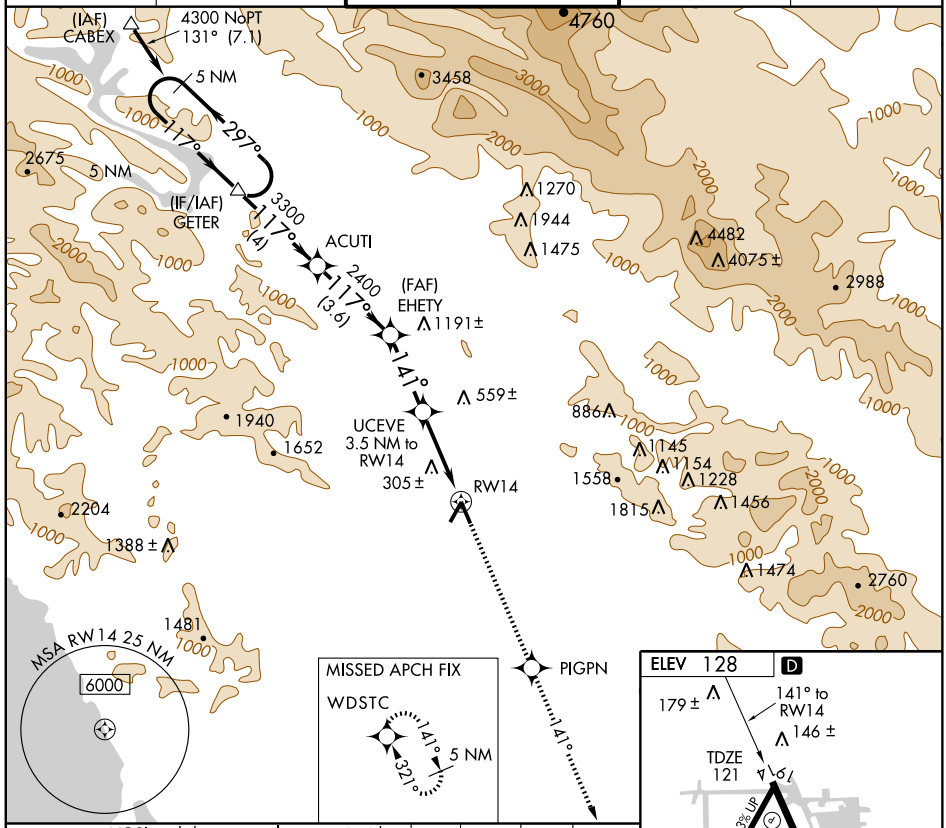
RNAV (GPS) RWY 14

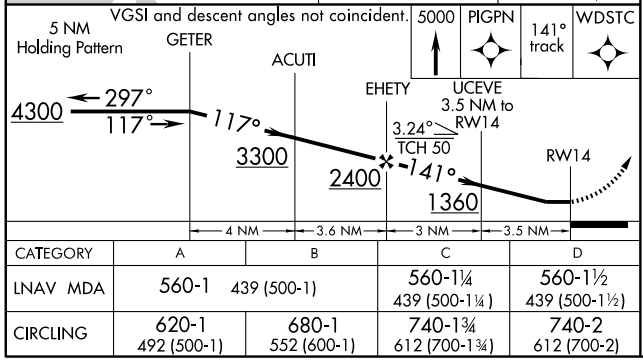
SANTA ROSA/CHARLES M. SCHULZ-SONOMA COUNTY (STS)

DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.

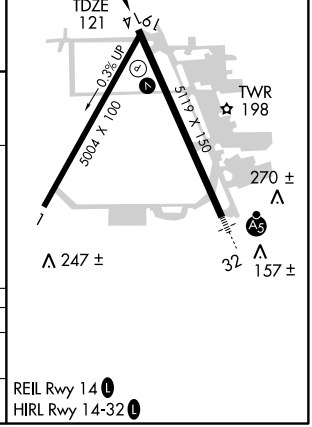
MISSED APPROACH: Climb to 5000 direct PIGPN and via 141° track to WDSTC and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER★	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95





CATEGORY	A	B	C	D
LNAV MDA	560-1 439 (500-1)		560-1¼ 439 (500-1¼)	560-1½ 439 (500-1½)
CIRCLING	620-1 492 (500-1)	680-1 552 (600-1)	740-1¾ 612 (700-1¾)	740-2 612 (700-2)



REIL Rwy 14 L
HIRL Rwy 14-32 L

SW-2, 22 OCT 2009 to 19 NOV 2009

SANTA ROSA, CALIFORNIA

AL-696 (FAA)

WAAS CH 72611 W32A	APP CRS 321°	Rwy Idg 5119 TDZE 122 Apt Elev 128

RNAV (GPS) RWY 32

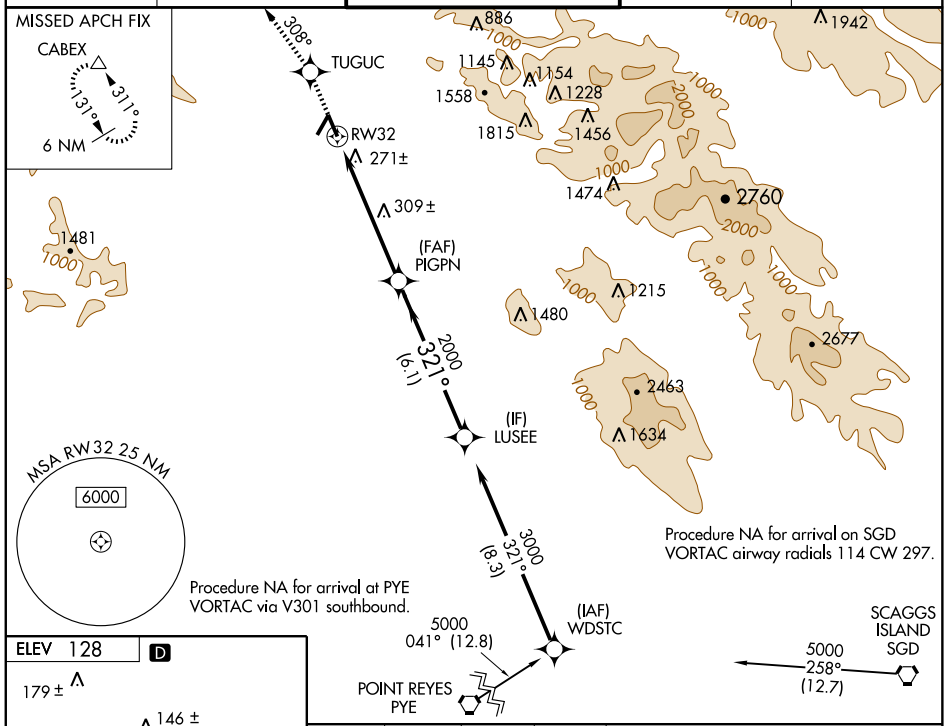
SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)

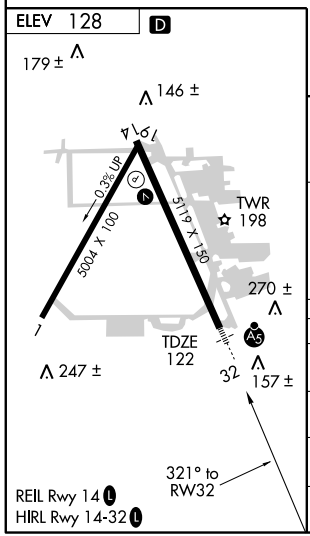
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.

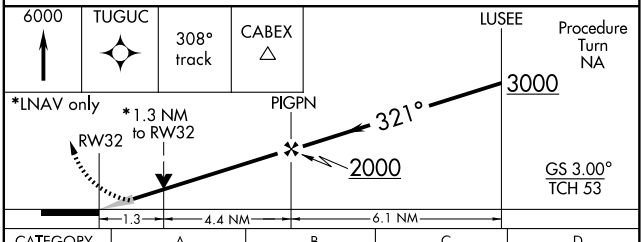
MALSR

MISSED APPROACH: Climb to 6000 direct TUGUC and via 308° track to CABEX and hold, continue climb-in-hold to 6000.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER★	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95





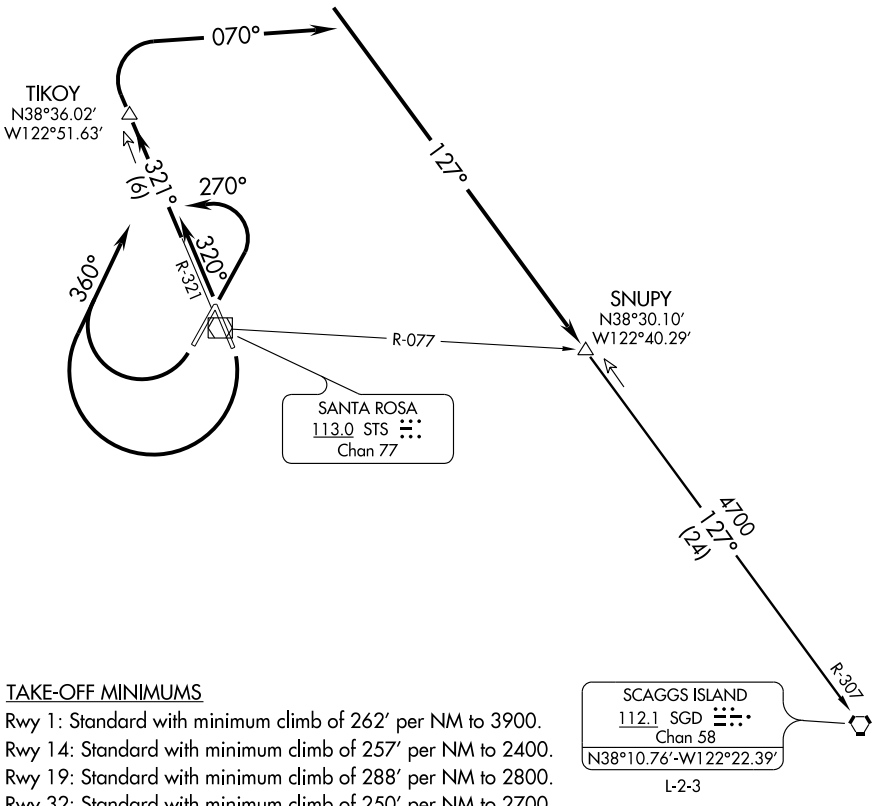


CATEGORY	A	B	C	D
LPV DA	455/40 333 (400-¾)			
LNAV/VNAV DA	556/50 434 (500-1)			
LNAV MDA	600/24 478 (500-½)		600/40 478 (500-¾)	600/50 478 (500-1)
CIRCLING	620-1 492 (500-1)	680-1 552 (600-1)	740-1¾ 612 (700-1¾)	740-2 612 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

SANTA ROSA SIX DEPARTURE

GND CON
121.9
SANTA ROSA TOWER ★
118.5 (CTAF) 363.0
OAKLAND CENTER
127.8 353.5



L-2-3

TAKE-OFF MINIMUMS

Rwy 1: Standard with minimum climb of 262′ per NM to 3900.
Rwy 14: Standard with minimum climb of 257′ per NM to 2400.
Rwy 19: Standard with minimum climb of 288′ per NM to 2800.
Rwy 32: Standard with minimum climb of 250′ per NM to 2700.

TAKE-OFF OBSTACLE NOTES

Rwy 1: Tree 739′ from DER, 525′ left of centerline, 40′ AGL/141′ MSL.
Rwy 14: Multiple trees beginning 321′ from DER, 421′ left of centerline, up to 73′ AGL/172′ MSL.
Tree 2113′ from DER, 721′ right of centerline, 77′ AGL/176′ MSL.
Rwy 19: Posts 39′ from DER, 259′ right of centerline, 7′ AGL/126′ MSL.
Multiple trees beginning 1482′ from DER, 461′ right of centerline, up to 100′ AGL/253′ MSL.
Multiple trees beginning 1666′ from DER, 58′ left of centerline, up to 55′ AGL/257′ MSL.
Rwy 32: Windsock 39′ from DER, 341′ left of centerline, 25′ AGL/133′ MSL.
Multiple trees beginning 2419′ from DER, 167′ left of centerline, up to 50′ AGL/216′ MSL.
Multiple trees beginning 810′ from DER, 87′ right of centerline, up to 50′ AGL/205′ MSL.

NOTE: DME required.

NOTE: Chart not to scale.

(Continued on next page)

SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1: Turn left heading 270°. Thence....

TAKE-OFF RUNWAYS 14 and 19: Turn right heading 360°. Thence....

TAKE-OFF RUNWAY 32: Climb via heading 320°. Thence....

....Intercept and climb via STS R-321 to TIKOY INT/STS 6 DME, turn right via heading 070° to intercept and proceed via SGD R-307 to SNUPY INT/SGD 24 DME, then via (transition) or (assigned route).

SCAGGS ISLAND TRANSITION (STS6.SGD): From over SNUPY INT/SGD 24 DME via SGD R-307 to SGD VORTAC.

SW-2, 22 OCT 2009 to 19 NOV 2009

SANTA ROSA, CALIFORNIA

AL-696 (FAA)

VOR/DME STS	APP CRS	Rwy Idg	5119
113.0	146°	TDZE	121
Chan 77		Apt Elev	128

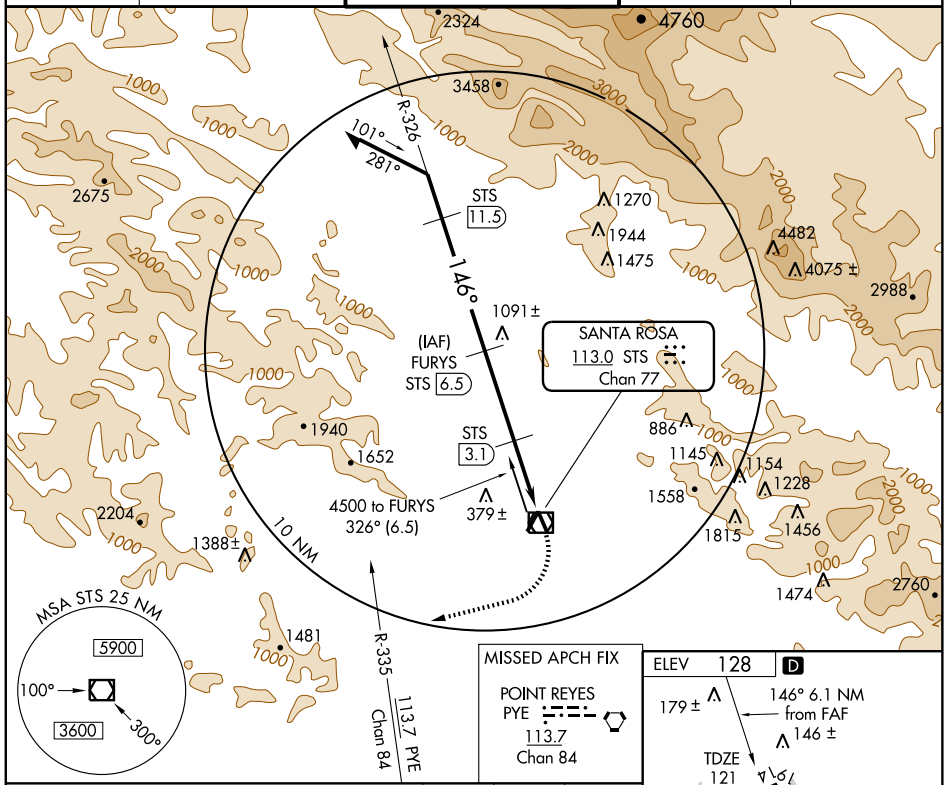
VOR/DME RWY 14

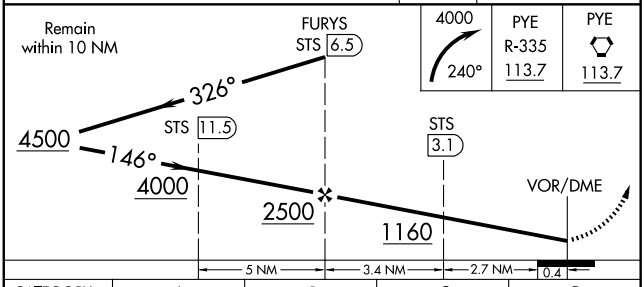
SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)

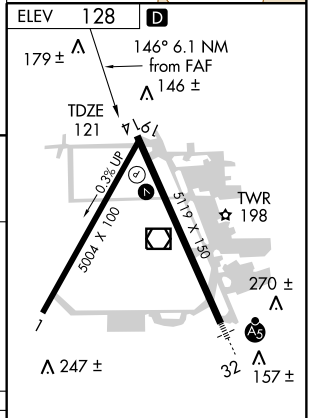
When local altimeter not received, procedure not authorized.

MISSED APPROACH: Climbing right turn to 4000 via heading 240° and PYE R-335 to PYE VORTAC.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER ★	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95







CATEGORY	A	B	C	D
S-14	640-1 519 (600-1)		640-1½ 519 (600-1½)	640-1¾ 519 (600-1¾)
CIRCLING	640-1 512 (600-1)	680-1 552 (600-1)	740-1¾ 612 (700-1¾)	740-2 612 (700-2)

REIL Rwy 14 L

HIRL Rwy 14-32 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME STS	APP CRS	Rwy Idg	5119
113.0	321°	TDZE	119
Chan 77		Apt Elev	125

VOR RWY 32

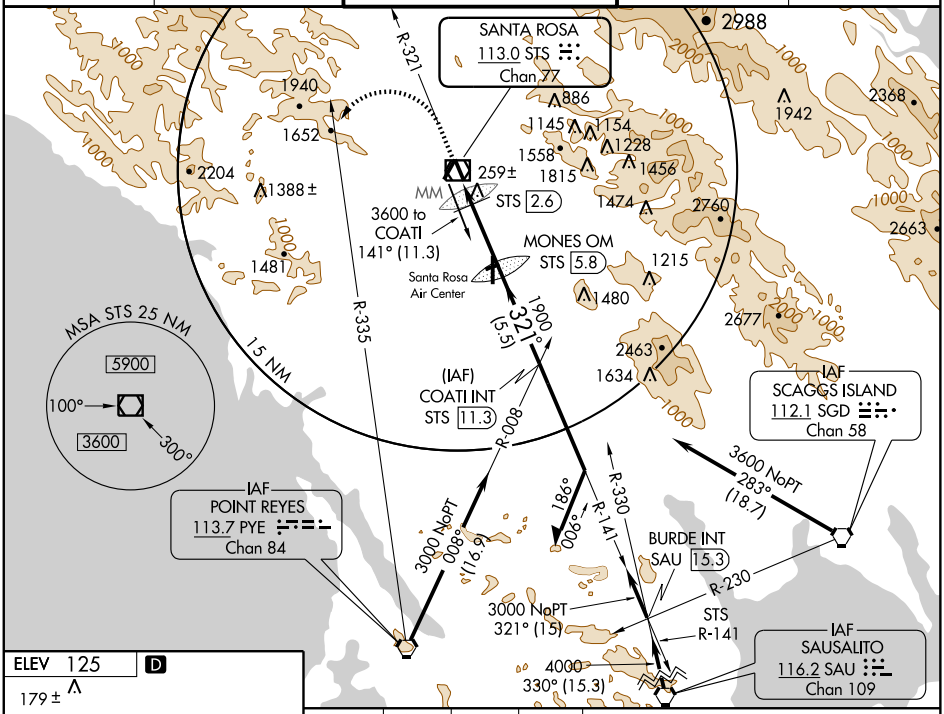
SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)

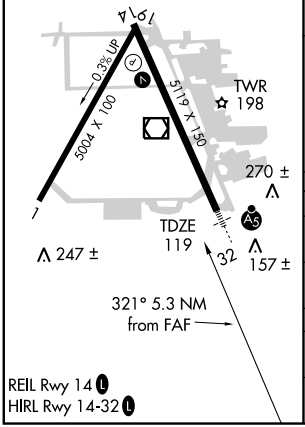
T A NA — S-32 Cat D DME minimums visibility increased to RVR 6000 for inoperative MALSR. When local altimeter not received, procedure NA.

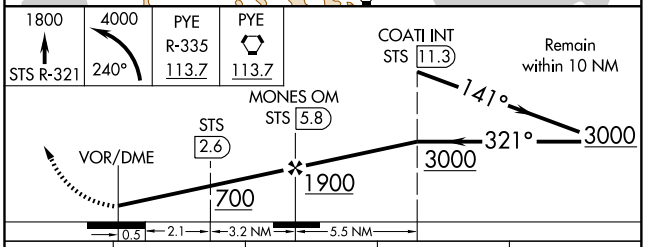
MALSR

MISSED APPROACH: Climb to 1800 via STS R-321 then climbing left turn to 4000 via heading 240° and PYE R-335 to PYE VORTAC.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER★	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95







CATEGORY	A	B	C	D
S-32	700/24 581 (600-½)		700/50 581 (600-1)	700/60 581 (600-1¼)
CIRCLING	700-1 575 (600-1)		740-1¾ 615 (700-1¾)	740-2 615 (700-2)
DME MINIMUMS				
S-32	520/24 401 (400-½)		520/40 401 (400-¾)	520/50 401 (400-1)
CIRCLING	580-1 455 (500-1)	680-1 555 (600-1)	740-1¾ 615 (700-1¾)	740-2 615 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

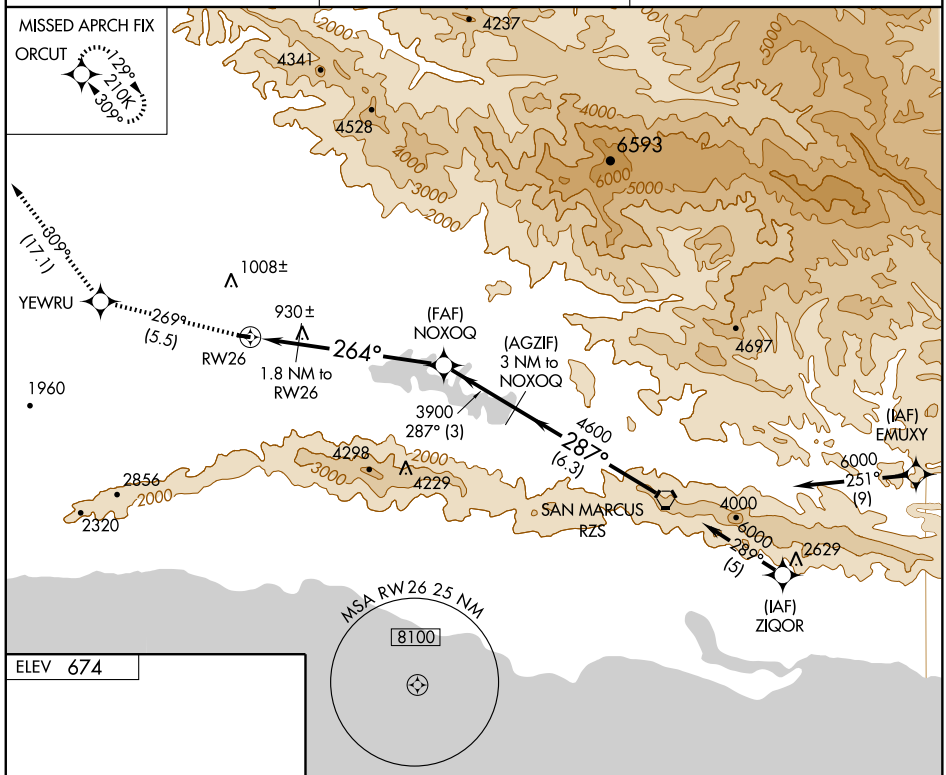
APP CRS	Rwy Idg	N/A
264°	TDZE	N/A
	Apt Elev	674

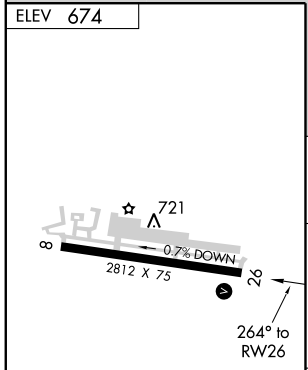
GPS-A
SANTA YNEZ (IZA)

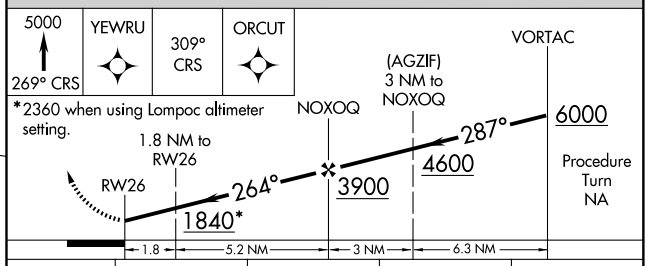
NA — Obtain local altimeter setting on CTAF, when not received, except for operators with approved weather reporting service, use Lompoc altimeter setting.

MISSED APPROACH: Climb to 5000 via 269° course to YEWRU WP, then via 309° course to ORCUT WP and hold.

AWOS-3	SANTA BARBARA APP CON★	UNICOM
118.075	124.15 327.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1120-1 446 (500-1)	1160-1 486 (500-1)	NA	
LOMPOC ALTIMETER SETTING MINIMUMS				
CIRCLING	1640-1¼ 966 (1000-1¼)	1680-1½ 1006 (1100-1½)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009

SANTA YNEZ, CALIFORNIA AL-5730 (FAA)

GPS RWY 8
SANTA YNEZ (IZA)

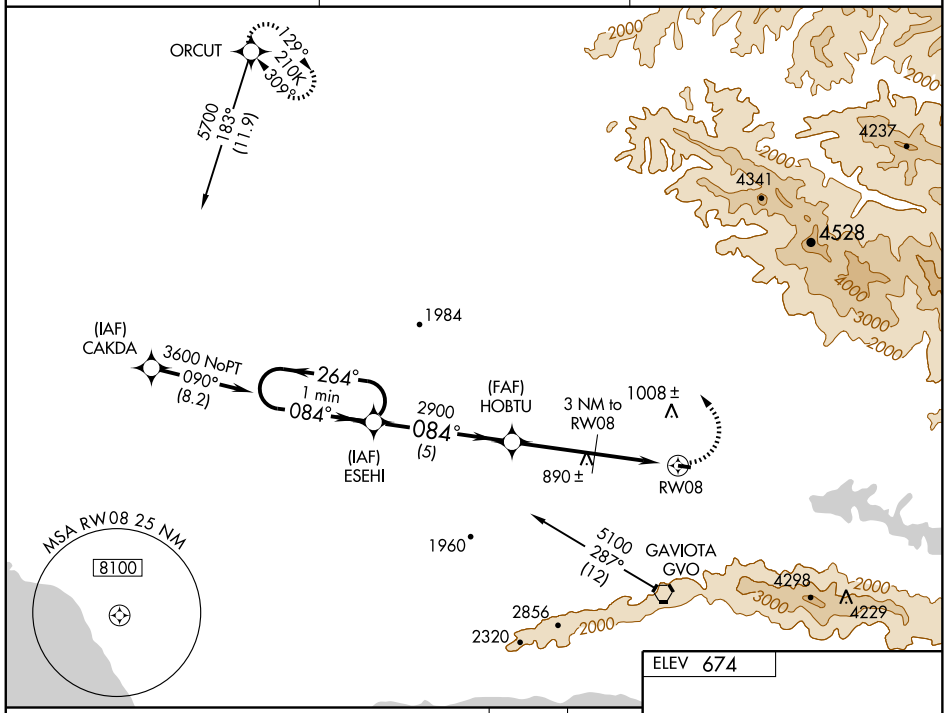
APP CRS	Rwy Idg	2804
084°	TDZE	671
	Apt Elev	674

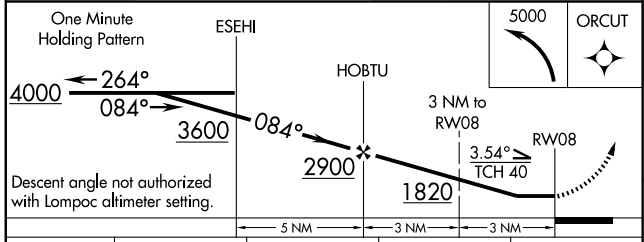
NA

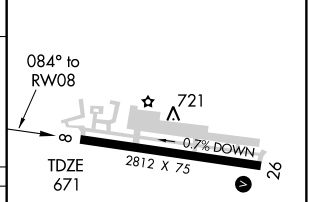
Obtain local altimeter setting on CTAF, when not received, except for operators with approved weather reporting service, use Lompoc altimeter setting.

MISSED APPROACH: Climbing left turn to 5000 direct ORCUT WP and hold.

AWOS-3	SANTA BARBARA APP CON ★	UNICOM
118.075	124.15 327.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-8	1060-1 389 (400-1)		NA	
CIRCLING	1120-1 446 (500-1)	1160-1 486 (500-1)	NA	
LOMPOC ALTIMETER SETTING MINIMUMS				
S-8	1600-1¼ 929 (1000-1¼)		NA	
CIRCLING	1640-1¼ 966 (1000-1¼)	1680-1½ 1006 (1100-1½)	NA	

MIRL Rwy 8-26 L

SW-3, 22 OCT 2009 to 19 NOV 2009

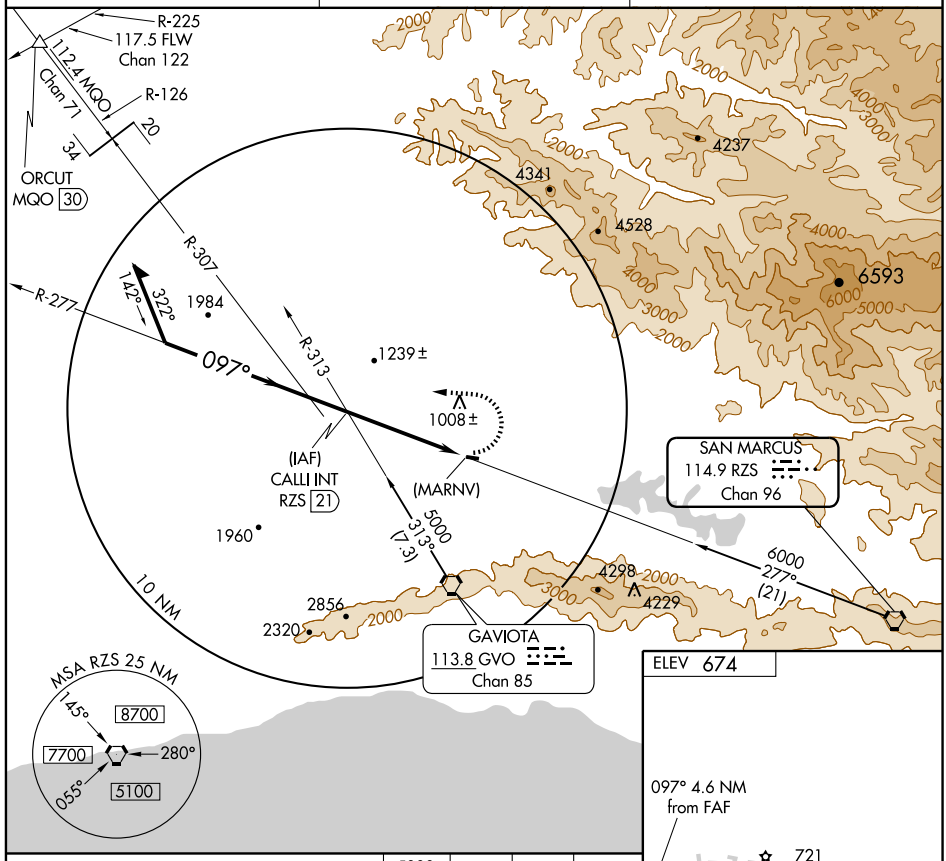
VORTAC RZS 114.9 Chan 96	APP CRS 097°	Rwy Idg N/A TDZE N/A Apt Elev 674

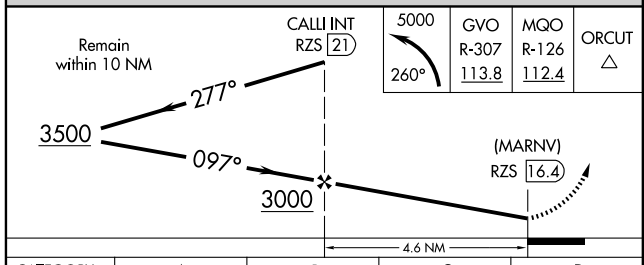
VOR or GPS-B
SANTA YNEZ (IZA)

Obtain local altimeter setting on CTAF, when not received, except for operators with approved weather reporting service, use Lompoc altimeter setting and increase all MDAs 540 feet.

MISSED APPROACH: Climbing left turn to 5000 via heading 260° and GVO R-307 and MQO R-126 to ORCUT Int.

AWOS-3	SANTA BARBARA APP CON★	UNICOM
118.075	124.15 327.8	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	1880-1¼ 1206 (1300-1¼)	1880-1½ 1206 (1300-1½)	NA	

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC EHF 115.4 Chan 101	APP CRS 269°	Rwy Idg 4501 TDZE 412 Apt Elev 422

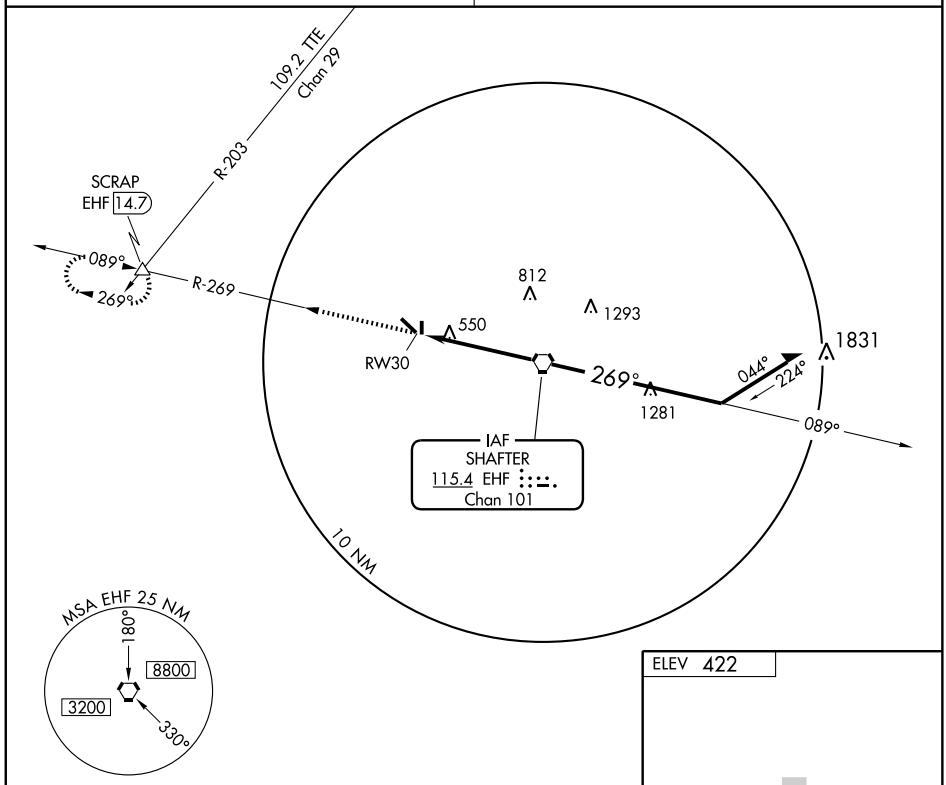
VOR or GPS RWY 30

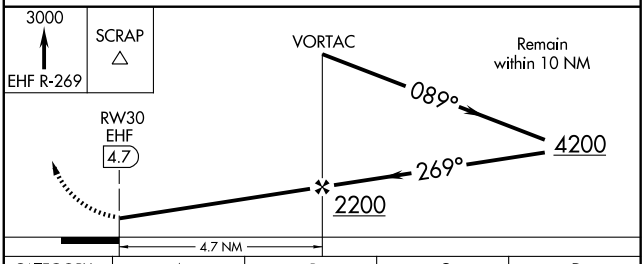
SHAFTER-MINTER FIELD (MIT)

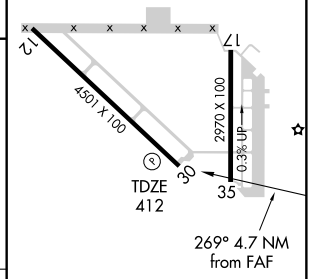
T NA — Use Bakersfield, CA altimeter setting.

MISSED APPROACH: Climb to 3000 via EHF R-269 to SCRAP INT/EHF 14.7 DME and hold.

BAKERSFIELD APP CON	CTAF
126.45 270.3	122.9 L







CATEGORY	A	B	C	D
S-30	860-1 448 (500-1)		860-1¼ 448 (500-1¼)	NA
CIRCLING	860-1 438 (500-1)	880-1 458 (500-1)	880-1½ 458 (500-1½)	NA

HIRL Rwy 12-30 L

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

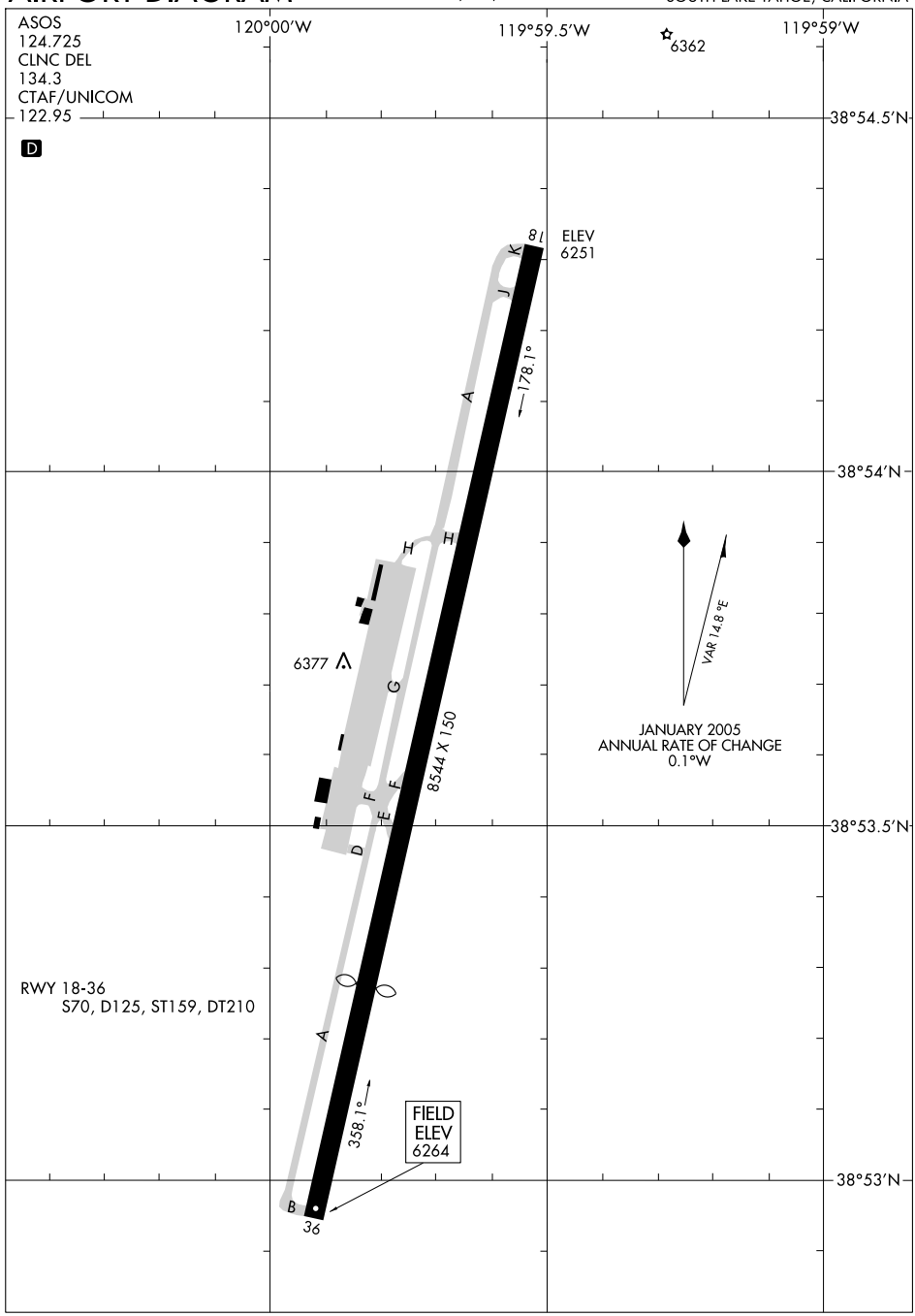
SW-3, 22 OCT 2009 to 19 NOV 2009

09239

AIRPORT DIAGRAM

AL-5416 (FAA)

SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)
SOUTH LAKE TAHOE, CALIFORNIA



SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7017
172°	TDZE	6254
	Apt Elev	6264

GPS RWY 18

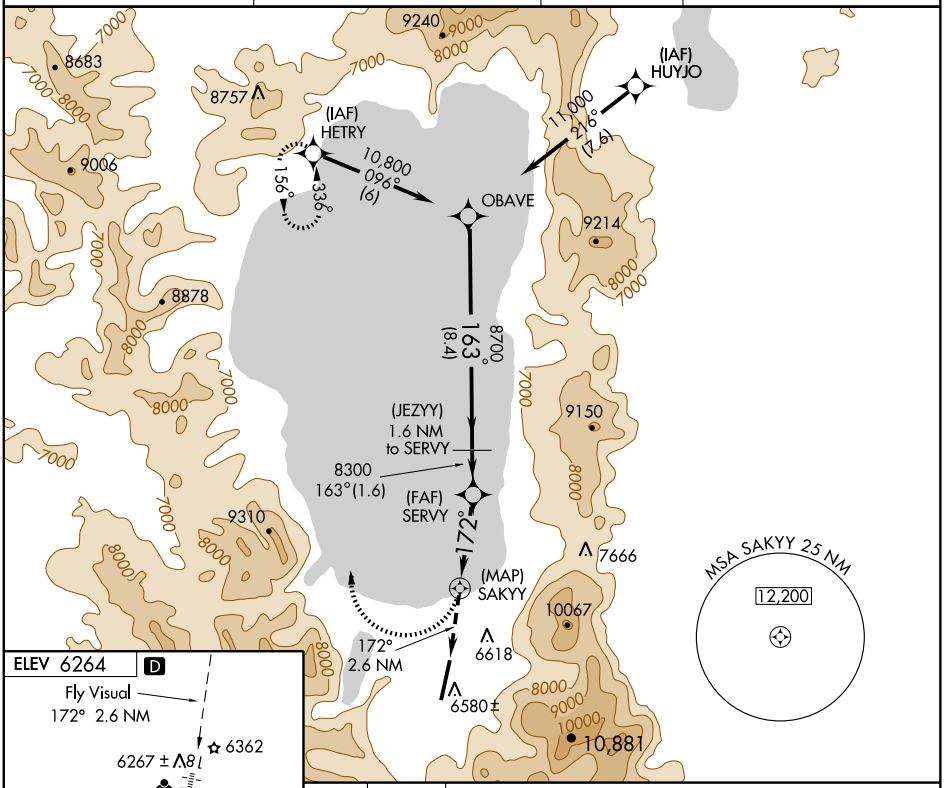
SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)

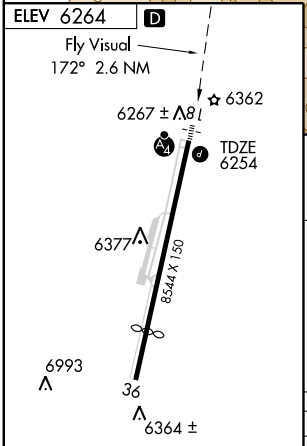
T
NA Circling not authorized at night.

MALSF

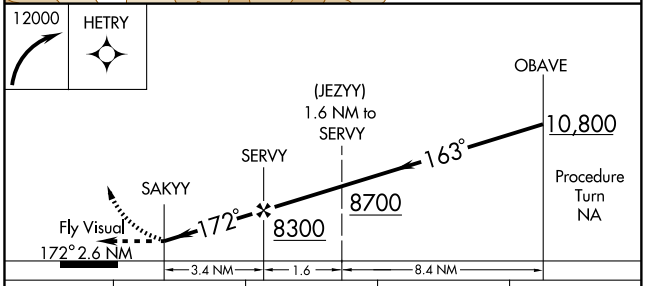
MISSED APPROACH: Climbing right turn to 12,000 direct HETRY WP and hold.

ASOS	OAKLAND CENTER	CLNC DEL	UNICOM
124.725	127.95 316.1	134.3	122.95 (CTAF) L





REIL Rwy 36
MIRL Rwy 18-36 L



CATEGORY	A	B	C	D
S-18	7160-3 906 (900-3)			8700-3 2446 (2500-3)
CIRCLING	7420-3 1156 (1200-3)	7520-3 1256 (1300-3)	7560-3 1296 (1300-3)	8700-3 2436 (2500-3)

SW-2, 22 OCT 2009 to 19 NOV 2009

SOUTH LAKE TAHOE, CALIFORNIA AL-5416 (FAA)

LOC/DME I-TVL	APP CRS	Rwy Idg	7017
108.9	171°	TDZE	6254
Chan 26		Apt Elev	6264

LDA/DME-1 RWY 18

SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)

T
NA — Circling not authorized at night.

MALSF

MISSED APPROACH: Climbing right turn to 11000 via heading 348° and SWR R-102 to SWR VOR/DME and hold.

ASOS	OAKLAND CENTER	CLNC DEL	UNICOM
124.725	127.95 316.1	134.3	122.95 (CTAF) L

IAF SQUAW VALLEY 113.2 SWR Chan 79

IAF MUSTANG 117.9 FMG Chan 126

MSA SWR 25 NM 11900

SWR 14

FMG 19

12000 201° (19)

12000 201° (2.3)

12000 060° (2.2)

12000 060° (14)

KINGS INT I-TVL 20.4

I-TVL 12.4

I-TVL 7.4

I-TVL 4.1

SHOLE I-TVL 9.7

R-060 R-201 R-218 038° 218° R-102

10-200 171° (18)

9500 171° (2.7)

172° 4.4 NM

10 NM

LOCALIZER 108.9 I-TVL Chan 26

9789 9240 8683 8757 9006 9214 8878 7933 9310 9150 7666 6618 10067 6580±

ELEV 6264 D

Fly Visual 172° 4.4 NM

6362 6267 ± 8l

TDZE 6254

6377 8544 X 150

6993 36 6364 ±

REIL Rwy 36

MIRL Rwy 18-36 L

Knots	60	90	120	150	180
Min:Sec					

11000 348° SWR R-102 SWR 113.2

KINGS INT I-TVL 20.4 12000

I-TVL 12.4 171° 10200

SHOLE I-TVL 9.7 9500

I-TVL 7.4 8600

I-TVL 4.1

Fly Visual 172° 4.4 NM

Procedure Turn NA

3.3 NM 2.3 NM 2.7 NM 8 NM

CATEGORY	A	B	C	D
S-18	7280-5 1026 (1100-5)			8540-5 2286 (2300-5)
CIRCLING	7420-5 1156 (1200-5)	7520-5 1256 (1300-5)	7540-5 1276 (1300-5)	8540-5 2276 (2300-5)

SW-2, 22 OCT 2009 to 19 NOV 2009

SOUTH LAKE TAHOE, CALIFORNIA AL-5416 (FAA)

LOC/DME I-TVL	APP CRS	Rwy Idg	7017
108.9	171°	TDZE	6254
Chan 26		Apt Elev	6264

LDA/DME-2 RWY 18

SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)

NA — Circling not authorized at night.

MALSF

MISSED APPROACH: Climbing right turn to 12000 via heading 035° and I-TVL north course to SHOLE/ 9.7 DME and hold.

ASOS	OAKLAND CENTER	CLNC DEL	UNICOM
124.725	127.95 316.1	134.3	122.95 (CTAF)

SQUAW VALLEY
113.2 SWR
Chan 79

IAF
MUSTANG
117.9 FMG
Chan 126

KINGS INT
I-TVL 20.4

FMG 19

12000
201° (19)

12000
201° (2.3)

R-060

R-201

171°

10200

(8)

I-TVL 12.4

9500
171° (2.7)

SHOLE
I-TVL 9.7

351°

I-TVL 7.4

I-TVL 4.1

172°
4.4 NM

10 NM

LOCALIZER 108.9
I-TVL
Chan 26

9789 9240 8683 8757 9006 8878 9214 9150 9310 7666 7933 10067 6618 6580±

ELEV 6264 D

Fly Visual
172° 4.4 NM

6362

6267 ± 8l

TDZE
6254

6377

8544 X 150

6993

36

6364 ±

REIL Rwy 36
MIRL Rwy 18-36 L

Knots	60	90	120	150	180
Min:Sec					

12000
035°

I-TVL
N crs

SHOLE
I-TVL
9.7

KINGS INT
I-TVL 20.4

I-TVL 12.4

SHOLE
I-TVL 9.7

I-TVL 7.4

I-TVL 4.1

12000

171°

10200

9500

8600

Procedure Turn NA

Fly Visual
172° 4.4 NM

3.3 NM | 2.3 NM | 2.7 NM | 8 NM

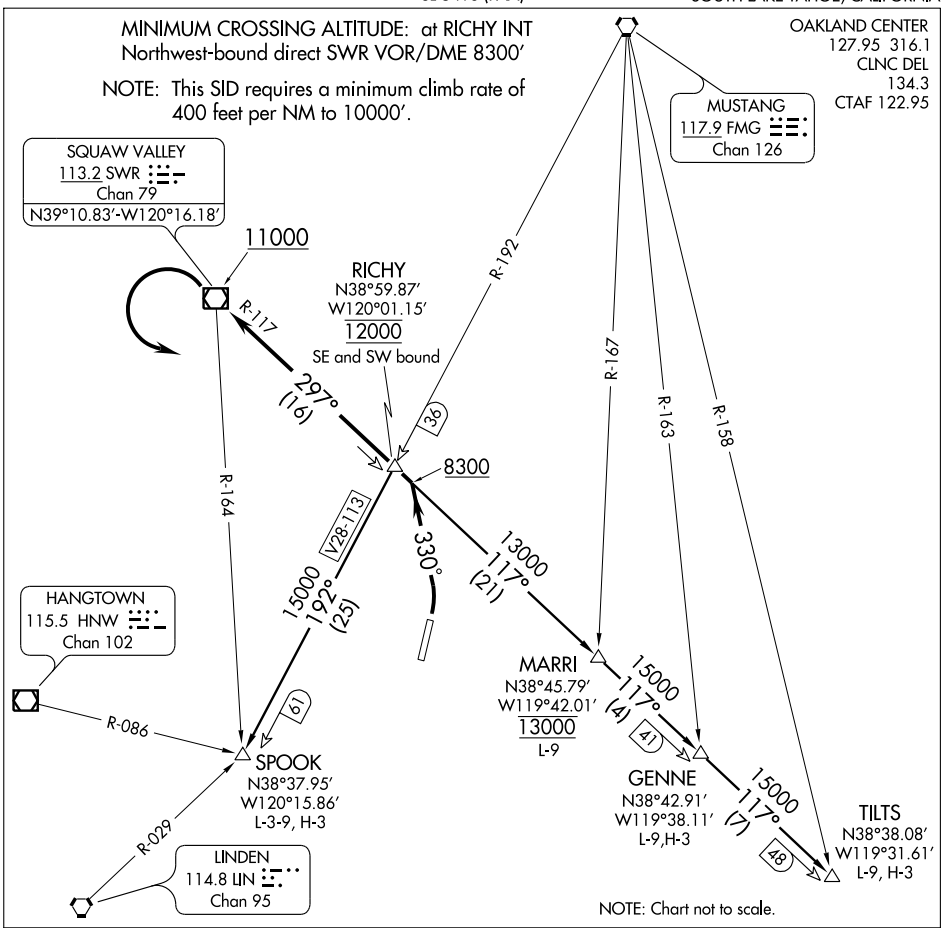
CATEGORY	A	B	C	D
S-18	8380-5 2126 (2200-5)			8540-5 2286 (2300-5)
CIRCLING	8380-5 2116 (2200-5)			8540-5 2276 (2300-5)

SW-2, 22 OCT 2009 to 19 NOV 2009

RICHY FIVE DEPARTURE

SL-5416 (FAA)

SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)
SOUTH LAKE TAHOE, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 36: Turn left heading 330°. Intercept SWR R-117 at or above 8300′, continue climb northwest bound on SWR R-117 to SWR VOR/DME. Cross SWR VOR/DME at or above 11000′. Aircraft cleared via a transition, reverse course to the left after crossing the SWR VOR/DME, and proceed to RICHY INT via SWR R-117. Cross RICHY INT at 12000′ southeast and southwest bound, thence (via transition).

GENNE TRANSITION (RICHY5.GENNE): From over RICHY INT via SWR R-117 to GENNE INT. Cross MARRI INT at 13000′. Expect further clearance to filed altitude after MARRI INT.

MARRI TRANSITION (RICHY5.MARRI): From over RICHY INT via SWR R-117 to MARRI INT Cross MARRI INT at 13000′. Expect further clearance to filed altitude after MARRI INT.

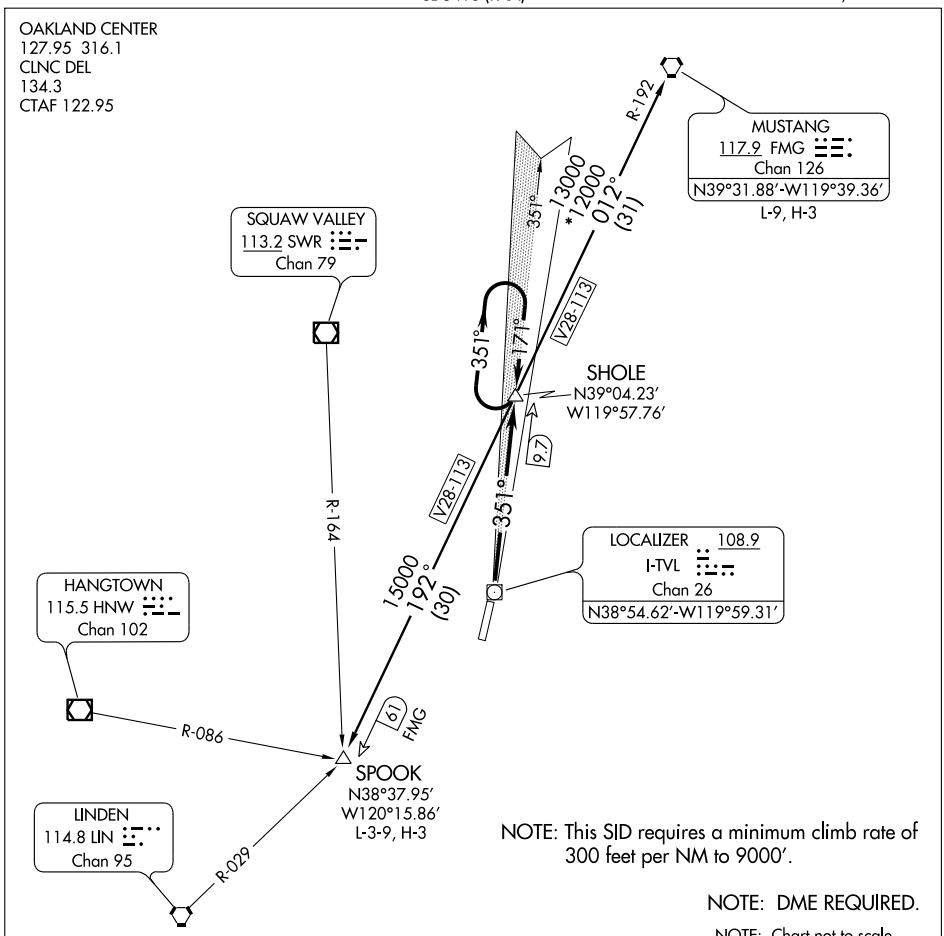
SPOOK TRANSITION (RICHY5.SPOOK): From over RICHY INT via FMG R-192 to SPOOK INT. Expect further clearance to filed altitude after SPOOK INT.

TILTS TRANSITION (RICHY5.TILTS): From over RICHY INT via SWR R-117 to TILTS INT. Cross MARRI INT at 13000′. Expect further clearance to filed altitude after MARRI INT.

SW-2, 22 OCT 2009 to 19 NOV 2009

SHOLE ONE DEPARTURE

SL-5416 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 18: Not authorized.

TAKE-OFF RUNWAY 36: Climb northbound via I-TVL localizer north course to SHOLE I-TVL 9.7 DME Fix. Continue climb in SHOLE 9.7 DME holding pattern, north 4 NM leg, right turns, 171° inbound I-TVL localizer until reaching 13000', thence via (transition) or (assigned route).

MUSTANG TRANSITION (SHOLE1.FMG): From over SHOLE DME via FMG R-192 to FMG VORTAC.

SPOOK TRANSITION (SHOLE1.SPOOK): From over SHOLE DME via FMG R-192 to SPOOK INT.

VOR/DME SWR	APP CRS	Rwy Idg	N/A
113.2	117°	TDZE	N/A
Chan 79		Apt Elev	6264

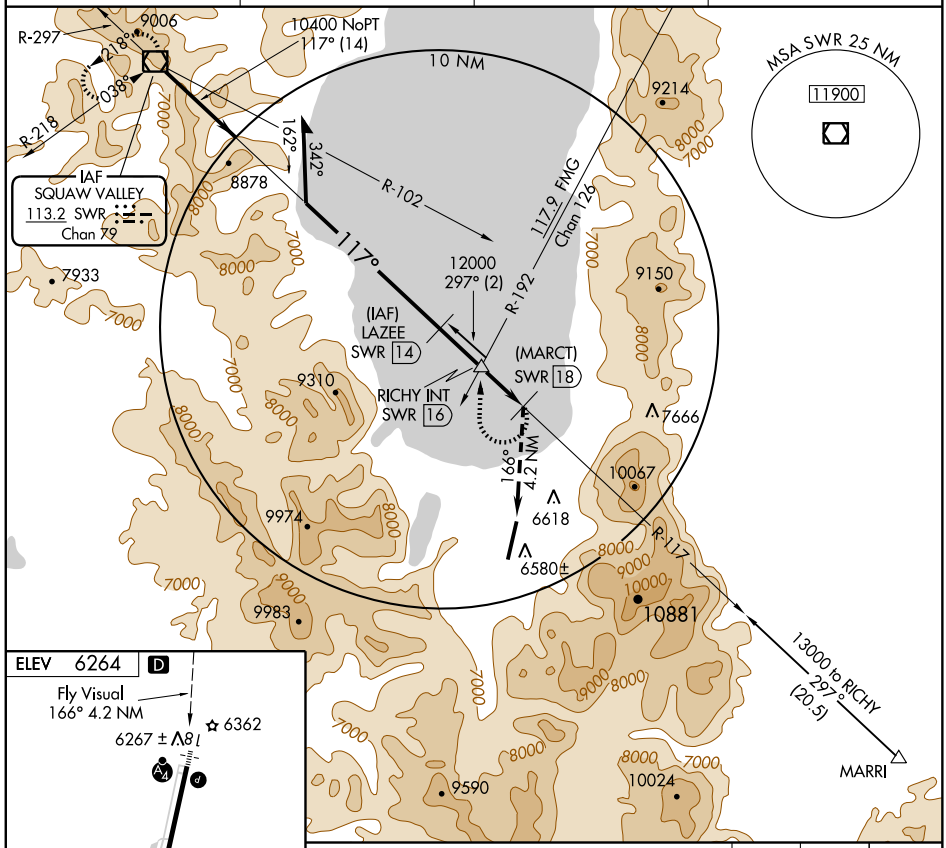
VOR/DME or GPS-A

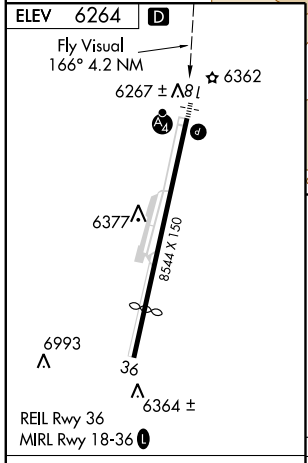
SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)

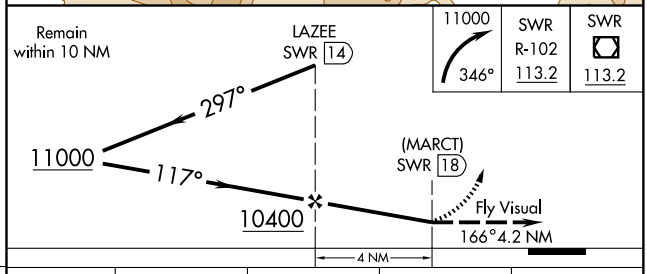
* Circling to Rwy 36 not authorized at night.
Air carrier landing visibility reduction for local conditions not authorized.

MISSED APPROACH: Climbing right turn to 11000 via heading 346° and SWR R-102 to SWR VOR/DME and hold.

ASOS	OAKLAND CENTER	CLNC DEL	UNICOM
124.725	127.95 316.1	134.3	122.95 (CTAF) L



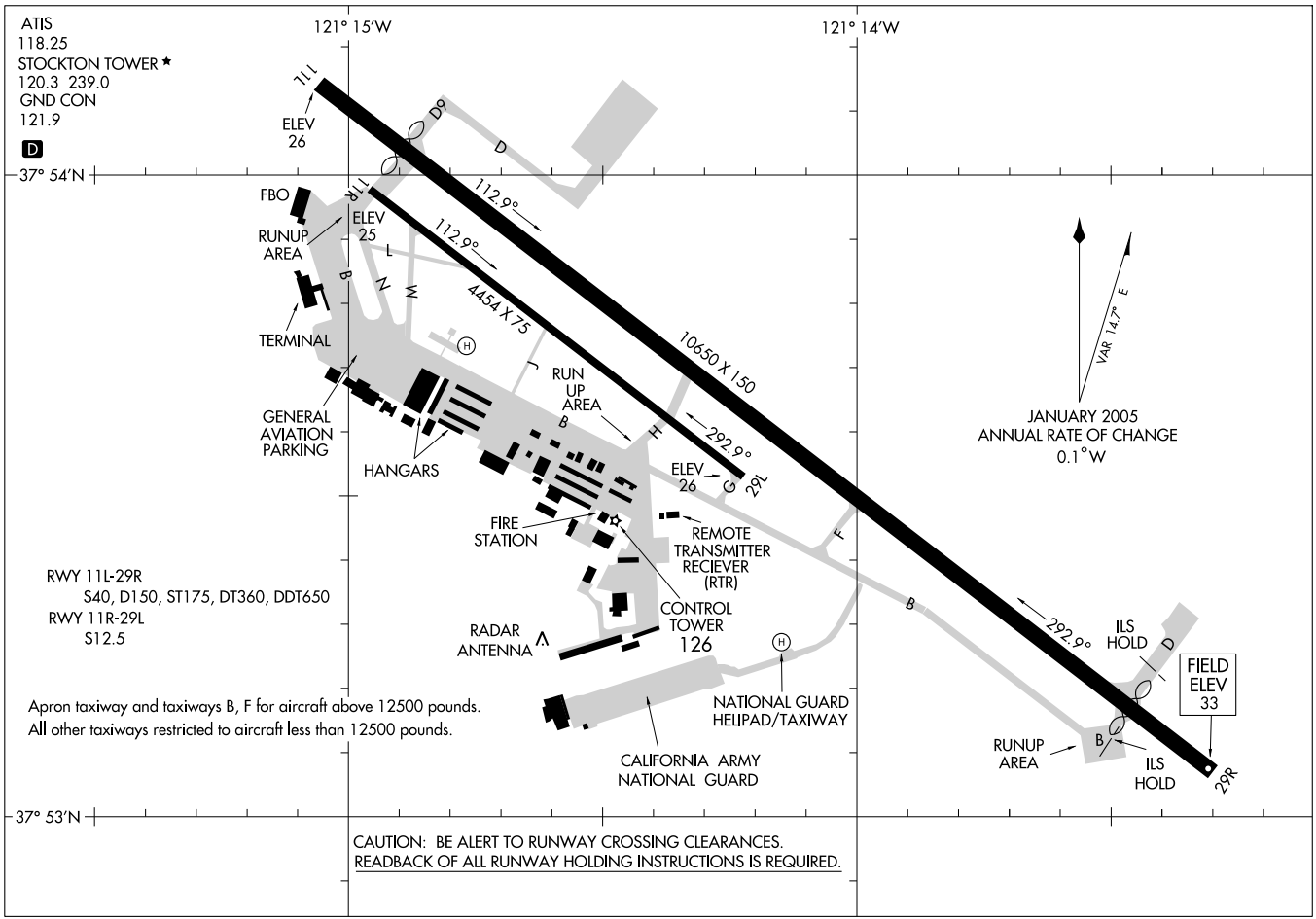




Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING*	8800-5	2536 (2600-5)		

SW-2, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-407 (FAA)

STOCKTON METROPOLITAN (SCK)

STOCKTON, CALIFORNIA

LOC I-SCK	APP CRS	Rwy Idg	8701
109.1	291°	TDZE	30
		Apt Elev	30

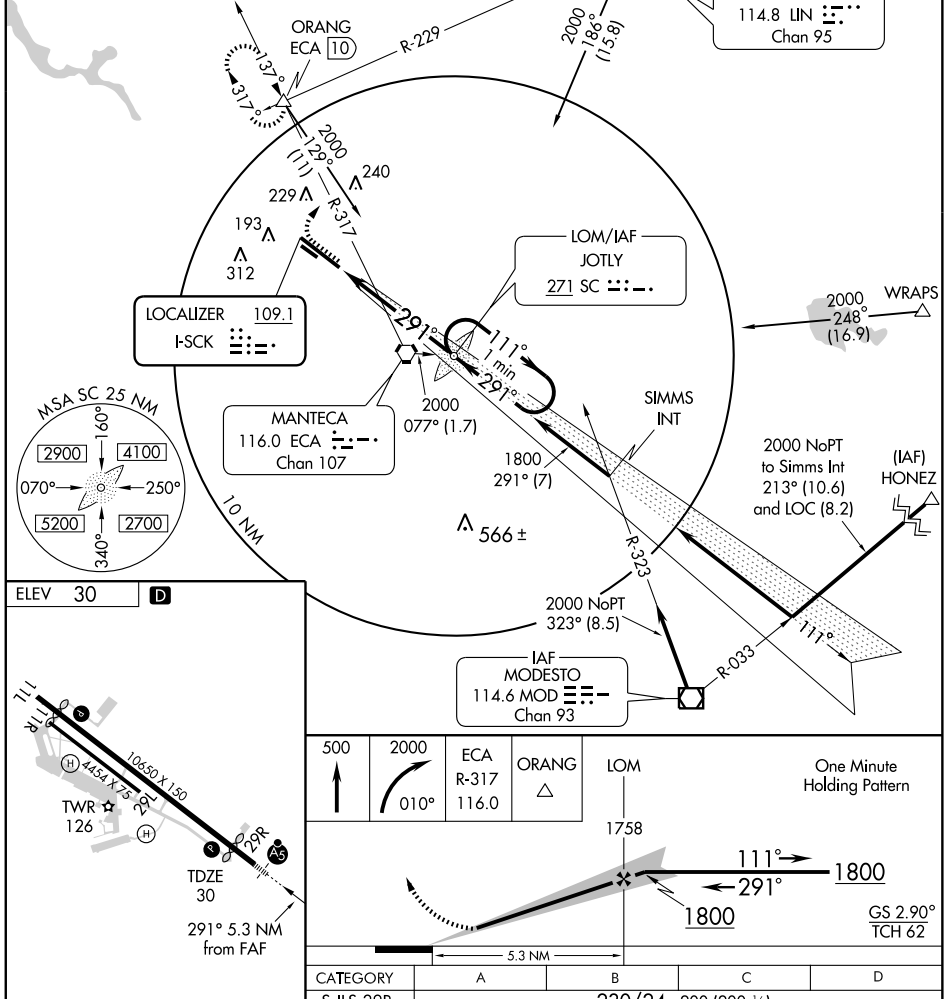
ILS or LOC RWY 29R
STOCKTON METROPOLITAN (SCK)

For inoperative MALSR, increase S-LOC 29R Cat D visibility to 1 mile.

MALSR

MISSED APPROACH: Climb to 500 then climbing right turn to 2000 via heading 010° and ECA R-317 to ORANG Int and hold.

ATIS	NORCAL APP CON	STOCKTON TOWER*	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95



HIRL Rwy 11L-29R L

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-ILS 29R	230/24 200 (200-½)			
S-LOC 29R	360/24 330 (400-½)			360/40 330 (400-¾)
CIRCLING	500-1 470 (500-1)	540-1 510 (600-1)	540-1½ 510 (600-1½)	700-2 670 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

LOM SC	APP CRS	Rwy Idg	8701
271	291°	TDZE	30
		Apt Elev	30

NDB RWY 29R

STOCKTON METROPOLITAN (SCK)

MALSR

MISSED APPROACH: Climbing right turn to 2000 via heading 010° and ECA R-317 to ORANG Int and hold.

ATIS	NORCAL APP CON	STOCKTON TOWER ★	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95

LINDEN
114.8 LIN
Chan 95

ORANG
ECA 10

R-229

2000
186°
(15.8)

137°
317°

2000
129°
(11.1)

229 240

R-317

193
312

LOM/IAF
JOTLY
271 SC

291°

111°
1 min
291°

WRAPS
2000
248°
(16.9)

MANTECA
116.0 ECA
Chan 107

2000
077° (1.7)

SIMMS
INT

1800
291° (7)

2000 NoPT
to Simms Int
213° (10.6)
and 291° (8.2)

(IAF)
HONEZ

566 ±

R-323

291°

MSA SC 25 NM
160°
2900
4100
070°
250°
5200
2700
340°

10 NM

2000 NoPT
323° (8.5)

R-033

IAF
MODESTO
114.6 MOD
Chan 93

ELEV 30 D

11L
29R
10650 X 150
4454 X 75
TWR
126
TDZE
30
291° 5.3 NM
from FAF

HIRL Rwy 11L-29R L

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

2000	ECA	ORANG
010°	R-317	△
	116.0	

LOM

One Minute
Holding Pattern

111°
291°
1800

5.3 NM

CATEGORY	A	B	C	D
S-29R	520/40 490 (500-¾)			520/60 490 (500-1¼)
CIRCLING	520-1 490 (500-1)	540-1 510 (600-1)	540-1½ 510 (600-1½)	700-2 670 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS		
CH 72910	114°	Rwy Idg	8690
W11A		TDZE	29
		Apt Elev	33

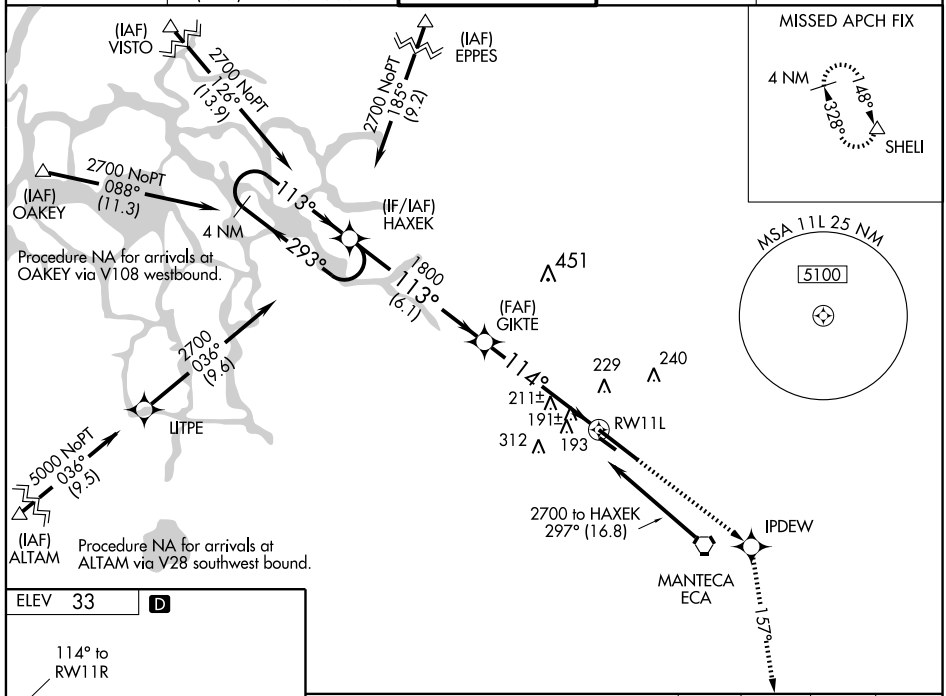
RNAV (GPS) RWY 11L

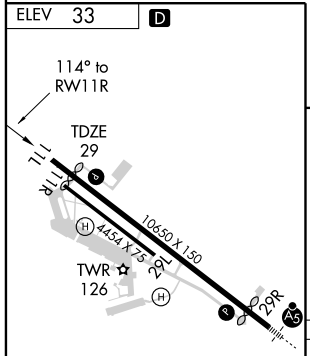
STOCKTON METROPOLITAN (SCK)

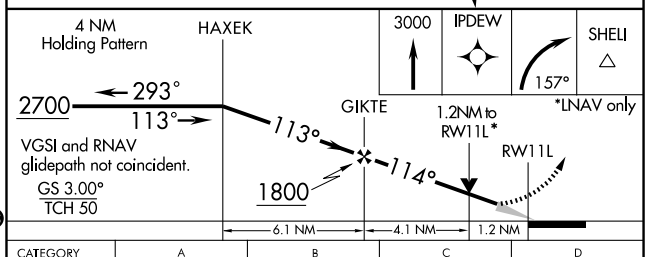
Baro-VNAV NA when using Modesto altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME-RNP-0.3 NA. When local altimeter setting not received, use Modesto altimeter setting: increase all DA 58 feet and LPV and LNAV/VNAV all Cats visibility ¼ mile; increase all MDA 60 feet and LNAV Cat C and circling Cat D visibility ¼ mile. VDP NA with Modesto altimeter setting.

MISSED APPROACH: Climb to 3000 direct IPDEW and right turn via 157° track to SHELI and hold.

ATIS	NORCAL APP CON	STOCKTON TOWER★	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95







CATEGORY	A	B	C	D
LPV DA	279- ¾	250 (300-¾)		
LNAV/VNAV DA	512-1 ¾	483 (500-1¾)		
LNAV MDA	480-1	451 (500-1)	480-1¼ 451 (500-1¼)	480-1½ 451 (500-1½)
CIRCLING	500-1 467 (500-1)	540-1 507 (600-1)	540-1½ 507 (600-1½)	680-2 647 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS		
CH 87010	294°	Rwy Idg	8701
W29A		TDZE	32
		Apt Elev	33

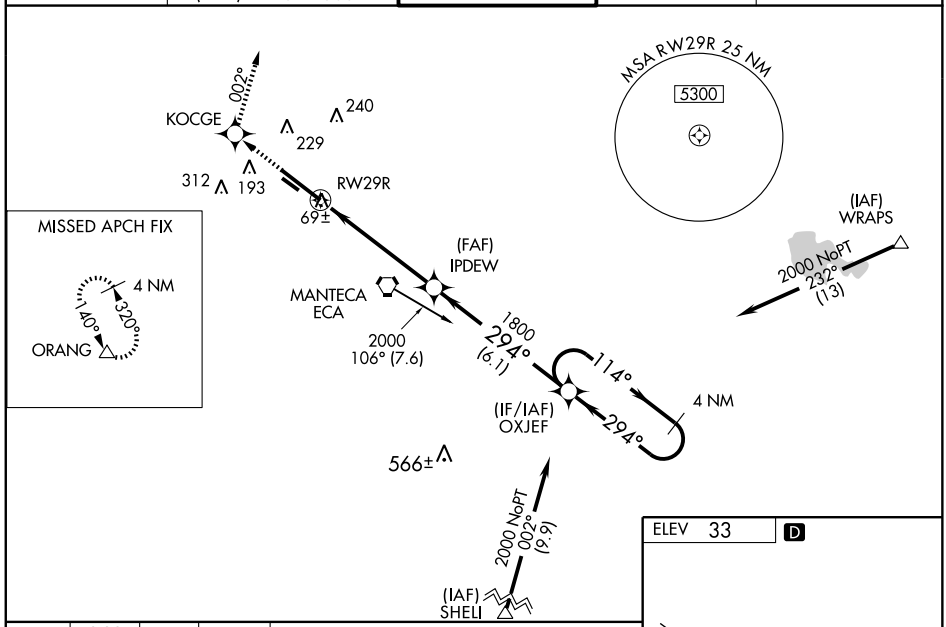
RNAV (GPS) RWY 29R
STOCKTON METROPOLITAN (SCK)

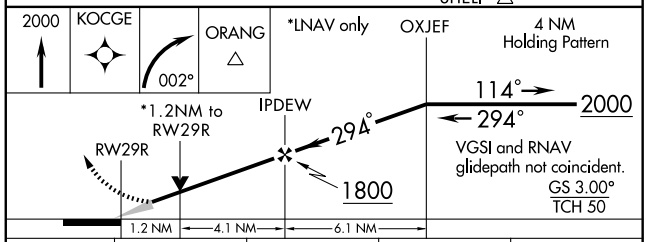
T For inoperative MALSR, increase LNAV/VNAV Cat D visibility to RVR 5000.
A Baro-VNAV NA when using Modesto altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Modesto altimeter setting: increase all DA 58 feet and LNAV/VNAV Cats A/B/C visibility ¼ mile; increase all MDA 60 feet and circling Cat D visibility ¼ mile. For inoperative MALSR, when using Modesto altimeter setting, increase LPV all Cats visibility to 1 mile.
VDP NA with Modesto altimeter setting.

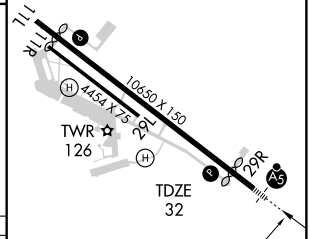
MALSR

MISSED APPROACH: Climb to 2000 direct KOCGE and right turn via 002° track to ORANG and hold, continue climb-in-hold to 2000.

ATIS	NORCAL APP CON	STOCKTON TOWER*	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95







CATEGORY	A	B	C	D
LPV DA	282/24 250 (300-½)			
LNAV/VNAV DA	327/24 295 (300-½)			327/40 295 (300-¾)
LNAV MDA	460/24 428 (500-½)		460/40 428 (500-¾)	460/50 428 (500-1)
CIRCLING	500-1 467 (500-1)	540-1 507 (600-1)	540-1½ 507 (600-1½)	680-2 647 (700-2)

HIRL Rwy 11L-29R L

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC ECA 116.0 Chan 107	APP CRS 304°	Rwy Idg 8701 TDZE 30 Apt Elev 30

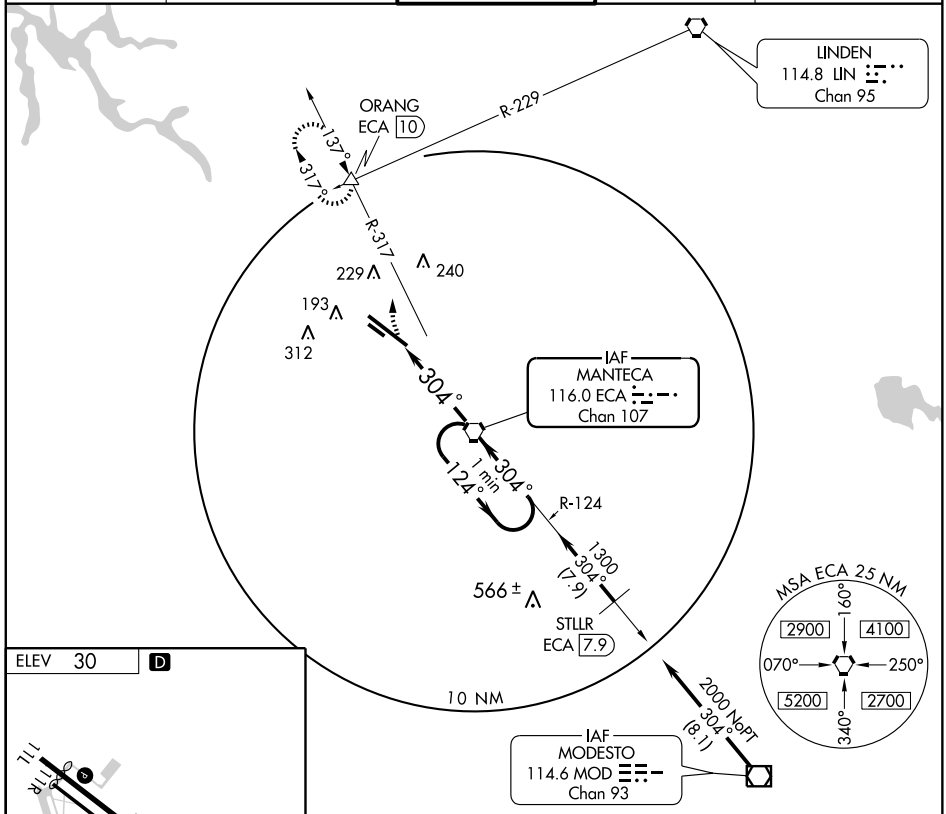
VOR RWY 29R
STOCKTON METROPOLITAN (SCK)

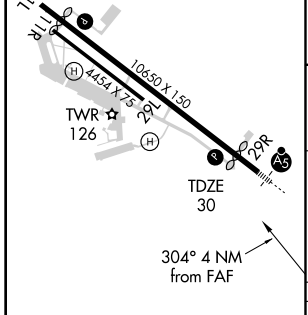
Inoperative table does not apply.

MALSR

MISSED APPROACH: Climbing right turn to 2000 via heading 010° and ECA R-317 to ORANG Int and hold.

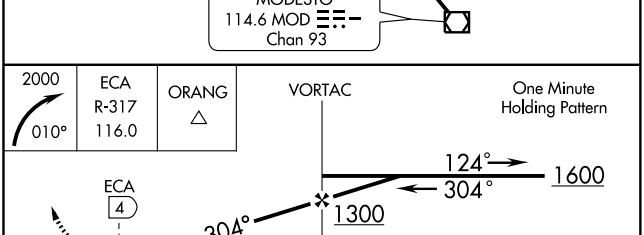
ATIS	NORCAL APP CON	STOCKTON TOWER ★	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95





HIRL Rwy 11L-29R L

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

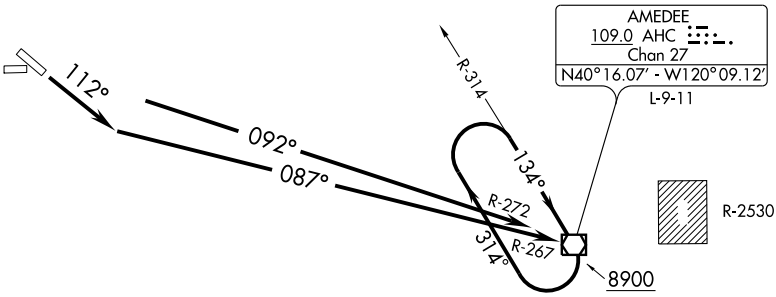


CATEGORY	A	B	C	D
S-29R	460/50	430 (500-1)	460/60 430 (500-1½)	460-1½ 430 (500-1½)
CIRCLING	500-1 470 (500-1)	540-1 510 (600-1)	540-1½ 510 (600-1¼)	700-2 670 (700-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

AMEDEE ONE DEPARTURE (OBSTACLE)

OAKLAND CENTER
128.8 285.5
CTAF 122.8



TAKE-OFF MINIMUMS

Rwy 7, 25, 29: NA- obstacles.

Rwy 11: Standard with minimum climb of 410′ per NM to 6000 or 1900-2½ for climb in visual conditions.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Climb via 112° heading and AHC R-267 to AHC VOR/DME, Thence....
Or climb in visual conditions to cross Susanville Muni Airport eastbound at or above 6000, then via AHC R-272 to AHC VOR/DME, Thence....

....cross AHC VOR/DME at or above 8900′. Climb in AHC holding pattern (hold NW, right turns, 134° inbound) to depart AHC VOR/DME at or above 14000 before proceeding on course.

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
142°	TDZE	N/A
	Apt Elev	4149

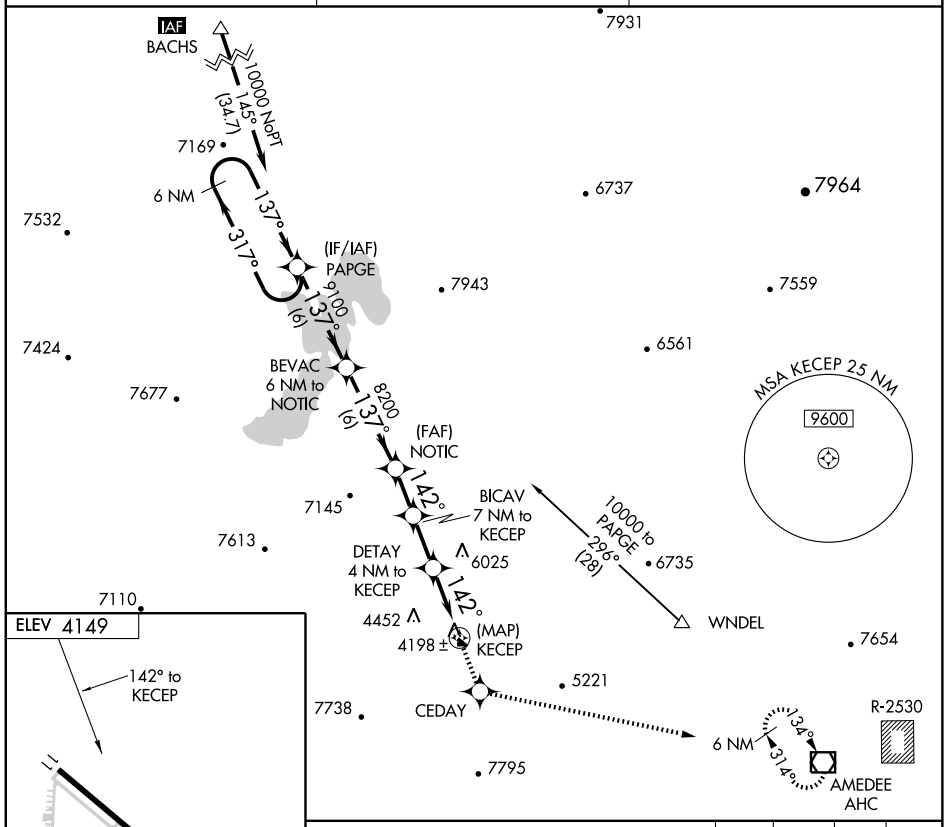
RNAV (GPS)-A
SUSANVILLE MUNI (SVE)

▼ ▲ NA

If local altimeter setting not received, use Reno/Stead altimeter setting and increase all MDAs 720 feet.
Circling to Rwy 7/25 NA.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climb to 14000 direct CEDAY WP and via 085° track to AHC VOR/DME and hold.

AWOS-3	OAKLAND CENTER	UNICOM
133.8	128.8 285.5	122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	5040-1¼ 891 (900-1¼)		5040-2¾ 891 (900-2¾)	5040-3 891 (900-3)

MIRL Rwy 11-29 L

SW-2, 22 OCT 2009 to 19 NOV 2009

SUSANVILLE, CALIFORNIA AL-9479 (FAA)

APP CRS	Rwy Idg	4049
297°	TDZE	4145
	Apt Elev	4149

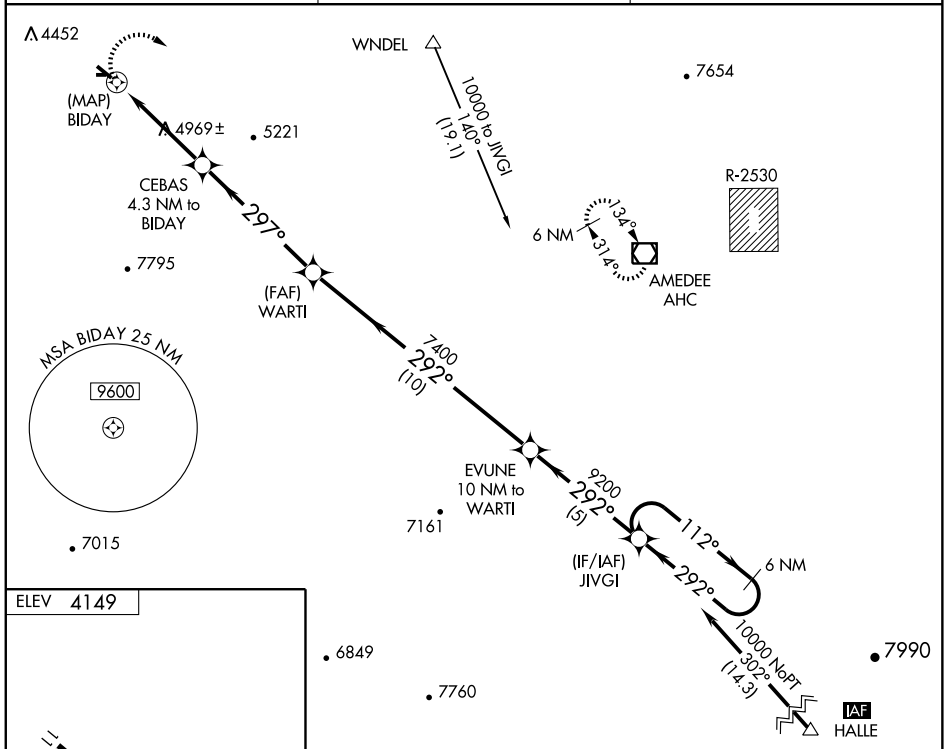
RNAV (GPS) RWY 29

SUSANVILLE MUNI (SVE)

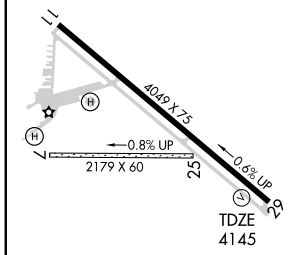
If local altimeter setting not received, use Reno/Stead altimeter setting and increase all MDAs 720 feet.
NA Straight-in minimums NA when using Reno/Stead altimeter setting.
Circling to Rwy 7/25 NA.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
IAF ARM APPROACH MODE PRIOR TO IAF.

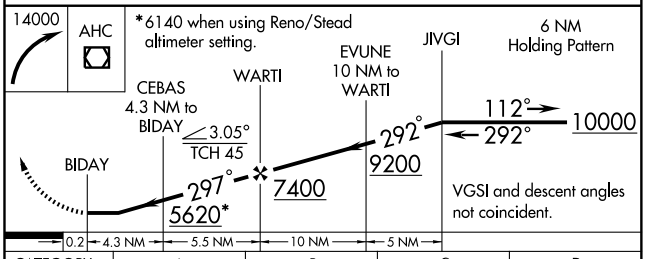
MISSED APPROACH: Climbing right turn to 14000 direct AHC VOR/DME and hold.

AWOS-3	OAKLAND CENTER	UNICOM
133.8	128.8 285.5	122.8 (CTAF) L



ELEV 4149

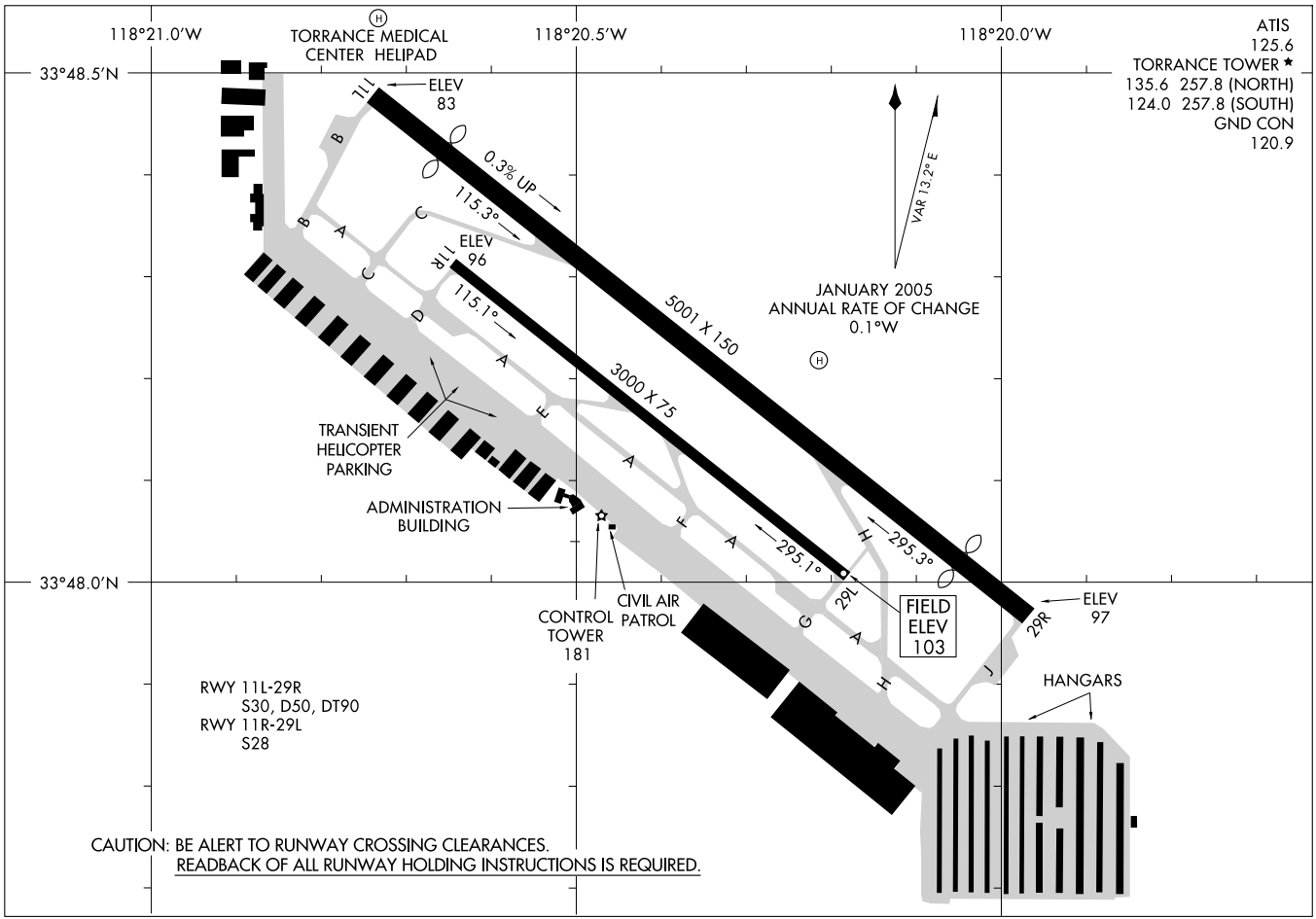




CATEGORY	A	B	C	D
LNAV MDA	5220-1¼ 1075 (1100-1¼)	5220-1½ 1075 (1100-1½)	5220-3	1075 (1100-3)
CIRCLING	5220-1¼ 1071 (1100-1¼)	5220-1½ 1071 (1100-1½)	5220-3	1071 (1100-3)

MIRL Rwy 11-29 L

SW-2, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-5179 (FAA)

TORRANCE/ZAMPERINI FIELD (TOA)
TORRANCE, CALIFORNIA

TORRANCE, CALIFORNIA AL-5179 (FAA)

LOC/DME I-TOA	APP CRS	Rwy Idg	4461
111.9	294°	TDZE	97
Chan 56		Apt Elev	103

ILS or LOC RWY 29R

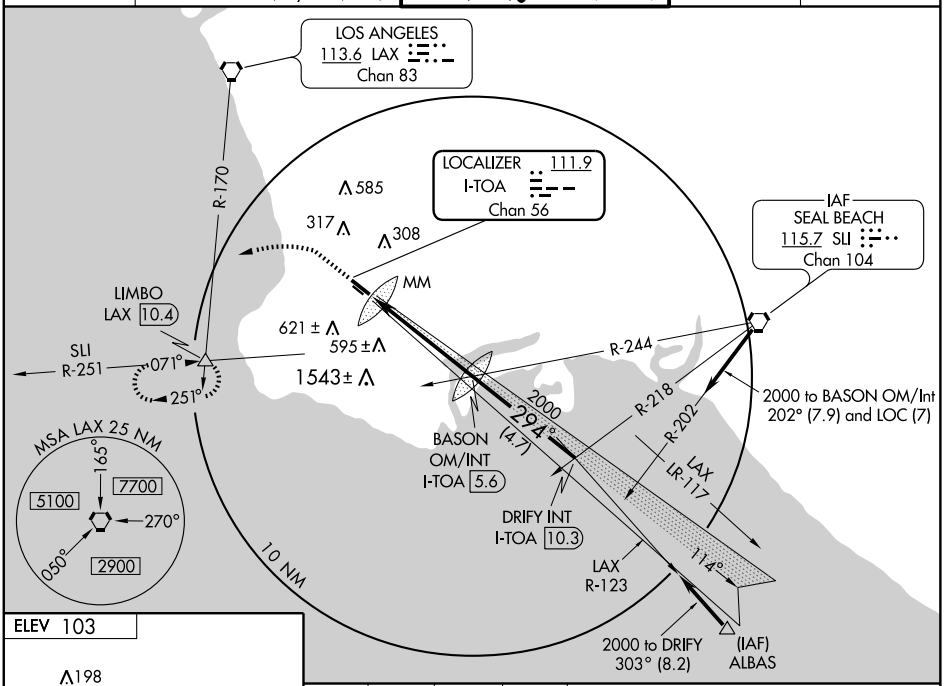
TORRANCE/ ZAMPERINI FIELD (TOA)

When control tower closed, except for operators with approved weather reporting service, use Los Angeles altimeter setting.
Inoperative table does not apply.
Circling NA southwest of Rwy 11R-29L.

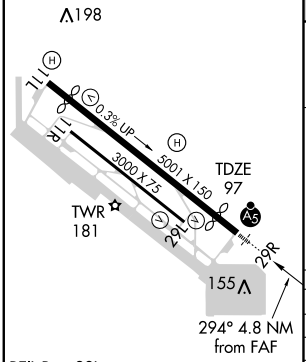
MALSR

MISSED APPROACH: Climb to 1100 then climbing left turn to 3000 via heading 250° and LAX R-170 to LIMBO Int/LAX 10.4 DME and hold.

ATIS	SOCAL APP CON	TORRANCE TOWER★	GND CON	UNICOM
125.6	124.3 363.2 (Rwys 11L, 11R) 127.2 269.6 (Rwys 29L, 29R)	135.6 257.8 (NORTH) 124.0 (CTAF) L 257.8 (SOUTH)	120.9	122.95

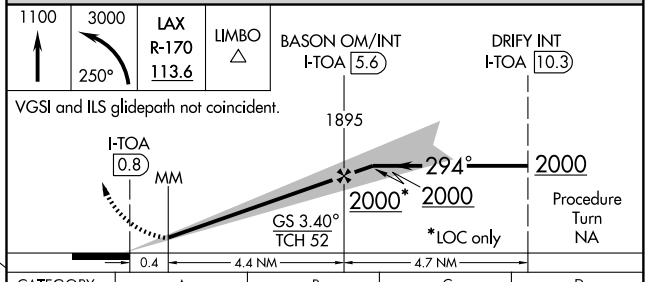


ELEV 103



REIL Rwy 29L
MIRL Rwys 11L-29R and 11R-29L

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36



CATEGORY	A	B	C	D
S-ILS 29R	381-¾ 284 (300-¾)		NA	
S-LOC 29R	620-1 523 (600-1)		NA	
CIRCLING	620-1 517 (600-1)		NA	
LOS ANGELES ALTIMETER SETTING MINIMUMS				
S-ILS 29R	405-1 308 (400-1)		NA	
S-LOC 29R	660-1 563 (600-1)		NA	
CIRCLING	660-1 557 (600-1)		NA	

SW-3, 22 OCT 2009 to 19 NOV 2009

KAYOH FOUR ARRIVAL

SOCAL APP CON
133.85 346.35
FULLERTON MUNI ATIS
125.05
LONG BEACH ATIS
127.75
ORANGE COUNTY ATIS
126.0
TORRANCE MUNI ATIS
125.6

HECTOR TRANSITION (HEC.KAYOH4): From over HEC VORTAC via HEC R-211 and PDZ R-030 to DAWNA INT, then via HDF R-353 to HDF VOR then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

PALM SPRINGS TRANSITION (PSP.KAYOH4): From over PSP VORTAC via PSP R-260 to BANDS INT, then via HDF R-054 to HDF VOR, then via HDF R-257 and SLI R-075 to KAYOH INT. Thence....

....From over KAYOH INT via SLI R-075 to SLI VORTAC.

Expect radar vectors to final approach course.

HECTOR
112.7 HEC
Chan 74
N34°47.82′
W116°27.78′
L-7, H-4

V8-21-283-587
10,500
211°
(46)

31
44

DAWNA
N34°15.90′-W117°06.78′
VERTICAL NAVIGATION PLANNING INFORMATION
Turbojet: Expect clearance to cross at 13,000′.
Non-Turbojet: Expect clearance to cross at 12,000′.

PARADISE
112.2 PDZ
Chan 59

29

R-030

V283-587
10,500
173°
(29)

POMONA
110.4 POM
Chan 41

KAYOH
N33°46.82′
W117°35.41′
VERTICAL NAVIGATION PLANNING INFORMATION

210K

FULLERTON MUNI

LONG BEACH (DAUGHERTY FIELD)

R-164

R-185

R-154

R-353

V283-372

8000
257°
(16)

V372
8000
234°
(18)

13,000
260°
(21)

V16-370-372

R-054

ZAMPERINI FIELD

R-075 4000
(14)

6000
255°
(9)

19
23
24
(5)

LOS ALAMITOS AAF

JOGIT
N33°46.91′
W117°46.85′

BANDS
N33°53.38′-W116°50.97′
VERTICAL NAVIGATION PLANNING INFORMATION
Expect clearance to cross at 14,000′.

JOHN WAYNE ARPT-ORANGE COUNTY

DEJAY
N33°46.77′
W117°29.86′

HOMELAND
113.4 HDF
N33°46.58′-W117°11.12′

R-021

SEAL BEACH
115.7 SLI
Chan 104
N33°47.00′-W118°03.29′

VERTICAL NAVIGATION PLANNING INFORMATION
Expect to cross at or above 8000′.

N

PALM SPRINGS
115.5 PSP
Chan 102
N33°52.20′-W116°25.79′
L-4, H-4

OCEANSIDE
115.3 OCN
Chan 100

NOTE: Chart not to scale.

VORTAC LAX	APP CRS	Rwy Idg	4459
113.6	135°	TDZE	96
Chan 83		Apt Elev	103

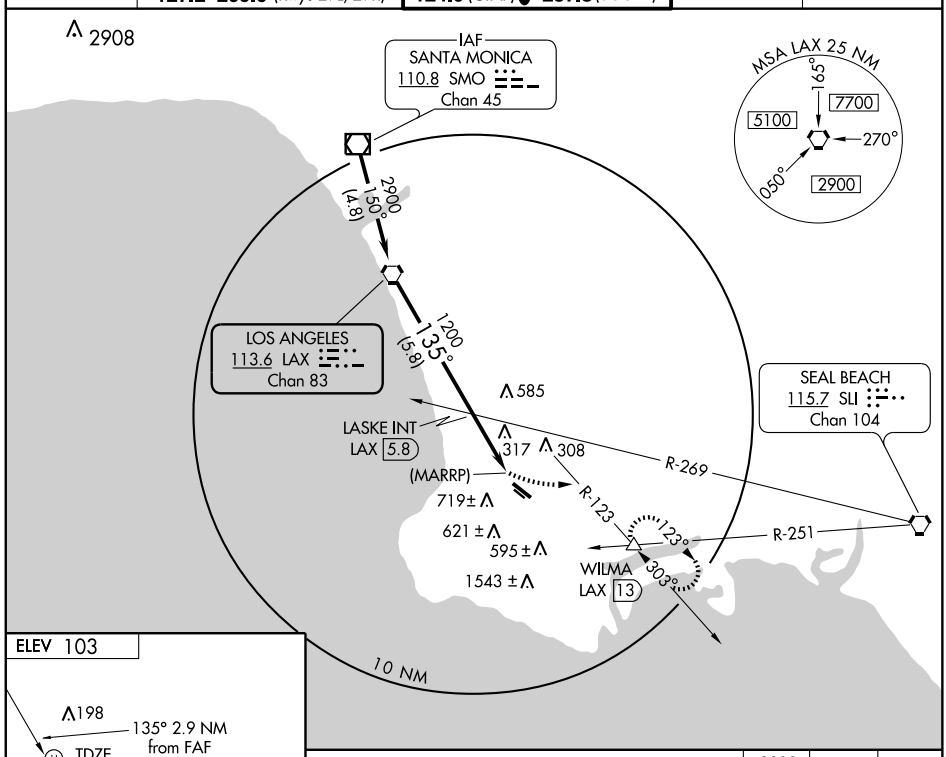
VOR or GPS RWY 11L

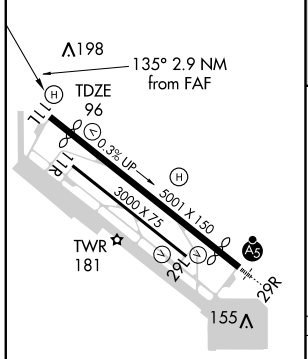
TORRANCE/ ZAMPERINI FIELD (TOA)

When control tower closed, except for operators with approved weather reporting service, use Los Angeles altimeter setting. Circling NA southwest of Rwy 11R-29L.

MISSED APPROACH: Climbing left turn to 3000 via heading 075° and LAX R-123 to WILMA Int and hold.

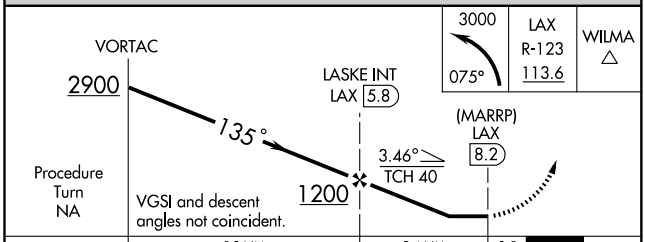
ATIS	SOCAL APP CON	TORRANCE TOWER*	GND CON	UNICOM
125.6	124.3 363.2 (Rwys 11L, 11R) 127.2 269.6 (Rwys 29L, 29R)	135.6 257.8 (NORTH) 124.0 (CTAF) 257.8 (SOUTH)	120.9	122.95





REIL Rwy 29L
MIRL Rwys 11L-29R and 11R-29L

FAF to MAP 2.4 NM					
Knots	60	90	120	150	180
Min:Sec	2:24	1:36	1:12	0:58	0:48



CATEGORY	A	B	C	D
S-11L	980-1¼	884 (900-1¼)	NA	
CIRCLING	980-1¼	877 (900-1¼)	NA	
LOS ANGELES ALTIMETER SETTING MINIMUMS				
S-11L	1020-1¼	924 (1000-1¼)	NA	
CIRCLING	1020-1¼	917 (1000-1¼)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009

NDB TCY	APP CRS	Rwy Idg	4001
203	114°	TDZE	193
		Apt Elev	193

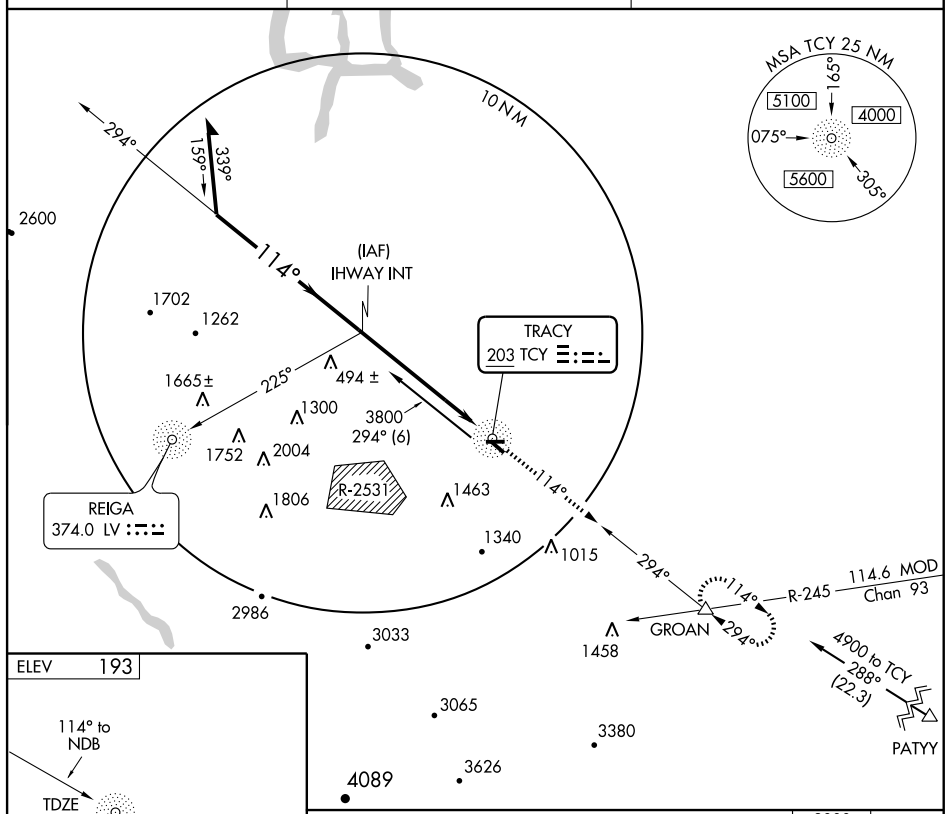
NDB RWY 12

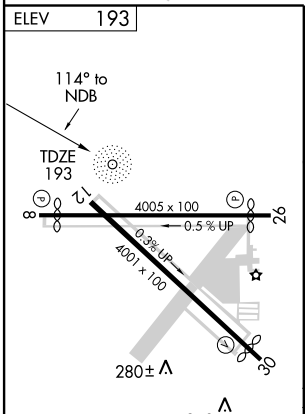
TRACY MUNI (TCY)

Circling NA southwest of Rwy 12-30.
When local altimeter setting not received use Stockton Metro altimeter setting and increase all MDA 60 feet.

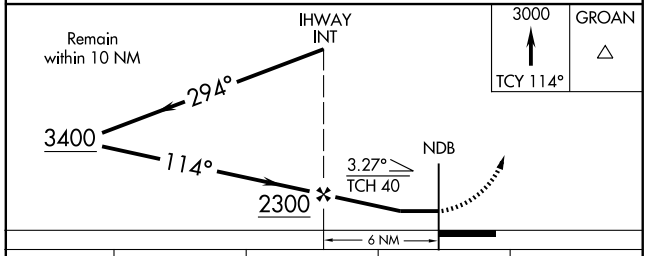
MISSED APPROACH: Climb to 3000 via 114° bearing from TCY NDB to GROAN INT and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	122.8 (CTAF) L





MIRL Rwys 8-26 and 12-30 L



CATEGORY	A	B	C	D
S-12	840-1 647 (700-1)		840-1¾ 647 (700-1¾)	NA
CIRCLING	840-1 647 (700-1)		840-1¾ 647 (700-1¾)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS CH 49200 W12A	APP CRS 116°	Rwy Idg 4001 TDZE 193 Apt Elev 193

RNAV (GPS) RWY 12

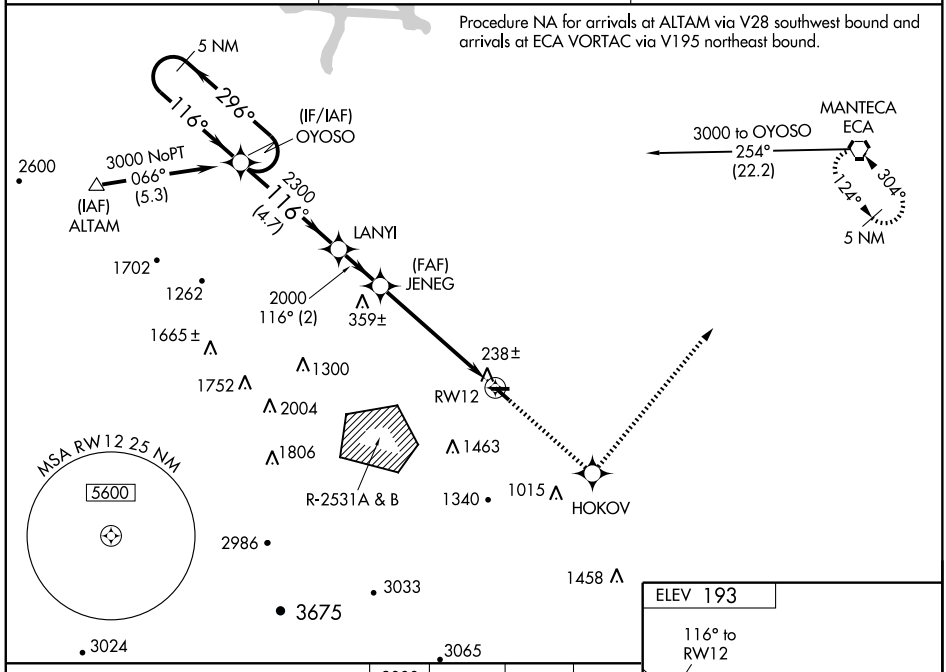
TRACY MUNI (TCY)

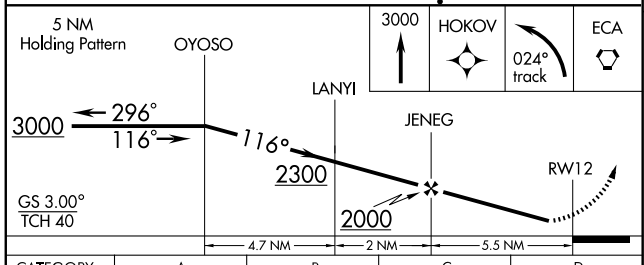
If local altimeter setting not received, use Stockton Metropolitan altimeter setting and increase all DAs/MDAs 60 feet.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 97°C (207°F).
Baro-VNAV NA when using Stockton Metropolitan altimeter setting.
DME/DME RNP -0.3 NA. Circling NA southwest of Rwy 12-30.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct HOKOV and left turn via 024° track to ECA VORTAC and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	122.8 (CTAF) L

Procedure NA for arrivals at ALTAM via V28 southwest bound and arrivals at ECA VORTAC via V195 northeast bound.





CATEGORY	A	B	C	D
LPV DA	448-1 255 (300-1)			NA
LNAV/VNAV DA	656-1¾ 463 (500-1¾)			NA
LNAV MDA	800-1 607 (700-1)		800-1¾ 607 (700-1¾)	NA
CIRCLING	800-1¾ 607 (700-1¾)			NA

MIRL Rwys 8-26 and 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3710
255°	TDZE	185
	Apt Elev	193

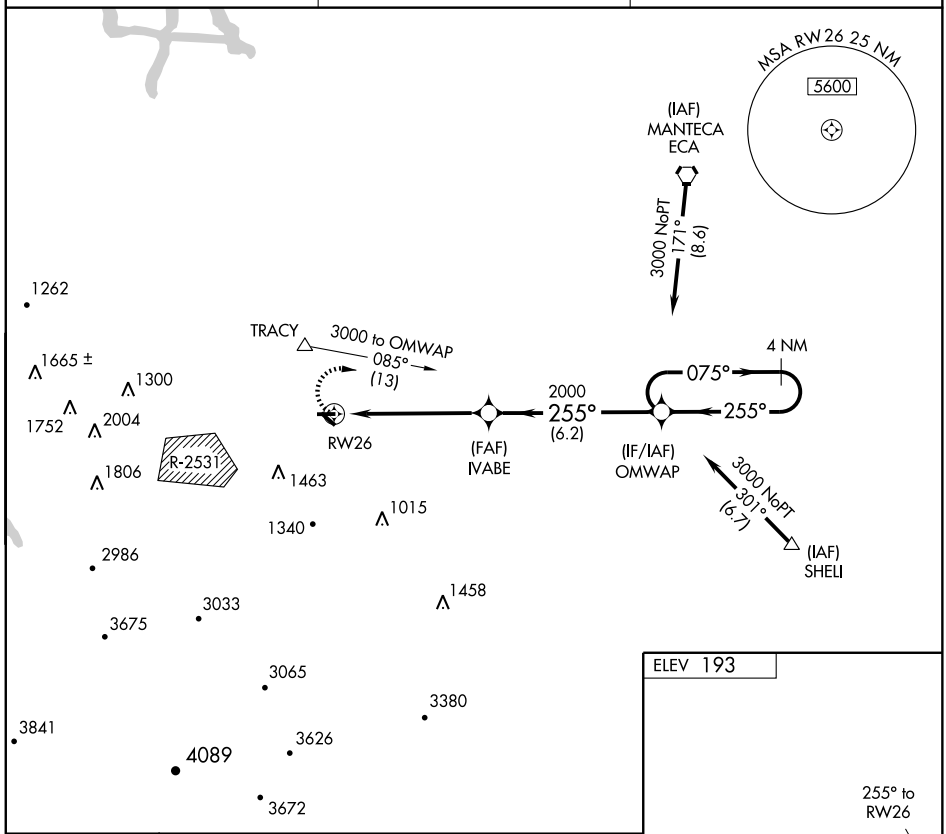
RNAV (GPS) RWY 26

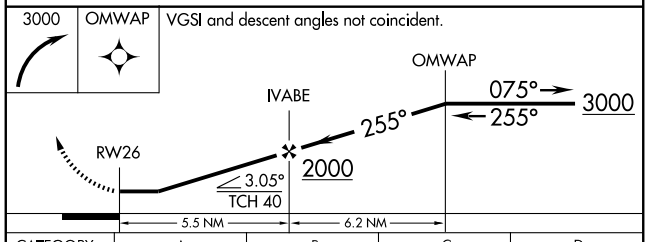
TRACY MUNI (TCY)

NA — DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received use Stockton Metropolitan altimeter setting and increase all MDA 60 feet. Circling NA Southwest of Rwy 12-30.

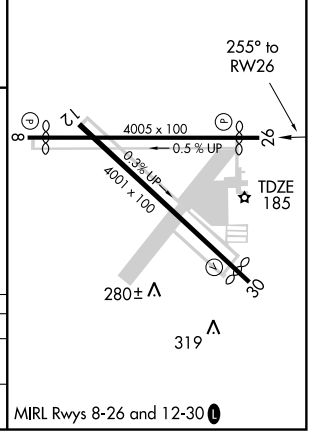
MISSED APPROACH: Climbing right turn to 3000 direct to OMWAP and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	600-1 415 (500-1)		600-1¼ 415 (500-1¼)	NA
CIRCLING	600-1 407 (500-1)	660-1 467 (500-1)	660-1½ 467 (500-1½)	NA



MIRL Rwys 8-26 and 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	3740
CH 69201	297°	TDZE	193
W30A		Apt Elev	193

RNAV (GPS) RWY 30
TRACY MUNI (TCY)

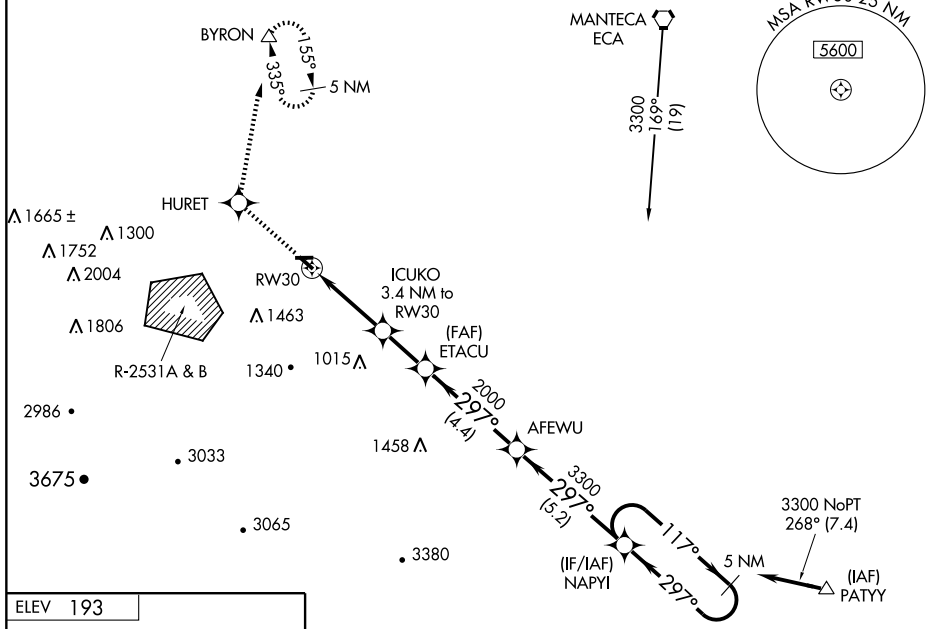
T
NA
W

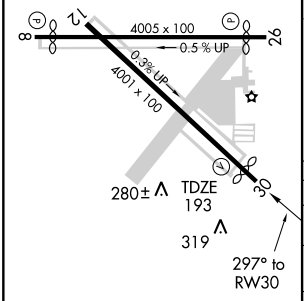
If local altimeter setting not received, use Stockton Metropolitan altimeter setting and increase all DAs/MDAs 60 feet.
Circling NA southwest of Rwy 12-30.
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.

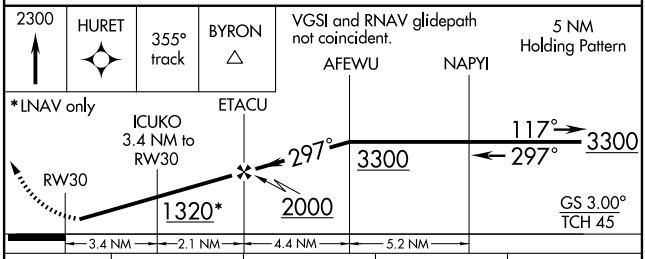
MISSED APPROACH: Climb to 2300 direct HURET and via 355° track to BYRON and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	122.8 (CTAF) L

Procedure NA for arrivals on ECA VORTAC airway radials 147 CW 229.







CATEGORY	A	B	C	D
LPV DA	477-1 284 (300-1)			NA
LNAV/VNAV DA	NA			
LNAV MDA	680-1 487 (500-1)		680-1¼ 487 (500-1¼)	NA
CIRCLING	680-1 487 (500-1)		680-1½ 487 (500-1½)	NA

MIRL Rwys 8-26 and 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME RWY 26

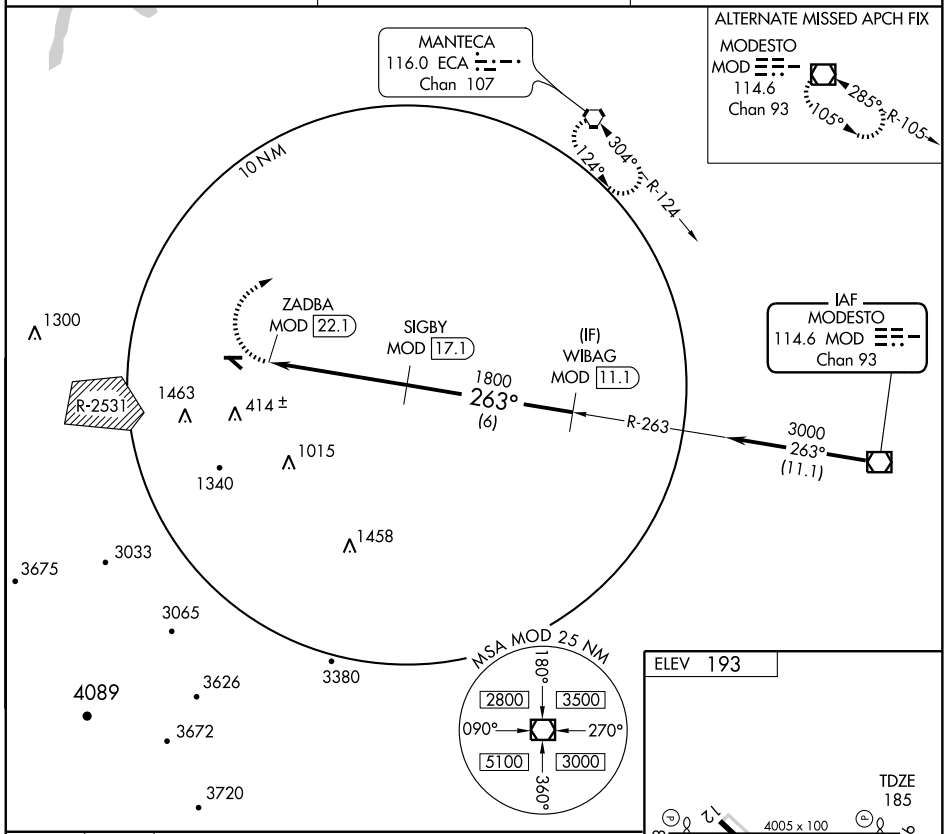
TRACY MUNI (TCY)

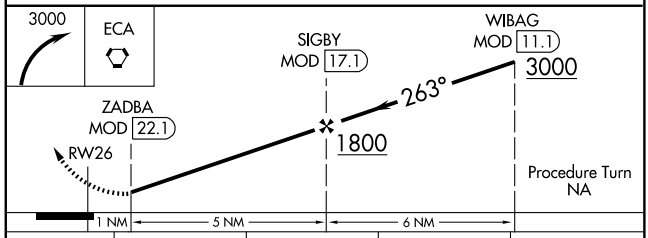
VOR/DME MOD	APP CRS		
114.6 Chan 93	263°	Rwy Idg	3710
		TDZE	185
		Apt Elev	193

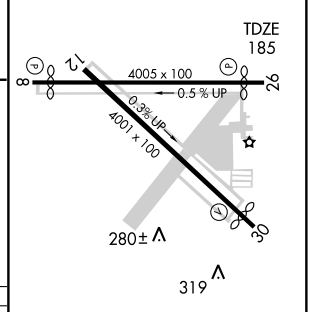
Visibility reduction by helicopters NA. When local altimeter setting not received use Stockton Metro altimeter setting and increase all MDA 60 feet, increase S-26 Cat C visibility ¼ mile and Circling Cat C visibility ¼ mile. Circling NA Southwest of Rwy 12-30.

MISSED APPROACH: Climbing right turn to 3000 direct to ECA VORTAC and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-26	760-1¼	575 (600-1¼)	760-1½ 575 (600-1½)	NA
CIRCLING	760-1¼	567 (600-1¼)	760-1½ 567 (600-1½)	NA

MIRL Rwys 8-26 and 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

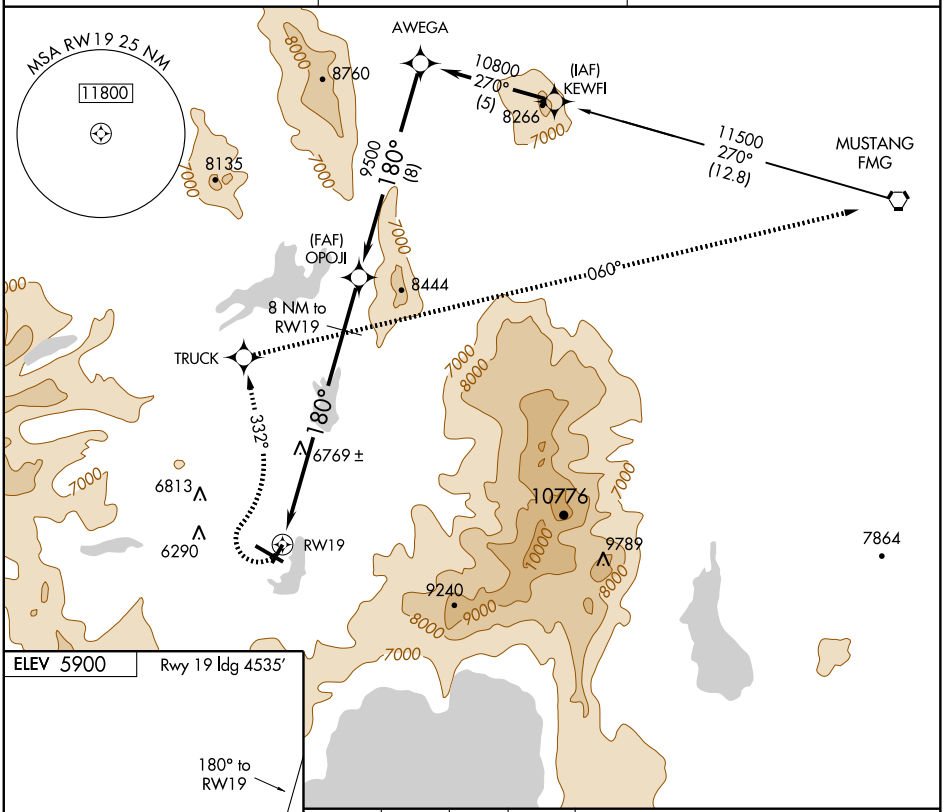
APP CRS	Rwy Idg	4535
180°	TDZE	5894
	Apt Elev	5900

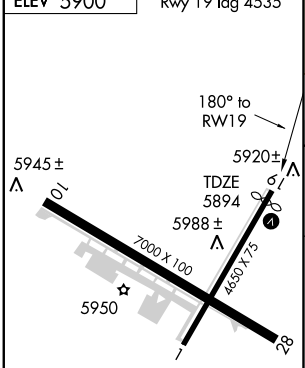
GPS RWY 19
TRUCKEE-TAHOE (TRK)

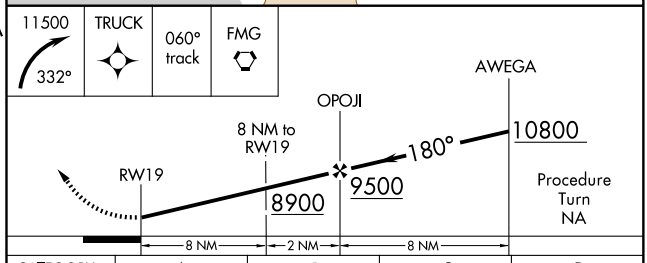
NA

MISSED APPROACH: Climbing right turn to 11500 via 332° course to TRUCK WP then via 060° course to FMG VORTAC.

AWOS-3	OAKLAND CENTER	UNICOM
118.0	127.95 316.1	122.8 (CTAF) L







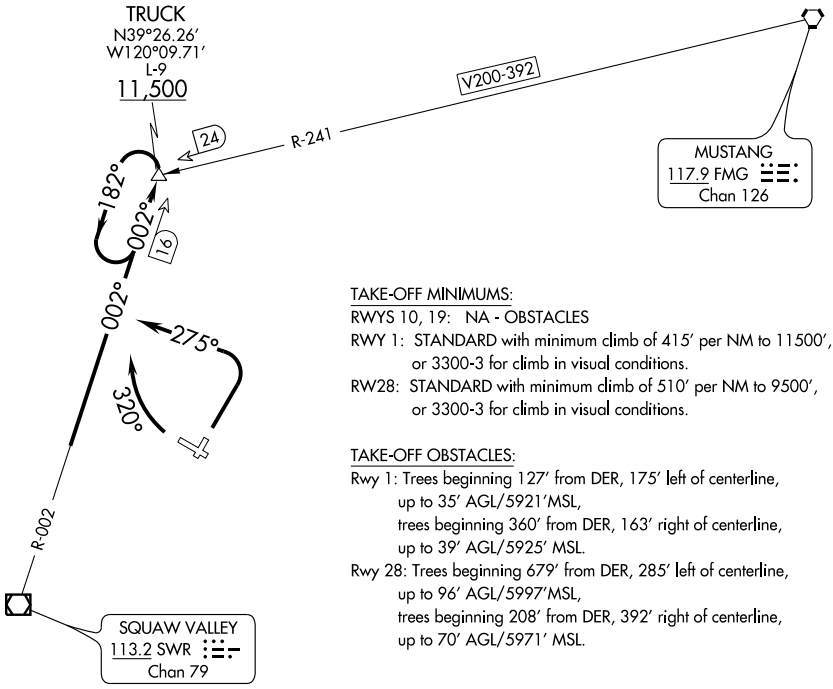
CATEGORY	A	B	C	D
S-19	7340-1¼ 1446 (1500-1¼)	7340-1½ 1446 (1500-1½)	7340 -3 1446 (1500-3)	
CIRCLING	7340-1¼ 1440 (1500-1¼)	7340-1½ 1440 (1500-1½)	7340-3 1440 (1500-3)	7360-3 1460 (1500-3)

REIL Rwy 10
MIRL Rwys 10-28 and 1-19 L

SW-2, 22 OCT 2009 to 19 NOV 2009

TRUCK THREE DEPARTURE (OBSTACLE)

OAKLAND CENTER
127.95 316.1
UNICOM 122.8 (CTAF)
AWOS-3 118.0



TAKE-OFF MINIMUMS:
RWYS 10, 19: NA - OBSTACLES
RWY 1: STANDARD with minimum climb of 415' per NM to 11500', or 3300-3 for climb in visual conditions.
RW28: STANDARD with minimum climb of 510' per NM to 9500', or 3300-3 for climb in visual conditions.

TAKE-OFF OBSTACLES:
Rwy 1: Trees beginning 127' from DER, 175' left of centerline, up to 35' AGL/5921'MSL,
trees beginning 360' from DER, 163' right of centerline, up to 39' AGL/5925' MSL.
Rwy 28: Trees beginning 679' from DER, 285' left of centerline, up to 96' AGL/5997'MSL,
trees beginning 208' from DER, 392' right of centerline, up to 70' AGL/5971' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1: Climbing left turn to 11,500' via heading 275°and SWR R-002 to TRUCK INT, thence..., or, climb in visual conditions to cross Trukee-Tahoe Airport heading 290° at or above 9100', then proceed on SWR R-002 to TRUCK INT, thence...
TAKE-OFF RUNWAY 28: Climbing right turn to 11,500' via heading 320° and SWR R-002 to TRUCK INT, thence...,or, climb in visual conditions to cross Trukee-Tahoe Airport heading 290° at or above 9100', then proceed on SWR R-002 to TRUCK INT, thence...

...Cross TRUCK INT at or above 11,500'. If required, continue climb-in-TRUCK INT holding pattern to cross TRUCK INT at or above 11,500'.

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME SWR	APP CRS	Rwy Idg	N/A
113.2	104°	TDZE	N/A
Chan 79		Apt Elev	5900

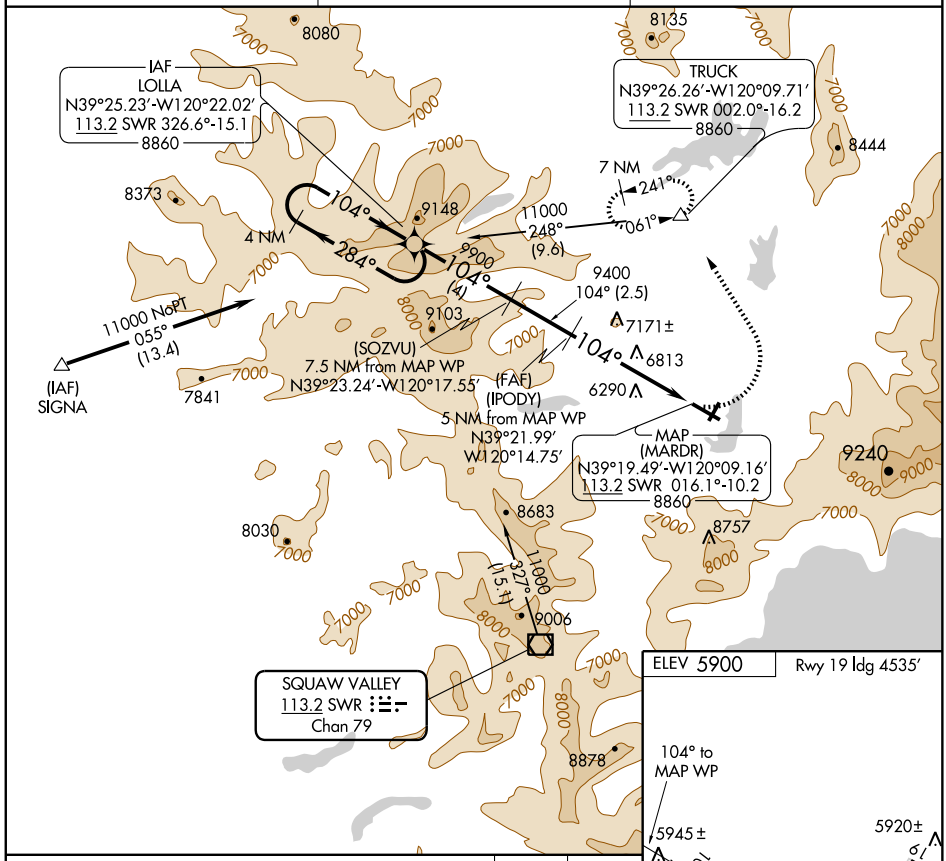
VOR/DME RNAV or GPS-A

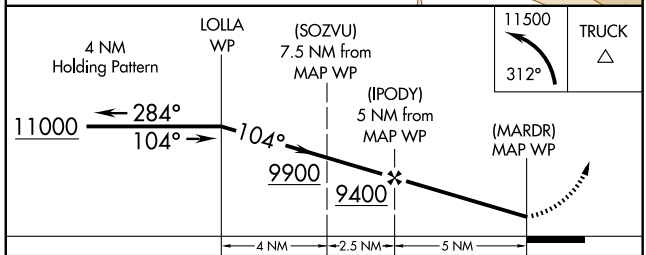
TRUCKEE-TAHOE (TRK)

T NA — If local altimeter setting not received, procedure not authorized.

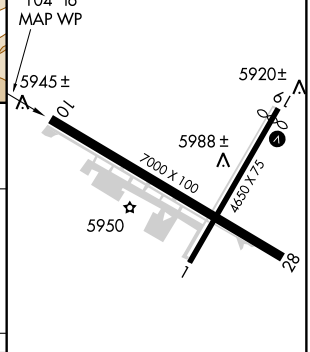
MISSED APPROACH: Climbing left turn to 11500 via track 312° to TRUCK WP and hold.

AWOS-3	OAKLAND CENTER	UNICOM
118.0	127.95 316.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	8200-1¼ 2300 (2300-1¼)	8200-1½ 2300 (2300-1½)	8200-3	2300 (2300-3)



REIL Rwy 10
MIRL Rwys 10-28 and 1-19 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VOR/DME VIS	APP CRS	Rwy Idg	3914
109.4	133°	TDZE	271
Chan 31		Apt Elev	271

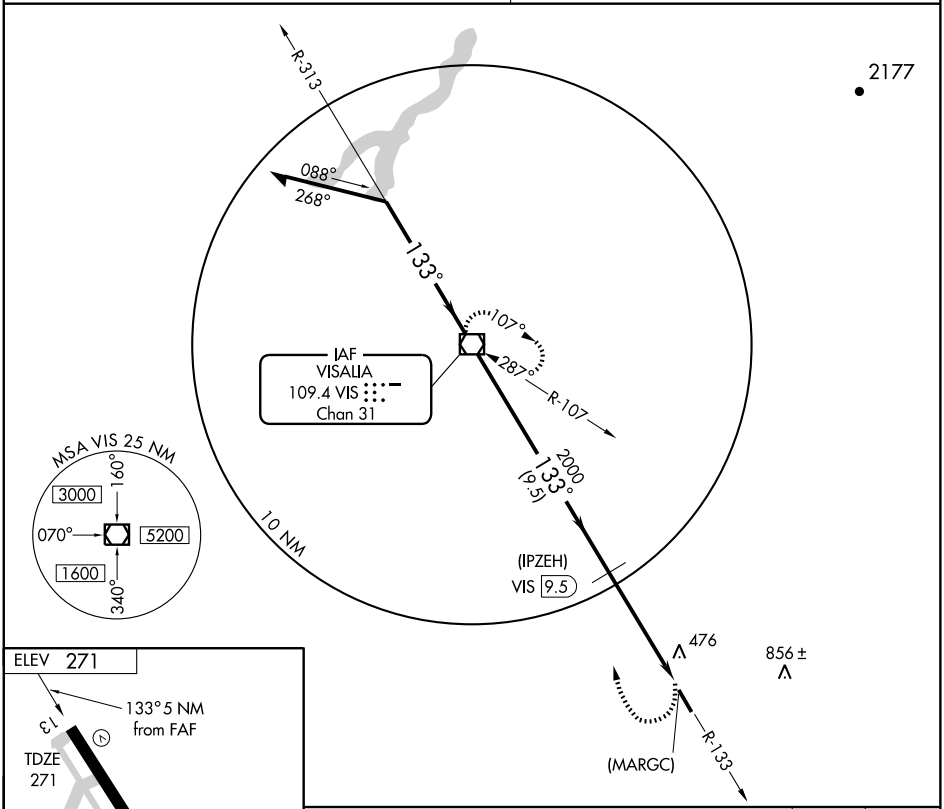
VOR/DME or GPS RWY 13

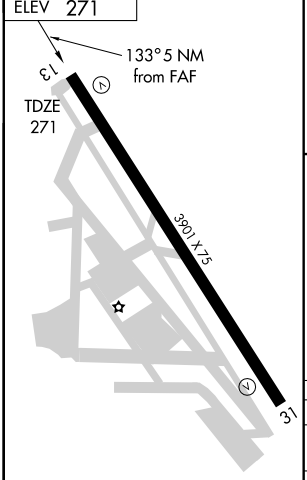
TULARE/MEFFORD FIELD (TLR)

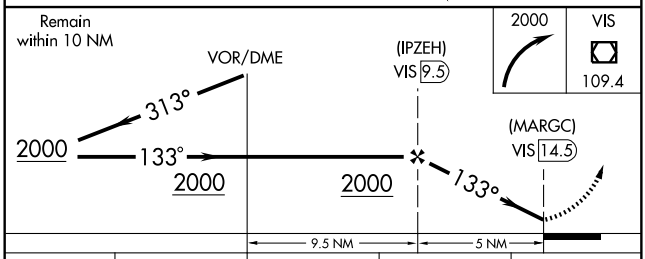
Use Visalia altimeter, if not received, use Fresno Air Terminal altimeter setting and increase all MDAs 200 feet.
NA

MISSED APPROACH: Climbing right turn to 2000 direct VIS VOR/DME and hold.

FRESNO APP CON	UNICOM
118.5 268.7	122.7 (CTAF) L

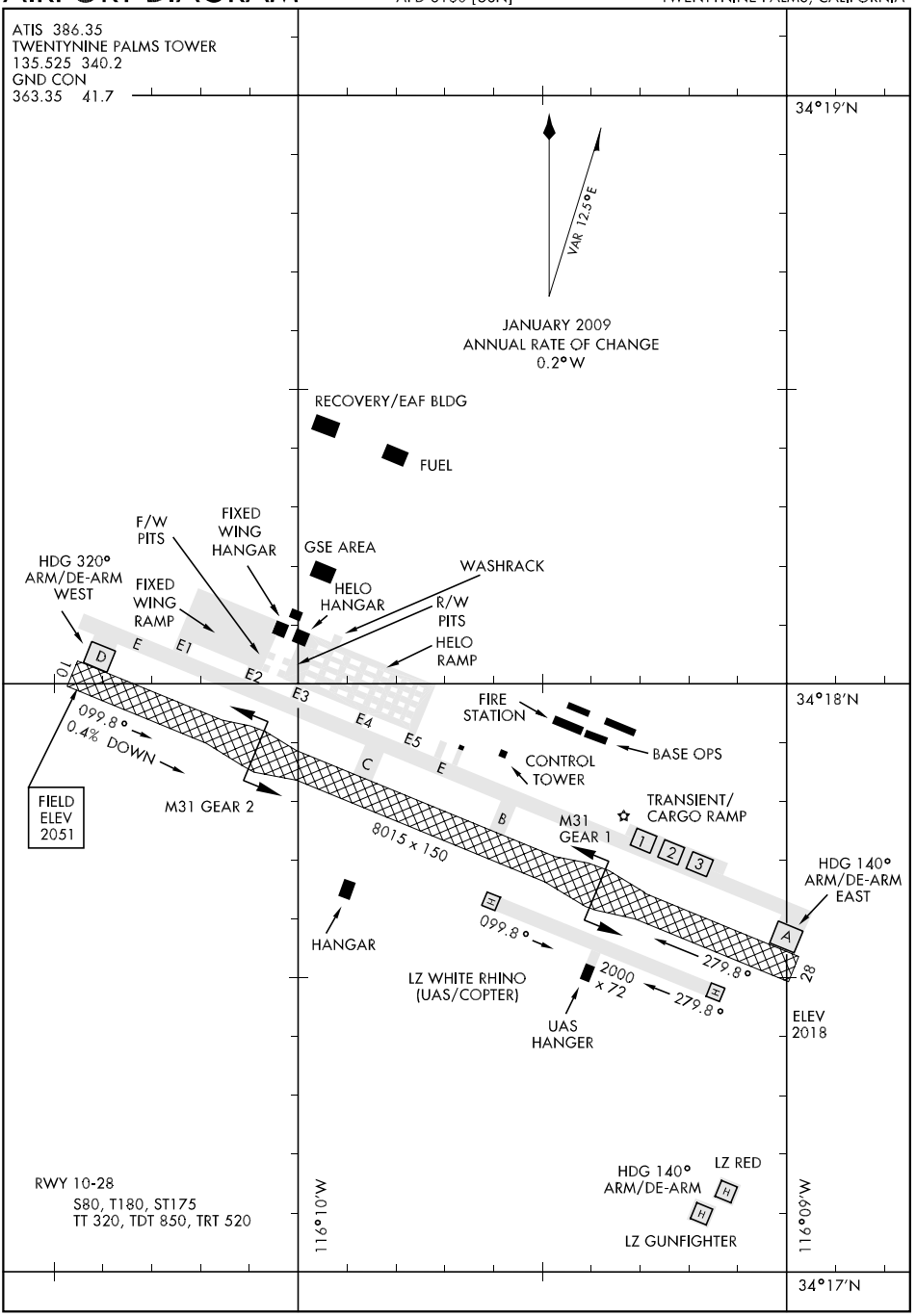






CATEGORY	A	B	C	D
S-13	920-1 649 (700-1)		920-1½ 649 (700-1½)	NA
CIRCLING	920-1 649 (700-1)		920-1½ 649 (700-1½)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009



SW-3, 22 OCT 2009 to 19 NOV 2009

CACTI-FIVE DEPARTURE (CACTI5 • TNP)

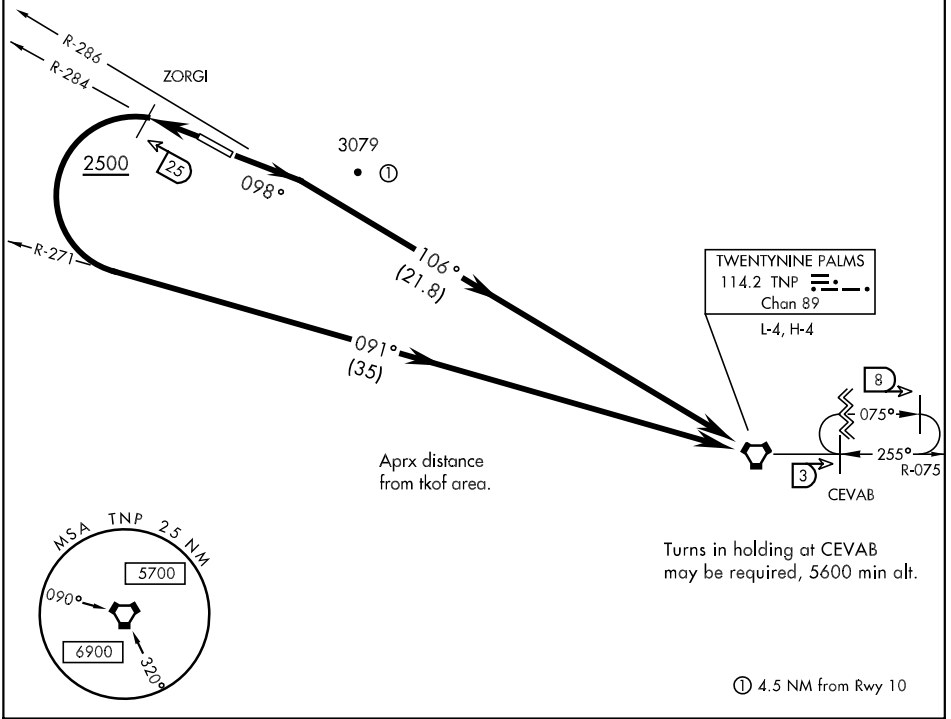
SHL-3160 [USN]

ATIS 386.35
GND CON
363.35 41.7
TWENTYNINE PALMS TOWER
135.525 340.2
LOS ANGELES CENTER
128.15 285.6

Rwy	Knots	60	120	180	240	300	360
*10 ⓐ	V/V(fpm)	285	570	855	1140	1425	1710
**10 ⓑ	V/V(fpm)	315	630	945	1260	1575	1890
†28 ⓒ	V/V(fpm)	235	470	705	940	1175	1410

* Minimum ** Civil minimum † ATC Climb Rate

ⓐ to 3300
ⓑ to 3400
ⓒ to 2500



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 10: Climb via heading 098° to intercept and proceed via TNP VORTAC R-286 to TNP.

TAKE-OFF RWY 28: Climb via TNP VORTAC R-284 to cross ZORGI at or above 2500. Then turn left to join and proceed via TNP R-271 to TNP.

SW-3, 22 OCT 2009 to 19 NOV 2009

COPTER TACAN RWY 28

TACAN	APCH CRS	Rwy ldg / TDZE / Arpt Elev
NXP Chan 63	296°	8015 / 2022 / 2051

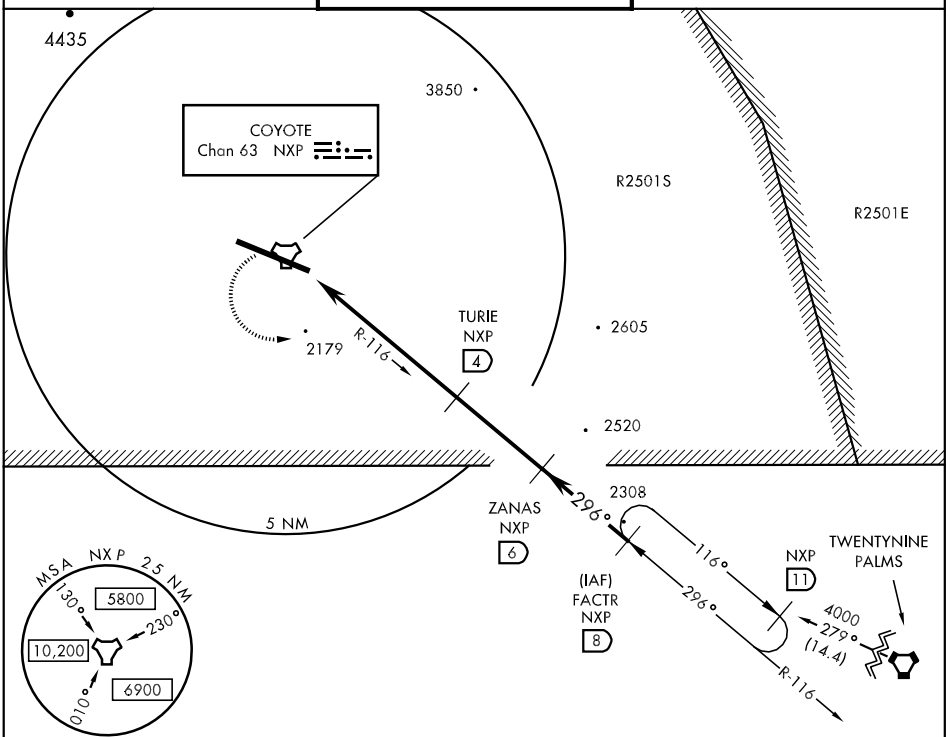
AL-3160 USN]

TWENTYNINE PALMS SELF (KNXP)

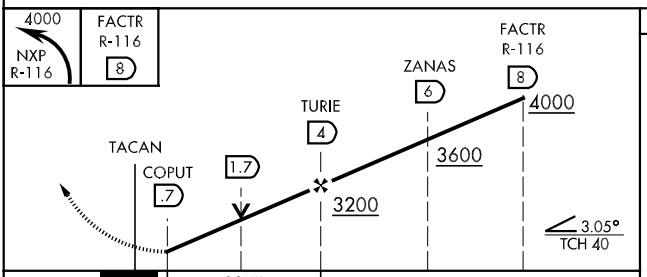
SALSF

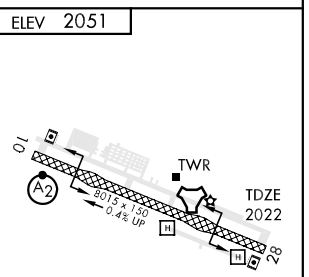
MISSED APPROACH: Climbing left turn to 4000 via NXP TACAN R-116 to FACTR and hold.

ATIS	TWENTYNINE PALMS TOWER	GND CON
386.35	135.525 340.2	363.35 41.7



EMERG SAFE ALT 100 NM 13,600





CATEGORY	COPTER
H-28	2440-½ 418 (400-½)
CIRCLING	NOT AUTHORIZED

HIRL Rwy 10-28

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 28

TACAN NXP Chan 63	APCH CRS 286°	Rwy ldg 8015 TDZE 2022 Arpt Elev 2051

JAL-3160 [USN]

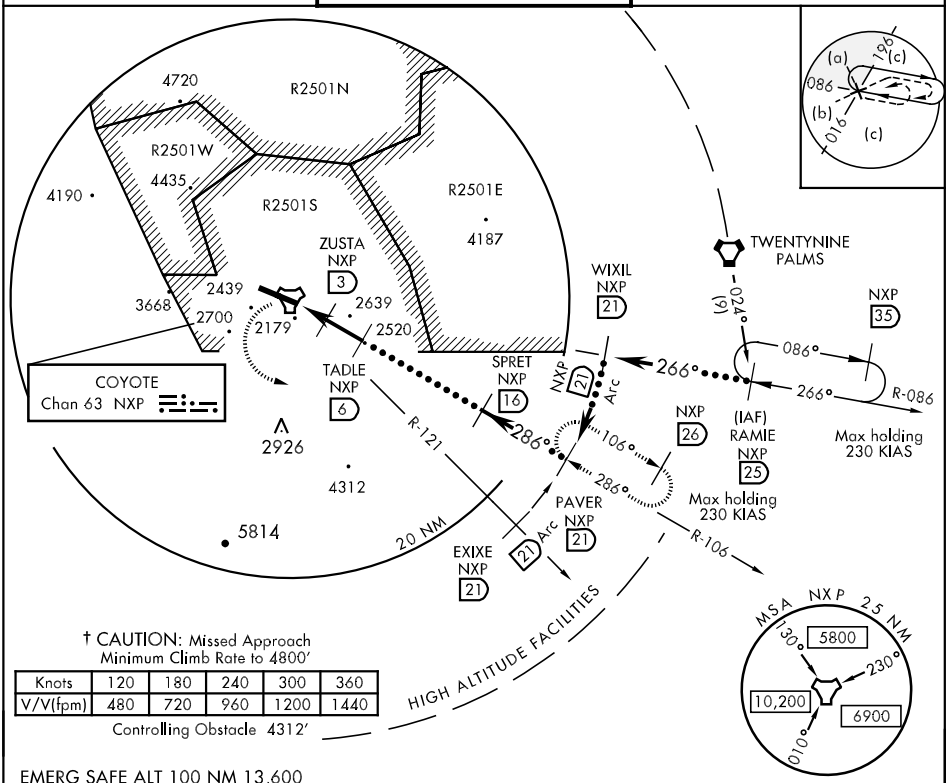
TWENTYNINE PALMS SELF (KNXP)

▼ * When ALS inop, increase vis CAT CD to 1¼ miles, CAT E vis to 1½ miles.
** Circling not authorized N of Rwy 10-28.

SALSF (A2)

† MISSED APPROACH: Climbing left turn to 6000 via NXP TACAN R-121 to EXIXE. Then Arc SE of NXP TACAN via NXP 21 DME Arc to PAVER and hold.

ATIS	PALMS TOWER	GND CON
386.35	135.525 340.2	363.35 41.7

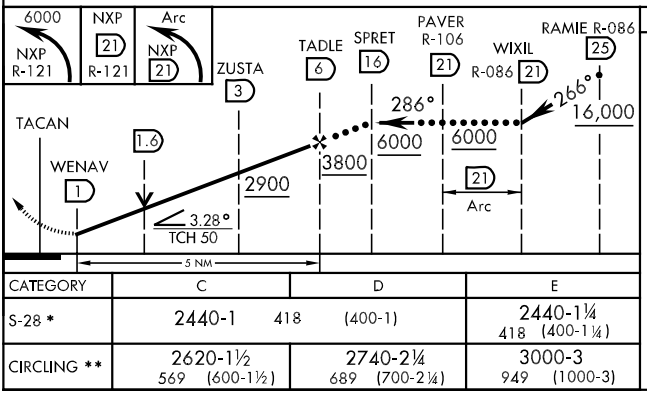


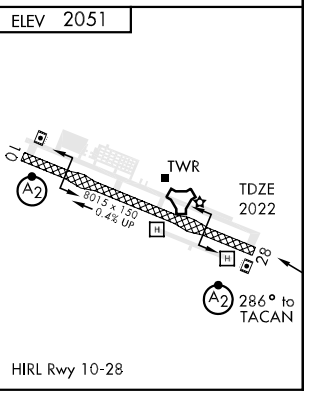
† CAUTION: Missed Approach Minimum Climb Rate to 4800'

Knots	120	180	240	300	360
V/V(fpm)	480	720	960	1200	1440

Controlling Obstacle 4312'

EMERG SAFE ALT 100 NM 13,600





CATEGORY	C	D	E
S-28 *	2440-1 418 (400-1)		2440-1¼ 418 (400-1¼)
CIRCLING **	2620-1½ 569 (600-1½)	2740-2¼ 689 (700-2¼)	3000-3 949 (1000-3)

HIRL Rwy 10-28

SW-3, 22 OCT 2009 to 19 NOV 2009

HI-VOR/DME RWY 28

VOR/DME TNP	APCH CRS	Rwy ldg	8015
114.2	285°	TDZE	2022
Chan 89		Arpt Elev	2051

JAL-3160 [USN]

TWENTYNINE PALMS SELF (KNXP)

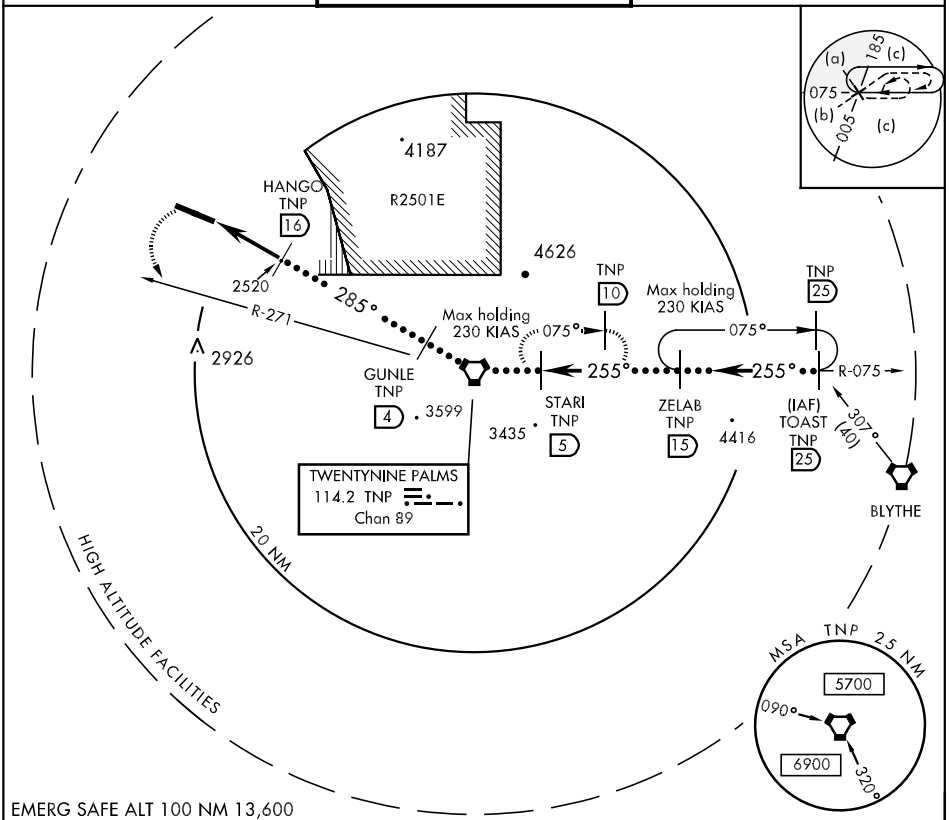
▼ * When ALS inop, increase vis CAT CDE to 3 miles.

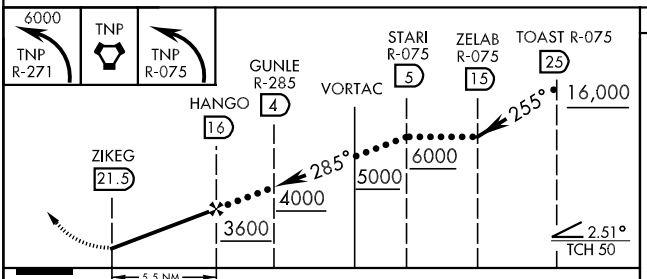
** Circling not authorized N of Rwy 10-28.

SALSF

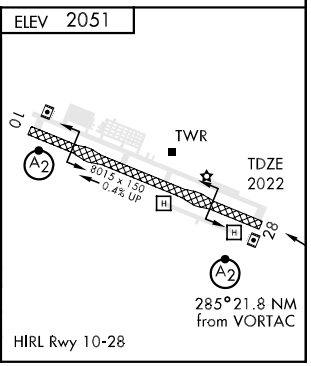
MISSED APPROACH: Climbing left turn to 6000 via TNP VORTAC R-271 direct TNP. Then via TNP R-075 to STARI and hold.

ATIS	PALMS TOWER	GND CON
386.35	135.525 340.2	363.35 41.7





CATEGORY	C	D	E
S-28 *	3480-2¾	1458	(1500-2¾)
CIRCLING **	3480-3	1429	(1500-3)



HIRL Rwy 10-28

TACAN RWY 28

TACAN NXP Chan 63	APCH CRS 286°	Rwy ldg 8015 TDZE 2022 Arpt Elev 2051

AL-3160 [USN]

TWENTYNINE PALMS SELF (KNXP)

* When ALS inop, increase vis CAT AB to 1 mile, CAT CD to 1¼ miles.
** Circling not authorized N of Rwy 10-28.

SALSF A2

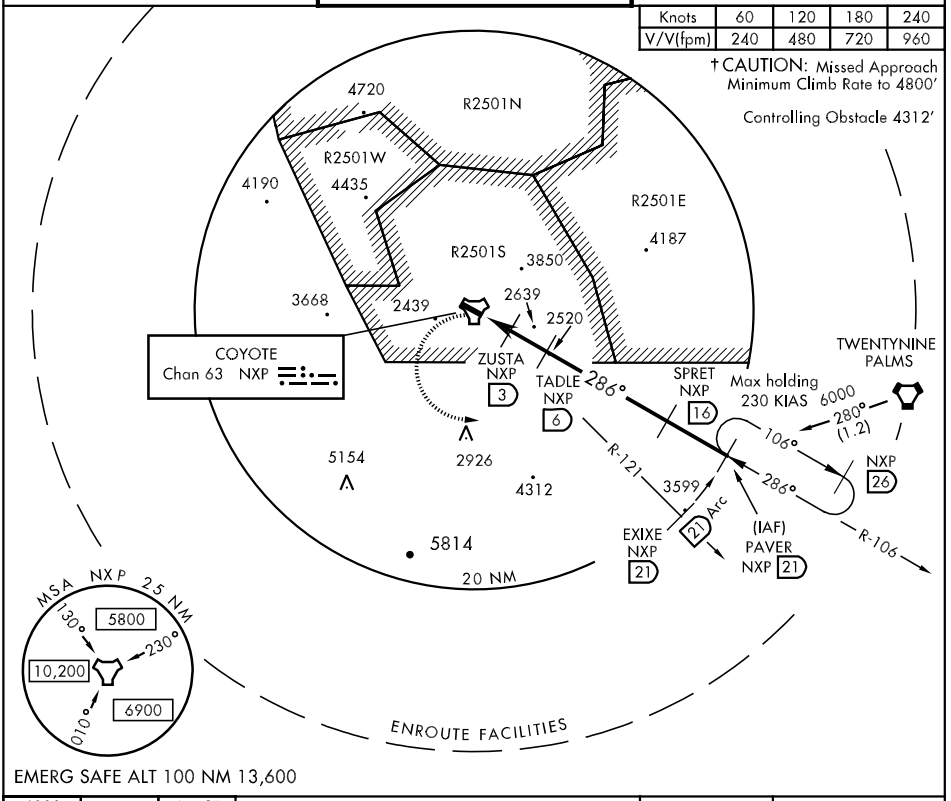
† MISSED APPROACH: Climbing left turn to 6000 via NXP TACAN R-121 to EXIXE. Then Arc SE of NXP via NXP 21 DME Arc to PAVER and hold.

ATIS	TWENTYNINE PALMS TOWER	GND CON
386.35	135.525 340.2	363.35 41.7

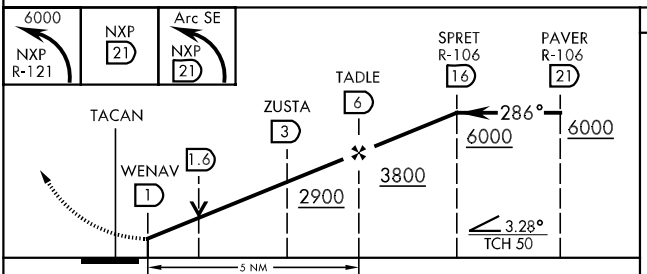
Knots	60	120	180	240
V/V(fpm)	240	480	720	960

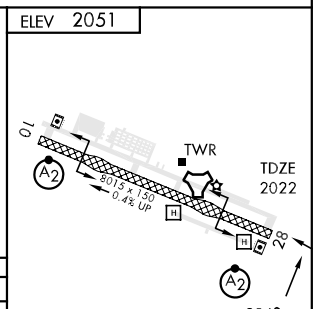
†CAUTION: Missed Approach Minimum Climb Rate to 4800′

Controlling Obstacle 4312′



EMERG SAFE ALT 100 NM 13,600





CATEGORY	A	B	C	D
S-28 *	2440-¾ 418 (400-¾)		2440-1 418 (400-1)	
CIRCLING **	2580-1 529 (600-1)		2620-1½ 569 (600-1½)	2740-2¼ 689 (700-2¼)

HIRL Rwy 10-28

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME RWY 28

VORTAC TNP 114.2 Chan 89	APCH CRS 285°	Rwy ldg 8015 TDZE 2022 Arpt Elev 2051

AL-3160 [USN]

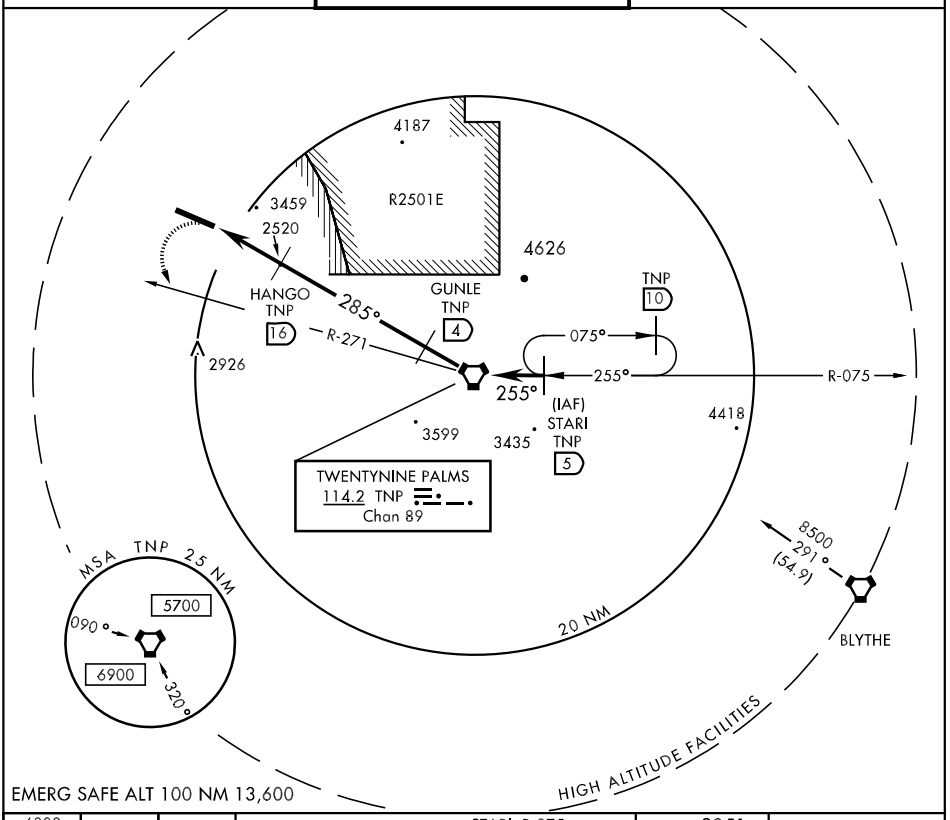
TWENTYNINE PALMS SELF (KNXP)

▼ * When ALS inop, increase CAT A to 1¼ miles, CAT B to 1½ miles, CAT CD to 3 miles.
** Circling not authorized N of Rwy 10-28.

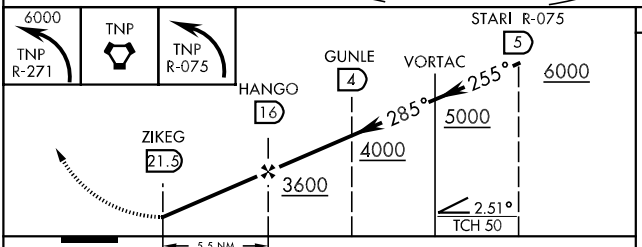
SALSF (A2)

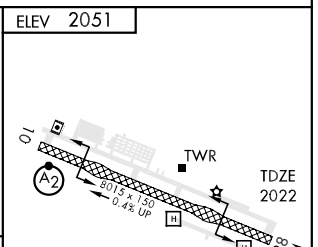
MISSED APPROACH: Climbing left turn to 6000 via TNP VORTAC R-271 direct TNP. Then via TNP R-075 to STARI and hold.

ATIS	TWENTYNINE PALMS TOWER	GND CON
386.35	135.525 340.2	363.35 41.7



EMERG SAFE ALT 100 NM 13,600





CATEGORY	A	B	C	D
S-28 *	3480-1 1458 (1500-1)	3480-1¼ 1458 (1500-1¼)	3480-2¾ 1458 (1500-2¾)	
CIRCLING **	3480-1¼ 1429 (1500-1¼)	3480-1½ 1429 (1500-1½)	3480-3 1429 (1500-3)	

SW-3, 22 OCT 2009 to 19 NOV 2009

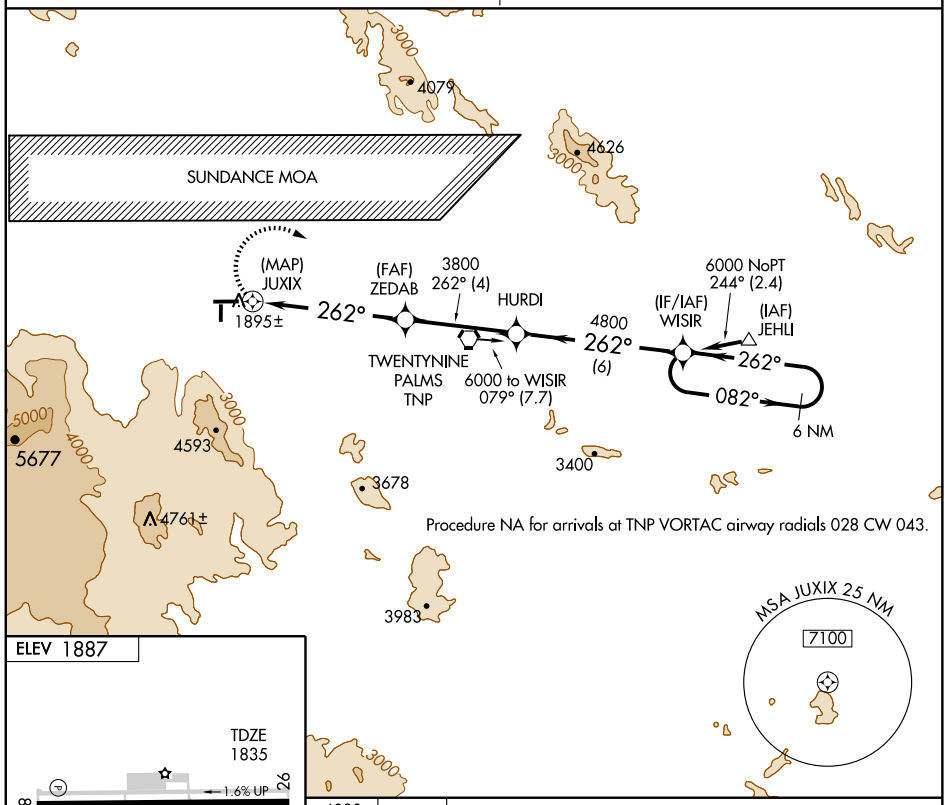
APP CRS	Rwy Idg	5531
262°	TDZE	1835
	Apt Elev	1887

RNAV (GPS) RWY 26
TWENTYNINE PALMS (TNP)

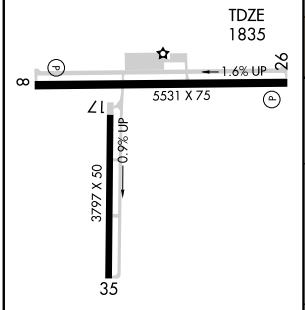
Circling NA south of Rwy 8-26. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Palm Springs Intl altimeter setting and increase all MDA 880 feet. VDP NA when using Palm Springs Intl altimeter setting.

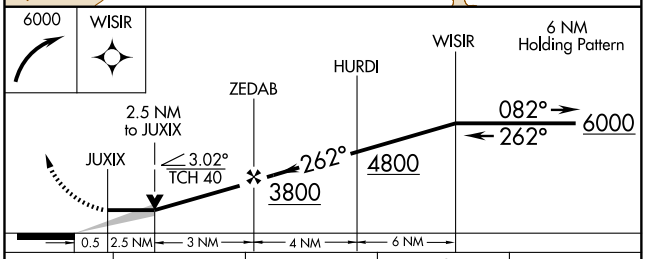
MISSED APPROACH: Climbing right turn to 6000 direct WISIR and hold.

LOS ANGELES CENTER	UNICOM
128.15 285.6	122.8 (CTAF) L



ELEV 1887





CATEGORY	A	B	C	D
LNAV MDA	2820-1¼ 985 (1000-1¼)		NA	
CIRCLING	2820-1¼ 933 (1000-1¼)		NA	

REIL Rwys 8 and 26 L
MIRL Rwys 8-26 and 17-35 L

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC TNP	APP CRS	Rwy Idg	5531
114.2	264°	TDZE	1835
Chan 89		Apt Elev	1888

VOR RWY 26

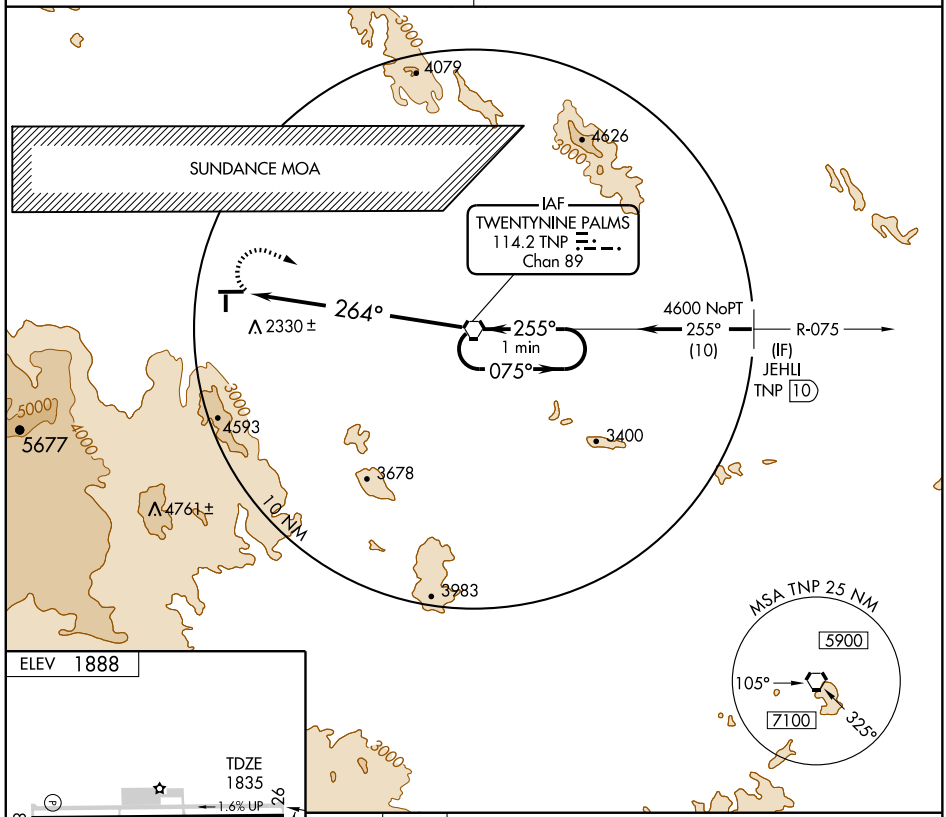
TWENTYNINE PALMS (TNP)

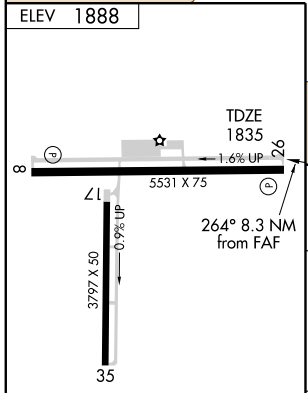
T NA — When Palm Springs Intl altimeter setting not received, procedure NA. Circling NA south of Rwy 8-26. Use Palm Springs Intl altimeter setting.

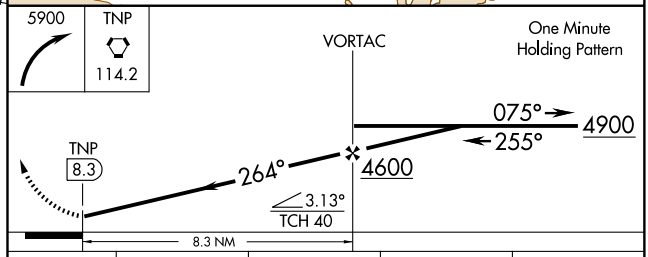
MISSED APPROACH: Climbing right turn to 5900 direct TNP VORTAC and hold, continue climb-in-hold to 5900.

LOS ANGELES CENTER
128.15 285.6

UNICOM
122.8 (CTAF) L







REIL Rwys 8 and 26 L
MIRL Rwys 8-26 and 17-35 L

FAF to MAP 8.3 NM

Knots	60	90	120	150	180
Min:Sec	8:18	5:32	4:09	3:19	2:46

CATEGORY	A	B	C	D
S-26	3580-1¼ 1745 (1700-1¼)	3580-1½ 1745 (1700-1½)	NA	
CIRCLING	3580-1¼ 1692 (1700-1¼)	3580-1½ 1692 (1700-1½)	NA	

SW-3, 22 OCT 2009 to 19 NOV 2009

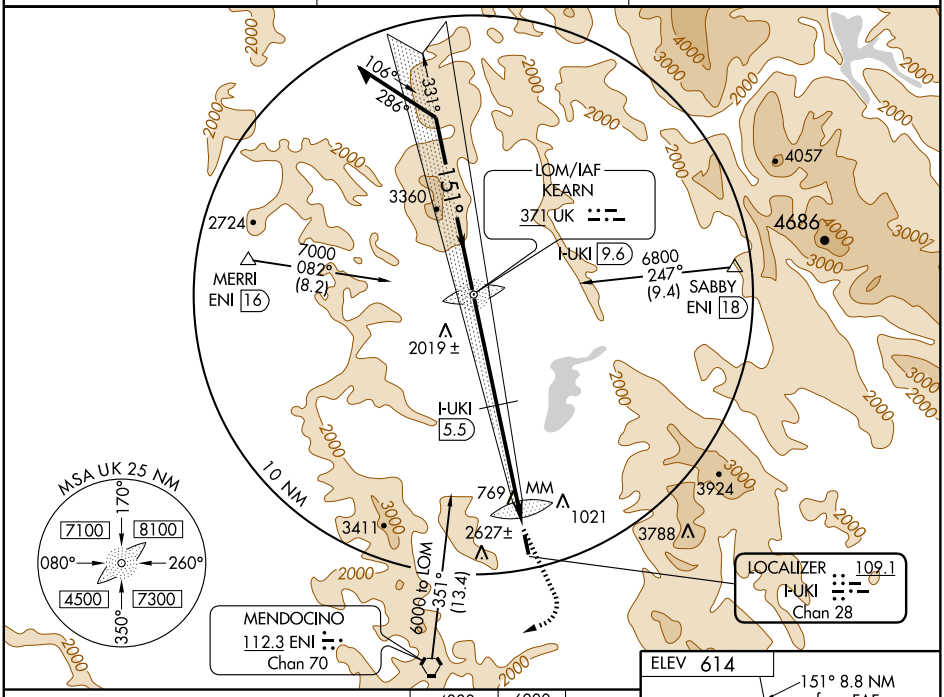
LOC/DME I-UKI	APP CRS	Rwy Idg	4415
109.1	151°	TDZE	614
Chan 28		Apt Elev	614

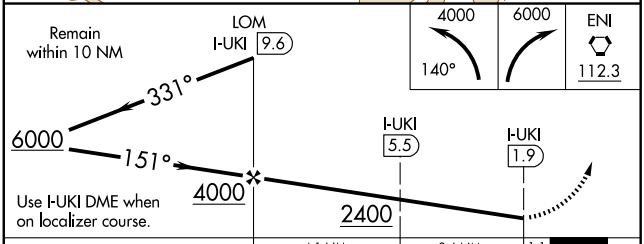
LOC RWY 15
UKIAH MUNI (UKI)

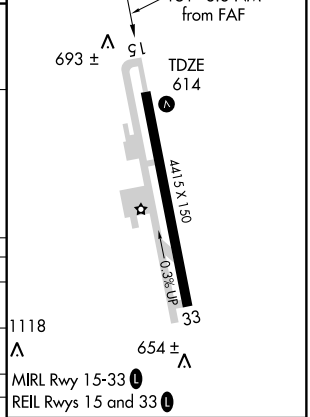
Circling NA west of Rwy 15-33.

MISSED APPROACH: Climbing left turn to 4000 via heading 140°, then climbing right turn to 6000 direct ENI VORTAC.

ASOS	OAKLAND CENTER	UNICOM
119.275	127.8 353.5	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-15	2400-1¼ 1786 (1800-1¼)	2400-1½ 1786 (1800-1½)	2400-3 1786 (1800-3)	
CIRCLING	2400-1¼ 1786 (1800-1¼)	2400-1½ 1786 (1800-1½)	2400-3 1786 (1800-3)	
DME MINIMUMS				
S-15	1720-1¼ 1106 (1200-1¼)	1720-1½ 1106 (1200-1½)	1720-3 1106 (1200-3)	
CIRCLING	1720-1¼ 1106 (1200-1¼)	1720-1½ 1106 (1200-1½)	1720-3 1106 (1200-3)	

FAF to MAP 7.7 NM

Knots	60	90	120	150	180
Min:Sec	7:42	5:08	3:51	3:05	2:34

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
331°	TDZE	N/A
	Apt Elev	614

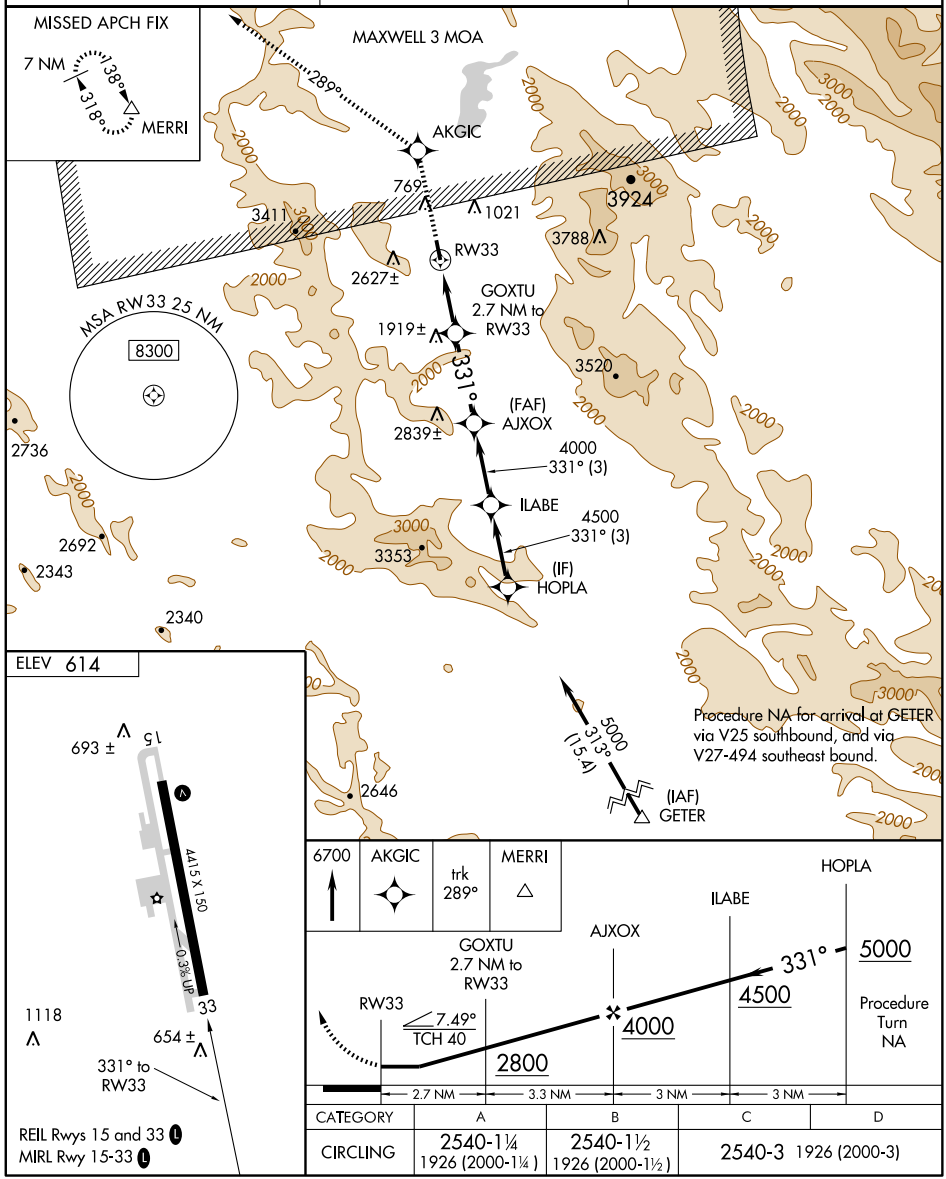
RNAV (GPS) -B

UKIAH MUNI (UKI)

Circling NA west of Rwy 15-33. DME/DME RNP- 0.3 NA. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6700 direct AKGIC and via track 289° to MERRI and hold, continue climb-in-hold to 6700.

ASOS	OAKLAND CENTER	UNICOM
119.275	127.8 353.5	123.0 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	2540-1¼ 1926 (2000-1¼)	2540-1½ 1926 (2000-1½)	2540-3 1926 (2000-3)	

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC ENI 112.3 Chan 70	APP CRS 022°	Rwy Idg N/A TDZE N/A Apt Elev 614

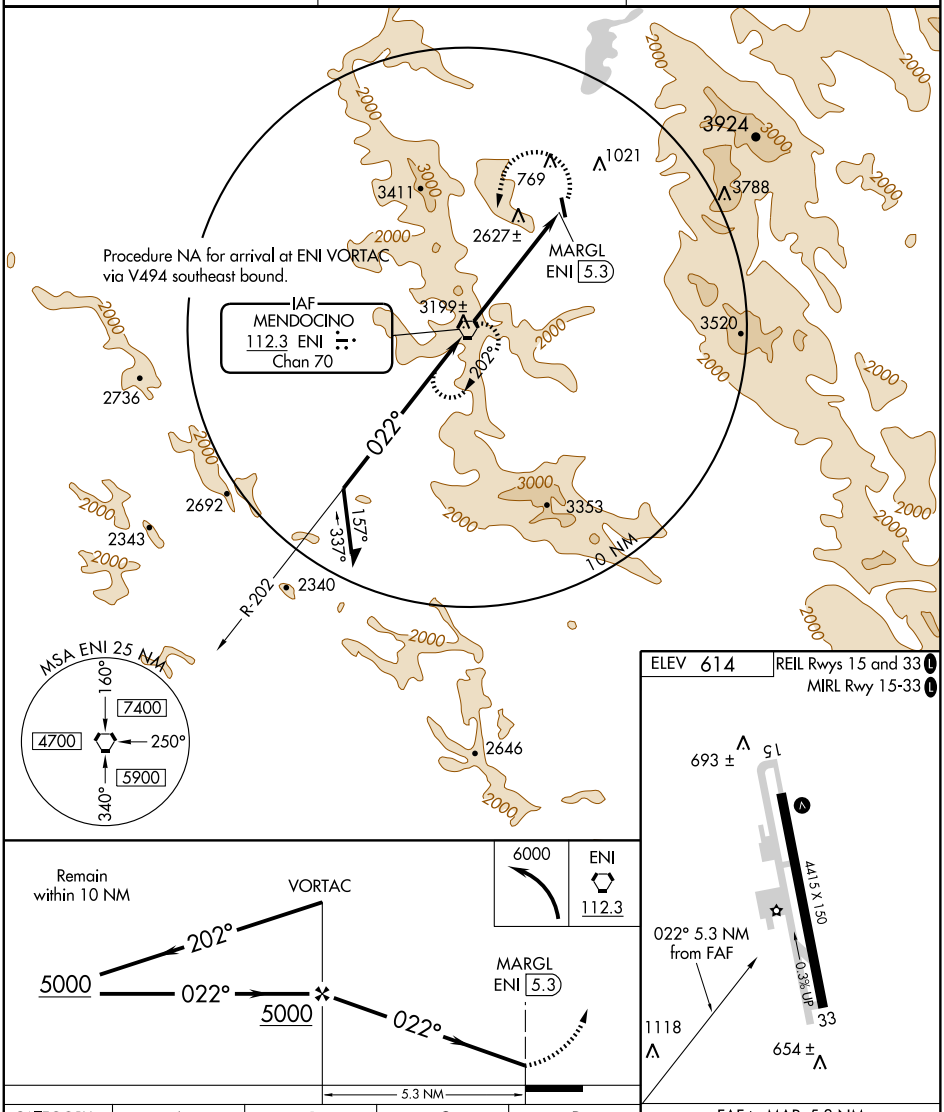
VOR-A

UKIAH MUNI (UKI)

Circling NA west of Rwy 15-33.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing left turn to 6000 direct ENI VORTAC and hold, continue climb-in-hold to 6000.

ASOS	OAKLAND CENTER	UNICOM
119.275	127.8 353.5	123.0 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	3400-1¼ 2786 (2800-1¼)	3400-1½ 2786 (2800-1½)	3400-3 2786 (2800-3)	

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3758
054°	TDZE	1426
	Apt Elev	1439

GPS RWY 6

UPLAND/CABLE (CCB)

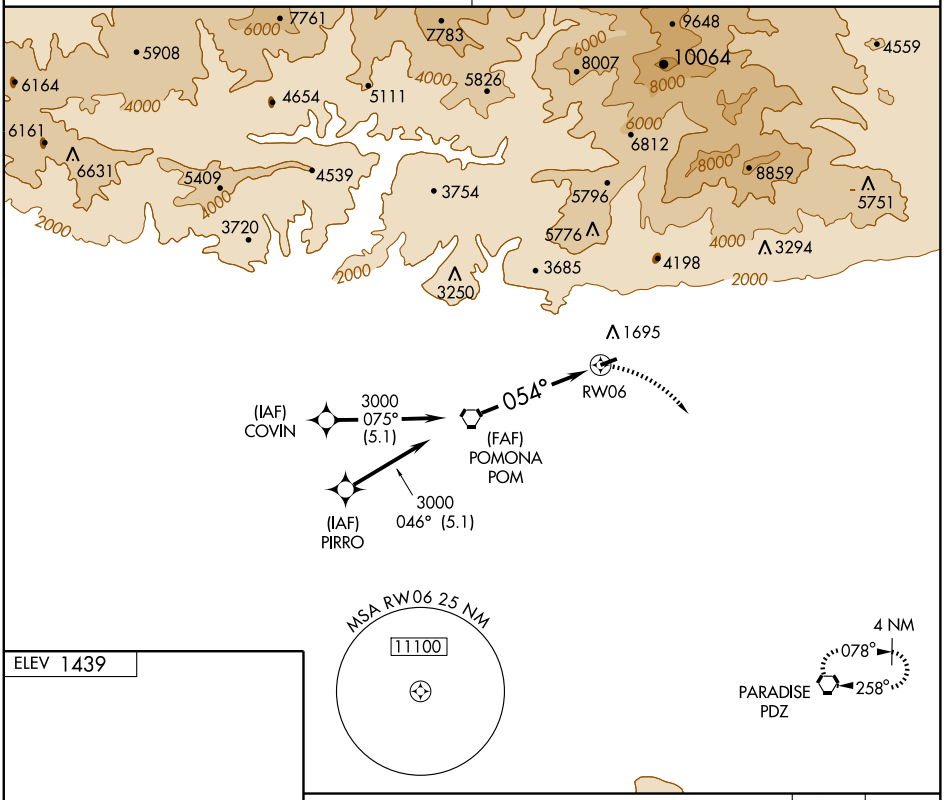
Circling not authorized north of Rwy 6-24.
Use Ontario altimeter setting.

NA

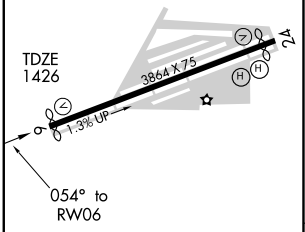
MISSED APPROACH: Climbing right turn to 4000 direct PDZ VORTAC and hold.

SOCAL APP CON
125.5 349.0

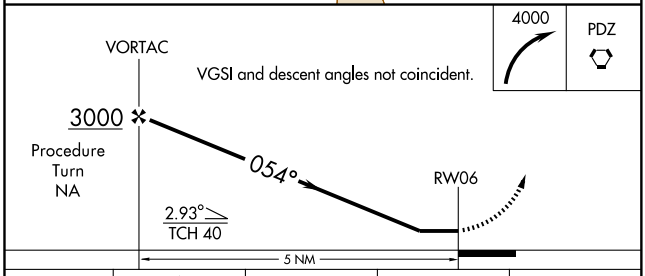
UNICOM
123.0 (CTAF) L



ELEV 1439



MIRL Rwy 6-24 L



CATEGORY	A	B	C	D
S-6	1980-1	554 (600-1)	1980-1½ 554 (600-1½)	NA
CIRCLING	1980-1	541 (600-1)	1980-1½ 541 (600-1½)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009

VORTAC POM	APP CRS	Rwy Idg	N/A
110.4	053°	TDZE	N/A
Chan 41		Apt Elev	1444

VOR-A

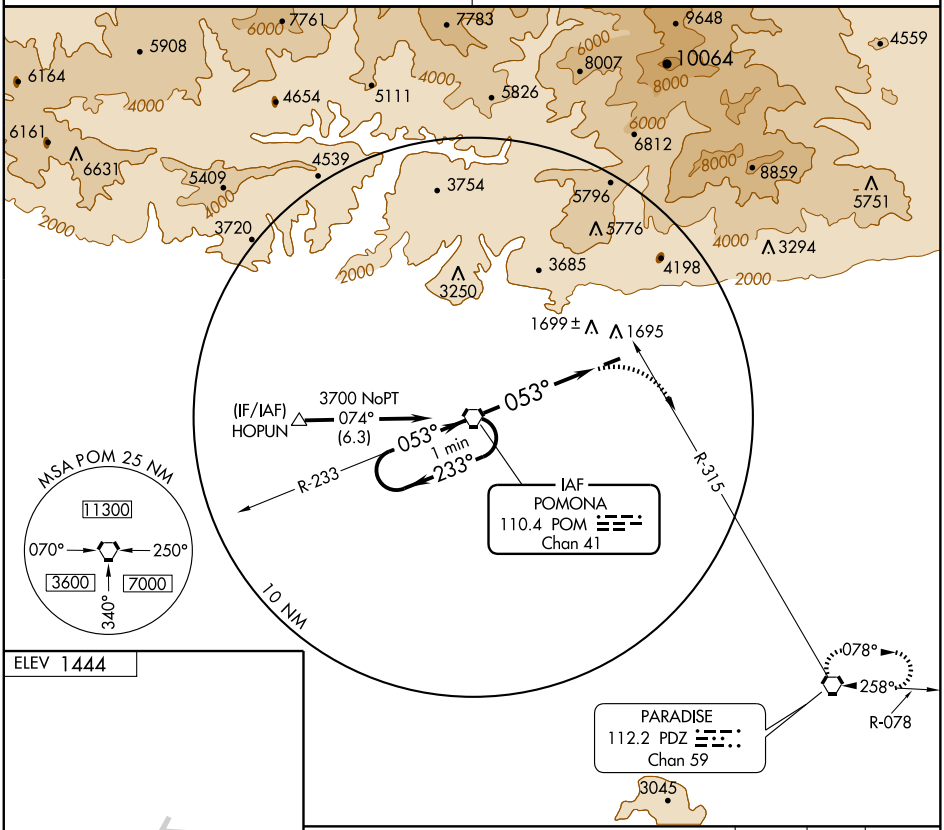
UPLAND/CABLE (CCB)

T
ANA

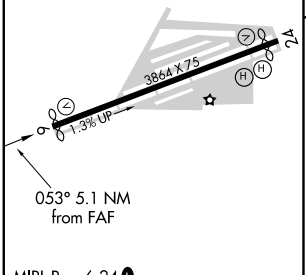
Circling NA north of Rwy 6-24.
Use Ontario altimeter setting.

MISSED APPROACH: Climbing right turn to 4000 via heading 105° and PDZ R-315 to PDZ VORTAC and hold.

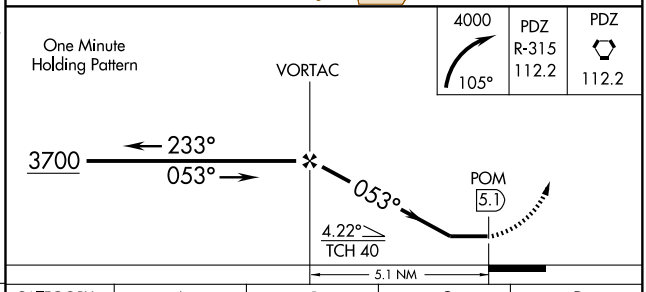
SOCAL APP CON	UNICOM
125.5 349.0	123.0 (CTAF) L



ELEV 1444



MIRL Rwy 6-24 L



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
CIRCLING	2240-1 796 (800-1)	2240-1¼ 796 (800-1¼)	2240-2¼ 796 (800-1¼)	NA

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS CH 53502 W20A	APP CRS 199°	Rwy Idg 4700 TDZE 117 Apt Elev 117

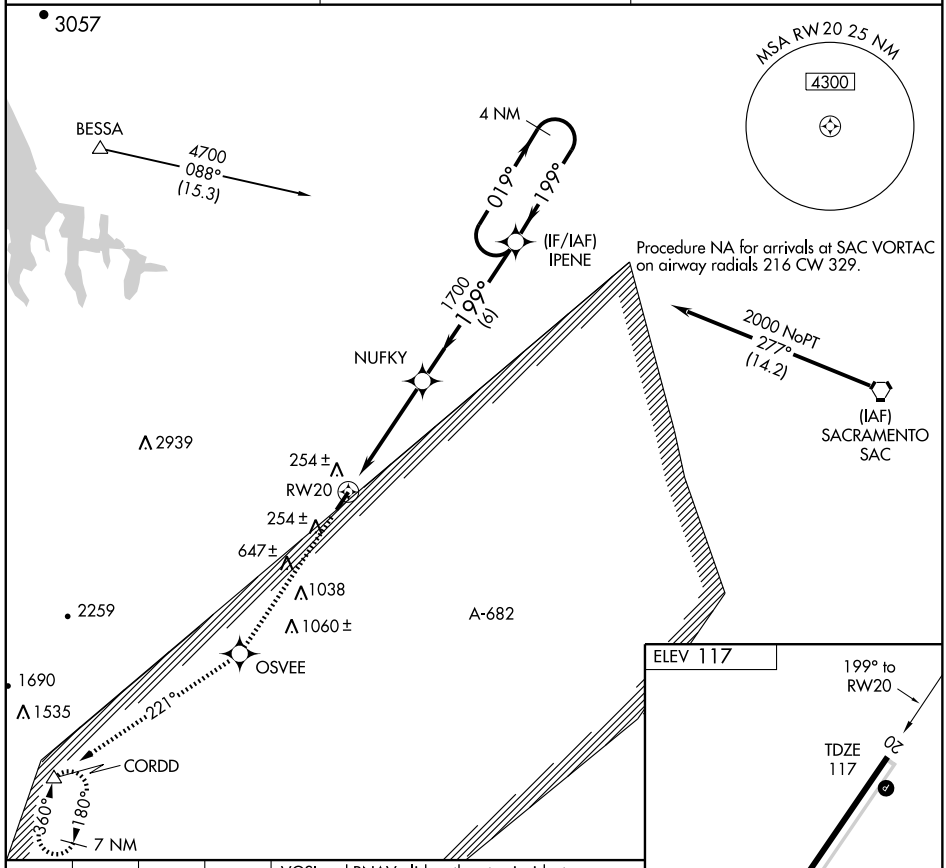
RNAV (GPS) Y RWY 20

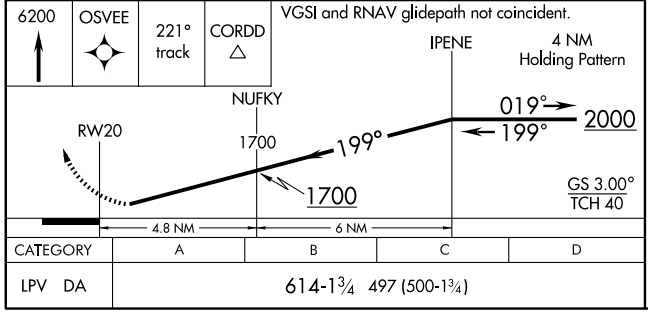
VACAVILLE/ NUT TREE (VCB)

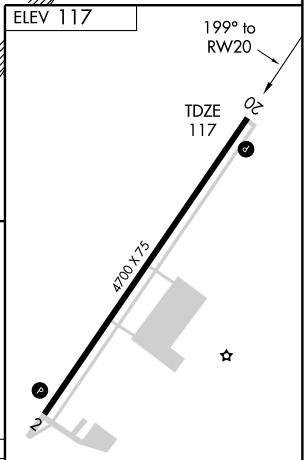
T A W DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Davis University altimeter setting and increase DA to 650 feet.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 6200 direct OSVEE and via 221° track to CORDD and hold, continue climb-in-hold to 6200.

ASOS	TRAVIS APP CON	UNICOM
134.75	128.4 291.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	614-1¾ 497 (500-1¾)			

MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L

SW-2, 22 OCT 2009 to 19 NOV 2009

VACAVILLE, CALIFORNIA AL-6094 (FAA)

APP CRS	Rwy Idg	4700
199°	TDZE	117
	Apt Elev	117

RNAV (GPS) Z RWY 20

VACAVILLE/ NUT TREE (VCB)

Circling NA west of Rwy 2-20. DME/DME RNP- 0.3 NA. If local altimeter setting not received, use Davis University altimeter setting and increase all MDAs 40 feet. Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 2000 direct IPENE and hold.

ASOS	TRAVIS APP CON	UNICOM
134.75	128.4 291.0	122.7 (CTAF) L

3057

MSA CULEX 25 NM
4300

BESSA
4700
088°
(15.3)

4 NM
019°
199°
(IF/IAF)
IPENE

1700
199°
(6)

(FAF)
NUFKY

(MAP)
CULEX

Procedure NA for arrivals at SAC VORTAC on airway radials 216 CW 329.

2000 NoPT
277°
(14.2)
(IAF)
SACRAMENTO
SAC

2939
254 ±
259 ±
254 ±
647 ±
1038
1060 ±
2259
A-682
1690
1535

ELEV 117
TDZE
117
20
2
4700 X 75

2000
IPENE
IPENE
4 NM
Holding Pattern
NUFKY
CULEX
3.04°
TCH 40
199°
019°
199°
2000
1700
VGSI and descent angles not coincident

0.3 — 4.5 NM — 6 NM

CATEGORY	A	B	C	D
LNAV MDA	520-1 403 (500-1)		520-1¼ 403 (500-1¼)	NA
CIRCLING	560-1 443 (500-1)	580-1 463 (500-1)	580-1½ 463 (500-1½)	NA

MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L

SW-2, 22 OCT 2009 to 19 NOV 2009

SOKOY TWO DEPARTURE

TRAVIS DEP CON
128.4 291.0

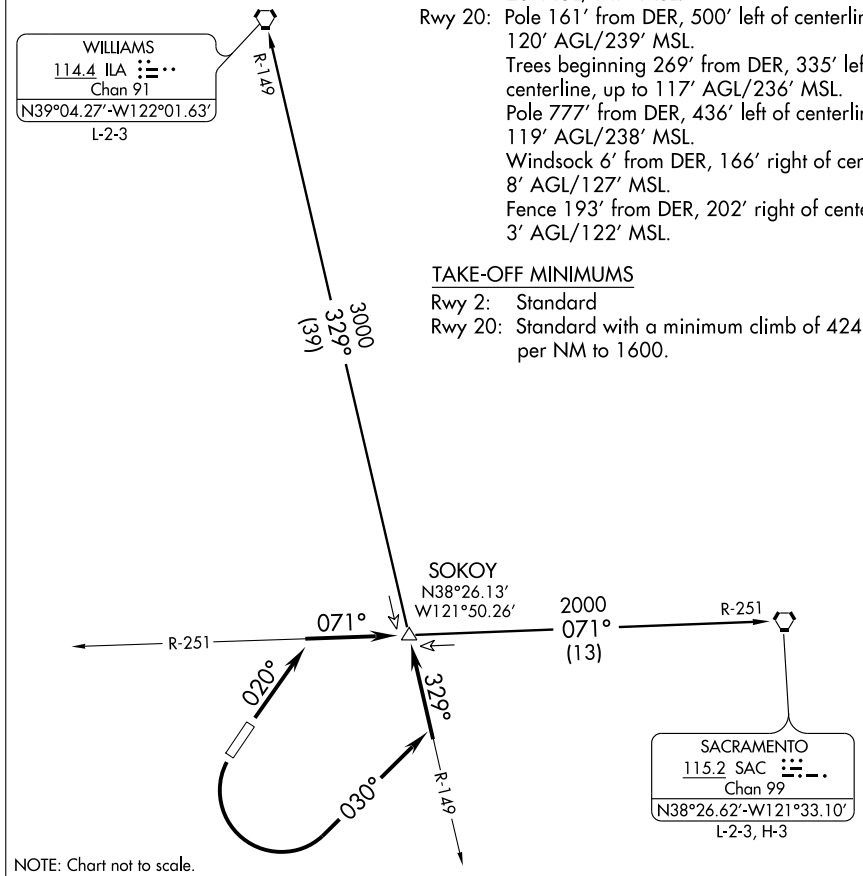
TAKE-OFF OBSTACLE NOTES

Rwy 2: Trees beginning 222′ from DER, 514′ left of centerline, up to 106′ AGL/225′ MSL.
Light pole 337′ from DER, 534′ left of centerline, 28′ AGL/147′ MSL.

Rwy 20: Pole 161′ from DER, 500′ left of centerline, 120′ AGL/239′ MSL.
Trees beginning 269′ from DER, 335′ left of centerline, up to 117′ AGL/236′ MSL.
Pole 777′ from DER, 436′ left of centerline, 119′ AGL/238′ MSL.
Windsock 6′ from DER, 166′ right of centerline, 8′ AGL/127′ MSL.
Fence 193′ from DER, 202′ right of centerline, 3′ AGL/122′ MSL.

TAKE-OFF MINIMUMS

Rwy 2: Standard
Rwy 20: Standard with a minimum climb of 424′ per NM to 1600.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 2: Climb via heading 020°, intercept SAC R-251 to SOKOY INT/ SAC 13 DME.

TAKE-OFF RUNWAY 20: Turn left heading 030°, intercept ILA R-149 to SOKOY INT/ ILA 39 DME.

SACRAMENTO TRANSITION (SOKOY2.SAC): From over SOKOY INT via SAC R-251 to SAC VORTAC.

WILLIAMS TRANSITION (SOKOY2.ILA): From over SOKOY INT via ILA R-149 to ILA VORTAC.

VORTAC SAC	APP CRS	Rwy Idg	N/A
115.2 Chan 99	241°	TDZE	N/A
		Apt Elev	117

VOR/DME-A

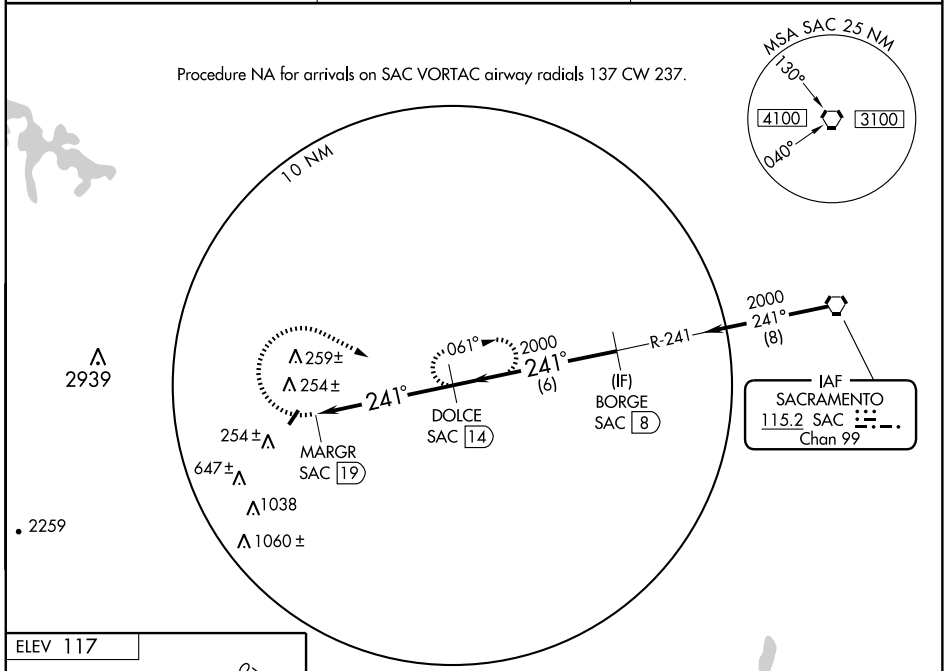
VACAVILLE/NUT TREE (VCB)

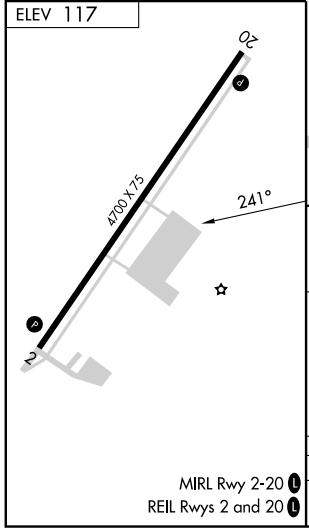
Circling NA west of Rwy 2-20.
When local altimeter setting not received, use Travis AFB altimeter setting and increase all MDA 40 feet and Cat C visibility ¼ mile.

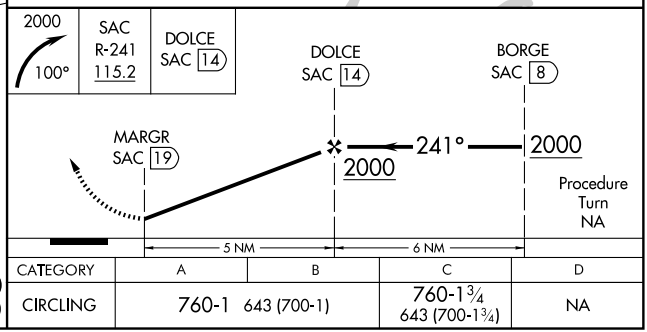
MISSED APPROACH: Climbing right turn to 2000 via heading 100° and SAC R-241 to DOLCE/14 DME and hold.

ASOS	TRAVIS APP CON	UNICOM
134.75	128.4 291.0	122.7 (CTAF) L

Procedure NA for arrivals on SAC VORTAC airway radials 137 CW 237.







MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L

CATEGORY	A	B	C	D
CIRCLING	760-1 643 (700-1)		760-1¾ 643 (700-1¾)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

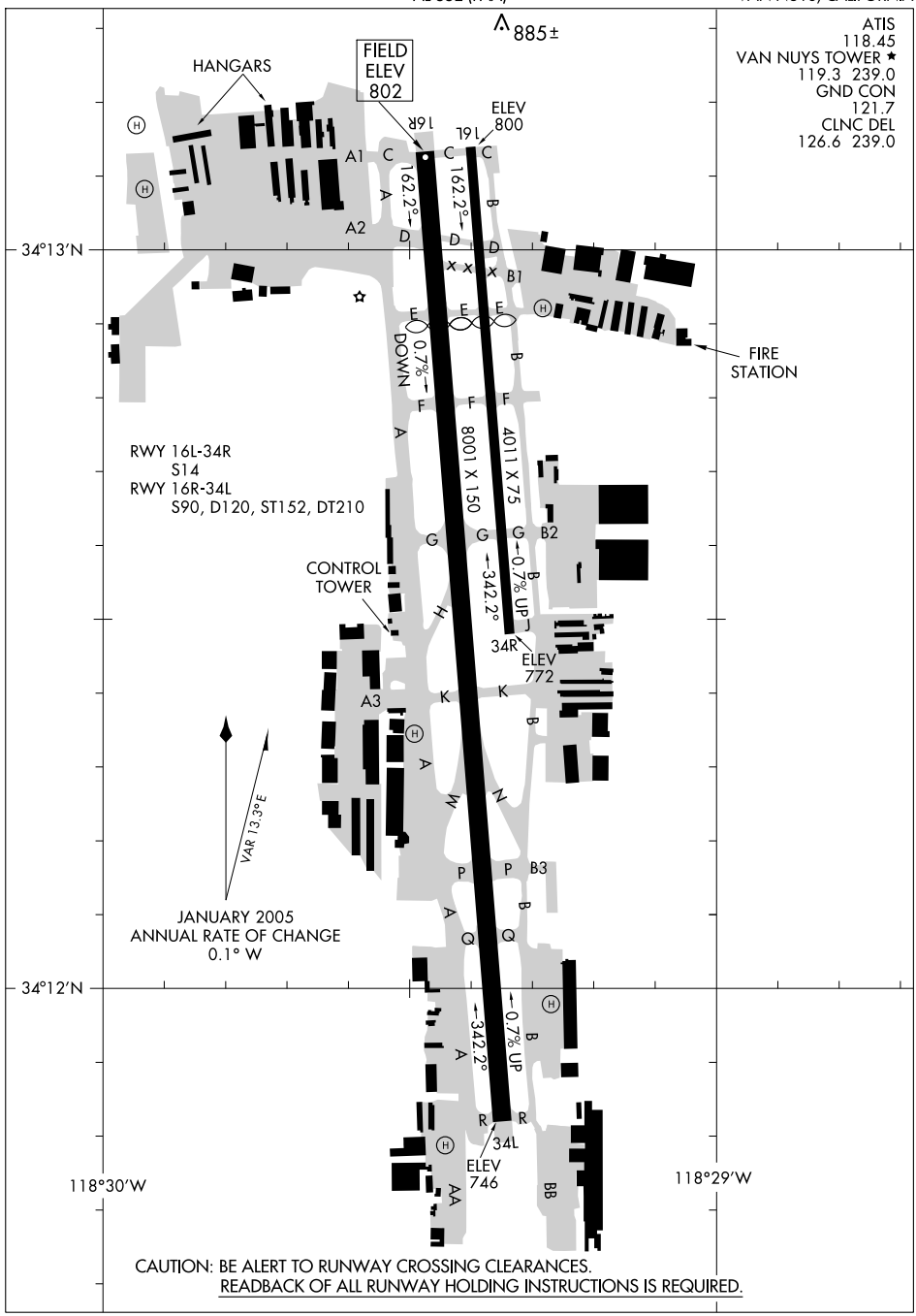
09183

AIRPORT DIAGRAM

AL-552 (FAA)

VAN NUYS (VNY)

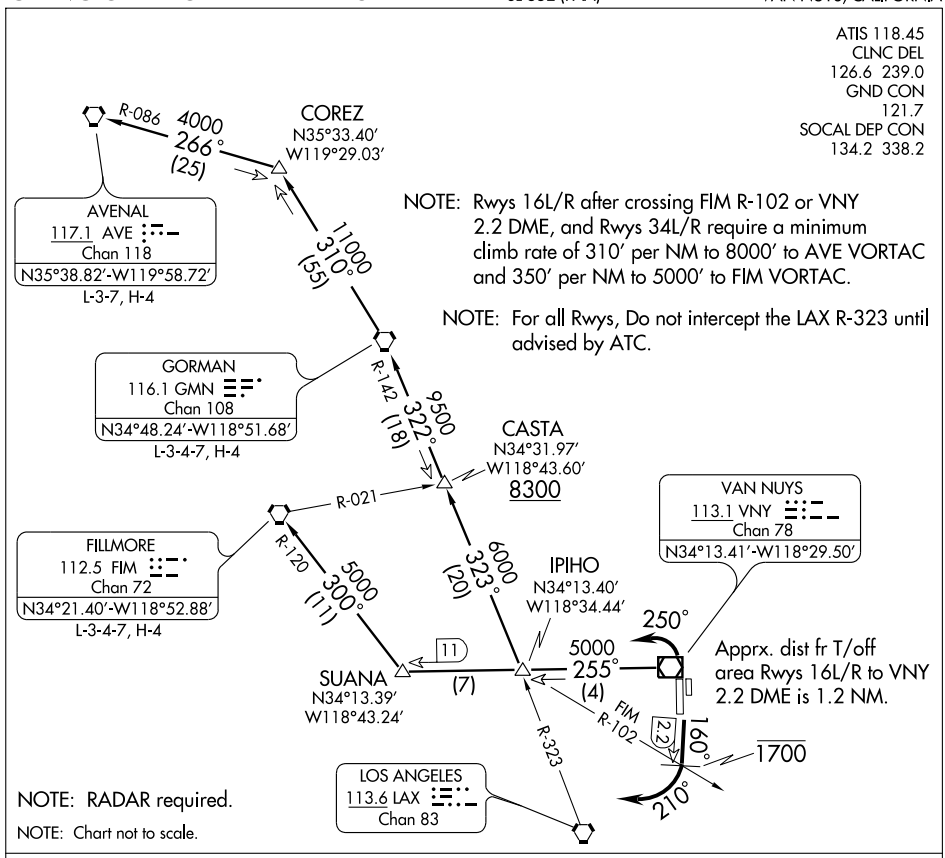
VAN NUYS, CALIFORNIA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-3, 22 OCT 2009 to 19 NOV 2009

CANOGA EIGHT DEPARTURE



SW-3, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R: Fly heading 160°, cross 2.2 DME at or below 1700'. Then turn right heading 210° for vectors to VNY R-255 and GMN R-142. Then via (transition) or (assigned route).

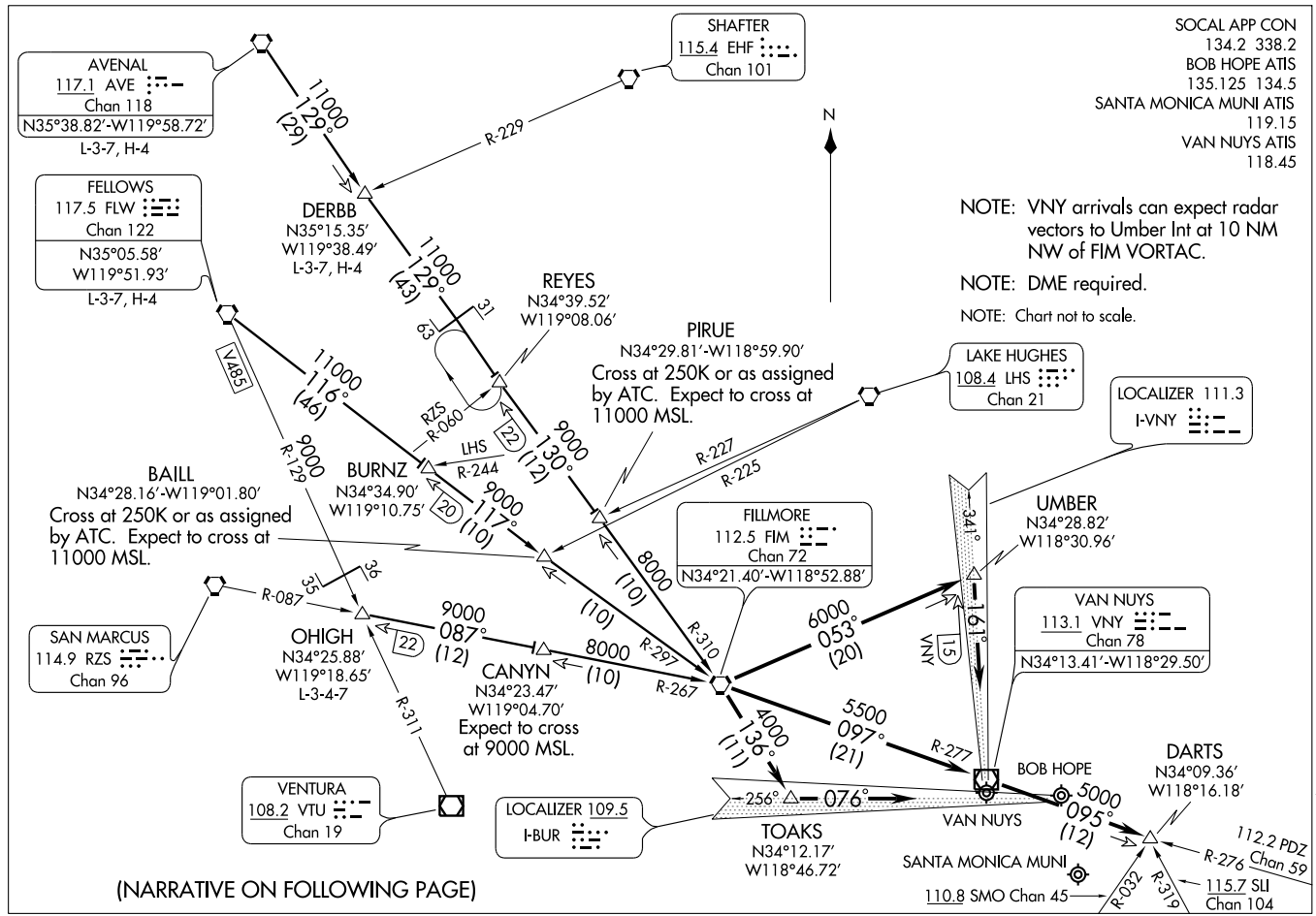
TAKE-OFF RUNWAYS 34L/R: Turn left heading 250° after departure end of runway for vectors to VNY R-255 and GMN R-142. Then via (transition) or (assigned route).

LOST COMMUNICATIONS: If not in contact with departure control within 3 NM: Rwys 16L/R, intercept the LAX R-323. Then as assigned; Rwys 34L/R, intercept the VNY R-255. Then as assigned.

AVENAL TRANSITION (CNOG8.AVE): Proceed along the VNY R-255 to intercept and proceed along the LAX R-323 and GMN R-142 to GMN VORTAC. Then via the GMN R-310 and AVE R-086 to AVE VORTAC. Cross CASTA INT at or above 8300'.

FILLMORE TRANSITION (CNOG8.FIM): Proceed via the VNY R-255 and FIM R-120 to FIM VORTAC.

GORMAN TRANSITION (CNOG8.GMN): Proceed via the VNY R-255 to intercept and proceed via the LAX R-323 and GMN R-142 to GMN VORTAC. Cross CASTA INT at or above 8300'.


(FIM.FERN5) 08269
FERNANDO FIVE ARRIVAL
ST-67 (FAA)
BURBANK, CALIFORNIA
SOCAL APP CON
134.2 338.2
BOB HOPE ATIS
135.125 134.5
SANTA MONICA MUNI ATIS
119.15
VAN NUYS ATIS
118.45
NOTE: VNY arrivals can expect radar vectors to Umber Int at 10 NM NW of FIM VORTAC.
NOTE: DME required.
NOTE: Chart not to scale.
N
AVENAL
117.1 AVE
Chan 118
N35°38.82'-W119°58.72'
L-3-7, H-4
SHAFTER
115.4 EHF
Chan 101
FELLOWS
117.5 FLW
Chan 122
N35°05.58'
W119°51.93'
L-3-7, H-4
DERBB
N35°15.35'
W119°38.49'
L-3-7, H-4
REYES
N34°39.52'
W119°08.06'
PIRUE
N34°29.81'-W118°59.90'
Cross at 250K or as assigned by ATC. Expect to cross at 11000 MSL.
LAKE HUGHES
108.4 LHS
Chan 21
LOCALIZER 111.3
I-VNY
BAILL
N34°28.16'-W119°01.80'
Cross at 250K or as assigned by ATC. Expect to cross at 11000 MSL.
BURNZ
N34°34.90'
W119°10.75'
FILLMORE
112.5 FIM
Chan 72
N34°21.40'-W118°52.88'
UMBER
N34°28.82'
W118°30.96'
VAN NUYS
113.1 VNY
Chan 78
N34°13.41'-W118°29.50'
SAN MARCUS
114.9 RZS
Chan 96
OHIGH
N34°25.88'
W119°18.65'
L-3-4-7
CANYN
N34°23.47'
W119°04.70'
Expect to cross at 9000 MSL.
VENTURA
108.2 VTU
Chan 19
LOCALIZER 109.5
I-BUR
TOAKS
N34°12.17'
W118°46.72'
BOB HOPE
VAN NUYS
DARTS
N34°09.36'
W118°16.18'
SANTA MONICA MUNI
110.8 SMO Chan 45
112.2 PDZ
Chan 59
115.7 SLI
Chan 104
11000 129° (29)
11000 129° (43)
11000 116° (46)
9000 130° (112)
9000 117° (110)
8000 (10)
9000 087° (12)
8000 (10)
6000 053° (20)
5500 097° (21)
4000 136° (111)
5000 095° (12)
R-229
R-227
R-225
R-129
R-244
R-087
R-297
R-310
R-267
R-311
R-277
R-276
R-032
R-319
V485
RZS R-080
LHS
341°
161°
256°
076°
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

AVENAL TRANSITION (AVE.FERN5): From over AVE VORTAC via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

DERBB TRANSITION (DERBB.FERN5): From over DERBB INT via AVE R-129 and FIM R-310 to FIM VORTAC. Thence....

FELLOWS TRANSITION (FLW.FERN5): From over FLW VORTAC via FLW R-116 and FIM R-297 to FIM VORTAC. Thence....

OHIGH TRANSITION (OHIGH.FERN5): From over OHIGH INT via FIM R-267 to FIM VORTAC. Thence....

....From over FIM VORTAC:

LANDING BOB HOPE: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect ILS RWY 8.

LANDING SANTA MONICA MUNI: Via FIM R-097 and VNY R-277 to VNY VOR/DME; then via VNY R-095 to DARTS INT. Expect VOR-A approach.

LANDING VAN NUYS RWY 16: Via FIM R-053 to UMBER INT, then via I-VNY localizer. Expect ILS RWY 16R.

LANDING VAN NUYS RWY 34: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect LDA-C; circle to land RWY 34L.

SW-3, 22 OCT 2009 to 19 NOV 2009

GLENDALE NINE DEPARTURE

ATIS 118.45
CLNC DEL
126.6 239.0
GND CON
121.7
SOCAL DEP CON
124.6 298.85

TAKE-OFF MINIMUMS

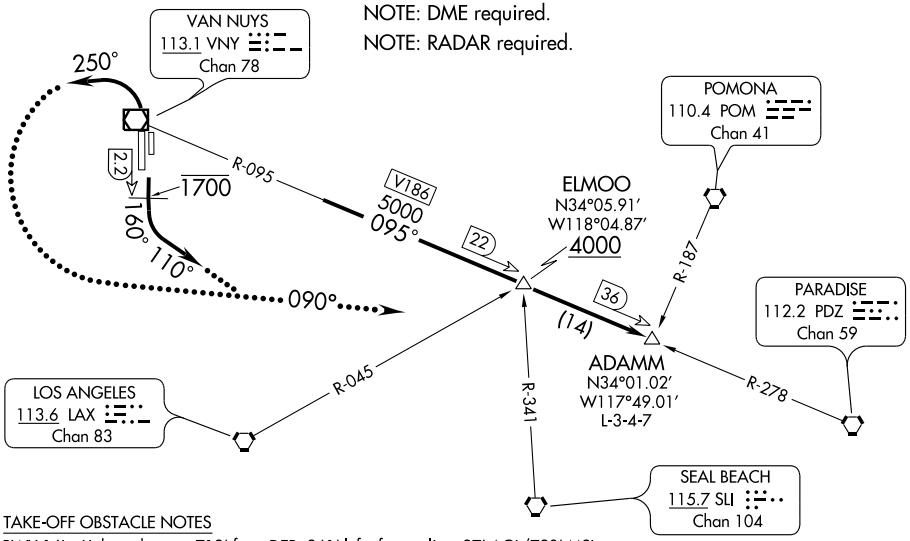
Rwy 16L, Standard with the following minimum climb requirements: ATC climb of 300′ feet per NM to 3800, obstacle climb of 240′ per NM to 2000.

Rwy 16R, Standard with the following minimum climb requirements: ATC climb of 300′ feet per NM to 3800, obstacle climb of 280′ per NM to 2300.

Rwy 34L, 34R, standard with minimum climb of 480′ per NM to 4200.

NOTE: DME required.

NOTE: RADAR required.



TAKE-OFF OBSTACLE NOTES

RWY 16L, Light on hangar 713′ from DER, 361′ left of centerline, 27′ AGL/798′ MSL.

RWY 16R, Hangar 209′ from DER, 516′ right of centerline, 9′ AGL/755′ MSL.
Flagpole 570′ from DER, 549′ right of centerline, 15′ AGL/761′ MSL.
Building 941′ from DER, 599′ left of centerline, 28′ AGL/774′ MSL.
Multiple trees beginning 1129′ from DER, left and right of centerline, up to 72 AGL/818′ MSL.

RWY 34L, Blast fence 169′ from DER, 405′ left of centerline, 10′ AGL/812′ MSL,
Obstruction light on blast fence, 241′ from DER, 195′ left of centerline, 17′ AGL/819′ MSL
Multiple trees beginning 325′ from DER, 549′ right of centerline, up to 119′ AGL/921′ MSL.
Railroad 305′ from DER, 369′ right of centerline, 30′ AGL/832′ MSL.
Building 424′ from DER, 589′ right of centerline, 29′ AGL/831′ MSL.
Antenna on building 450′ from DER, 462′ left of centerline, 15′ AGL/817′ MSL.
Pole 1376′ from DER, 779′ left of centerline, 68′ AGL/870′ MSL.

RWY 34R, Railroad 305′ from DER, 5′ right of centerline, 33′ AGL/832′ MSL.
Multiple trees beginning 325′ from DER, 174′ right of centerline, up to 122′ AGL/921′ MSL.
Building 424′ from DER, 214′ right of centerline, 32′ AGL/831′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R: Climb via heading 160° to cross VNY 2.2 DME at or below 1700′. Then climbing left turn heading 110° for vectors to VNY R-095 to ADAMM INT. Then via (assigned route).

TAKE-OFF RUNWAYS 34L/R: Climbing left turn via heading 250° for vectors to VNY R-095 to ADAMM INT. Then via (assigned route).

LOST COMMUNICATIONS: If not in contact with departure control within 3 NM, turn left heading 090° to intercept VNY R-095 to ADAMM INT, maintain 5000 or as assigned.

LOC I-VNY	APP CRS	Rwy Idg	6570
111.3	161°	TDZE	793
		Apt Elev	802

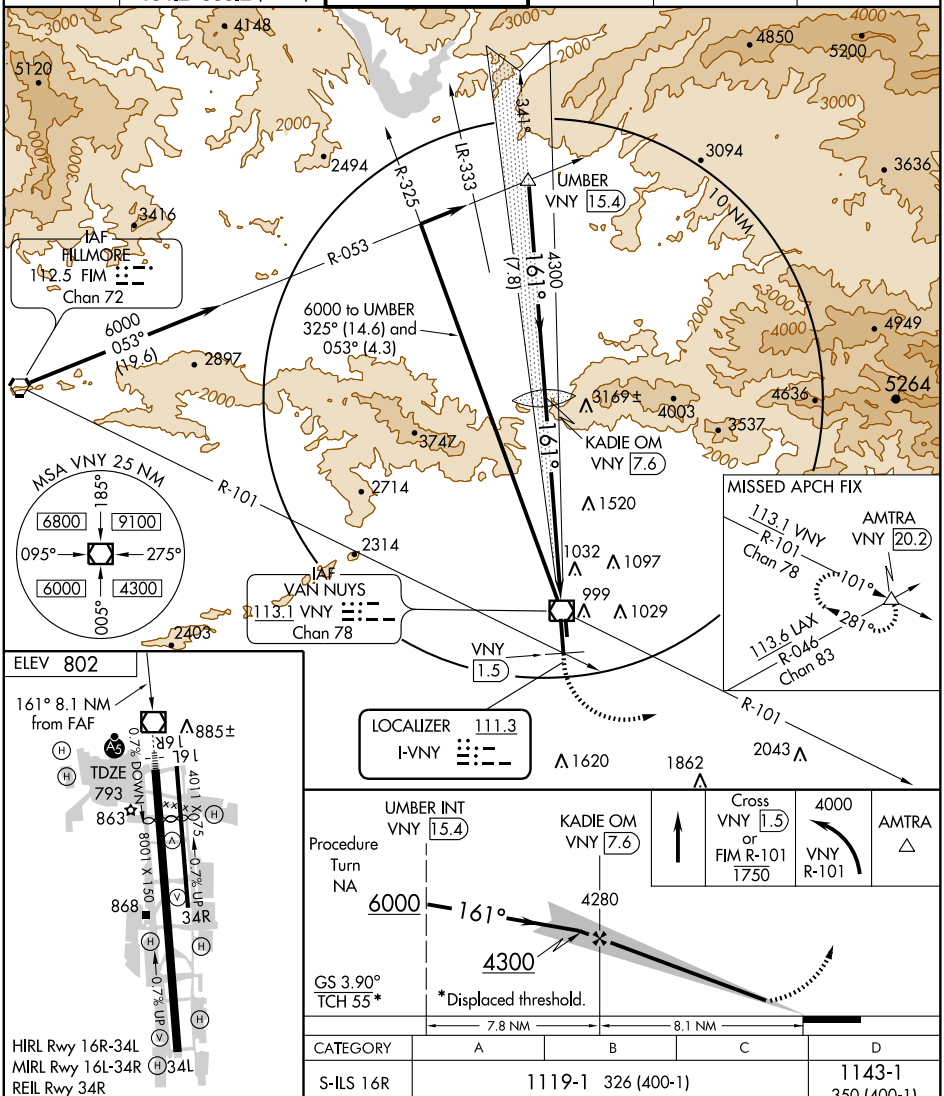
ILS RWY 16R
VAN NUYS (VNY)

Inoperative table does not apply.
Circling requires descent on GS to MDA.
Visibility reduction by helicopters NA.

MALSR

MISSED APPROACH: Climb to cross VNY 1.5 DME or FIM R-101 at or below 1750, then climbing left turn to 4000 via VNY VOR/DME R-101 to AMTRA INT/VNY 20.2 DME and hold.

ATIS	SOCAL APP CON	VAN NUYS TOWER★	GND CON	CLNC DEL	UNICOM
118.45	120.4 360.6 (NORTH) 134.2 338.2 (WEST)	119.3 (CTAF) 239.0	121.7	126.6 239.0	122.95



FAF to MAP 8.1 NM					
Knots	60	90	120	150	180
Min:Sec	8:06	5:24	4:03	3:14	2:42

CATEGORY	A	B	C	D
S-ILS 16R	1119-1 326 (400-1)			1143-1 350 (400-1)
APPROACH NOT AUTHORIZED WHEN GLIDE SLOPE NOT USED				
CIRCLING	1300-1 498 (500-1)		1340-1½ 538 (600-1½)	1360-2 558 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-BUR	APP CRS	Rwy Idg	N/A
109.5	076°	TDZE	N/A
		Apt Elev	799

LDA-C
VAN NUYS (VNY)

MISSED APPROACH: Climb to 4000 via VNY R-101 to AMTRA INT and hold.

ATIS	SOCAL APP CON	VAN NUYS TOWER★	GND CON	CLNC DEL	UNICOM
118.45	120.4 360.6 (NORTH) 134.2 338.2 (WEST)	119.3 (CTAF) 239.0	121.7	126.6 239.0	122.95

IAF FILLMORE 112.5 FIM Chan 72
4000 NoPT 136° (10.5)
R-136
10 NM
VAN NUYS 113.1 VNY Chan 78
LOCALIZER 109.5 I-BUR
(IAF) SILEX INT
4000 242° (6.1)
3300 076° (8.4)
076° 1 min 256°
076°
256°
4100 NoPT 054° (14.5)
TOAKS INT
BUDDE OM/INT
R-164
R-316
R-101
LMM VINEE 253 UR
IAF VENTURA 108.2 VTU Chan 19
2897 3747 2714 2314 2403 3111 2824 2908 2469 2126 1620 1862 2043 3296 4636 4003 3537 3892 1520 1032 1097 999 1029

MISSED APCH FIX
113.1 VNY R-101 Chan 78
AMTRA VNY 20.2
101°
281°
113.6 LAX R-046 Chan 83
LOS ANGELES 113.6 LAX Chan 83
4000 316° (18.3)

MSA VNY 25 NM
185°
6800 9100
095° 275°
6000 4300
500°

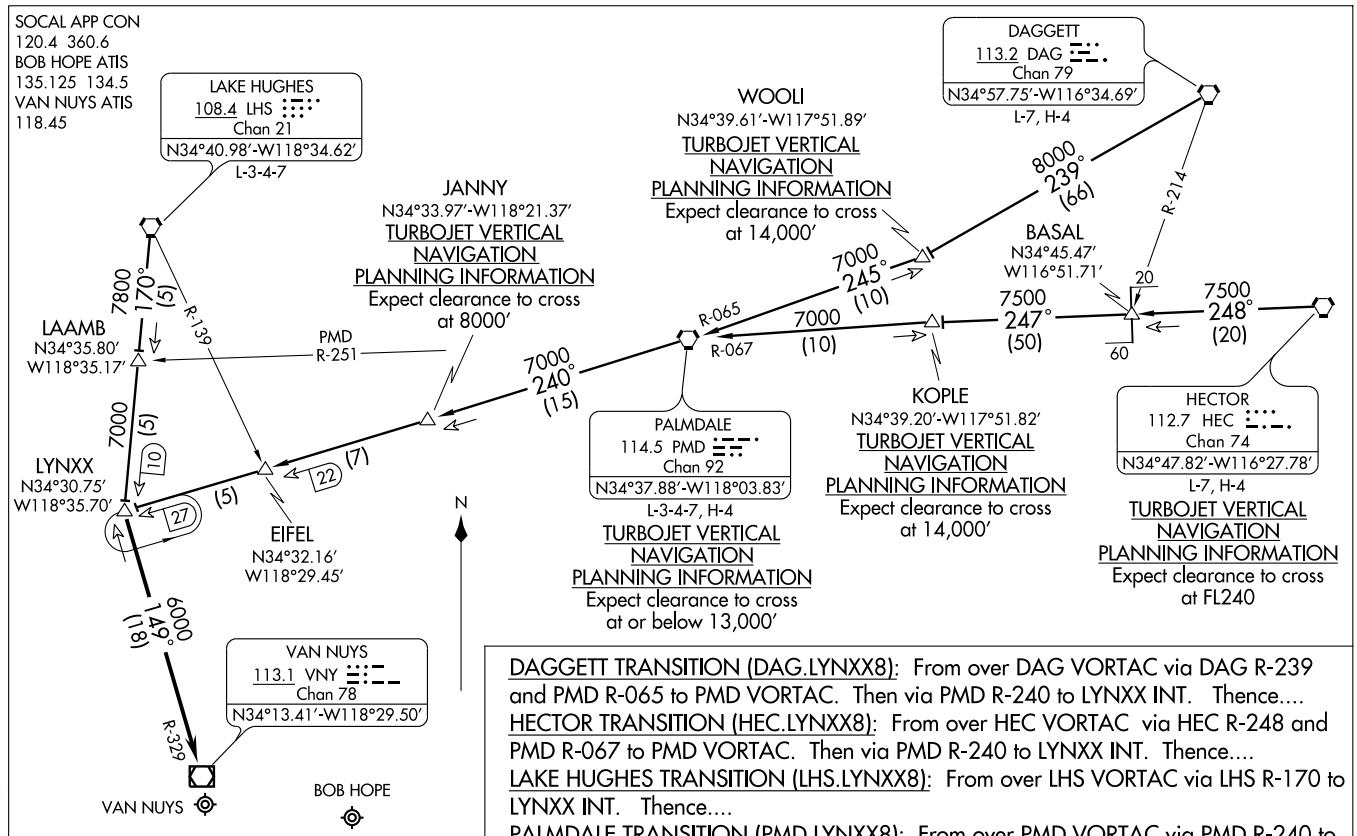
ELEV 799
885±
0.7% DOWN
4011 X 75
0.7% UP
8001 X 150
863
868
16L 16R 34L 34R
076° 6 NM from FAF
BUDDE OM/INT
0.7% up
HIRL Rwy 16R-34L
MIRL Rwy 16L-34R
REIL Rwy 34R

One Minute Holding Pattern
SILEX INT
3500 256° 076°
3300 076°
BUDDE OM/INT
6 NM
4000 VNY R-101
AMTRA
Disregard glide slope indications

FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

CATEGORY	A	B	C	D
CIRCLING	2600-1¼ 1801 (1900-1¼)	2600-1½ 1801 (1900-1½)	2600-3	1801 (1900-3)

SW-3, 22 OCT 2009 to 19 NOV 2009



DAGGETT TRANSITION (DAG.LYNXX8): From over DAG VORTAC via DAG R-239 and PMD R-065 to PMD VORTAC. Then via PMD R-240 to LYNXX INT. Thence....

HECTOR TRANSITION (HEC.LYNXX8): From over HEC VORTAC via HEC R-248 and PMD R-067 to PMD VORTAC. Then via PMD R-240 to LYNXX INT. Thence....

LAKE HUGHES TRANSITION (LHS.LYNXX8): From over LHS VORTAC via LHS R-170 to LYNXX INT. Thence....

PALMDALE TRANSITION (PMD.LYNXX8): From over PMD VORTAC via PMD R-240 to LYNXX INT. Thence....

....From over LYNXX INT via VNY R-329 to VNY VOR/DME. Expect radar vectors to final approach course after VNY VOR/DME.

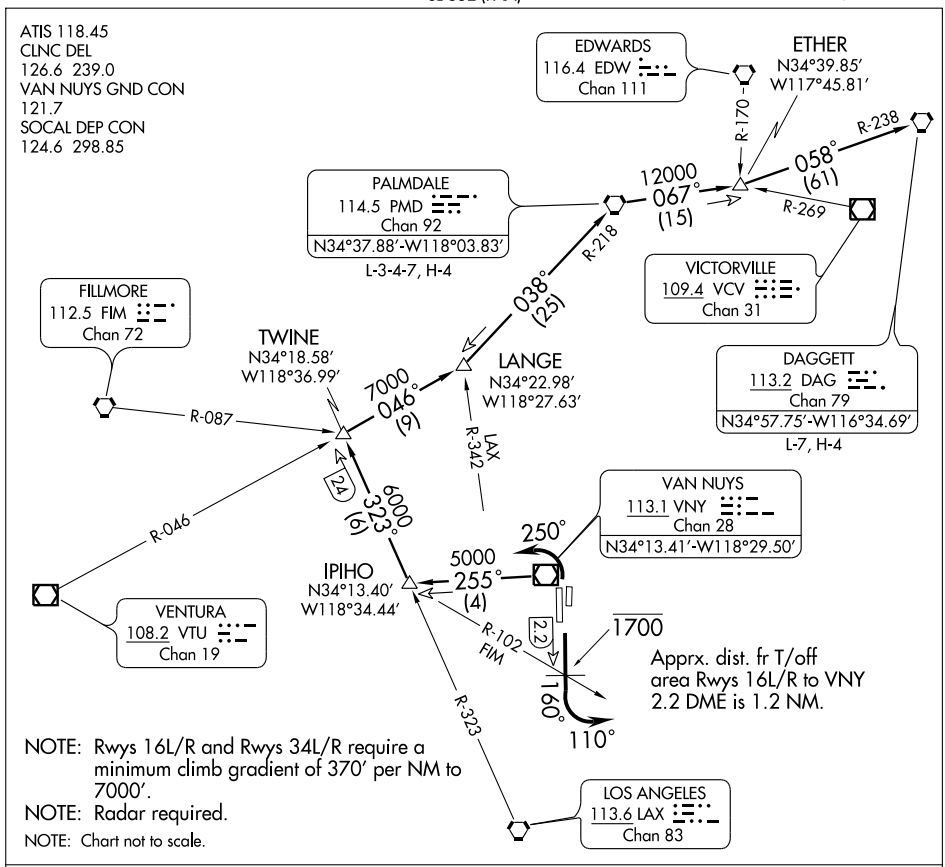
NOTE: DME required for DAGGETT, HECTOR, and PALMDALE TRANSITIONS.

NOTE: Chart not to scale.

NEWHALL SIX DEPARTURE

SL-552 (FAA)

VAN NUYS (VNY)
VAN NUYS, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R: Fly heading 160° to cross FIM R-102 or VNY 2.2 DME at or below 1700′. Then turn left heading 110° for vectors to VNY R-255 and LAX R-323. Then via (transition) or (assigned route).

TAKE-OFF RUNWAYS 34L/R: Turn left heading 250° after departure end of runway for vectors to VNY R-255 and LAX R-323. Then via (transition) or (assigned route).

LOST COMMUNICATIONS: If not in contact with Departure Control within 3 NM: Rwys 16L/R: Intercept the LAX R-323, then as assigned; Rwys 34L/R: Intercept the VNY R-255, then as assigned.

DAGGETT TRANSITION (NUAL6.DAG): Proceed on the VNY R-255 to intercept and proceed via the LAX R-323 and the VTU R-046 to LANGE INT; then the PMD R-218 to the PMD VORTAC. Then via the PMD R-067 and the DAG R-238 to DAG VORTAC.

PALMDALE TRANSITION (NUAL6.PMD): Proceed on the VNY R-255 to intercept and proceed via the LAX R-323 and the VTU R-046 to LANGE INT; then via the PMD R-218 to the PMD VORTAC.

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME VNY	APP CRS	Rwy Idg	N/A
113.1	075°	TDZE	N/A
Chan 78		Apt Elev	802

VOR-A
VAN NUYS (VNY)

When local altimeter setting not received, use Burbank altimeter setting and increase all MDAs 20 feet.

MISSED APPROACH: Climbing right turn 4000 via VNY R-101 to AMTRA INT/ 20.2 DME and hold.

ATIS	SOCAL APP CON	VAN NUYS TOWER★	GND CON	CLNC DEL	UNICOM
118.45	120.4 360.6 (NORTH) 134.2 338.2 (WEST)	119.3 (CTAF) 239.0	121.7	126.6 239.0	122.95

Procedure NA for arrivals at FIM VORTAC via V518 westbound.

IAF FILLMORE 112.5 FIM Chan 72

MSA VNY 25 NM
185°
7300 9300
095° 275°
6200 4400
005°

4400 NoPT 120° (11.3)

(IAF) GINNA VNY 16.9

4400 NoPT 075° (5.5)

R-120

3400 075° (6.3)

(IAF) CANOG INT VNY 5.1

1249±Λ 1161±Λ

075° 1 min 255°

R-255

4600 255° (5.1)

VAN NUYS 113.1 VNY Chan 78

R-101

4600 NoPT 053° (17.6)

(IF) SUANA VNY 11.4

IAF VENTURA 108.2 VTU Chan 19

MISSED APCH FIX

AMTRA VNY 20.2

113.1 VNY R-101 Chan 78

101°

281°

113.6 LAX R-046 Chan 83

4400 317° (14.5)

4400 320° (19.2)

LOS ANGELES 113.6 LAX Chan 83

SANTA MONICA 110.8 SMO Chan 45

10 NM

R-317

3416 2897 3747 2714 3537 4903 4636 3892 3296 3111 2824 2908 2469 2126 2403

Λ1520 Λ1620 2043Λ 1097 1032Λ 999 Λ1029

ELEV 802

885±

075° to VOR/DME

863 868

0.7% DOWN

4011 X 75

8001 X 150

0.7% up

34R 34L

HIRL Rwy 16R-34L
MIRL Rwy 16L-34R
REIL Rwy 34R

One Minute Holding Pattern

CANOG INT VNY 5.1

4000 VNY R-101

AMTRA

3700 255° 075°

3400 075°

VOR/DME

5.1 NM

CATEGORY	A	B	C	D
CIRCLING	1500-1	698 (700-1)	1500-2 698 (700-2)	1500-2 ¼ 698 (700-2¼)

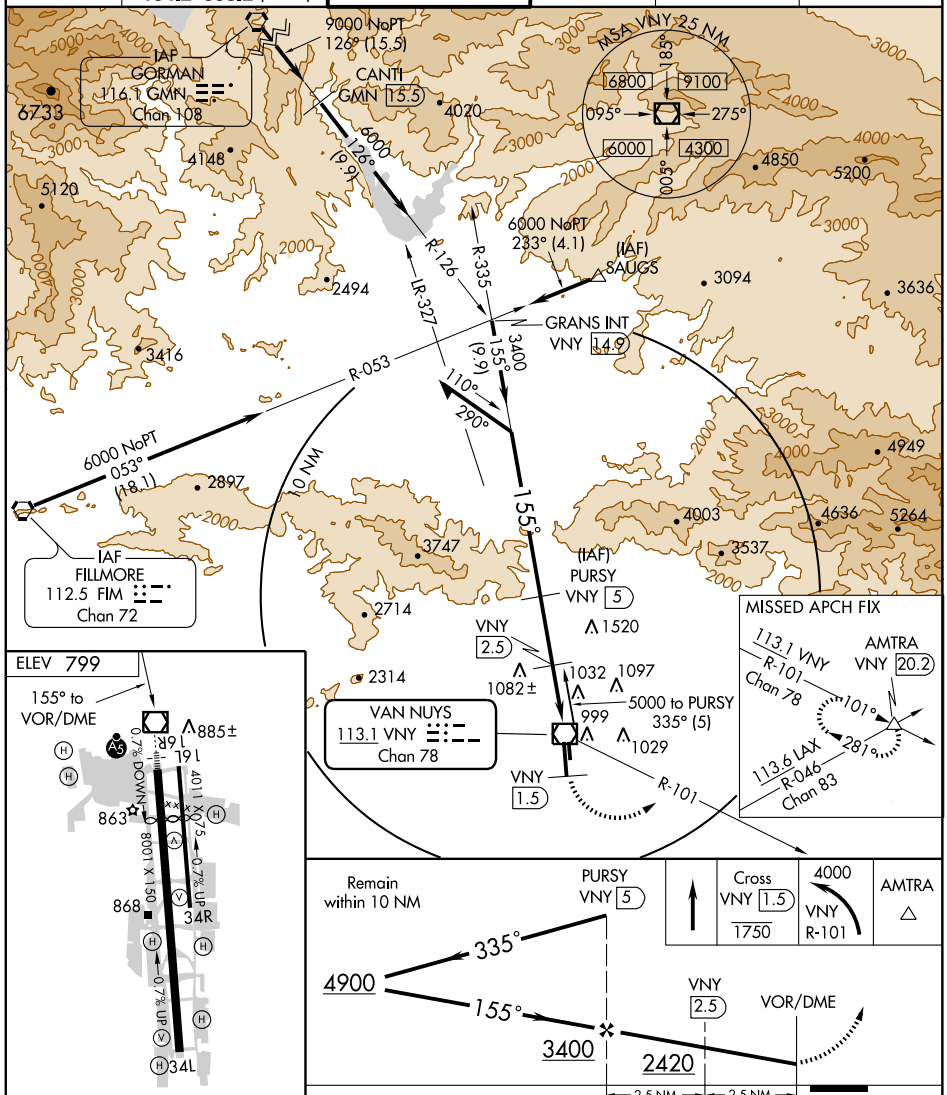
SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME VNY	APP CRS	Rwy Idg	N/A
113.1	155°	TDZE	N/A
Chan 78		Apt Elev	799

VOR/DME or GPS-B
VAN NUYS (VNY)

MISSED APPROACH: Climb to cross VNY 1.5 DME at or below 1750, then climbing left turn to 4000 via VNY R-101 to AMTRA INT and hold.

ATIS	SOCAL APP CON	VAN NUYS TOWER★	GND CON	CLNC DEL	UNICOM
118.45	120.4 360.6 (NORTH) 134.2 338.2 (WEST)	119.3 (CTAF) 239.0	121.7	126.6 239.0	122.95



HIRL Rwy 16R-34L
MIRL Rwy 16L-34R
REIL Rwy 34R

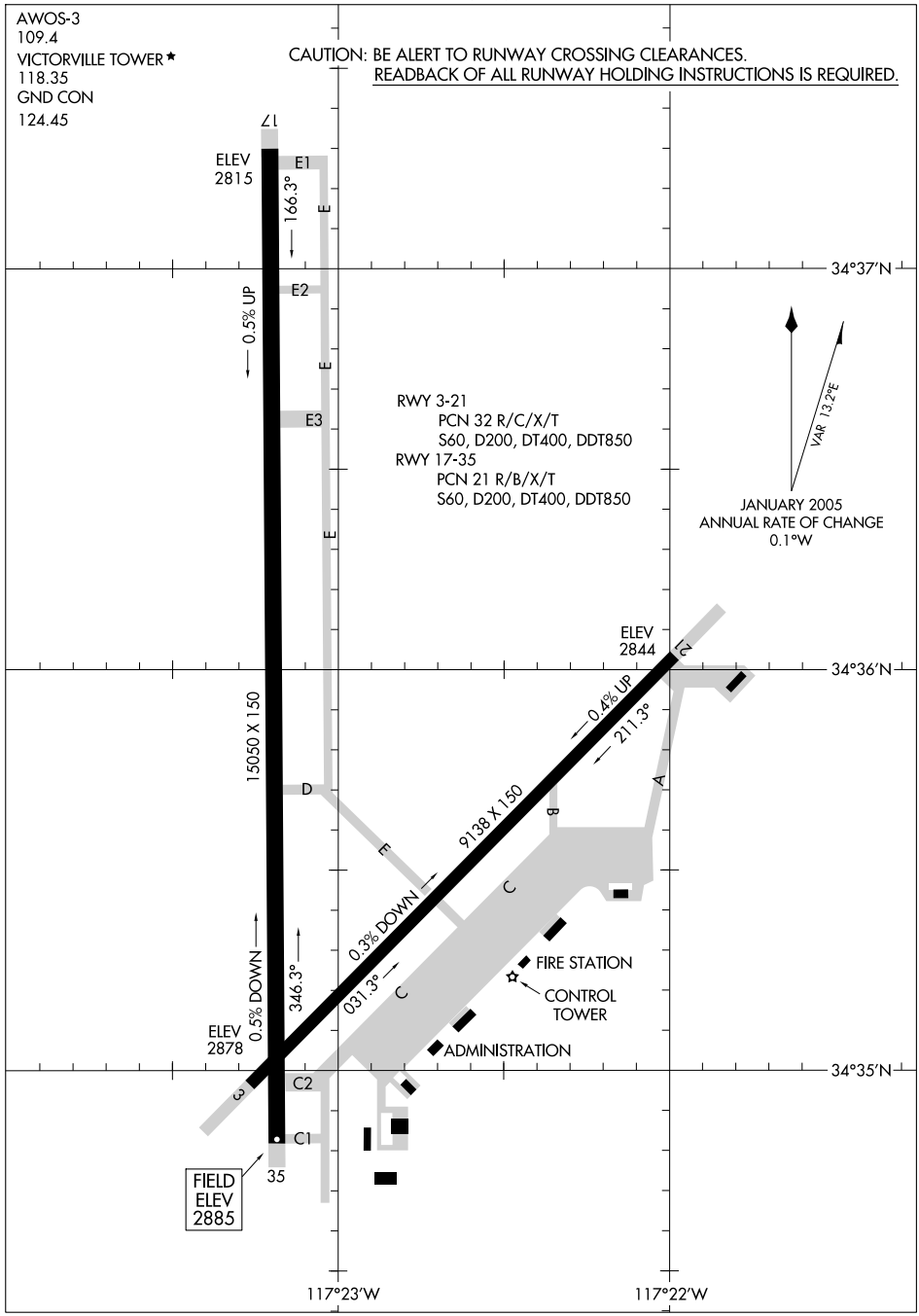
CATEGORY	A	B	C	D
CIRCLING	1300-1	501 (600-1)	1340-1½ 541 (600-1½)	1360-2 561 (600-2)

SW-3, 22 OCT 2009 to 19 NOV 2009

09239

AIRPORT DIAGRAM

VICTORVILLE/SOUTHERN CALIFORNIA LOGISTICS (VCV)
AL-794 (FAA)
VICTORVILLE, CALIFORNIA



SW-3, 22 OCT 2009 to 19 NOV 2009

VICTORVILLE, CALIFORNIA AL-794 (FAA)

LOC I-VCV	APP CRS	Rwy Idg	15050
108.75	166°	TDZE	2825
		Apt Elev	2885

ILS or LOC RWY 17

VICTORVILLE/ SOUTHERN CALIFORNIA LOGISTICS (VCV)

When local altimeter setting not received, use Edwards AFB altimeter setting and increase all DA and MDA 160 feet. Increase all visibilities ½ mile. DME from VCV VOR/DME. Simultaneous reception of I-VCV and VCV DME required.

MISSED APPROACH: Climb to 3500, then climbing right turn to 6000 via heading 300° and VCV VOR/DME R-269 to ETHER INT and hold.

AWOS-3	JOSHUA APP CON	VICTORVILLE TOWER ★	GND CON
109.4	124.55 363.0	118.35 (L)	124.45

DME or RADAR REQUIRED

R-2515

BUCKHORN MOA

(IF) SCCAT VCV 12.2

346° R-346 LR-356

5200 VCV 12.2 Arc

BYTHE VCV 12.2

166° (6.1) 4300

R-011

VCV 12.2 Arc 6600

4896

MSA VCV 25 NM

7600

090° 270°

11300 10000

360°

SUZZQ VCV 6.1 RADAR

VICTORVILLE 109.4 VCV Chan 31

Procedure NA for arrivals at APLES via V394 and V442 southwest bound.

3450

R-269

3098± 4715

5273

3897

(IAF) APLES VCV 12.2

R-089

3168±

10 NM

3288

LOCALIZER 108.75 I-VCV

ALTERNATE MISSED APCH FIX

116.4 EDW R-169 Chan 111

114.5 PMD R-081 Chan 92

081° 261°

ZOREN PMD 15

MISSED APCH FIX

116.4 EDW R-170 Chan 111

ETHER VCV 19

R-067 269° 089°

109.4 VCV R-269 Chan 31

114.5 PMD Chan 92

ELEV 2885

166° 4.4 NM from FAF

2829±

TDZE 2825

0.5% UP

15050 X 150

0.5% DOWN

9138 X 150

0.4% UP

0.3% DOWN

TWR

21

35

REIL Rwys 17 and 35

HIRL Rwys 3-21 and 17-35 (L)

SCCAT VCV 12.2

Procedure Turn NA

SUZZQ VCV 6.1 RADAR

3500	6000	VCV	ETHER
↑	300°	R-269 109.4	△

VGSI and ILS glidepath not coincident

5200 166° 4300

4300

VCV 1.7

GS 3.00° TCH 54

6.1 NM 4.4 NM

CATEGORY	A	B	C	D
S-ILS 17	3025/40 200 (200-¾)			
S-LOC 17	3080/50 255 (200-1)			
CIRCLING	3360-1 475 (500-1)	3420-1 535 (600-1)	3420-1½ 535 (600-1½)	3580-2¼ 695 (700-2¼)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

SW-3, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	15050
CH 77523	166°	TDZE	2825
W17A		Apt Elev	2885

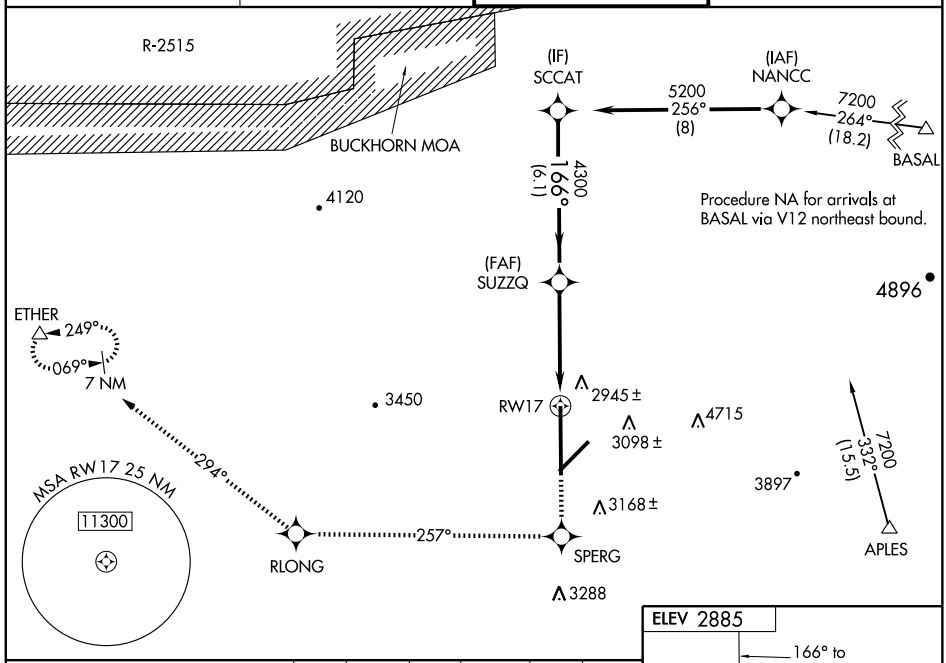
RNAV (GPS) RWY 17

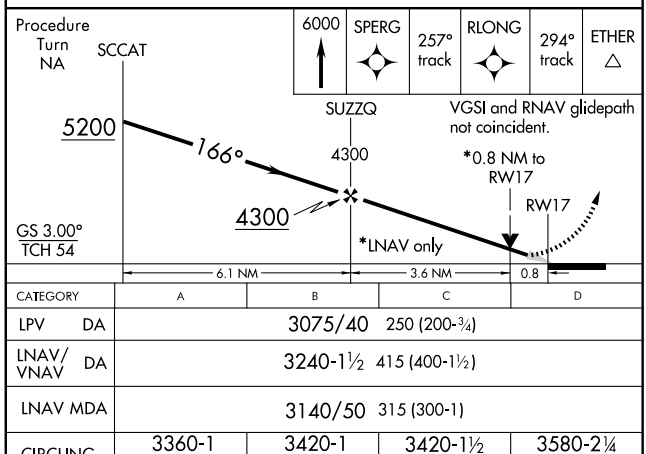
VICTORVILLE/ SOUTHERN CALIFORNIA LOGISTICS (VCV)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F).
DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Edwards AFB altimeter setting and increase all DA and MDA 160 feet. Increase all visibilities ¾ mile.
VDP and Baro-VNAV NA when using Edwards AFB altimeter setting.

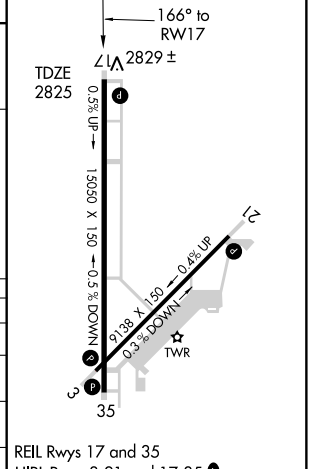
MISSED APPROACH: Climb to 6000 direct SPERG and via 257° track to RLONG and via 294° track to ETHER and hold.

AWOS-3	JOSHUA APP CON	VICTORVILLE TOWER *	GND CON
109.4	124.55 363.0	118.35 (L)	124.45





CATEGORY	A	B	C	D
LPV DA	3075/40	250 (200-¾)		
LNAV/VNAV DA	3240-1½	415 (400-1½)		
LNAV MDA	3140/50	315 (300-1)		
CIRCLING	3360-1 475 (500-1)	3420-1 535 (600-1)	3420-1½ 535 (600-1½)	3580-2¼ 695 (700-2¼)



REIL Rwys 17 and 35
HIRL Rwys 3-21 and 17-35 (L)

SW-3, 22 OCT 2009 to 19 NOV 2009

VOR/DME VCV	APP CRS	Rwy Idg	15050
109.4	170°	TDZE	2825
Chan 31		Apt Elev	2885

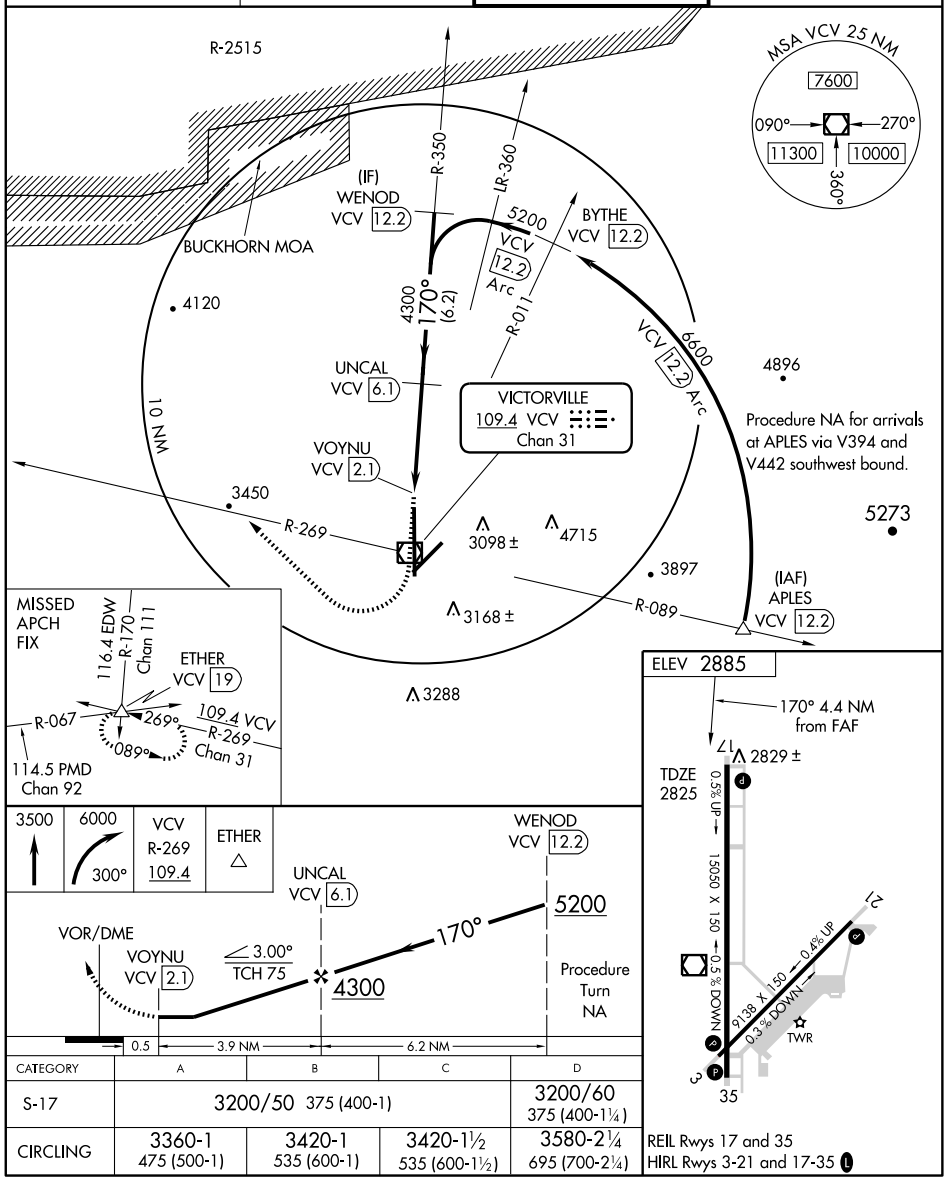
VOR/DME RWY 17

VICTORVILLE/ SOUTHERN CALIFORNIA LOGISTICS (VCV)

When local altimeter setting not received, use Edwards AFB altimeter setting and increase all MDA 160 feet. Increase all visibilities ½ mile.

MISSED APPROACH: Climb to 3500, then climbing right turn to 6000 via heading 300° and VCV R-269 to ETHER INT and hold.

AWOS-3	JOSHUA APP CON	VICTORVILLE TOWER ★	GND CON
109.4	124.55 363.0	118.35 L	124.45



CATEGORY	A	B	C	D
S-17	3200/50 375 (400-1)			3200/60 375 (400-1¼)
CIRCLING	3360-1 475 (500-1)	3420-1 535 (600-1)	3420-1½ 535 (600-1½)	3580-2¼ 695 (700-2¼)

REIL Rwys 17 and 35
HIRL Rwys 3-21 and 17-35 L

SW-3, 22 OCT 2009 to 19 NOV 2009

LOC I-VIS	APP CRS	Rwy Idg	5635
108.5	301°	TDZE	295
		Apt Elev	295

ILS or LOC/DME RWY 30

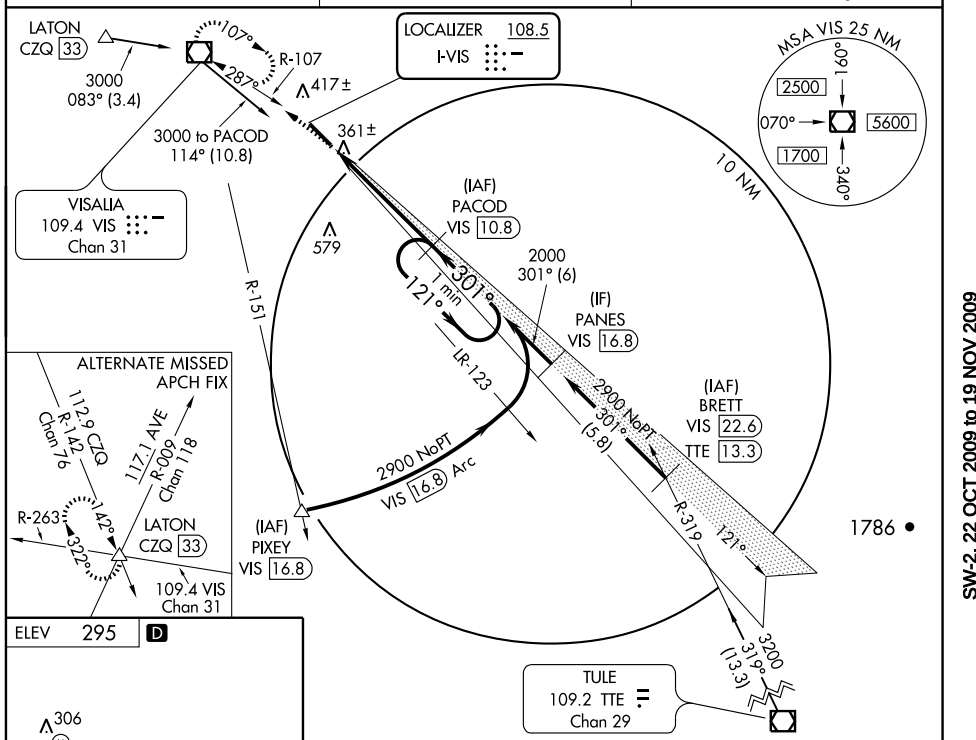
VISALIA MUNI (VIS)

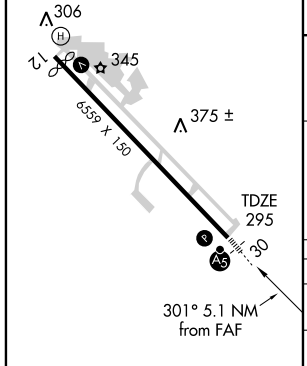
When local altimeter setting not received, use Hanford altimeter setting and increase all DA/MDA 40 feet.
For inoperative MALSR, increase local altimeter setting S-LOC Cat D visibility to 1 mile.
DME from VIS VOR/DME. Simultaneous reception of I-VIS and VIS DME required.

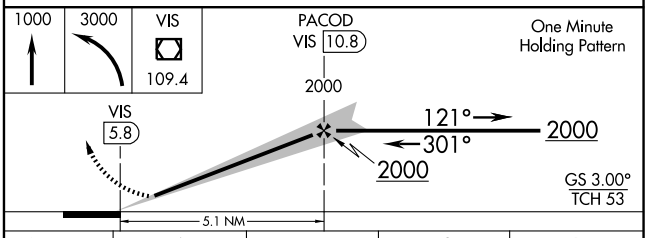
MALSR

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 direct VIS VOR/DME and hold, continue climb-in-hold to 3000.

AWOS-3	FRESNO APP CON	UNICOM
119.925	118.5	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 30	495-½ 200 (200-½)			
S-LOC 30	620-½ 325 (400-½)			620-¾ 325 (400-¾)
CIRCLING	720-1 425 (500-1)	760-1 465 (500-1)	760-1½ 465 (500-1½)	860-2 565 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5635
129°	TDZE	294
	Apt Elev	295

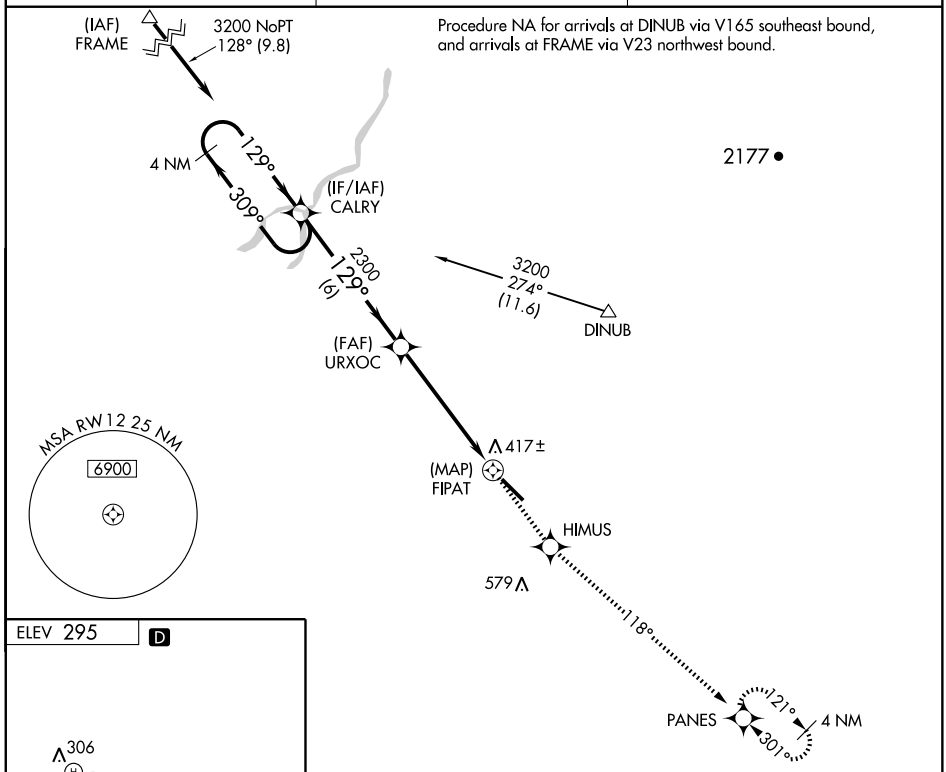
RNAV (GPS) RWY 12
VISALIA MUNI (VIS)

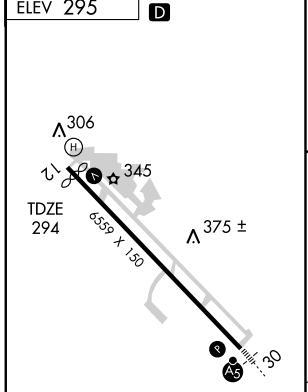
DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Hanford altimeter setting and increase all MDA 40 feet and increase LNAV Cat C visibility ¼ mile.

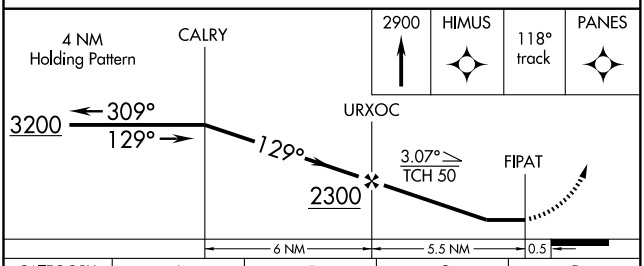
MISSED APPROACH: Climb to 2900 direct HIMUS and via 118° track to PANES and hold.

AWOS-3	FRESNO APP CON	UNICOM
119.925	118.5	123.05 (CTAF) L

Procedure NA for arrivals at DINUB via V165 southeast bound, and arrivals at FRAME via V23 northwest bound.







CATEGORY	A	B	C	D
LNAV MDA	680-1 386 (400-1)			680-1¼ 386 (400-1¼)
CIRCLING	720-1 425 (500-1)	760-1 465 (500-1)	760-1½ 465 (500-1½)	860-2 565 (600-2)

REIL Rwy 12
HIRL Rwy 12-30 L

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5635
301°	TDZE	295
	Apt Elev	295

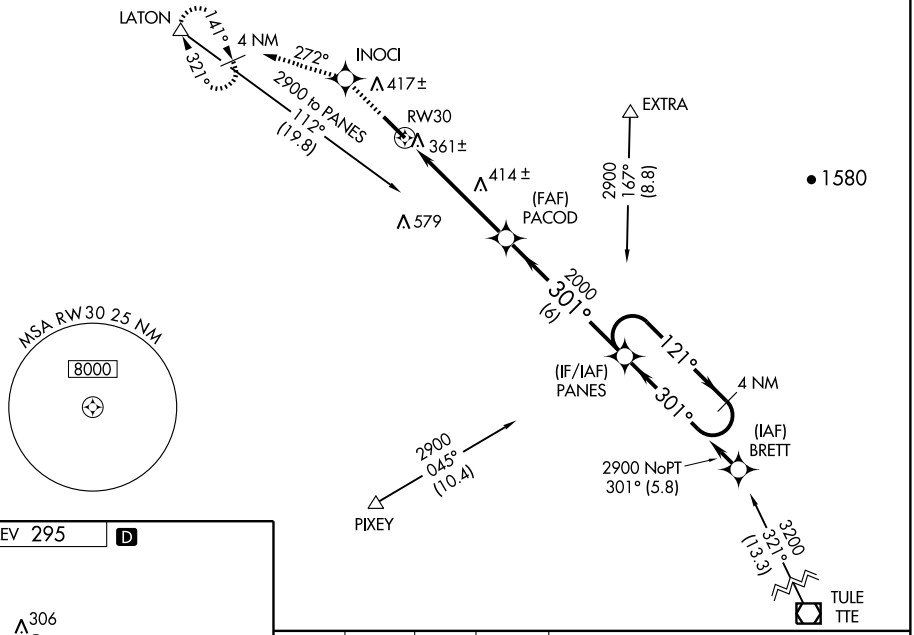
RNAV (GPS) RWY 30
VISALIA MUNI (VIS)

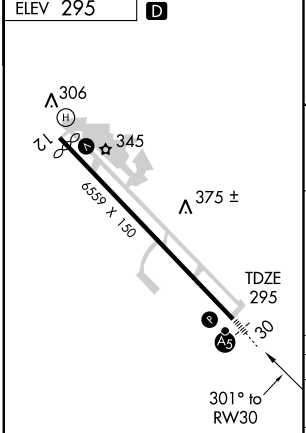
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP- 0.3 NA.
When local altimeter setting not received, use Hanford altimeter setting and increase all DA/MDA 40 feet and increase LNAV Cat C visibility ¼ mile.
Baro-VNAV and VDP NA when using Hanford altimeter setting.
For inoperative MALSR when using local altimeter and Hanford altimeter setting, increase LNAV Cat D visibility to 1¼ mile.

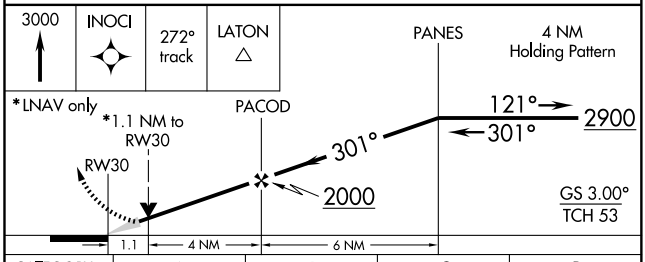
MALSR

MISSED APPROACH: Climb to 3000 direct INOCI and via 272° track to LATON and hold, continue climb-in-hold to 3000.

AWOS-3	FRESNO APP CON	UNICOM
119.925	118.5	123.05 (CTAF) L







CATEGORY	A	B	C	D
LNAV/VNAV DA	626-¾ 331 (400-¾)			
LNAV MDA	680-½ 385 (400-½)			680-1 385 (400-1)
CIRCLING	720-1 425 (500-1)	760-1 465 (500-1)	760-1½ 465 (500-1½)	860-2 565 (600-2)

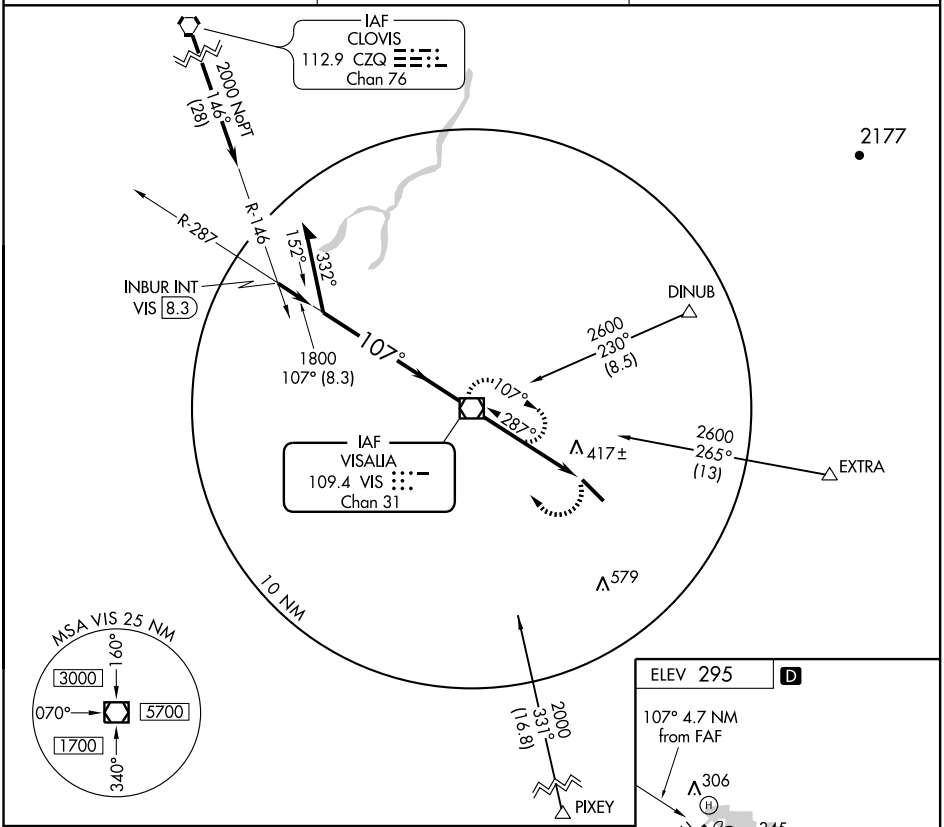
SW-2, 22 OCT 2009 to 19 NOV 2009

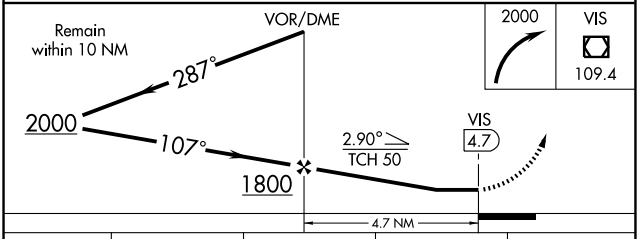
VOR/DME VIS	APP CRS	Rwy Idg	5635
109.4	107°	TDZE	294
Chan 31		Apt Elev	295

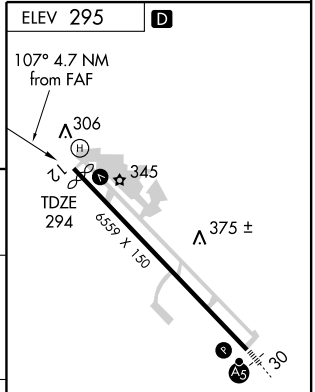
VOR RWY 12
VISALIA MUNI (VIS)

MISSED APPROACH: Climbing right turn to 2000 direct VIS VOR/DME and hold.

AWOS-3	FRESNO APP CON	UNICOM
119.925	118.5	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-12	680-1 386 (400-1)			680-1¼ 386 (400-1¼)
CIRCLING	720-1 425 (500-1)	760-1 465 (500-1)	760-1½ 465 (500-1½)	860-2 565 (600-2)

REIL Rwy 12
HIRL Rwy 12-30 L

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

SW-2, 22 OCT 2009 to 19 NOV 2009

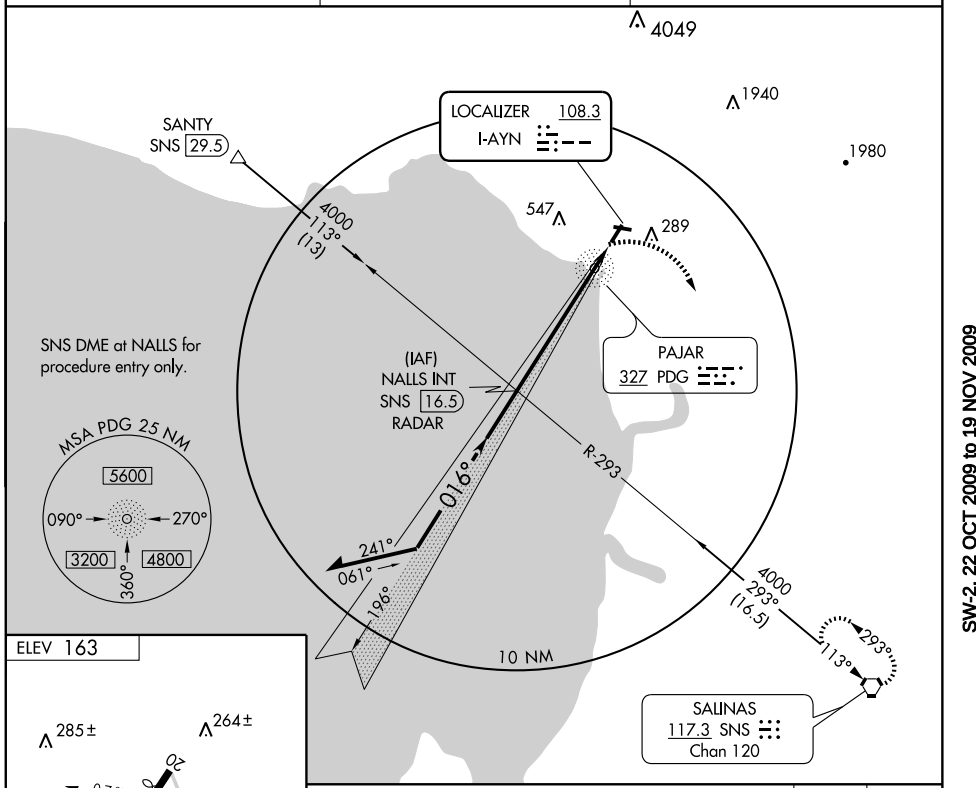
LOC I-AYN	APP CRS	Rwy Idg	4501
108.3	016°	TDZE	152
		Apt Elev	163

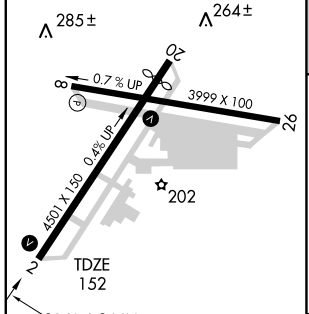
LOC RWY 2
WATSONVILLE MUNI (WVI)

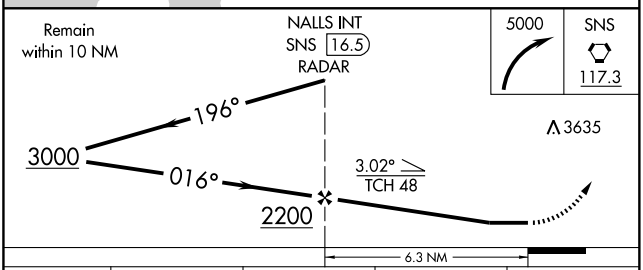
Circling not authorized west of Rwy 2-20. When local altimeter setting not received, use Monterey altimeter setting and increase all MDA 80 feet and visibility Cats C and D ¼ mile and circling Cat C ¼ mile.

MISSED APPROACH: Climbing right turn to 5000 direct SNS VORTAC and hold, continue climb-in-hold to 5000.

ASOS	NORCAL APP CON	UNICOM
132.275	127.15 307.125	122.8 (CTAF)







FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

CATEGORY	A	B	C	D
S-2	680-1 528 (600-1)		680-1½ 528 (600-1½)	680-1¾ 528 (600-1¾)
CIRCLING	680-1 517 (600-1)		680-1½ 517 (600-1½)	720-2 557 (600-2)

SW-2, 22 OCT 2009 to 19 NOV 2009

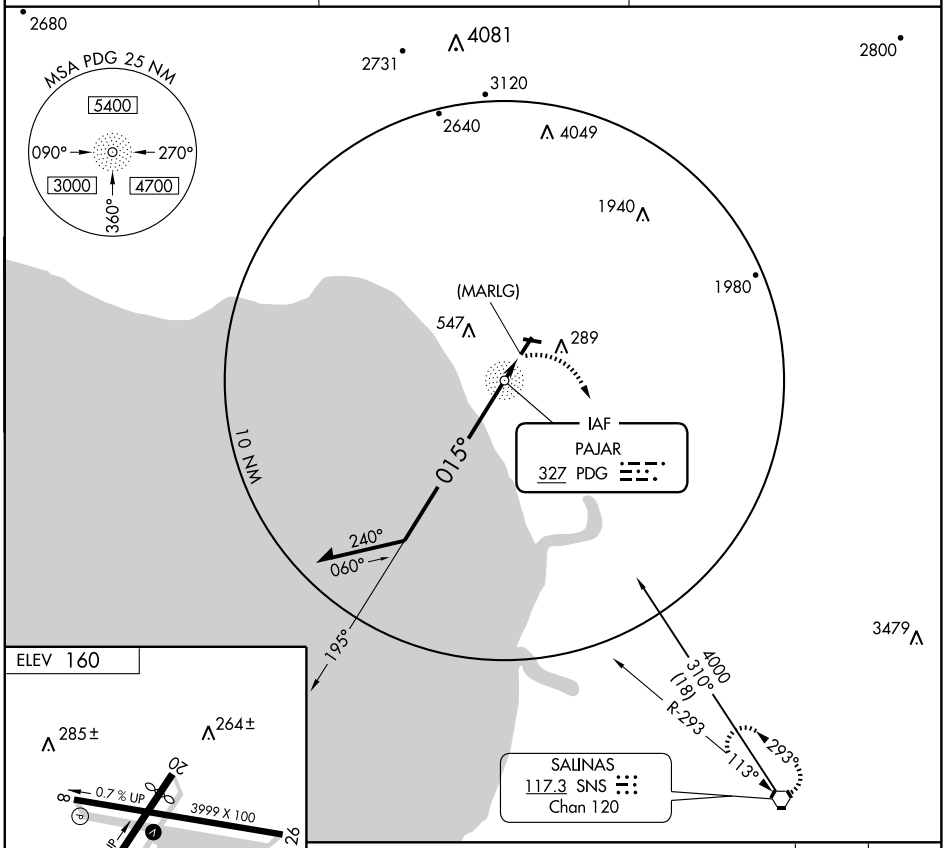
NDB PDG	APP CRS	Rwy Idg	N/A
327	015°	TDZE	N/A
		Apt Elev	160

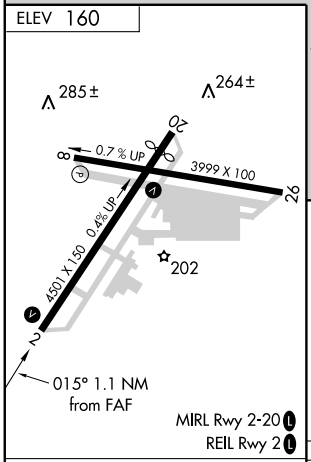
NDB or GPS-B
WATSONVILLE MUNI (WVI)

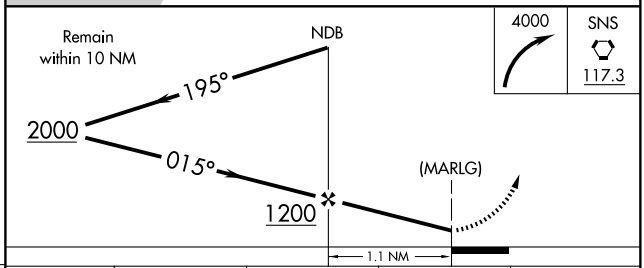
T
A NA — Circling not authorized west of Rwy 2-20.

MISSED APPROACH: Climbing right turn to 4000 direct SNS VORTAC and hold.

ASOS	NORCAL APP CON	UNICOM
132.275	127.15 307.125	122.8 (CTAF) L







FAF to MAP 1.1 NM					
Knots	60	90	120	150	180
Min:Sec	1:06	0:44	0:33	0:26	0:22

CATEGORY	A	B	C	D
CIRCLING	900-1 740 (800-1)		900-2 740 (800-2)	900-2¼ 740 (800-2¼)

SW-2, 22 OCT 2009 to 19 NOV 2009

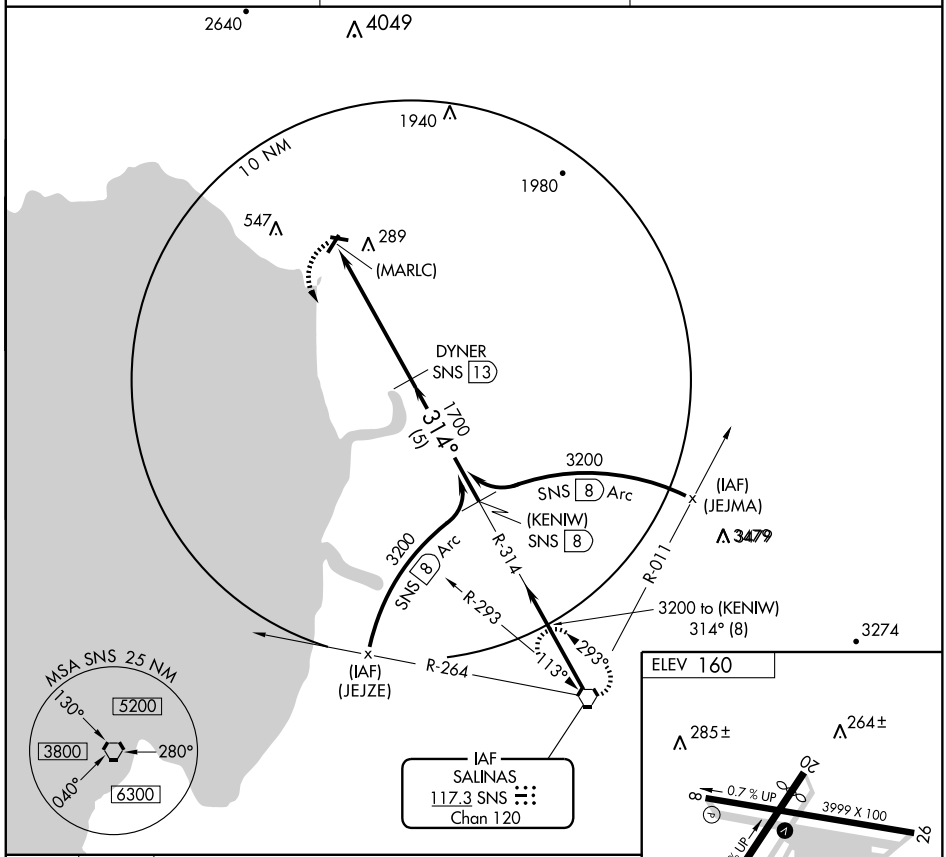
VORTAC SNS 117.3 Chan 120	APP CRS 314°	Rwy Idg N/A TDZE N/A Apt Elev 160

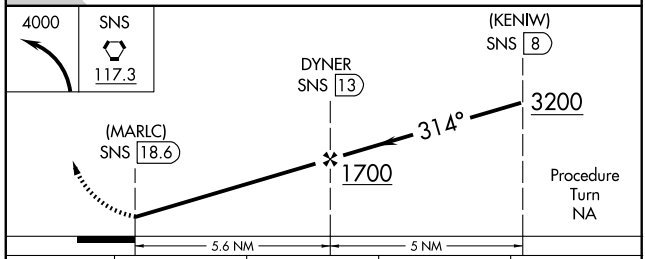
VOR/DME or GPS-A
WATSONVILLE MUNI (WVI)

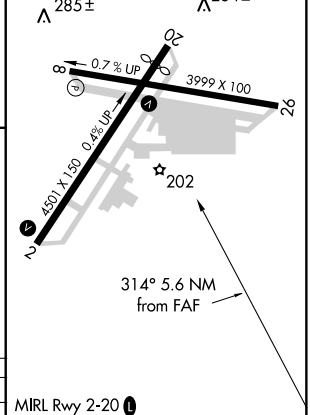
T
A NA — Circling not authorized west of Rwy 2-20.

MISSED APPROACH: Climbing left turn to 4000 direct SNS VORTAC and hold.

ASOS	NORCAL APP CON	UNICOM
132.275	127.15 307.125	122.8 (CTAF) L







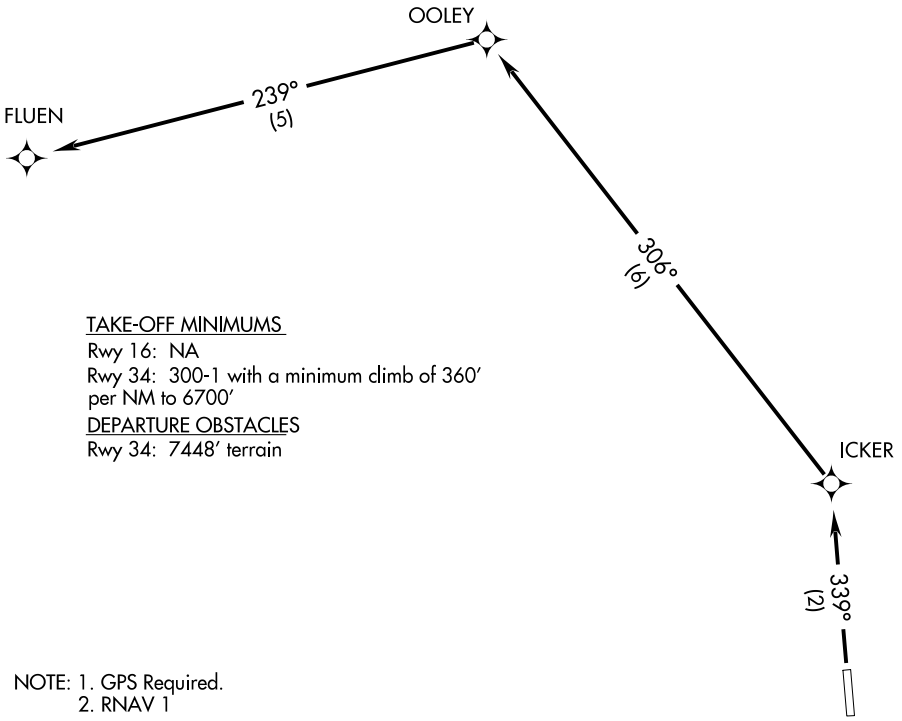
CATEGORY	A	B	C	D
CIRCLING	1300-1¼ 1140 (1200-1¼)	1300-1½ 1140 (1200-1½)	1300-3 1140 (1200-3)	

MIRL Rwy 2-20 L
REIL Rwy 2 L

SW-2, 22 OCT 2009 to 19 NOV 2009

FLUEN ONE DEPARTURE (RNAV) (OBSTACLE)

OAKLAND CENTER
132.2 350.3
UNICOM 122.8 (CTAF) L



TAKE-OFF MINIMUMS
Rwy 16: NA
Rwy 34: 300-1 with a minimum climb of 360′ per NM to 6700′
DEPARTURE OBSTACLES
Rwy 34: 7448′ terrain

NOTE: 1. GPS Required.
2. RNAV 1

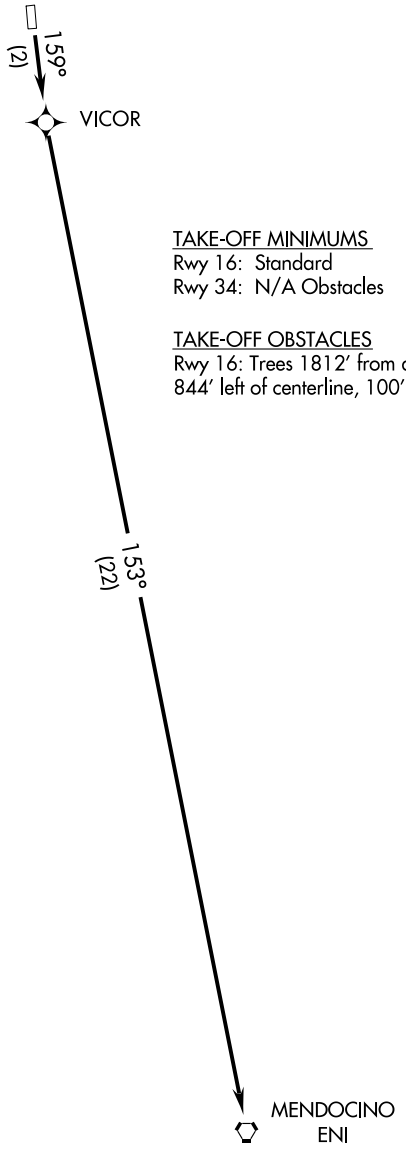
SW-2, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 34: Climb via 339° course to ICKER WP, then via 306° course to OOLEY WP, then via 239° course to FLUEN WP, thence proceed on course.

MENDOCINO ONE DEPARTURE (RNAV) (OBSTACLE)

OAKLAND CENTER
132.2 350.3
UNICOM 122.8 (CTAF)



TAKE-OFF MINIMUMS
Rwy 16: Standard
Rwy 34: N/A Obstacles

TAKE-OFF OBSTACLES
Rwy 16: Trees 1812′ from departure end of rwy, 844′ left of centerline, 100′ AGL/2139′ MSL.

NOTE: 1. GPS Required.
2. RNAV 1

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb to 6000 direct VICOR WP, then via 153° track to ENI VORTAC, thence proceed on course.

APP CRS	Rwy Idg	3000
145°	TDZE	2063
	Apt Elev	2063

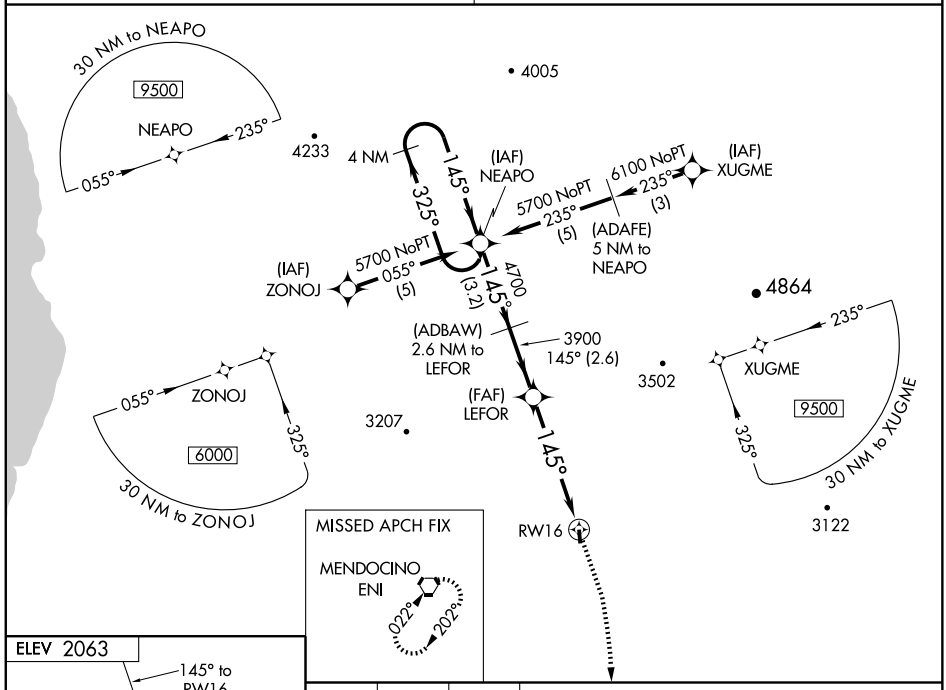
RNAV (GPS) RWY 16

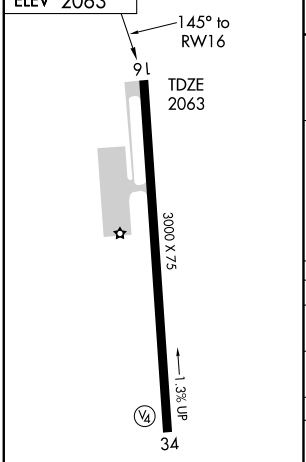
WILLITS/ELLS FIELD-WILLITS MUNI (028)

Obtain local altimeter setting on CTAF, when not received use Ukiah Muni altimeter setting.
Circling NA west of Rwy 16-34.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

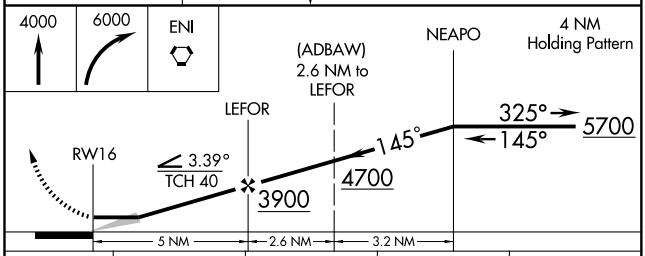
MISSED APPROACH: Climb to 4000 then climbing right turn to 6000 direct ENI VORTAC and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	122.8 (CTAF) L





MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LNAV MDA	3340-1¼ 1277 (1300-1¼)	3340-1½ 1277 (1300-1½)	3340-3 1277 (1300-3)	NA
CIRCLING	3340-1¼ 1277 (1300-1¼)	3340-1½ 1277 (1300-1½)	3340-3 1277 (1300-3)	NA
UKIAH MUNI ALTIMETER SETTING				
LNAV MDA	3600-1¼ 1537 (1600-1¼)	3600-1½ 1537 (1600-1½)	3600-3 1537 (1600-3)	NA
CIRCLING	3600-1¼ 1537 (1600-1¼)	3600-1½ 1537 (1600-1½)	3600-3 1537 (1600-3)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3000
339°	TDZE	2063
	Apt Elev	2063

RNAV (GPS) RWY 34

WILLITS/ELLS FIELD-WILLITS MUNI (O28)

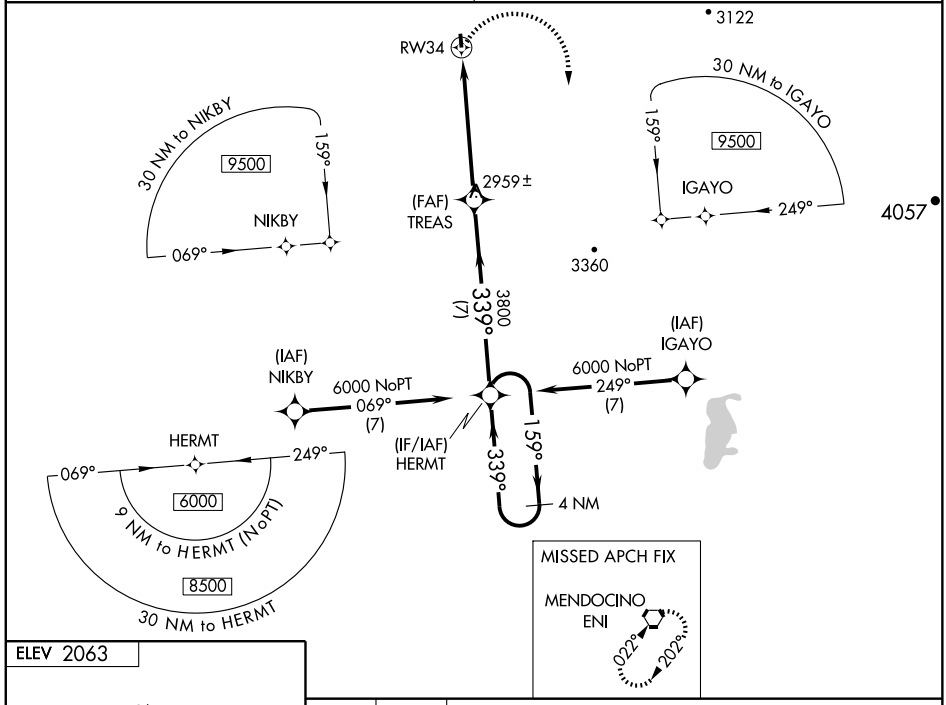
T
ANA

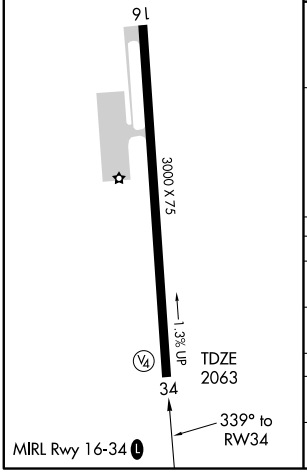
Obtain local altimeter setting on CTAF, when not received use Ukiah altimeter setting.
Circling NA west of Rwy 16-34.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

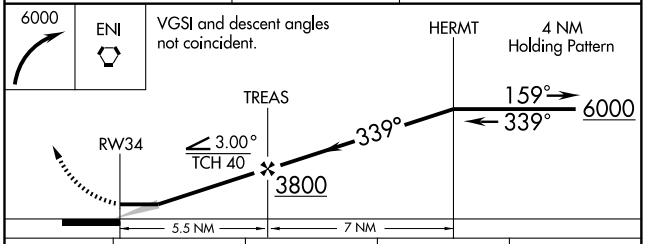
MISSED APPROACH: Climbing right turn to 6000 direct ENI VORTAC and hold.

OAKLAND CENTER
132.2 350.3

UNICOM
122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	2780-1 717 (800-1)		2780-2 717 (800-2)	NA
CIRCLING	2780-1 717 (800-1)		2780-2 717 (800-2)	NA
UKIAH MUNI ALTIMETER SETTING MINIMUMS				
LNAV MDA	3020-1¼ 957 (1000-1¼)	3020-1½ 957 (1000-1½)	3020-3 957 (1000-3)	NA
CIRCLING	3020-1¼ 957 (1000-1¼)	3020-1½ 957 (1000-1½)	3020-3 957 (1000-3)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4125
343°	TDZE	136
	Apt Elev	139

GPS RWY 34

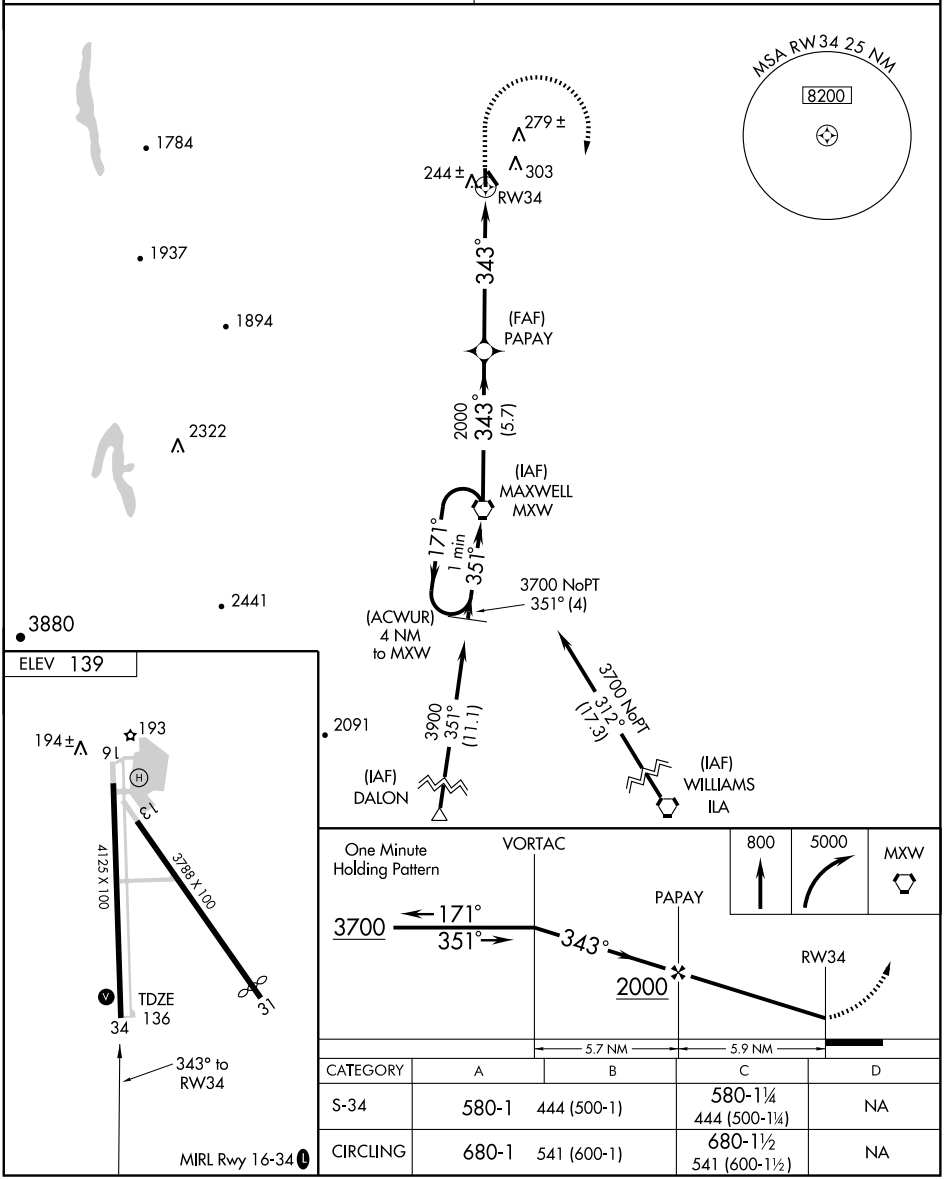
WILLOWS-GLENN COUNTY(WLW)

T
NA

Use Oroville Muni altimeter setting.

MISSED APPROACH: Climb to 800 then climbing right turn to 5000 direct MXW VORTAC and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-34	580-1	444 (500-1)	580-1¼ 444 (500-1¼)	NA
CIRCLING	680-1	541 (600-1)	680-1½ 541 (600-1½)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC MXW	APP CRS	Rwy Idg	4125
110.0	342°	TDZE	136
Chan 37		Apt Elev	139

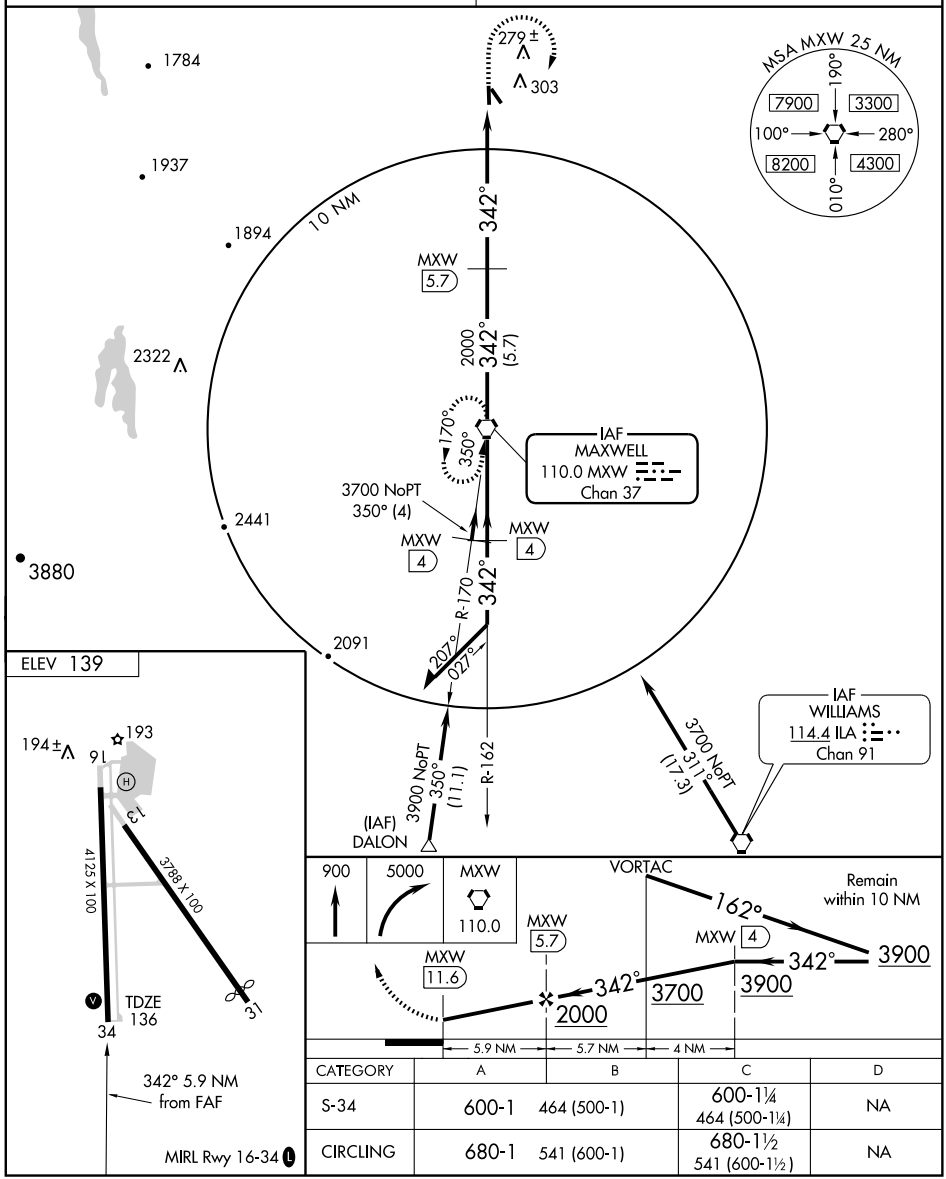
VOR/DME RWY 34

WILLOWS-GLENN COUNTY (WLW)

T
A NA — Use Oroville Muni altimeter setting.

MISSED APPROACH: Climb to 900 then climbing right turn to 5000 direct MXW VORTAC and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-34	600-1	464 (500-1)	600-1¼ 464 (500-1¼)	NA
CIRCLING	680-1	541 (600-1)	680-1½ 541 (600-1½)	NA

SW-2, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	3385
004°	TDZE	125
	Apt Elev	125

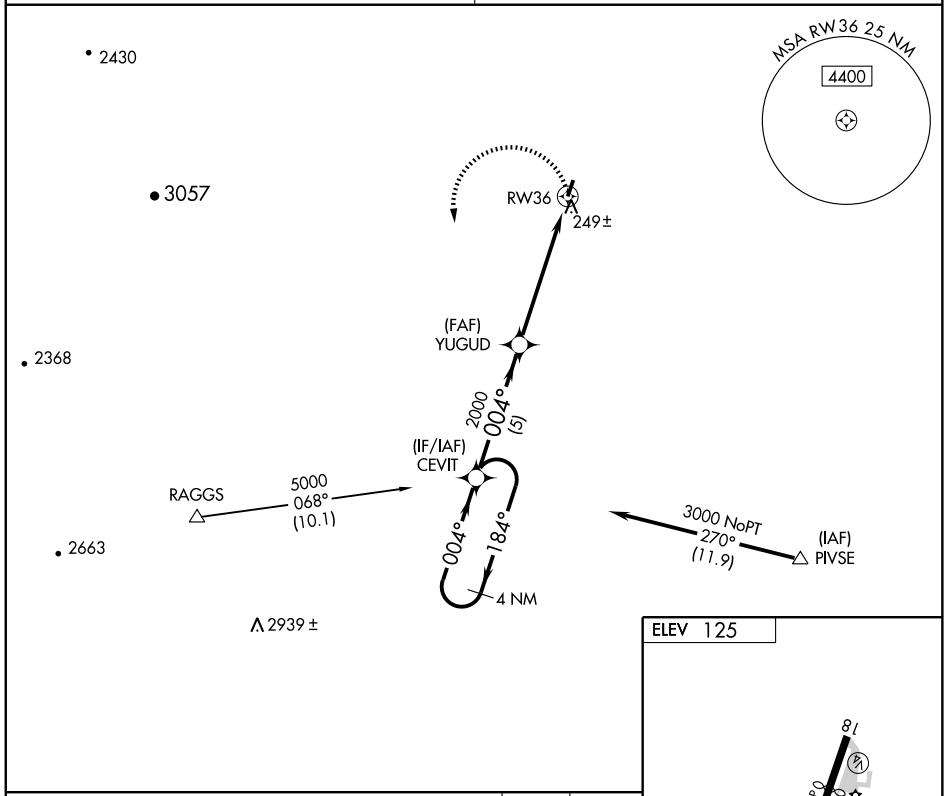
RNAV (GPS) RWY 36

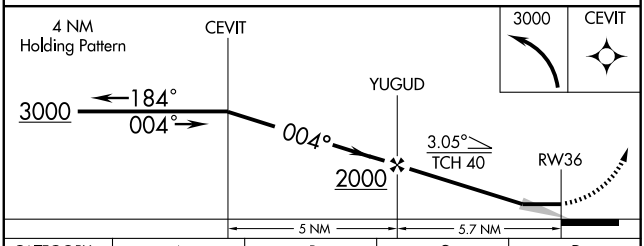
WOODLAND/ WATTS-WOODLAND (041)

DME/DME RNP- 0.3 NA.
Procedure NA at night.
Use Sacramento Intl altimeter setting; when not received, use Sacramento Executive altimeter setting and increase all MDA 20 feet.

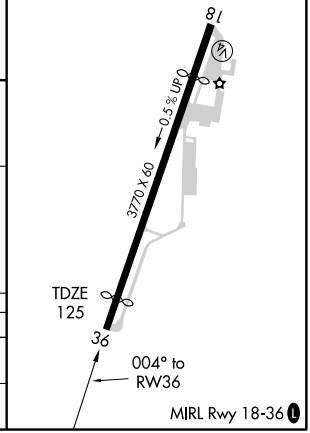
MISSED APPROACH: Climbing left turn to 3000 direct CEVIT and hold.

TRAVIS APP CON	UNICOM
126.6 291.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	560-1	435 (500-1)	NA	
CIRCLING	620-1	495 (500-1)	NA	



SW-2, 22 OCT 2009 to 19 NOV 2009

VORTAC SAC	APP CRS	Rwy Idg	N/A
115.2	296°	TDZE	N/A
Chan 99		Apt Elev	125

VOR/DME-A

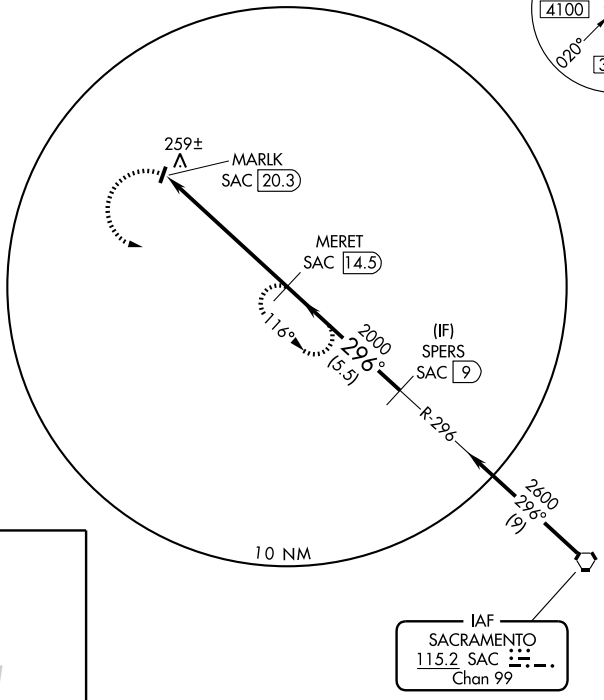
WOODLAND/WATTS-WOODLAND (041)

Procedure NA at night.
NA Use Sacramento Intl altimeter setting; when not received, use Sacramento Executive altimeter setting and increase all MDA 20 feet.

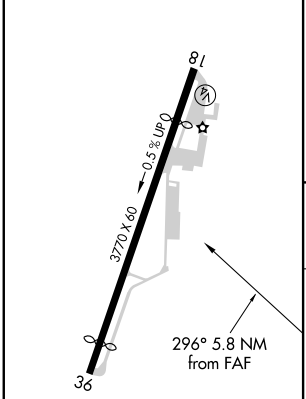
MISSED APPROACH: Climbing left turn to 2000 via SAC VORTAC R-296 to MERET/14.5 DME and hold.

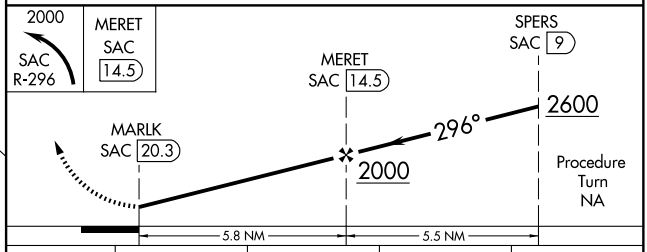
TRAVIS APP CON	UNICOM
126.6 291.0	122.8 (CTAF) L

1940



Procedure NA for arrival on SAC VORTAC airway radials 257 CW 329.





CATEGORY	A	B	C	D
CIRCLING	620-1 495 (500-1)	620-1¼ 495 (500-1¼)	NA	

MIRL Rwy 18-36 L

SW-2, 22 OCT 2009 to 19 NOV 2009

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

AKRON, CO
COLORADO PLAINS RGNL ..... **RNAV (GPS) Rwy 11**
NA when local weather not available.

ALAMOSA, CO
SAN LUIS VALLEY RGNL/ BERGMAN FIELD ..... **RNAV (GPS) Rwy 2**
RNAV (GPS) Rwy 20
NA when local weather not available.

ALBUQUERQUE, NM
ALBUQUERQUE INTL SUNPORT ..... **VOR or TACAN Rwy 8**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾; Category E, 900-3.

CLAYTON, NM
CLAYTON MUNI AIRPARK ..... **NDB Rwy 2**[1]
NDB Rwy 20[2]
RNAV (GPS) Rwy 2
RNAV (GPS) Rwy 20
NA when local weather not available.
[1]Categories A, B, 900-2; Category C, 900-2½, Category D, 900-2¾.
[2]Category D, 800-2¼.

CLOVIS, NM
CLOVIS MUNI ..... **VOR Rwy 22,**800-2¼

COLORADO SPRINGS, CO
CITY OF COLORADO SPRINGS MUNI ..... **ILS or LOC Rwy 17L**[1]
ILS or LOC Rwy 35L[2]
ILS or LOC Rwy 35R[23]
NDB Rwy 35L[4]
RNAV (GPS) Rwy 17R[35]
RNAV (GPS) Rwy 35R[3]
[1]ILS, 700-2.
[2]ILS, Category D, 700-2.
[3]NA when local weather not available.
[4]Category E, 1000-3.
[5]Category C, 800-2¼; Category D, 800-2½.

NAME — ALTERNATE MINIMUMS

CORTEZ, CO
CORTEZ MUNI ..... **RNAV (GPS) Y Rwy 21**[1]
RNAV (GPS) Z Rwy 21[2]
VOR Rwy 21[1]
[1]Category D, 900-3.
[2]Categories A, B, 1300-2; Categories C, D, 1300-3.

CRAIG, CO
CRAIG-MOFFAT ..... **VOR/DME Rwy 7**[1]
VOR Rwy 25[2]
[1]1300-3.
[2]1700-3.

DEMING, NM
DEMING MUNI ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 26
VOR Rwy 26
NA when local weather not available.

DENVER, CO
CENTENNIAL ..... **ILS or LOC Rwy 35R**[1]
NDB Rwy 35R[2]
RNAV (GPS) Rwy 28[34]
RNAV (GPS) Rwy 35R[14]
[1]Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.
[2]Categories A,B, 1000-2; Categories C,D, 1000-3.
[3]Category D, 800-2¼.
[4]NA when local weather not available.

DENVER, CO
DENVER INTL ..... **ILS or LOC Rwy 34L**
ILS, 700-2.

ROCKY MOUNTIAN METROPOLITAN ..... **ILS or LOC Rwy 29R**
VOR/DME Rwy 29L/R
NA when control tower closed.

NAME ALTERNATE MINIMUMS

DURANGO, CO
DURANGO-LA PLATA COUNTY ..... **VOR/DME Rwy 3**
NA when control zone not effective except for operators with approved weather reporting service.

EAGLE, CO
EAGLE COUNTY RGNL ..... **LDA/DME Rwy 25**
Categories A,B, 2100-2; Category C, 2100-3.
NA when control tower closed.
NA when local weather not available.

FARMINGTON, NM
FOUR CORNERS RGNL ..... **ILS or LOC Rwy 25[1][2]**
RNAV (GPS) Rwy 5[3]
RNAV (GPS) Rwy 7[3]
RNAV (GPS) Rwy 23[4]
[1]NA when control tower closed.
[2]ILS, Categories B,C,D, 700-2.
[3]NA when local weather not available.
[4]Category D, 800-2¼.

FORT COLLINS/LOVELAND, CO
FORT COLLINS-LOVELAND MUNI ..... **RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
VOR/DME-A
NA when local weather not available.

GALLUP, NM
GALLUP MUNI ..... **RNAV (GPS) Rwy 6[1][2]**
RNAV (GPS) Rwy 24[3]
VOR Rwy 6[1]
[1]Category C, 800-2¼; Category D, 900-3.
[2]NA when local weather not available.
[3]Category D, 900-3.

GRAND JUNCTION, CO
GRAND JUNCTION RGNL ..... **ILS or LOC Rwy 11[1]**
LDA/DME Rwy 29[2]
RNAV (GPS) Rwy 11[2]
[1]ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.

GREELEY, CO
GREELEY-WELD COUNTY ..... **ILS or LOC Rwy 34**
RNAV (GPS) Rwy 16
RNAV (GPS) Rwy 27
RNAV (GPS) Rwy 34
VOR or TACAN-A
NA when local weather not available.

NAME ALTERNATE MINIMUMS

GUNNISON, CO
GUNNISON-CRESTED BUTTE RGNL ..... **ILS or LOC Rwy 6[1]**
RNAV (RNP) Rwy 6, 800-2¼
VOR or GPS-A[2][3]
[1]ILS,LOC, Categories A, B, C, 1600-3.
[2]Categories A,B,C, 1700-3;Cat D, 2300-3.
[3]NA when local altimeter setting not available except for operators with approved weather reporting service.

HAYDEN, CO
YAMPA VALLEY ... **ILS or LOC/DME Y Rwy 10[1]**
RNAV (GPS) Y Rwy 10[1][2]
VOR/DME-B[2][3]
[1]Categories A, B, 1200-2; Categories C, D, 1200-3.
[2]NA when local weather not availalbe.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.

HOBBS, NM
LEA COUNTY RGNL ..... **ILS or LOC Rwy 3[1]**
LOC/DME BC Rwy 21[2]
RNAV (GPS) Rwy 3[3]
RNAV (GPS) Rwy 21[2]
RNAV (GPS) Rwy 30[2]
VOR/DME or TACAN Rwy 21[2]
VOR or TACAN Rwy 3[2]
[1]NA when control tower closed.
[2]NA when control tower closed, except standard for operators with approved weather reporting service.
[3]NA when local weather not available.

LA JUNTA, CO
LA JUNTA MUNI ..... **RNAV (GPS) Rwy 8**
RNAV (GPS) Rwy 26
NA when local weather not available.

LAMAR, CO
LAMAR MUNI ..... **RNAV (GPS) Rwy 18[1]**
RNAV (GPS) Rwy 36[2]
VOR Rwy 18[3]
[1]NA when local weather not available.
[2]Category D, 800-2¼.
[3]Category C, 900-2½, Category D, 900-2¾.

LAS VEGAS, NM
LAS VEGAS MUNI ..... **RNAV (GPS) Rwy 2**
RNAV (GPS) Rwy 20
RNAV (GPS) Rwy 32
VOR Rwy 2
VOR Rwy 20
NA when local weather not available.

NAME ALTERNATE MINIMUMS

MONTROSE, CO

MONTROSE
RGNL ..... **ILS or LOC/DME Rwy 17**
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 35
RNAV (GPS) Y Rwy 17
RNAV (GPS) Z Rwy 17
VOR/DME Rwy 13
Category C, 1000-2¾; Category D, 1000-3.

PAGOSA SPRINGS, CO

STEVENS FIELD ..... **RNAV (GPS)-A**
NA when local weather not available.

PORTALES, NM

PORTALES MUNI ..... **RNAV (GPS) Rwy 1**
Category D, 900-3.

PUEBLO, CO

PUEBLO MEMORIAL ..... **ILS or LOC Rwy 8L[13]**
ILS or LOC Rwy 26R[23]
RNAV (GPS) Rwy 8L[4]
RNAV (GPS) Rwy 26R[4]
VOR or TACAN Rwy 26R[3]
[1]ILS, Categories A,B,C,D, 700-2; Category E,1000-3. LOC, Category E, 1000-3.
[2]ILS, 700-2.
[3]NA when control tower closed.
[4]NA when local weather not available.

RATON, NM

RATON MUNICIPAL/
CREWS FIELD ..... **VOR/DME Rwy 2**
Categories A,B, 1400-2; Categories C,D, 1400-3.

RIFLE, CO

GARFIELD COUNTY
RGNL ..... **LOC/DME-A[123]**
ILS Rwy 26[234]
RNAV (GPS) Y Rwy 8[25]
RNAV (GPS) W Rwy 26[27]
RNAV (GPS) X Rwy 26[28]
RNAV (RNP) Y Rwy 26[26]
RNAV (RNP) Z Rwy 8[29]
RNAV (RNP) Z Rwy 26[2]
VOR/DME-C[5]
[1]Categories A,B, 2400-2; Category C,2400-3.
[2]NA when local weather not available.
[3]Not authorized 0200-1300Z.
[4]ILS, Categories A,B,C, 1300-4.
[5]Categories A,B, 1900-2; Category C, 1900-3.
[6]Categories A,B,C, 800-2¼.
[7]Categories A,B, 1700-2; Category C, 1700-3.
[8]Categories A,B,C, 900-2½.
[9]Categories A,B,C, 900-3.

NAME ALTERNATE MINIMUMS

ROSWELL, NM

ROSWELL
INTL AIR CENTER ..... **ILS Rwy 21[1]**
LOC BC Rwy 3[1]
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 21[2]
RNAV (GPS) Rwy 35[2]
[1]NA when control tower closed.
[2]NA when local weather not available.

SANTA FE, NM

SANTA FE MUNI ..... **ILS or LOC Rwy 2[12]**
VOR/DME-A[34]
VOR Rwy 33[34]
[1]NA when control tower closed.
[2]ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.
[4]NA when control tower closed except for operators with approved weather reporting service.

SILVER CITY, NM

GRANT COUNTY ..... **VOR-A**
VOR/DME-B
NA when Deming FSS closed.

TAOS, NM

TAOS REGIONAL ..... **VOR/DME-B**
Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

TRUTH OR CONSEQUENCES, NM

TRUTH OR CONSEQUENCES
MUNI ..... **VOR-A**
Category D, 800-2¼.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

AKRON, CO

COLORADO PLAINS RGNL (AKO)

ORIG 09127 (FAA)

NOTE: **Rwy 11,** rod on obstruction light on anemometer 314' from DER, 525' left of centerline, 26' AGL/4695' MSL. Lights on hangers 412' from DER, 301' left of centerline, 18' AGL/4687' MSL. **Rwy 29,** vehicles on roadway beginning 971' from DER, 315' left of centerline, 15' AGL/4741' MSL. Trees beginning 1651' from DER, 528' left of centerline, up to 100' AGL/4839' MSL.

ALAMOGORDO, NM

ALAMOGORDO-WHITE SANDS RGNL

TAKE-OFF MINIMUMS: **Rwy 16,21,34,** NA

DEPARTURE PROCEDURE: Use CORONA ONE Departure.

ALAMOSA, CO

SAN LUIS VALLEY RGNL-BERGMAN FIELD

TAKE-OFF MINIMUMS: **Rwys 6, 24,** NA.

DEPARTURE PROCEDURE: **Rwy 2**, turn right. **Rwy 20,** turn left. Climb direct ALS VORTAC, continue climb in ALS VORTAC holding pattern (SE, right turns, 301° inbound) to depart ALS VORTAC at airway MEA/MCA, all others climb to 16000.

NAME — TAKE-OFF MINIMUMS

ALBUQUERQUE, NM

ALBUQUERQUE INTL SUNPORT (ABQ)

AMDT 5 08157

TAKE-OFF MINIMUMS: **Rwy 3**, 200 - 1 or std. w/ min. climb of 240' per NM to 5600, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1900' prior to departure end of rwy, **Rwy 8,** std. w/ min. climb of 515' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 3, 30, 35,** climbing left turn direct ABQ VORTAC. If required, continue cllmb in ABQ VORTAC holding pattern (hold west, left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight. **Rwy 8,** climbing right turn direct ABQ VORTAC. If required, continue climb in ABQ VORTAC holding pattern (hold west, left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight. (do not exceed 250 kts until ABQ VORTAC). **Rwys 12, 17, 21,** climbing right turn direct ABQ VORTAC. If required, continue climb in ABQ VORTAC holding pattern (hold west, left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight. **Rwy 26,** climb direct ABQ VORTAC. If required, continue climb in ABQ VORTAC holding pattern (hold west,left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight.

ALBUQUERQUE INTL SUNPORT (CON'T)

NOTE: **Rwy 3,** light 549' from departure end of runway, 575' right of centerline, 29' AGL/5344' MSL. Light 2109' from departure end of runway, 1001' left of centerline, 67' AGL/5382' MSL. Multiple tanks beginning 4962' from departure end of runway, 1708' left of centerline, up to 154' AGL/5469' MSL. **Rwy 12,** electrical equipment 36' from departure end of runway, 214' right of centerline, 20' AGL/5315' MSL. **Rwy 17,** light 114' from departure end of runway, 360' right of centerline, 19' AGL/5328' MSL. Pole 248' from departure end of runway, 423' left of centerline, 32' AGL/5321' MSL. **Rwy 21,** terrain beginning 23' from departure end of runway, 277' left to 291' right of centerline, up to 5319' MSL. **Rwy 30,** tower 1057' from departure end of runway, 743' right of centerline, 93' AGL/5393' MSL. **Rwy 35,** light on fence 106' from departure end of runway, 11' right of centerline, 11' AGL/5326' MSL. Sign 165' from departure end of runway, 140' left of centerline, 13' AGL/5328' MSL. Vehicles on road 215' from departure end of runway, from left to right of centerline, up to 15' AGL/5335' MSL. Multiple trees beginning 314' from departure end of runway, 53' left of centerline, up to 50' AGL/5367' MSL. Multiple trees beginning 329' from departure end of runway, 172' right of centerline, up to 50' AGL/5362' MSL. Tower 3208' from departure end of runway, 860' right of centerline, 100' AGL/5410' MSL.

DOUBLE EAGLE II (AEG)

AMDT 1 08045 (FAA)

DEPARTURE PROCEDURE: **Rwy 4 ,** climb heading 035° to 11700 before turning right, all others turn left on course. **Rwy 17,** climb heading 169° to 9400 before turning left, all others turn right on course. **Rwy 22,** climb heading 215° to 9100 before turning left, all others turn right on course. **Rwy 35 ,** climb heading 349° to 11000 before turning right, all others turn left on course.

NOTE: **Rwy 17,** antenna 64' from departure end of runway, 395' left of centerline, 8' AGL/ 5807' MSL. Tree 3482' from departure end of runway, 1409' right of centerline, 100' AGL/ 5919' MSL. **Rwy 35,** antenna 53' from departure end of runway, 405' right of centerline, 9' AGL/ 5808' MSL.

ANGEL FIRE, NM

ANGEL FIRE (AXX)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 35,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 17,** use ANEKE RNAV DEPARTURE.

ASPEN, CO

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)

AMDT 8 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15,** NA-terrain.

DEPARTURE PROCEDURE: **Rwy 33,** use SARDD DEPARTURE.

BELEN, NM

ALEXANDER MUNI

TAKE-OFF MINIMUMS: **Rwys 3,21**, std. with min. climb of 326' per NM to 11700, or 2300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3, 21**, for climb in visual conditions: cross Alexander Municipal Airport at or above 7500.

BUCKLEY AFB (KBKF)

AURORA, CO

Rwy 14, 700-1*

* Or standard with minimum climb of 240/NM to 5700.

TAKE-OFF OBSTACLES: Rwy 14: Rising Terrain 5685' to 5700' MSL 975'-1355' from departure end of rwy, 210'-270' right of centerline.

BUENA VISTA, CO

CENTRAL COLORADO RGNL

TAKE-OFF MINIMUMS: **Rwy 15,** std. with a min. climb of 400' per NM to 8200 then 340' per NM to 15500.
Rwy 33, NA-due to terrain.

DEPARTURE PROCEDURE: **Rwy 15,** use PUEBLO RNAV DEPARTURE. **Rwy 33,** NA-due to terrain.

NOTE: **Rwy 15,** tree 4468' from departure end of runway, 659' right of centerline, 60' AGL/8159' MSL.

BUTTS AAF (KFCS)

FORT CARSON, CO

. . . . . .Rwy 31, 400-1*

* Or standard with a minimum climb of 210/NM to 6100'.

Rwy 13 climbing left turn heading 080° within 1 mile.
Rwy 3l climbing right turn heading 80° within 1 mile.
All aircraft continue climb via hdg 080° until joining V-81.

CANNON AFB (KCVS),

CLOVIS, NM. . . . . .(07354 USAF)

DIVERSE DEPARTURES AUTHORIZED ALL RWYS

TAKE-OFF OBSTACLES: **Rwy 04**: Terrain 4304' MSL, 0' from DER, 25' to 222' right of centerline. Terrain 4305' MSL, 16' to 268' from DER, 500' left of centerline. Terrain 4329' MSL, 1124' from DER, 800' left of centerline.

Rwy 13: Terrain 4284' MSL, 0' to 409' from DER, 41' to 500' left of centerline. Terrain 4280' MSL, 66' to 528' from DER, 500' to 585' right of centerline.

Rwy 22: Terrain 4295' MSL, 0' to 538' from DER, 61' to 636' left of centerline. Terrain 4281' MSL, 66' from DER, 258' right of centerline.

Rwy 31: Terrain 4294' MSL, 0' from DER, 500' left of centerline. Terrain 4304' MSL, 370' from DER, 588' left of centerline. Power Pole 25' AGL/4357' MSL, 2517' from DER, 98' left of centerline. Terrain 4314' MSL, 197' to 317' from DER, 500' to 585' right of centerline.

CANON CITY, CO

FREMONT COUNTY

TAKE-OFF MINIMUMS: **Rwy 29,** 4600-2 or std. with a min. climb of 450' per NM to 10400.

DEPARTURE PROCEDURE: **Rwy 11,** climb runway heading. **Rwy 29,** turn left heading 115°.
All aircraft intercept and climb via PUB VORTAC R-262 (V244) PUB VORTAC before proceeding on course.

CLAYTON, NM

CLAYTON MUNI

TAKE-OFF MINIMUMS: **Rwy 30,** 1300-1 or std. with a min. climb of 244' per NM until 6700.

COLORADO SPRINGS, CO

CITY OF COLORADO SPRINGS MUNI

TAKE-OFF MINIMUMS: **Rwy 30**, 600-2 or std. with a min. climb of 220' per NM to 6900.

DEPARTURE PROCEDURE: **Rwys 12,17L,17R**, turn left. **Rwys 30,35L**,**35R,** turn right. **All aircraft** climb direct BRK VORTAC. Aircraft departing on BRK R-325 CW R-153 climb on course. Aircraft departing BRK R-154 CW R-324 climb in BRK holding pattern (NW, left turns, 154° inbound) to cross BRK VORTAC at or above 14000.

CORTEZ, CO

CORTEZ MUNI

TAKE-OFF MINIMUMS: **Rwy 3,** 300-2 or std. w/ min. climb of 220' per NM to 6300. **Rwy 21**, 1000-2.

DEPARTURE PROCEDURE: **Rwy 3**, left turn.
Rwy 21, right turn, climbing direct to CEZ VOR. Aircraft northwestbound V391 continue climb on course to 9800 or above; southeastbound V391, V211, and direct HBU VOR/DME, continue climb on R-295 to 8000, left climbing turn to recross CEZ VOR at or above 9400. Aircraft enroute HBU VOR/DME and able to climb 230' per NM to 15000 may climb on course (CEZ R-034) to 16300 or above.

NOTE: **Rwy 3,** tree 1.7 NM from departure end of runway, 2964' left of centerline, 6096 AGL/6196 MSL.

CRAIG, CO

CRAIG-MOFFAT

TAKE-OFF MINIMUMS: **Rwys 7,25**, 800-1¼, or std. with a min. climb of 400' per NM to 7000.

DEPARTURE PROCEDURE: **Rwys 7,25**, climb direct CHE VOR/DME and hold (W, right turns, 108° inbound) climbing to: aircraft departing CHE R-213 CW R-296 depart on course; all others continue climbing to cross CHE at or above; CHE R-076 CW R-114 10500, R-115 CW R-212 11300, and R-297 CW R-076 11300.

DEMING, NM

DEMING MUNI

TAKE-OFF MINIMUMS: **Rwy 4,** NA.

DEPARTURE PROCEDURE: WESTBOUND: **Rwy 8,** climbing left turn heading 214°; **Rwy 22,** climbing right turn heading 302°; **Rwy 26,** climbing right turn heading 275°; intercept DMN VORTAC R-258 then via V94 on course. EASTBOUND: **Rwy 8,** climb direct DMN VORTAC; **Rwys 22, 26,** climbing right turn direct DMN VORTAC; then via V94 on course. NORTHBOUND: **Rwy 8,** climb direct DMN VORTAC; **Rwys 22, 26,** climbing right turn direct DMN VORTAC; then via V110 on course.

DENVER, CO

CENTENNIAL (APA)

AMDT 4 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17L,** std. w/ min. climb of 253' per NM to 6900.**Rwy 17R,** std. w/ min. climb of 370' per NM to 6900.

DEPARTURE PROCEDURE: **Rwy 10,** when departing on course between 159° CCW to 330° from departure end of runway climb heading 100° to 6300. All other courses: climbing left turn heading 326° to intercept DEN VOR/DME R-191 to DEN VOR/DME, thence ... **Rwys 17L, 17R,** climb on a heading between 346° CW to 159° from departure end of runway. All other courses: climbing left turn heading 331° to intercept DEN VOR/DME R-196 to DEN VOR/DME, thence ...**Rwy 28,** climb on a heading between 330° CW to 100° from departure end of runway. All other courses: climbing right turn heading 072° to intercept DEN VOR/DME R-207 to DEN VOR/DME, thence ... **Rwy 35L**, climb on a heading between 330° CW to 159° from departure end of runway. All other courses: climb heading 346° to intercept DEN VOR/DME R-208 to DEN VOR/DME, thence ...**Rwy 35R,** climb on a heading between 330° CW to 159° from departure end of runway. All other courses: climb heading 347° to intercept DEN VOR/DME R-208 to DEN VOR/DME, thence ...

... Climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 10,** terrain beginning 238' from departure end of runway, 30' right of centerline, up to 5859' MSL. Fences beginning 1211' from departure end of runway, 233' right of centerline, up to 8' AGL/5841' MSL. Multiple bushes beginning 1378' from departure end of runway,284' right of centerline, up to 6' AGL/5840' MSL. Multiple roads with vehicles beginning 198' from departure end of runway, 404' left of centerline, up to 15' AGL/5835' MSL. Terrain 1357' from departure end of runway, 253' left of centerline, 5829' MSL. **Rwy 17L,** multiple trees beginning 2968' from departure end of runway, 761' right of centerline, 100' AGL/5976' MSL. **Rwy 17R,** terrain 181' from departure end of runway, 496' right of centerline, 5887' MSL. Fence 538' from departure end of runway, 196' right of centerline, 8' AGL/5889' MSL. Multiple trees beginning 562' from departure end of runway, 61' right of centerline, up to 16' AGL/5976' MSL. Multiple light poles beginning 2362' from departure end of runway, 256' right of centerline, up to 30' AGL/5942' MSL. Vehicles on roads beginning 2812' from departure end of runway, on centerline, up to 17' AGL/5946' MSL. Obstruction light on building 3282' from departure end of runway, 842 feet right of centerline, 90' AGL/6021' MSL. **Rwy 28,** terrain beginning 89' from departure end of runway, from 513' left to 137' right of centerline, up to 5849' MSL. Windsock 100' from departure end of runway, 183'left of centerline, 15' AGL/5832' MSL. Multiple trees beginning 1640' from departure end of runway, 731' left of centerline, up to 100' AGL/5959' MSL. **Rwy 35L,** terrain beginning 54' from departure end of runway, 110' right of centerline, up to 5829' MSL.

DENVER, CO (CON'T)

DENVER INTL (DEN)

AMDT 2 08213 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb on a heading between 312° CW to 215° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 8,** climb on a heading between 307° CW to 218° from departure end of runway. All other courses: climbing right turn, thence ... **Rwys 16L, 16R,** climb on a heading between 210° CCW to 350° from departure end of runway. All other courses: climbing left turn, thence... **Rwys 17L, 17R,** climb on a heading between 219° CCW to 350° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 25,** climb on a heading between 314° CW to 080° or 203° CCW to 080° from departure end of runway. All other courses: climbing left turn, thence ... **Rwy 26,** climb on a heading between 310° CW to 080° or 216° CCW to 080° from departure end of runway. All other courses: climbing left turn, thence ... **Rwys 34L, 34R,** climb on a heading between 310° CW to 169° from departure end of runway. All other courses: climbing right turn, thence ... **Rwys 35L, 35R,** climb on a heading between 310° CW to 169° from departure end of runway. All other courses: climbing left turn, thence ...

. . .direct DEN VOR/DME, climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 8,** multiple trees beginning 115' from departure end of runway, 444' right of centerline, up to 100' AGL/5389' MSL. **Rwy 16L,** tower 4722' from departure end of runway, 1359' left of centerline, 153' AGL/5473' MSL. Antenna on obstruction light tower 4746' from departure end of runway, 1358' left of centerline, 153' AGL/5473' MSL. **Rwy 17L,** multiple trees beginning 247' from departure end of runway, 543' right of centerline, up to 100' AGL/5489' MSL. **Rwy 17R,** multiple trees beginning 1457' from departure end of runway, 759' right of centerline, up to 100' AGL/5529' MSL. **Rwy 25,** multiple trees beginning 303' from departure end of runway, 557' right of centerline, up to 100' AGL/5439' MSL. **Rwy 34L,** multiple trees beginning 273' from departure end of runway, 537' right of centerline, up to 100' AGL/5399' MSL. **Rwy 34R,** multiple trees beginning 471' from departure end of runway, 580' right of centerline, up to 100' AGL/5449' MSL. **Rwy 35L,** terrain beginning 149' from departure end of runway, 34' right of centerline, up to 5414' MSL.

DENVER, CO (CON'T)

FRONT RANGE (FTG)
AMDT 2 08213 (FAA)

DEPARTURE PROCEDURE: **Rwy 8,** climb on a heading between 310° CW to 225° from departure end of runway. All other courses: climbing left turn,thence ... **Rwy 17,** climb on a heading between 350° CW to 226° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 26,** climb on a heading between 311° CW to 080° or between 224° CCW to 080° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 35,** climb on a heading between 310° CW to 169° from departure end of runway. All other courses: climbing left turn, thence ...

... Direct DEN VOR/DME, climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 17,** multiple trees beginning 247' from departure end of runway, 534' left of centerline, up to 50' AGL/5629' MSL. Multiple trees beginning 293' from departure end of runway, 555' right of centerline, up to 50' AGL/5599' MSL. Pole 3618' from departure end of runway, 516' left of centerline, 92' AGL/5603' MSL. **Rwy 26,** multiple trees beginning 255' from departure end of runway, 317' left of centerline, up to 50'AGL/5499' MSL. Multiple trees beginning 272' from departure end of runway, 498' right of centerline, up to 50' AGL/5479' MSL.

ROCKY MOUNTAIN METROPOLITAN (BJC)
AMDT 4 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29L,** 200-1 or std. w/ min. climb of 402' per NM to 5900.

DEPARTURE PROCEDURE: **Rwy 2,** climb on a heading between 350° CW to 160° from departure end of runway. All other courses: climbing right turn heading 147° to intercept DEN VOR/DME R-282 to DEN VOR/DME, thence ... **Rwys 11L, 11R,** climb on a heading between 160° CCW to 350° from departure end of runway. All other courses: climb heading 113° to intercept DEN VOR/DME R-272 to DEN VOR/DME, thence ...**Rwy 20,** climb on a heading between 160° CCW to 024° from departure end of runway. All other courses: climbing left turn heading 044° to intercept DEN VOR/DME R-269 to DEN VOR/DME, thence ...**Rwy 29R,** climb on a heading between 350° CW to 113° from departure end of runway. All other courses: climbing right turn heading 142° to intercept DEN VOR/DME R-277 to DEN VOR/DME, thence ... **Rwy 29L,** climb on a heading between 350° CW to 113° from departure end of runway. All other courses: Climbing right turn heading 142° to intercept DEN VOR/DME R-276 to DEN VOR/DME, thence ...

... climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 2,** pole 432' from departure end of runway, 370' right of centerline, 49' AGL/5619' MSL. **Rwy 29L,** terrain beginning 45' from departure end of runway 292' left of centerline, up to 5839' MSL. Fence 1015' from departure end of runway 392' left of centerline, 15' AGL/5725' MSL. Fence 982' from departure end of runway 303' left of centerline, 14 ' AGL/5714' MSL. Multiple trees beginning 687' from departure end of runway 615' right of centerline up to 70' AGL/5839' MSL. Tree 3196' from departure end of runway 1337' left of centerline, 70' AGL/5839' MSL.

DURANGO, CO

DURANGO-LA PLATA COUNTY (DRO)
AMDT 6A 09015

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ a min. climb of 215' per NM to 7600, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn to 9000 heading 160° and DRO VOR/DME R-125 to RESER INT, or for climb in visual conditions: Cross Durango-La Plata County Airport Southeast bound at or above 8200 MSL, then proceed on DRO VOR/DME R-125 to RESER INT. **Rwy 21**, climbing right turn to 9500 heading 280° and DRO VOR/DME R-235 to MARKE INT.

NOTE: **Rwy 3,** trees beginning 1223' from departure end of runway, 794' left of centerline, up to 42' AGL/6741' MSL. Trees beginning 488' from departure end of runway, 431' right of centerline, up to 42' AGL/6698' MSL, vehicles on road beginning 8' from departure end of runway, right and left of centerline, up to 15' AGL/6706' MSL.

EAGLE, CO

EAGLE COUNTY RGNL (EGE)
AMDT 7 09239 (FAA)

DEPARTURE PROCEDURE: use GYPSUM DEPARTURE.

ERIE, CO

ERIE MUNI

TAKE-OFF MINIMUMS: **Rwy 15,** 500-2 or std. with a min. climb gradient of 270' per NM to 5700.

DEPARTURE PROCEDURE: **Rwys 9,15,** turn right; **Rwys 27,33,** turn left; climb direct BJC VOR/DME. Departures on BJC R-340 CW R-150 climb on course. All others climb in BJC holding pattern (NE, left turns 203° inbound) to cross BJC VOR/DME at or above 13300, or comply with RADAR vectors.

FARMINGTON, NM

FOUR CORNERS RGNL

TAKE-OFF MINIMUMS: **Rwys 11, 29,** NA.

DEPARTURE PROCEDURE: **Rwy 5,** climb runway heading to 6300 before turning left. **Rwy 23,** climb runway heading to 6500 before turning left.

FORT COLLINS, CO

FORT COLLINS-LOVELAND MUNI (FNL)
AMDT 5 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6,24,** NA-VFR runway.

DEPARTURE PROCEDURE: **Rwy 15,** climb on heading between 117° CCW to 329° from departure end of runway. All other courses: climbing left turn heading 017° to intercept GLL VORTAC R-242 to GLL VORTAC, thence...**Rwy 33,** climb on heading between 323° CW to 148° from departure end of runway. All other courses: climbing right turn heading 122° to intercept GLL VORTAC R-257 to GLL VORTAC, thence...

...climb in GLL VORTAC holding pattern (hold NE, right turns, 205° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 33,** multiple trees beginning 833' from departure end of runway, 516' right of centerline, up to 66' AGL/5025' MSL. Multiple poles beginning 567' from departure end of runway, 540' left of centerline, up to 26' AGL/4995' MSL.

GALLUP, NM

GALLUP MUNI

TAKE-OFF MINIMUMS: **Rwy 6,** CAT A,B 1300-2 or std. with a min. climb of 300' per NM until passing 8000. CAT C,D 1600-3 or std. with a min. climb of 320' per NM until passing 8500. **Rwy 24,** 700-2 or std. with a min. climb of 370' per NM until passing 8000.

DEPARTURE PROCEDURE: **Rwy 6**, turn left. **All aircraft** climb direct GUP VORTAC. Departures via GUP R-190 CW R-242 climb on course. Departures via GUP R-243 CW R-189 climb in GUP holding pattern (SW, right turns, 047° inbound) to cross GUP at or above9000.

GRAND JUNCTION, CO

GRAND JUNCTION RGNL (GJT)

AMDT 11 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** NA-obstacles. **Rwy 22,** NA-obstacles, facility reception (JNC VORTAC).

DEPARTURE PROCEDURE: **Rwys11, 29,** use MONUMENT DEPARTURE.

GRANTS, NM

GRANTS-MILAN MUNI

TAKE-OFF MINIMUMS: **Rwy 13,** 2400-2 or std. with a min. climb of 420' per NM to 11000. **Rwy 31,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb runway heading to join V12 at or above 11000 before proceeding on course.

GREELEY, CO

GREELEY-WELD COUNTY (GXY)

AMDT 3 08241 (FAA)

DEPARTURE PROCEDURE: **Rwy 9,** climb on a heading between 289° CW to 211° from departure end of runway. All other courses: climbing left turn, thence...**Rwy 16,** climb on a heading between 209° CCW to 347° from departure end of runway. All other courses: climbing left turn, thence...**Rwy 27,** climb on a heading between 291° CW to 094° or 206° CCW to 094° from departure end of runway. All other courses: climbing right turn, thence...**Rwy 34,** climb on a heading between 290° CW to 166° from departure end of runway. All other courses: climbing right turn, thence...

...direct GLL VORTAC, climb in GLL VORTAC holding pattern (hold NE, right turns, 205° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 27,** tree 1634' from departure end of runway, 836' left of centerline, 56' AGL/4717' MSL, fence 237' from departure end of runway, 422' right of centerline, 9' AGL/4670' MSL, fence 99' from departure end of runway, 423' left of centerline, 4' AGL/4665' MSL. **Rwy 34,** multiple trees beginning 1860' from departure end of runway, 595' right of centerline, up to 67' AGL/4785' MSL, tree 2854' from departure end of runway, 524' left of centerline, 73' AGL/4770' MSL.

GUNNISON, CO

GUNNISON-CRESTED BUTTE RGNL

TAKE-OFF MINIMUMS: **Rwy 6**, 1600-3 or 600-2 with a min. climb of 550' per NM to 9500. **Rwy 24**, 1200-3 or 400-2 with a min. climb of 350' per NM to 9500. **Rwys 17, 35**, NA.

DEPARTURE PROCEDURE: **Rwy 6**, at departure end of runway, climb heading 072° to 9500 then climbing right turn direct HBU VOR/DME. Aircraft unable to maintain 550' per NM must maneuver visually to depart the 11 DME fix inbound to the HBU VOR/DME on the HBU R-062 at or above 9200. **Rwy 24**, climb runway heading to 8400 then climbing left turn direct HBU VOR/DME. Aircraft unable to maintain 350' per NM must maneuver visually to depart the 4 DME fix inbound to the HBU VOR/DME on the HBU R-010 at or above 8800. **All aircraft** continue climbing in HBU holding pattern (SW, left turns, 031° inbound) to depart HBU VOR/DME at or above: R-261 CW R-280, 10800; R-281 CW R-189 and R-191 CW R-260, 13000; R-190, 12500.

HAYDEN, CO

YAMPA VALLEY (HDN)

AMDT 3 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, std. w/ min. climb of 400' per NM to 12200, or 3200-3 for climb in visual conditions. **Rwy 28**, std. w/ min. climb of 245' per NM to 9500, or 3200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb on heading 147° to 12200 before proceeding on course. **Rwy 28,** climb on heading 238° to 9500 before proceeding on course. **Rwys 10, 28,** for climb in visual conditions: cross Yampa Valley airport at or above 9700 before proceeding on course.

NOTE: **Rwy 10,** tree 241' from DER, 420' right of centerline, 100' AGL/6699' MSL. Tree 644' from DER, 340' left of centerline, 100' AGL/6699' MSL. Multiple transmission towers, beginning 3606' from DER, left to right of centerline, up to 145' AGL/6745' MSL. Terrain beginning 1714' from DER, 707' right of centerline, up to 6676' MSL.

HOBBS, NM

LEA COUNTY RGNL

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ a min. climb of 218' per NM to 4300, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1600' prior to departure end of runway.

NOTE: **Rwy 3,** multiple trees beginning 546' from departure end of runway, 811' right of centerline, up to 40' AGL/3700' MSL. Sign 822' from departure end of runway, 694' left of centerline, 38' AGL/3676' MSL. **Rwy 8,** tower 3 NM from departure end of runway, 2587' right of centerline, 515' AGL/4120' MSL. **Rwy 12,** road at departure end of runway, 112' right of centerline, 15' AGL/3654' MSL. **Rwy 17,** obstruction light on glideslope, 1014' from departure end of runway, 486' right of centerline, 37' AGL/3687' MSL. **Rwy 21,** tree 1304' from departure end of runway, 726' right of centerline, 46' AGL/3690' MSL. **Rwy 26,** road 253' from departure end of runway, across centerline, 15' AGL/3669' MSL. **Rwy 30,** wind sock 103' from departure end of runway, 280' left of centerline, 16' AGL/3675' MSL, pole 1035' from departure end of runway, 540' right of centerline, 25' AGL/3689' MSL. **Rwy 35,** multiple fences, roads and poles beginning 103' from departure end of runway, across centerline, up to 37' AGL/3696' MSL, pole 299' from departure end of runway, 495' left of centerline, 25' AGL/ 3689' MSL, pole 293' from departure end of runway, 94' right of centerline, 25' AGL/ 3682' MSL.

HOLLOMAN AFB (KHMN),

ALAMOGORDO, NM . . . . . .ORIG, 08101

Rwy 7, NA
Rwy 16, 8000-3*
Rwy 22, 8000-3**
Rwy 25, 8000-3*
Rwy 34, 8000-3***
* Or standard with minimum climb of 510/NM to 14,100.
** Or standard with minimum climb of 470/NM to 14,100.
*** Or standard with minimum climb of 490/NM to 14,100.
Rwy 16, 22, 25, 34, RADAR REQUIRED (when R-5103C not under Holloman Approach or Cherokee control).

TAKE-OFF OBSTACLES: **Rwy 16,** Terrain 4052' MSL, 46' from DER, 512' left of centerline; Terrain 4052' MSL, 16' from DER, 500' left of centerline; Terrain 4052' MSL, 12' from DER, 503' left of centerline; Vehicle on road 15' AGL/4180' MSL, 589' from DER, 1170' right of centerline; Building 17' AGL/4070' MSL, 67' from DER, 283' right of centerline. **Rwy 22,** Terrain 4058' MSL, 4' from DER, 63' left of centerline; Terrain 4060' MSL, 127' from DER, 534' right of centerline; Terrain 4059' MSL, 0' from DER, 500' right of centerline; Vehicle on road 10' AGL/4190' MSL, 1963' from DER, 422' right of centerline; Vehicle on road 10' AGL/4190' MSL, 1977' from DER, 90' right of centerline. **Rwy 25,** Vehicle on road 10' AGL/4190' MSL, 4387' from DER, 14' left of centerline; Vehicle on road 10' AGL/4190' MSL, 4225' from DER, 303' left of centerline; Vehicle on road 15' AGL/4190' MSL, 1812' from DER, 1464' left of centerline.

HOLYOKE, CO

HOLYOKE

NOTE: **Rwy 14,** trees 2012' from departure end of runway, 29' left of centerline, 100' AGL/3829' MSL. **Rwy 32,** trees 1009' from departure end of runway, 697' left of centerline, 100' AGL/3839' MSL.

KREMMLING, CO

MC ELROY AIRFIELD

TAKE-OFF MINIMUMS: **Rwy 9,** 2600-2 or std. with a min. climb of 370' per NM to 12700. **Rwy 27,** 3200-2 or std. with a min. climb of 500' per NM to 12700.

DEPARTURE PROCEDURE: **Rwy 9,** climb runway heading to 10000, then climbing right turn. **Rwy 27,** climb runway heading to 10900, then climbing left turn. **All aircraft** proceed direct RLG VOR/DME. Continue climb to 13,000 in RLG holding pattern (hold SW, left turns, 051° inbound).

LA JUNTA, CO

LA JUNTA MUNI

DEPARTURE PROCEDURE: **Rwy 8,** climb via heading 080°. **Rwy 12,** climb via heading 120°. **Rwy 26,** turn left heading 160°. **Rwy 30,** turn left heading 140°. **All aircraft,** intercept LAA R-238 (V210) to LAA VORTAC. When at or above 8000 proceed on course.

LAMAR, CO

LAMAR MUNI

DEPARTURE PROCEDURE: **Rwys 8,36,** turn left. **Rwy 18,** turn left/right. **Rwy 26,** turn right. Direct LAA VORTAC. Aircraft departing LAA R-048 CW R-118 climb on course. All others continue climbing in LAA holding pattern (N, right turns, 169° inbound) to 6000 before proceeding on course.

LAS CRUCES, NM

LAS CRUCES INTL

DEPARTURE PROCEDURE: **Rwys 4, 8,** climbing right turn. **Rwy 12,** CAT A,B, climb runway heading CAT C,D, NA. **Rwys 22, 26,** climbing left turn. **Rwy 30,** climbing runway heading to 5100 then climbing left turn. **All aircraft** climb direct HAWKE LOM. Continue climb in HAWKE holding pattern (SE, left turns, 304° inbound) to cross HAWKE LOM at or above 10000 before proceeding on course.

LAS VEGAS, NM

LAS VEGAS MUNI

DEPARTURE PROCEDURE: **Rwys 2, 14** turn left/right. **Rwy 20,** turn left (except via FTI R-215). **Rwy 32,** turn right.

Departures via FTI VORTAC R-001 CW R-215 climb on course. Departures via FTI VORTAC R-216 CW R-360 proceed direct FTI VORTAC. Climb in FTI VORTAC holding pattern (hold north, left turn, 192° inbound) to cross FTI at airway MEA/MCA. (NOTE: climb in hold not authorized for turbojet aircraft)

LEADVILLE, CO

LAKE COUNTY (LXV)
AMDT 2 08101 (FAA)

DEPARTURE PROCEDURE: **Rwy 16,** use LOZUL (RNAV) DEPARTURE. **Rwy 34,** use DAVVY (RNAV) DEPARTURE.

LONGMONT, CO
VANCE BRAND
TAKE-OFF MINIMUMS: **Rwy 11,** 300-1 or std. with a min. climb of 250' per NM until passing 5400. **Rwy 29,** CAT A,B 1900-3 or std. with a min. climb of 380' per NM until passing 7000. CAT C,D NA.
DEPARTURE PROCEDURE: Comply with RADAR vectors, or: **Rwys 11, 29,** turn right climb direct BJC VOR/DME. Departures on BJC R-340 CW R-150 climb on course. All others climb in BJC holding pattern (NE, left turns, 203° inbound) to cross BJC VOR/DME at or above 13300.
NOTE: Climb in holding NA for turbojet aircraft.

LOS ALAMOS, NM
LOS ALAMOS
TAKE-OFF MINIMUMS: **Rwy 27,** NA-obstacles and airport restriction.
DEPARTURE PROCEDURE: **Rwy 9,** climb via heading 092° until intercepting SAF VORTAC R-354. Northbound proceed via V83 climbing to 11000. Southbound proceed via V83 at 9000.

LOVINGTON, NM
LEA COUNTY-ZIP FRANKLIN MEMORIAL
DEPARTURE PROCEDURE: **Rwy 3,** climb runway heading to 4700 before turning on course. **Rwy 12,** 35' AGL powerline 1250' from departure end of runway 150' right of centerline. **Rwy 21,** 40' AGL tower 936' from departure end of runway 273' right of centerline. **Rwy 30,** 50' AGL windmill 1800' from departure end of runway 50' right of centerline.

MEEKER, CO
MEEKER (EEO)
AMDT 1 08157
TAKE-OFF MINIMUMS: **Rwys 3, 21,** 4100-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwys 3, 21,** for climb in visual conditions: cross Meeker Airport at or above 10500 before proceeding on course.
NOTE: **Rwy 21,** multiple trees beginning 843' from departure end of runway, 20' left of centerline, up to 100' AGL/7190' MSL. Multiple trees beginning 227' from departure end of runway, 187' right of centerline, up to 100' AGL/6862' MSL.

MONTE VISTA, CO
MONTE VISTA MUNI
DEPARTURE PROCEDURE: **Rwy 2,** climbing right turn. **Rwy 20,** climbing left turn. **All aircraft,** climb direct ALS VORTAC, continue climb in ALS holding pattern (SE, right turns, 301° inbound) to cross ALS VORTAC at or above 11,000, except V210 westbound 11,200 and J102 northeastbound 13,700, before proceeding enroute.

MONTROSE, CO
MONTROSE RGNL (MTJ)
AMDT 4 09127 (FAA)
DEPARTURE PROCEDURE: Use MONTROSE DEPARTURE.

NUCLA, CO
HOPKINS FIELD
TAKE-OFF MINIMUMS: **Rwys 11, 29,** NA-environmental
DEPARTURE PROCEDURE: **Rwys 5, 23,** use NUCLA (RNAV) DEPARTURE.

PAGOSA SPRINGS , CO
STEVENS FIELD (PSO)
ORIG 08045 (FAA)
TAKE-OFF MINIMUMS: **Rwy 1,** std. w/ min. climb of 437' per NM to 9600, or 1900-3 for climb in visual conditions. **Rwy 19,** std. w/ min. climb of 296' per NM to 9300, or 1900-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 216° to intercept DRO VOR/DME R-066 to DRO VOR/DME .... for climb in visual conditions cross Stevens Field airport south bound at or above 9400 MSL, then via DRO VOR/DME R-066 to DRO VOR/DME ....
Rwy 19, climb via heading 194° to intercept DRO VOR/DME R-075 to DRO VOR/DME .... for climb in visual conditions cross Stevens Field airport south bound at or above 9400 MSL, then via DRO VOR/DME R-066 to DRO VOR/DME .... .
... thence cross DRO VOR/DME at MEA/MCA for direction of flight before proceeding on course.
NOTE: **Rwy 1,** terrain beginning 30' from departure end of runway, 53' left of centerline, up to 7697' MSL. Terrain beginning 127' from departure end of runway, 69' right of centerline, up to 7681' MSL. Multiple trees beginning 940' from departure end of runway, left and right of centerline, up to 100' AGL/7739' MSL. **Rwy 19,** multiple trees beginning 664' from departure end of runway, 156' left of centerline, up to 100' AGL/7693' MSL. Multiple trees beginning 1625' from departure end of runway, 5' right of centerline, up to 100' AGL/7698' MSL.

PUEBLO, CO

PUEBLO MEMORIAL (PUB)
AMDT 4 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 35,** 300-1¾ or standard w/ a min. climb of 254' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 8L,** climb heading 077° to 5500, then climbing left turn via heading 210° and PUB R-040 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 8R,** climb heading 077° to 5400, then climbing left turn via heading 210° and PUB R-040 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 17,** climb heading 167° to 5800, then climbing left turn via heading 050 and PUB R-180 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 26L**, climb heading 257° to 5700, then climbing left turn via heading 070° and PUB R-220 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 26R,** climb heading 257° to 5700, then climbing left turn via heading 070° and PUB R-220 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 35,** climb heading 347° to 5200, then climbing right turn via heading 150° and PUB R-360 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 8L**, rising terrain 57' from DER, 123' left of centerline, up to 4649' MSL. **Rwy 8R,** rising terrain 180' from DER, 58' left of centerline, up to 4659' MSL. **Rwy 26L,** rising terrain 110' from DER, 182' right of centerline, up to 4659' MSL, rising terrain 128' from DER, 122' left of centerline, up to 4659' MSL. **Rwy 26R,** rising terrain 208' from DER, 446' right of centerline, up to 4679' MSL. **Rwy 35,** rising terrain 2' from DER, 7' left of centerline, up to 4749' MSL, rising terrain 196' from DER, 11' right of centerline, up to 4793' MSL, transmission poles 1.1 NM from DER, 703' right of centerline, 46' AGL/4925' MSL, radar reflector 996' from DER, on centerline, 4' AGL/4757' MSL.

RATON, NM

RATON MUNI/CREWS FIELD

DEPARTURE PROCEDURE: When weather below 1500-2: **Rwys 2,7**, climb on CIM R-040 northeastbound to 8000, then on course to assigned altitude. **Rwys 20,25**, climb on CIM R-040 southwestbound to 8000, then on course to assigned altitude.

RIFLE, CO

GARFIELD COUNTY RGNL (RIL)
AMDT 8 08157

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ a min. climb of 369' per NM to 12400 or 5400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** DME required. Climb via RIL R-081 to ZOBAK/10 DME, then climbing left turn direct RIL VOR/DME. Climb in RIL VOR/DME holding pattern (Hold E, right turn, 263° inbound) to cross RIL VOR/DME at or above MEA/MCA before proceeding enroute, or for climb in visual conditions cross Garfield County Rgnl Airport at or above 10800 before proceeding on course. **Rwy 26,** use SQUAT RNAV DEPARTURE.

NOTE: **Rwy 8,** transmission line towers beginning 1.2 NM from departure end of runway, 437' right of centerline, up to 150' AGL/6069' MSL. Trees beginning 1.9 NM from departure end of runway, 647' right of centerline, up to 100' AGL/5983' MSL. Terrain beginning 124' from departure end of runway, 287' right of centerline, up to 5863' MSL. Pole 1083' from departure end of runway, 656' right of centerline, 28' AGL/5588' MSL.

ROSWELL, NM

ROSWELL INTL AIR CENTER

DEPARTURE PROCEDURE: **Rwy 30,** climb to 6000 via runway heading to intercept CME R-323, upon reaching 6000 proceed on course. **Rwy 35,** climbing left turn to 6000 via heading 277° to intercept CME R-323, upon reaching 6000 proceed on course.

RUIDOSO, NM

SIERRA BLANCA RGNL

TAKE-OFF MINIMUMS: **Rwys 6,24**, 5200-3 or std. with a min. climb of 420' per NM to 12,100'.

DEPARTURE PROCEDURE: **Rwy 6**, climb at 385' per NM to 9100' direct CEP NDB, continue climb in holding pattern (*hold E, left turns, 273° inbound) to cross CEP NDB at or above the MEA for direction of flight. *Do not exceed 230 kts in holding pattern. **Rwy 24**, immediate climbing left turn to 9100' direct CEP NDB, continue climb in holding pattern (*hold E, left turns, 273° inbound) to cross CEP NDB at or above the MEA for direction of flight . *Do not exceed 230 kts in holding pattern.

SALIDA, CO

HARRIET ALEXANDER FIELD (ANK)
ORIG 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 24,** 6800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 6, 24,** For climb in visual conditions: Cross Harriet Alexander Field at or above 14200 MSL before proceeding on course.

NOTE: **Rwy 24,** Multiple transmission towers beginning 666' from departure end of runway, 440' right of centerline, up to 73' AGL/7651' MSL. Multiple trees beginning 5455' from departure end of runway, 663' right of centerline, up to 100' AGL/7908' MSL.

SANTA FE, NM

SANTA FE MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 1000-3 or std. with a min. climb of 240' per NM until passing 7300 MSL. **Rwys 2, 33,** Cats. C and D, 2900-3 or std. with a min. climb of 330' per NM until 9000 MSL.

DEPARTURE PROCEDURE: **Rwys 2, 10, 33**, turn right; **Rwys 20, 28,** turn left; **Rwy 15,** climb runway heading. **All aircraft** climb direct to SAF VORTAC. Continue climbing in SAF VORTAC holding pattern (hold SE, right turns, 332° inbound) to cross SAF VORTAC at or above airway MEA/MCA for direction of flight.

SANTA TERESA, NM

DONA ANA COUNTY AT SANTA TERESA

TAKE-OFF MINIMUMS: **Rwy 10,** std. with a min. climb of 419' per NM to 8400, or 2800-3 for climb in visual conditions. **Rwy 28,** std. with a min. climb of 358' per NM to 8400, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 10, 28,** for climb in visual conditions: cross Dona Ana County at Santa Teresa Airport at or above 6800 before proceeding on course.

SILVER CITY, NM

GRANT COUNTY

TAKE-OFF MINIMUMS: **Rwys 3,8,12,17,21,26,30,35,** std. with a min. climb of 354' per NM to 9200, or 3800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3,8,12,17,21,26,30, 35,** for climb in visual conditions: cross Grant County Airport at or above 9200.

NOTE: **Rwy 3,** crane 5007' from departure end of runway, 1056' right of centerline, 200' AGL/5610' MSL. **Rwy 8,** pole 1.12 NM from departure end of runway, 381' right of centerline, 30' AGL/5383' MSL. Power line 2.18 NM from departure end of runway, 139' right of centerline, 200' AGL/5520' MSL. **Rwy 12,** pole 5265' from departure end of runway, 490' right of centerline, 72' AGL/5417' MSL. **Rwy 17,** pole 1.02 NM from departure end of runway, 469' left of centerline, 50' AGL/5408' MSL. **Rwy 21,** multiple bushes beginning from 4556' from departure end of runway, 79' right of centerline, up to 40' AGL/5403' MSL.

SOCORRO, NM

SOCORRO MUNI (ONM)

AMDT 3 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6,15,24,** NA-terrain. **Rwy 33,** 200-1¼ or std. w/ min. climb of 216' per NM to 5100, or alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1500' prior to DER.

DEPARTURE PROCEDURE: **Rwy 33**, climbing right turn via heading 030° and ONM VORTAC R-179 to ONM VORTAC, continue climb-in-hold (hold North, right turns, 182° inbound) to cross ONM VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 33,** trees beginning 67' from DER, 66' left of centerline, up to 15' AGL/4814' MSL. Trees beginning 436' from DER, 438' right of centerline, up to 15' AGL/4814' MSL. Tower 4996' from DER, 1161' left of centerline, 147' AGL/4947' MSL. Tower 5851' from DER, 584' right of centerline, 200' AGL/4956' MSL.

SPRINGFIELD, CO

SPRINGFIELD MUNI (8V7)

ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17,** 4900-3 or std. w/ a min. climb of 225' per NM to 5000.

NOTE: **Rwy 17,** tower 15212' from departure end of runway, 2936' right of centerline, 425' AGL/4817' MSL.

STEAMBOAT SPRINGS, CO

STEAMBOAT SPRINGS/BOB ADAMS FIELD

TAKE-OFF MINIMUMS: **Rwys 14,** 1500-3 or std. with a min. climb of 610' per NM to 9000. **Rwy 32,** 1900-3 or std. with a min. climb of 500' per NM to 9000.

DEPARTURE PROCEDURE: **Rwy 14,** turn right heading 220°, intercept BQZ R-172. **Rwy 32,** turn left direct BQZ VOR/DME. **All aircraft** climb to 12100 via BQZ R-172 to SBURG Int and hold (S, right turns, 352° inbound).

STERLING, CO

STERLING MUNI

DEPARTURE PROCEDURE: **Rwys 3,30,33**, turn left. **Rwys 12,15,21**, turn right climb to 6000 direct toward SNY or AKO VOR/DME before proceeding on course.

TAOS, NM

TAOS RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 300-1.

DEPARTURE PROCEDURE: **Rwy 4**, climbing left turn. **Rwy 22**, climbing right turn. Intercept TAS R-100. Climbing direct to the TAS VORTAC, continue climb in holding pattern to cross TAS VORTAC at or above the MEA for direction of flight.

TELLURIDE, CO

TELLURIDE RGNL (TEX)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, NA-obstacles. **Rwy 27**, std. w/ min. climb of 457' per NM to 10500, or 5300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 27**, climb to 12000 via heading 273° to intercept the ETL R-096 to ETL VOR/DME, or for climb in visual conditions: cross Telluride Airport westbound at or above 14200 via ETL R-095 to ETL VOR/DME. NOTE: All aircraft cross ETL VOR/DME at or above airway MEA/MCA for direction of flight.

NOTE: **Rwy 27,** trees beginning 203' from departure end of runway, 186' left of centerline, up to 100' AGL/9124' MSL. Trees beginning 281' from departure end of runway, 45' right of centerline, up to 100' AGL/9219' MSL. Obstruction light on post 2' from departure end of runway, 308' left of centerline, 17' AGL/9095' MSL. Terrain beginning at departure end of runway, left and right of centerline, up to 9075' MSL.

TRINIDAD, CO

PERRY STOKES

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA

DEPARTURE PROCEDURE: **Rwy 3,** turn left. **Rwy 21,** turn right, direct TAD NDB. Climb in holding to 7600 (N, left turns, 165° inbound). Aircraft departing TAD NDB bearing 330° CW 140° from TAD NDB: climb on course. Aircraft departing TAD NDB bearing 141° CW 329° from TAD NDB: depart at or above 12,500'.

NOTE: **Rwy 3,** tree 180' from departure end of runway, on centerline, 30' AGL/5765' MSL.

TRUTH OR CONSEQUENCES, NM

TRUTH OR CONSEQUENCES MUNI

TAKE-OFF MINIMUMS: 1500-3 or std. with a min. climb of 500' per NM to 8000.

DEPARTURE PROCEDURE: **Rwys 19,25,29,31,** turn right; **Rwys 1,7,11,13,15,33**, turn left, climb direct TCS VORTAC, continue climb in holding pattern (N, left turns, 180° inbound) to cross TCS VORTAC at above the MEA for direction of flight.

TUCUMCARI, NM

TUCUMCARI MUNI

DEPARTURE PROCEDURE: All Rwys for SW-bound V-264 climb TCC R-255 within 10 NM to 5500 before departing on course. **Rwy 21,** climb heading 213° to 5500 before proceeding on course. **Rwy 26,** climb heading 258° to 5500 before proceeding on course.

WALDEN, CO

WALDEN-JACKSON COUNTY (33V)

ORIG 08157

TAKE-OFF MINIMUMS: **Rwys 17, 35,** NA-ATC.

DEPARTURE PROCEDURE: **Rwys 4, 22,** Use WALRU RNAV DEPARTURE.

WRAY, CO

WRAY MUNI

TAKE-OFF MINIMUMS: **Rwy 17,** 500-2 or std. with a min. climb of 280' per NM to 4400.

DEPARTURE PROCEDURE: **Rwy 17,** climbing right turn via AKO VOR/DME R-084 to 7000 before proceeding on course. **Rwy 35,** climbing left turn via AKO VOR/DME R-077 to 7000 before proceeding on course.

NOTE: **Rwy 35,** trees 2175' left of departure end of runway, 100' AGL/3778' MSL.

ZUNI PUEBLO, NM

BLACK ROCK

TAKE-OFF MINIMUMS: **Rwy 7**, 1200-2 or std. with a min. climb of 360 feet per NM to 7600.

DEPARTURE PROCEDURE: **Rwy 7**, climbing left turn direct ZUN VORTAC. **Rwy 25**, climb direct ZUN VORTAC.

APP CRS	Rwy Idg	7000
109°	TDZE	4714
	Apt Elev	4714

RNAV (GPS) RWY 11

AKRON/ COLORADO PLAINS RGNL (AKO)

DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Sterling altimeter setting and increase all MDA 160 feet, increase LNAV Cat C and D visibility ½ mile and circling Cat C and D visibility ½ mile.
VDP NA with Sterling altimeter setting. Straight-in minimums NA at night.

MISSED APPROACH: Climb to 6400 direct CULIT and via 114° track to GERON and hold.

ASOS	DENVER CENTER	UNICOM
135.475	133.95 317.55	122.8 (CTAF) L

Procedure NA for arrivals at AKO VOR/DME via V8 eastbound.

(IAF) TUMBL

6300 NoPT 135° (11.8)

MSA RW11 25 NM
6400

(IAF) SYLVR

6300 NoPT 086° (12.5)

7 NM

109°

289°

(IF/IAF) KUKMY

6300 109° (6.1)

(FAF) ADEWU

4839±

RW11

4949

5060

4800

CULIT

6300 to KUKMY 290° (13.8)

AKRON AKO

114°

GERON

293°

113°

7 NM

ELEV 4714

109° to RW11

TDZE 4714

7000 X 100

4796

4799±

0.6% UP

7 NM Holding Pattern

KUKMY

ADEWU

6400

CULIT

114° track

GERON

6300 289° 109° 109° 6300

1.1 NM to RW11

RW11

3.04°

TCH 40

6.1 NM 3.7 NM 1.1

CATEGORY	A	B	C	D
LNAV MDA	5100-1 386 (400-1)			5100-1¼ 386 (400-1¼)
CIRCLING	5180-1 466 (500-1)		5180-1½ 466 (500-1½)	5280-2 566 (600-2)

MIRL Rwy 11-29 L
REIL Rwys 11 and 29

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7000
289°	TDZE	4681
	Apt Elev	4714

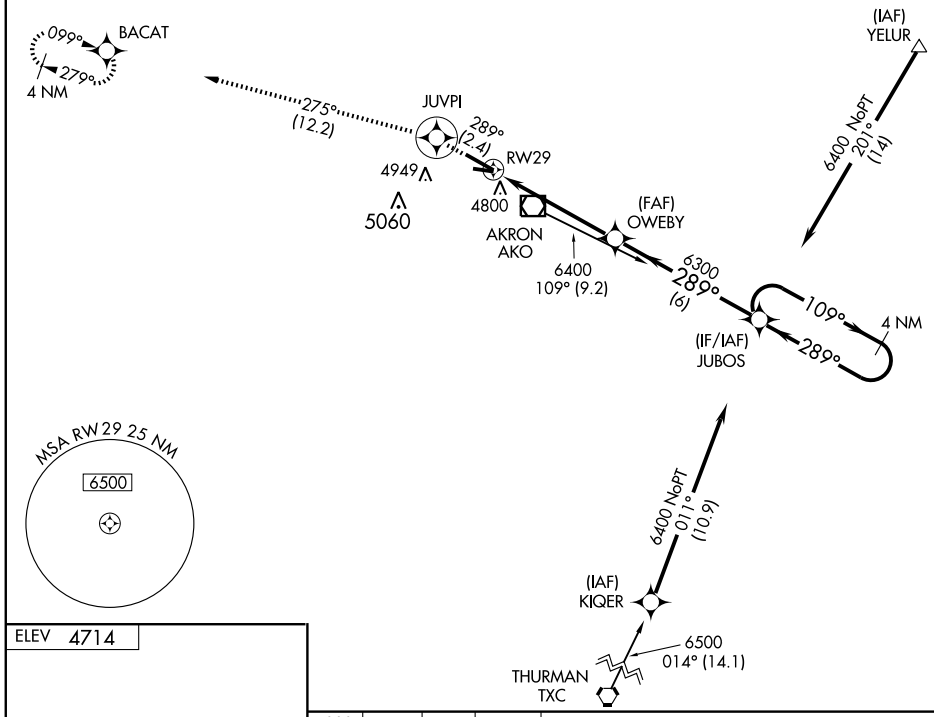
RNAV (GPS) RWY 29

AKRON/ COLORADO PLAINS RGNL (AKO)

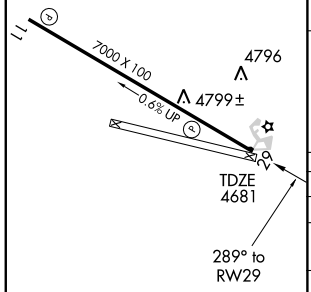
GPS or RNP -0.3 required. DME/DME RNP -0.3 NA. Baro-VNAV NA below -24°C (-11°F).

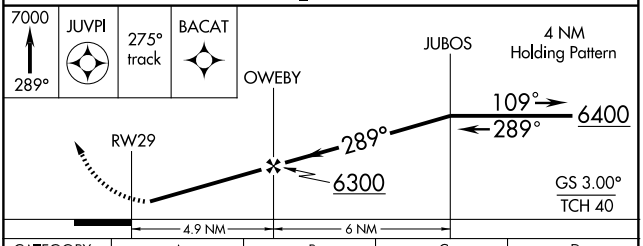
MISSED APPROACH: Climb to 7000, via 289° course to JUVPI WP then via 275° track to BACAT WP and hold.

ASOS	DENVER CENTER	UNICOM
135.475	133.95 317.55	122.8 (CTAF)



ELEV 4714





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	5100-1½ 419 (400-1½)			
LNAV MDA	5100-1 419 (400-1)		5100-1¼ 419 (400-1¼)	
CIRCLING	5180-1½ 466 (500-1½)			5280-2 566 (600-2)

MIRL Rwy 11-29 (L)
REIL Rwys 11 and 29

SW-1, 22 OCT 2009 to 19 NOV 2009

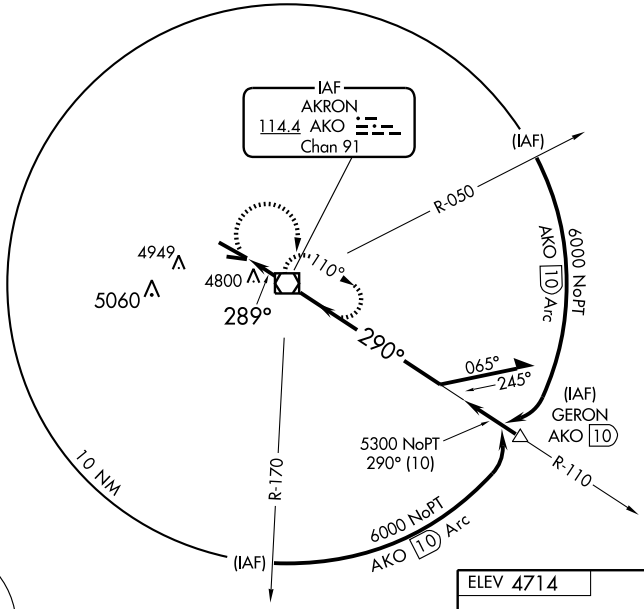
VOR/DME AKO	APP CRS	Rwy Idg	7000
114.4	289°	TDZE	4681
Chan 91		Apt Elev	4714

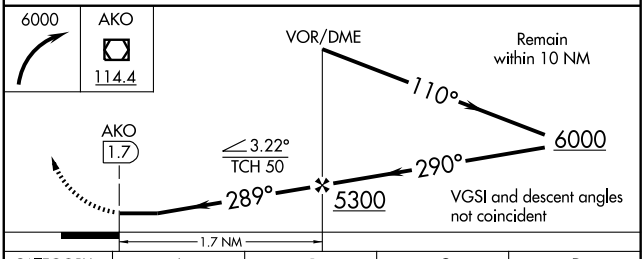
VOR RWY 29

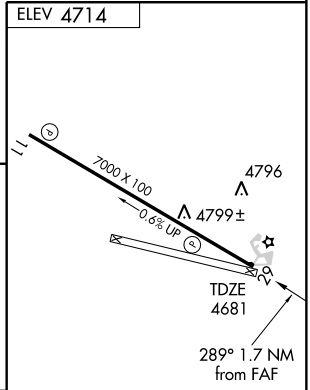
AKRON/ COLORADO PLAINS RGNL (AKO)

MISSED APPROACH: Climbing right turn to 6000 direct AKO VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
135.475	133.95 317.55	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-29	5120-1 439 (500-1)		5120-1¼ 439 (500-1¼)	5120-1½ 439 (500-1½)
CIRCLING	5160-1 446 (500-1)	5180-1 466 (500-1)	5300-1½ 586 (600-1½)	5300-2 586 (600-2)

MIRL Rwy 11-29 L
REIL Rwys 11 and 29

FAF to MAP 1.7 NM

Knots	60	90	120	150	180
Min:Sec	1:42	1:08	0:51	0:41	0:34

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-VQR	APP CRS	Rwy Idg	8519
111.9	023°	TDZE	7539
		Apt Elev	7539

ILS or LOC RWY 2

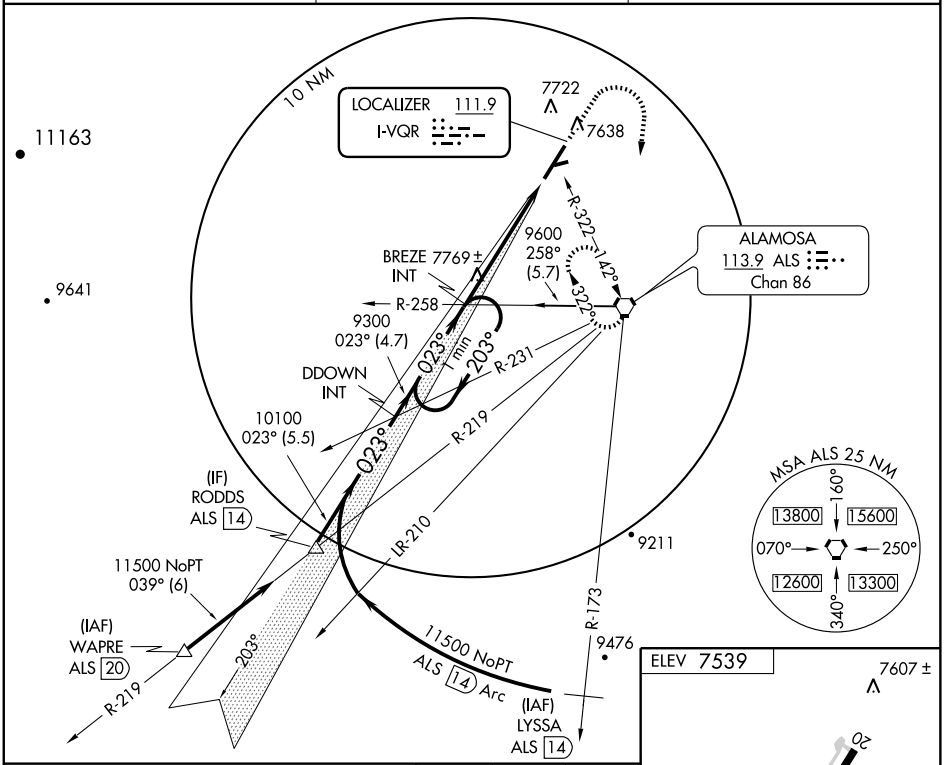
ALAMOSA/SAN LUIS VALLEY RGNL/BERGMAN FIELD (ALS)

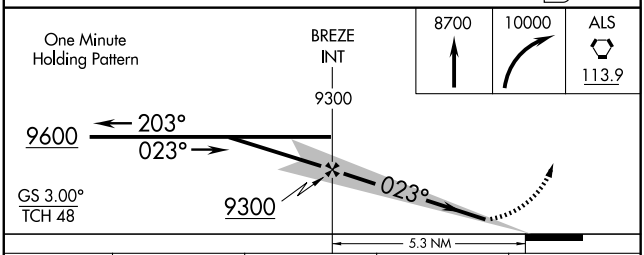
When local altimeter setting not received, procedure NA.

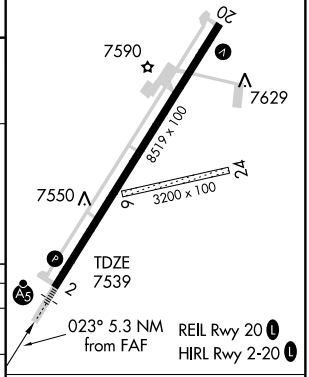
MALSR

MISSED APPROACH: Climb to 8700, then climbing right turn to 10000 direct ALS VORTAC and hold.

ASOS	DENVER CENTER	UNICOM
135.175	128.375 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 2	7739-½ 200 (200-½)			
S-LOC 2	8020-½ 481 (500-½)		8020-¾ 481 (500-¾)	8020-1 481 (500-1)
CIRCLING	8040-1 501 (600-1)		8040-1½ 501 (600-1½)	8100-2 561 (600-2)

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 90410 W02A	APP CRS 023°	Rwy Idg 8519 TDZE 7539 Apt Elev 7539

RNAV (GPS) RWY 2

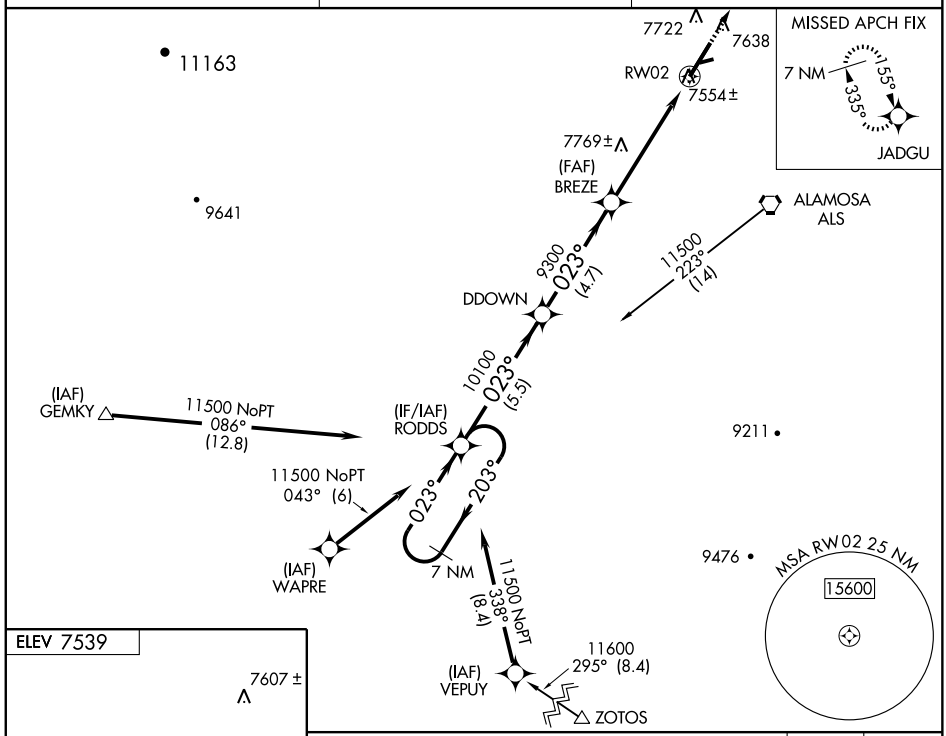
ALAMOSA/SAN LUIS VALLEY RGNL/BERGMAN FIELD (ALS)

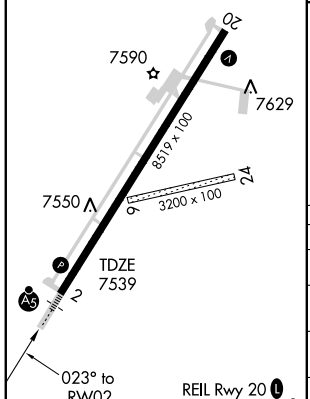
For inoperative MALSR, increase LNAV/VNAV Cat D visibility to 1 mile. When local altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -30°C (-22°F) or above 34°C (93°F). DME/DME RNP -0.3 NA.

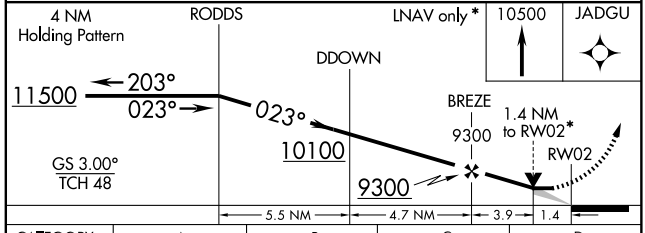
MALSR

MISSED APPROACH: Climb to 10500 direct JADGU and hold.

ASOS	DENVER CENTER	UNICOM
135.175	128.375 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	7739-½ 200 (300-½)			
LNAV/ VNAV DA	7804-½ 265 (300-½)			7804-¾ 265 (300-¾)
LNAV MDA	8020-½ 481 (500-½)		8020-¾ 481 (500-¾)	8020-1 481 (500-1)
CIRCLING	8040-1 501 (600-1)		8040-1½ 501 (600-1½)	8100-2 561 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8519
CH 93500	203°	TDZE	7539
W20A		Apt Elev	7539

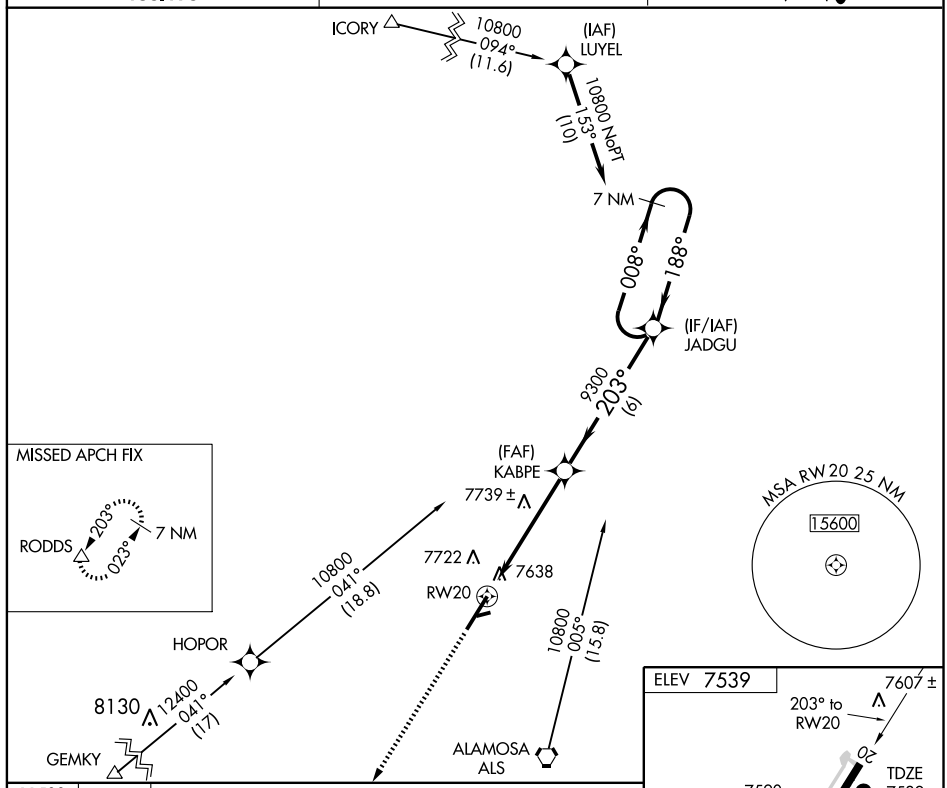
RNAV (GPS) RWY 20

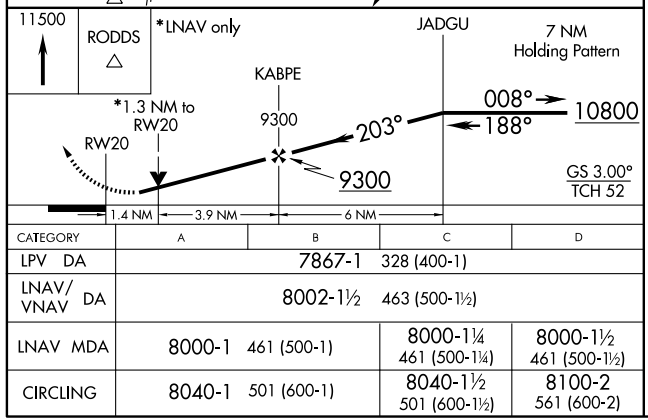
ALAMOSA/ SAN LUIS VALLEY RGNL/BERGMAN FIELD (ALS)

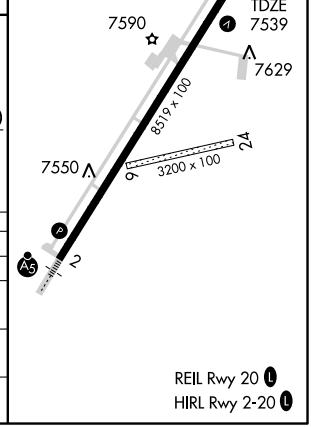
When local altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -30°C (-22°F) or above 34°C (93°F). DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 11500 direct RODDS and hold, continue climb-in-hold to 11500.

ASOS	DENVER CENTER	UNICOM
135.175	128.375 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	7867-1 328 (400-1)			
LNAV/ VNAV DA	8002-1½ 463 (500-1½)			
LNAV MDA	8000-1 461 (500-1)		8000-1¼ 461 (500-1¼)	8000-1½ 461 (500-1½)
CIRCLING	8040-1 501 (600-1)		8040-1½ 501 (600-1½)	8100-2 561 (600-2)

REIL Rwy 20 L
HIRL Rwy 2-20 L

SW-1, 22 OCT 2009 to 19 NOV 2009

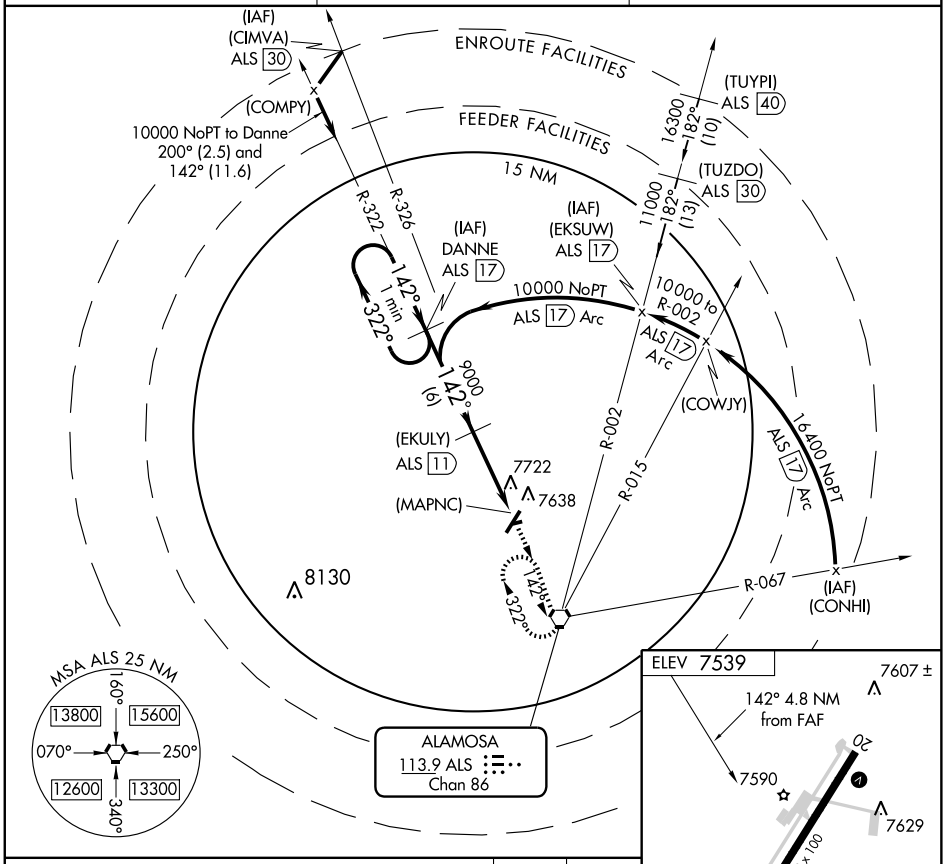
VORTAC ALS	APP CRS	Rwy Idg	N/A
113.9	142°	TDZE	N/A
Chan 86		Apt Elev	7539

VOR/DME or GPS-B

ALAMOSA/SAN LUIS VALLEY RGNL/BERGMAN FIELD (ALS)

MISSED APPROACH: Climb to 10000 direct ALS VORTAC and hold.

ASOS	DENVER CENTER	UNICOM
135.175	128.375 379.95	122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	8020-1 485 (500-1)		8020-1½ 485 (500-1½)	8100-2 565 (600-2)

REIL Rwy 20 L
HIRL Rwy 2-20 L

SW-1, 22 OCT 2009 to 19 NOV 2009

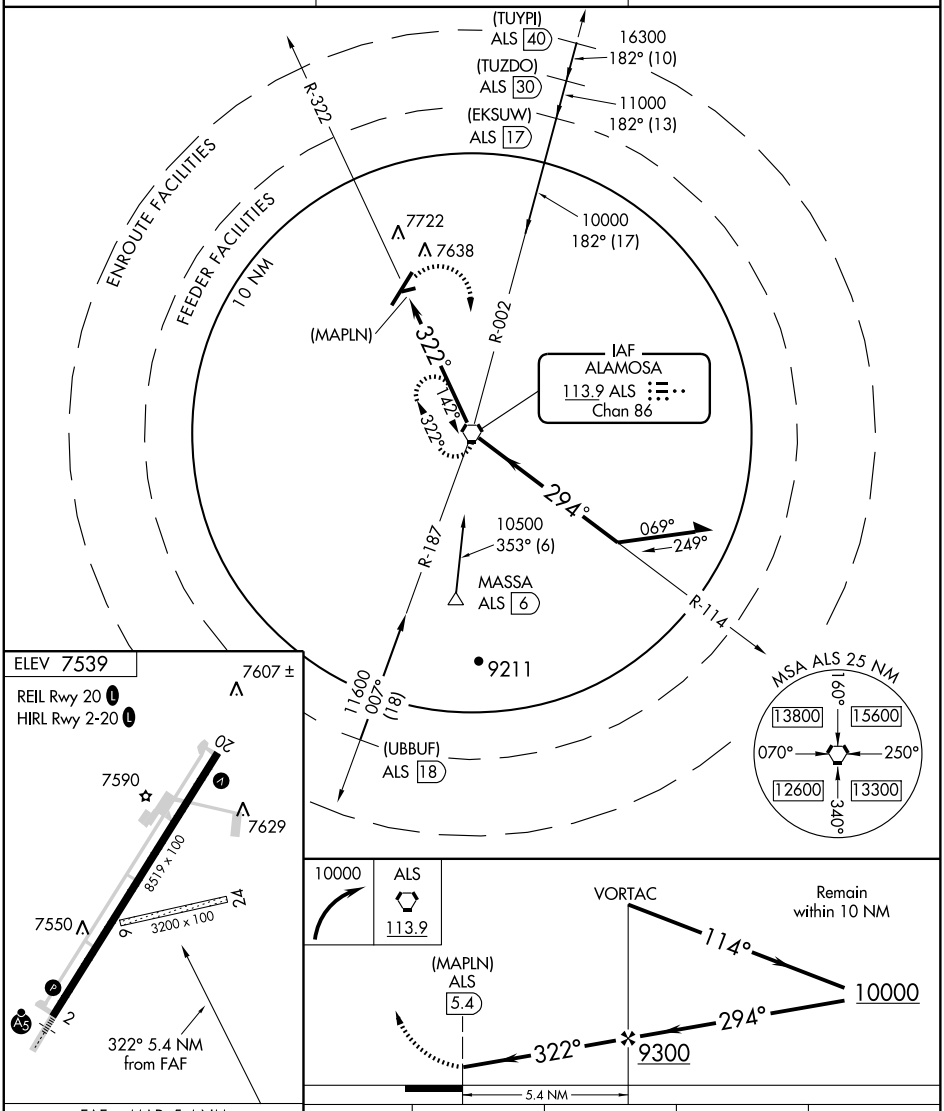
VORTAC ALS	APP CRS	Rwy Idg	N/A
113.9	322°	TDZE	N/A
Chan 86		Apt Elev	7539

VOR or GPS-A

ALAMOSA/SAN LUIS VALLEY RGNL/BERGMAN FIELD (ALS)

MISSED APPROACH: Climbing right turn to 10000 direct ALS VORTAC and hold.

ASOS	DENVER CENTER	UNICOM
135.175	128.375 379.95	122.8 (CTAF) L



FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
CIRCLING	8020-1	485 (500-1)	8020-1½ 485 (500-1½)	8100-2 565 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

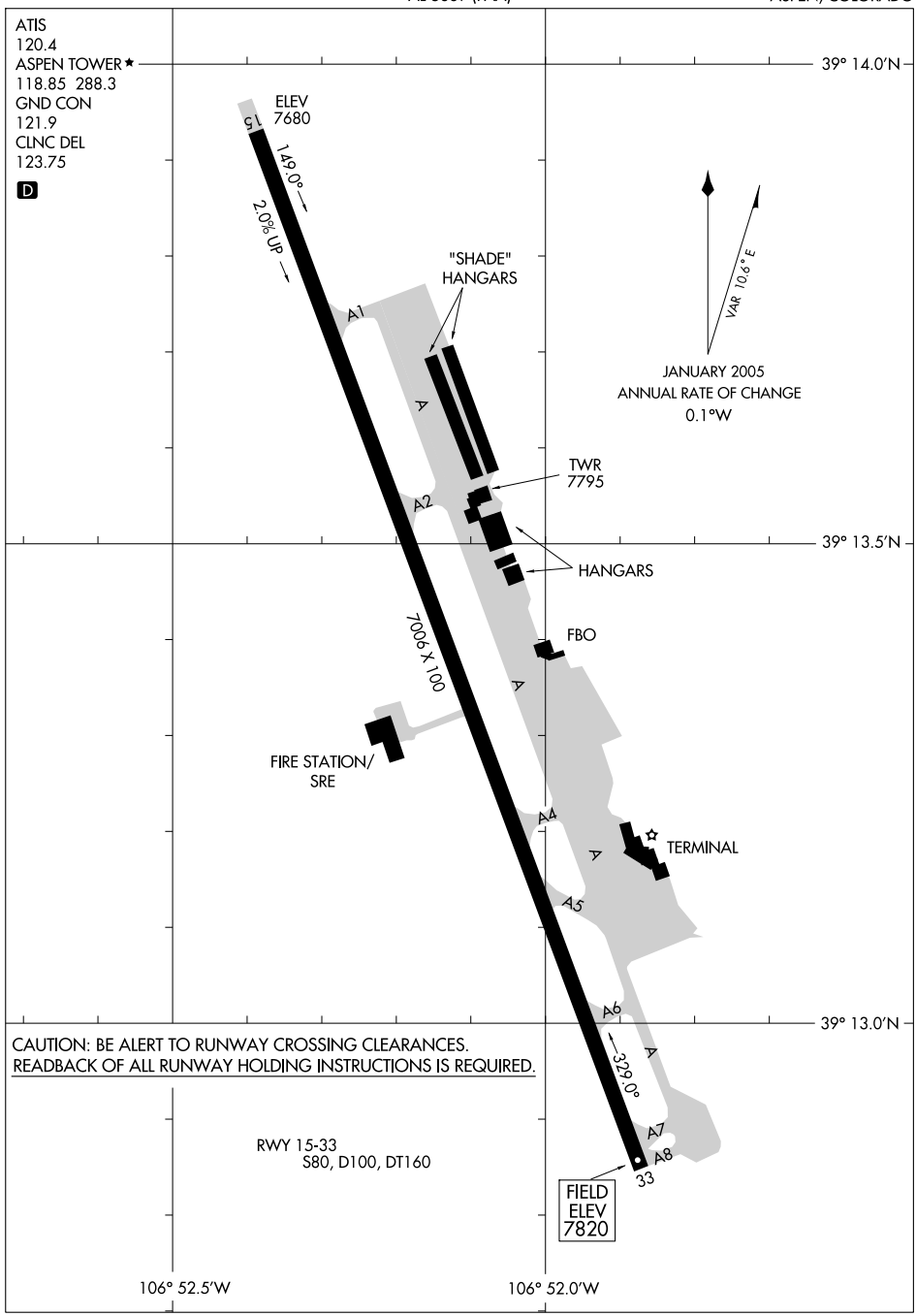
09295

AIRPORT DIAGRAM

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)

AL-5889 (FAA)

ASPEN, COLORADO

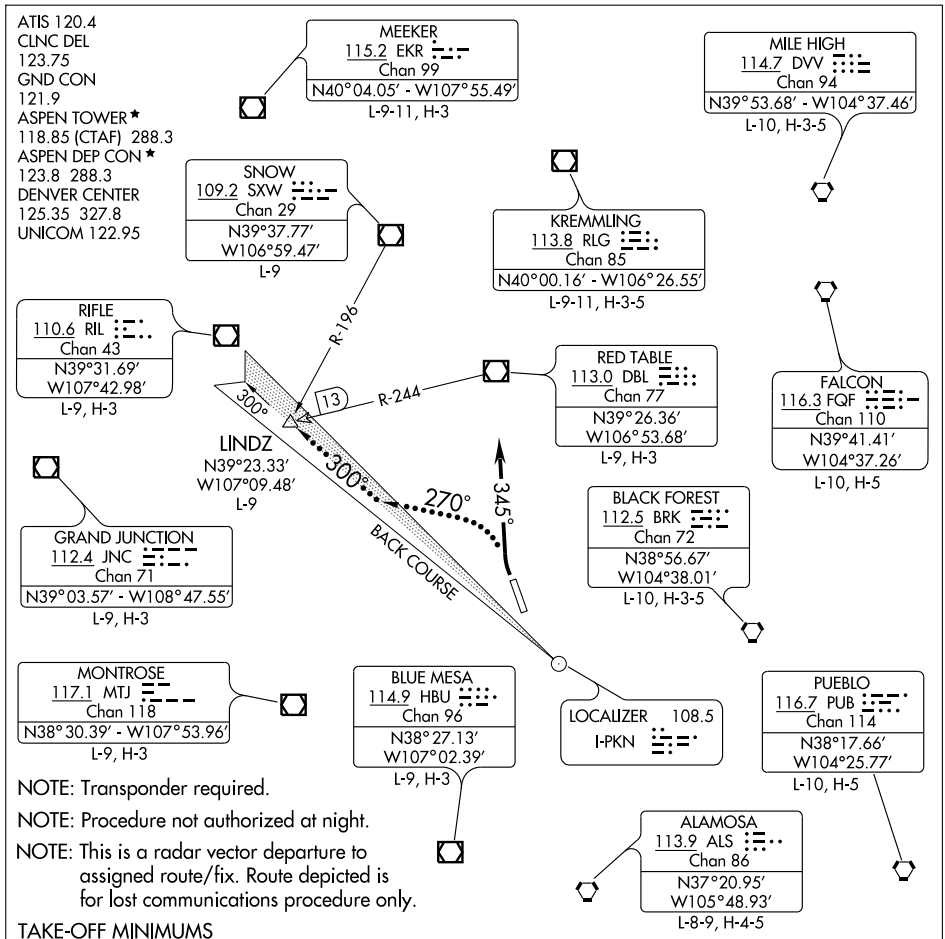


SW-1, 22 OCT 2009 to 19 NOV 2009

ASPEN THREE DEPARTURE

SL-5889 (FAA)

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)
ASPEN, COLORADO



NOTE: Transponder required.

NOTE: Procedure not authorized at night.

NOTE: This is a radar vector departure to assigned route/fix. Route depicted is for lost communications procedure only.

NOTE: Chart not to scale.

TAKE-OFF MINIMUMS

RWY 33: 400-1 with minimum obstacle climb of 650' per NM to 13000, ATC climb of 840' per NM to 16000.

RWY 15: NA - terrain.

TAKE-OFF OBSTACLE NOTES

RWY 33: Multiple trees beginning 35' from DER, 386' right of centerline, up to 100' AGL/7722' MSL. Terrain, trees and bushes beginning 4' from DER, 400' left of centerline, 100' AGL/7821' MSL. Multiple trees and bushes begining 3484' from DER, 752' left of centerline, up to 100' AGL/8179' MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climbing right turn heading 345°, maintain 16000 or assigned altitude for radar vectors to assigned route/fix. Expect clearance to filed altitude 10 minutes after departure.

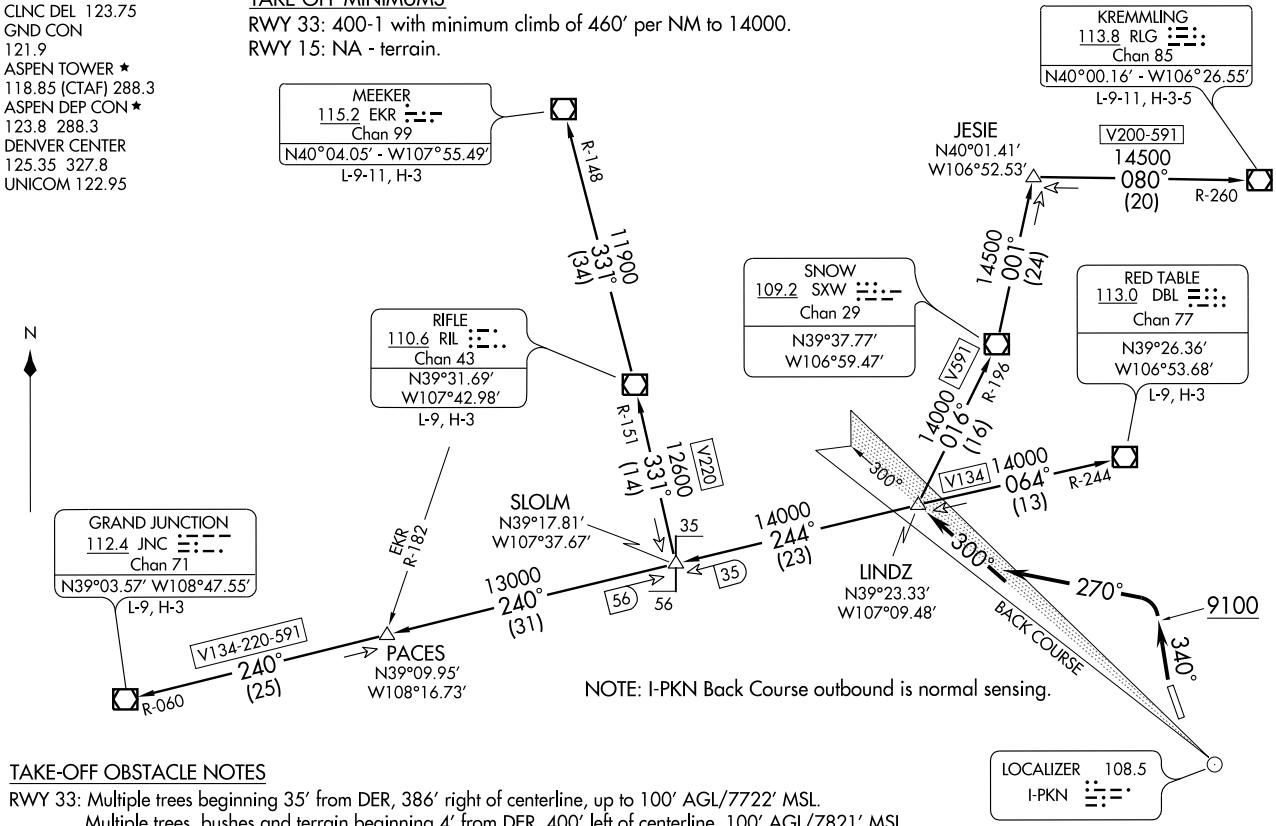
LOST COMMUNICATIONS: If no transmissions are received for one minute after departure, turn left heading 270° to intercept and proceed via the I-PKN NW course (outbound) to LINDZ INT/DBL R-244/13 DME, thence via assigned fix/route.

SW-1, 22 OCT 2009 to 19 NOV 2009

ATIS 120.4
CLNC DEL 123.75
GND CON
121.9
ASPEN TOWER ★
118.85 (CTAF) 288.3
ASPEN DEP CON ★
123.8 288.3
DENVER CENTER
125.35 327.8
UNICOM 122.95

TAKE-OFF MINIMUMS

RWY 33: 400-1 with minimum climb of 460′ per NM to 14000.
RWY 15: NA - terrain.



NOTE: I-PKN Back Course outbound is normal sensing.

TAKE-OFF OBSTACLE NOTES

RWY 33: Multiple trees beginning 35′ from DER, 386′ right of centerline, up to 100′ AGL/7722′ MSL.
Multiple trees, bushes and terrain beginning 4′ from DER, 400′ left of centerline, 100′ AGL/7821′ MSL.
Multiple trees and bushes begining 3484′ from DER, 752′ left of centerline, up to 100′ AGL/8179′ MSL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

LINDZ FIVE DEPARTURE

(LINDZ5.LINDZ) 09295

SL-5889 (FAA)

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)
ASPEN, COLORADO

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climb heading 340° to 9100, then a climbing left turn to 16000 heading 270° to intercept I-PKN NW course outbound to LINDZ INT/ DBL 13 DME. Then via assigned transition. Maintain 16000, expect clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received for one minute after departure, turn left heading 270° to intercept and proceed via the I-PKN NW course (outbound) to LINDZ INT/DBL 13 DME, then via assigned route/transition.

GRAND JUNCTION TRANSITION (LINDZ5.JNC): From over LINDZ INT via DBL R-244 and JNC R-060 to JNC VOR/DME.

KREMMLING TRANSITION (LINDZ5.RLG): From over LINDZ INT via SXW R-196 to SXW VOR/DME; then via SXW R-001 and RLG R-260 to RLG VOR/DME.

MEEKER TRANSITION (LINDZ5.EKR): From over LINDZ INT via DBL R-244 and RIL R-151 to RIL VOR/DME; then via RIL R-331 and EKR R-148 to EKR VOR/DME.

RED TABLE TRANSITION (LINDZ5.DBL): From over LINDZ INT via DBL R-244 to DBL VOR/DME.

RIFLE TRANSITION (LINDZ5.RIL): From over LINDZ INT via DBL R-244 and RIL R-151 to RIL VOR/DME.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-ASE	APP CRS	Rwy Idg	N/A
111.15	148°	TDZE	N/A
Chan 48 (Y)		Apt Elev	7820

LOC/DME-E

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)

NA — Procedure not authorized at night.

MISSED APPROACH: Climbing right turn to 14000 via heading 300° and I-PKN northwest course (300°) to LINDZ INT/DBL 12.6 DME and DBL VOR/DME R-244 to GLENO INT/DBL 22.7 DME and hold.

ATIS	ASPEN APP CON ★	ASPEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.4	123.8 288.3	118.85 (CTAF) L 288.3	121.9	123.75	122.95

Procedure NA for arrivals at DBL VOR/DME via airway radials 175° CW 244°.

MSA DBL 25 NM
200°
13100
15700
060°

(IAF) AJAXX I-ASE 19 DBL 6.6

IAF RED TABLE 113.0 DBL Chan 77

LINDZ DBL 12.6

(IF) JARGU INT I-ASE 13

KICER I-ASE 10.8

FIMSO I-ASE 8.9

DOYPE I-ASE 7

CEYAG I-ASE 3.9

GLENO DBL 22.7

I-PKN back course outbound is normal sensing.

BACK COURSE

LOCALIZER 111.15 I-ASE Chan 48 (Y)

LOCALIZER 108.5 I-PKN

10 NM

ELEV 7820 D

7795

7006 X 100

2.0% UP

15

33

REIL Rwy 33 L
MIRL Rwy 15-33

JARGU INT I-ASE 13	KICER I-ASE 10.8	FIMSO I-ASE 8.9	DOYPE I-ASE 7	14000 300°	I-PKN NW CRS 108.5	LINDZ △	DBL R-244 113.0	GLENO △
13400	12900	12300	11700	148°	6.59° TCH 55	CEYAG I-ASE 3.9	VGSI and descent angles not coincident	

Procedure Turn NA

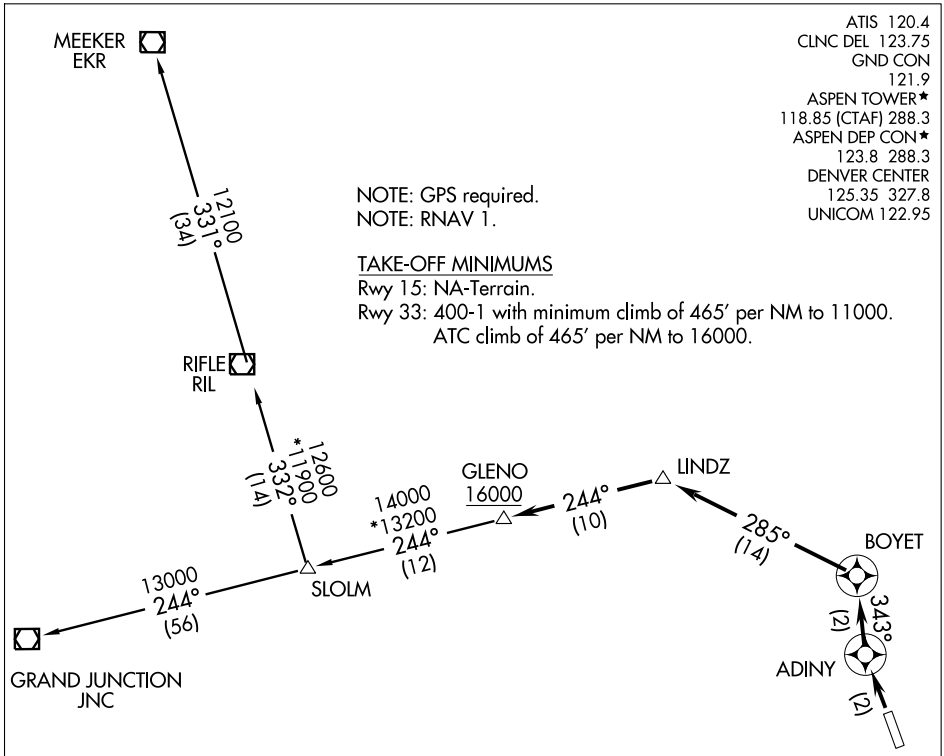
2.2 NM | 1.9 NM | 1.9 NM | 3.1 NM | 2.6 NM

CATEGORY	A	B	C	D
CIRCLING	9840-3 2020 (2100-3)	10020-3 2200 (2200-3)	10140-3 2320 (2400-3)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

PITKN ONE DEPARTURE (RNAV)

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)
ASPEN, COLORADO



TAKE-OFF OBSTACLE NOTES

Rwy 33: Multiple trees beginning 35′ from DER, 386′ right of centerline, up to 100′ AGL/7722′ MSL.
Multiple trees, bushes, and terrain beginning 4′ from DER, 400′ left of centerline, 100′ AGL/7821′ MSL.
Multiple trees and bushes beginning 3484′ from DER, 752′ left of centerline, up to 100′ AGL/8179′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climb to 16000 direct ADINY, and via 343° track to BOYET, and via 285° track to LINDZ, and via 244° track to GLENO, thence. . . .

. . . .via transition or assigned route, expect clearance to filed altitude 10 minutes after departure.

GRAND JUNCTION TRANSITION (PITKN1.JNC)

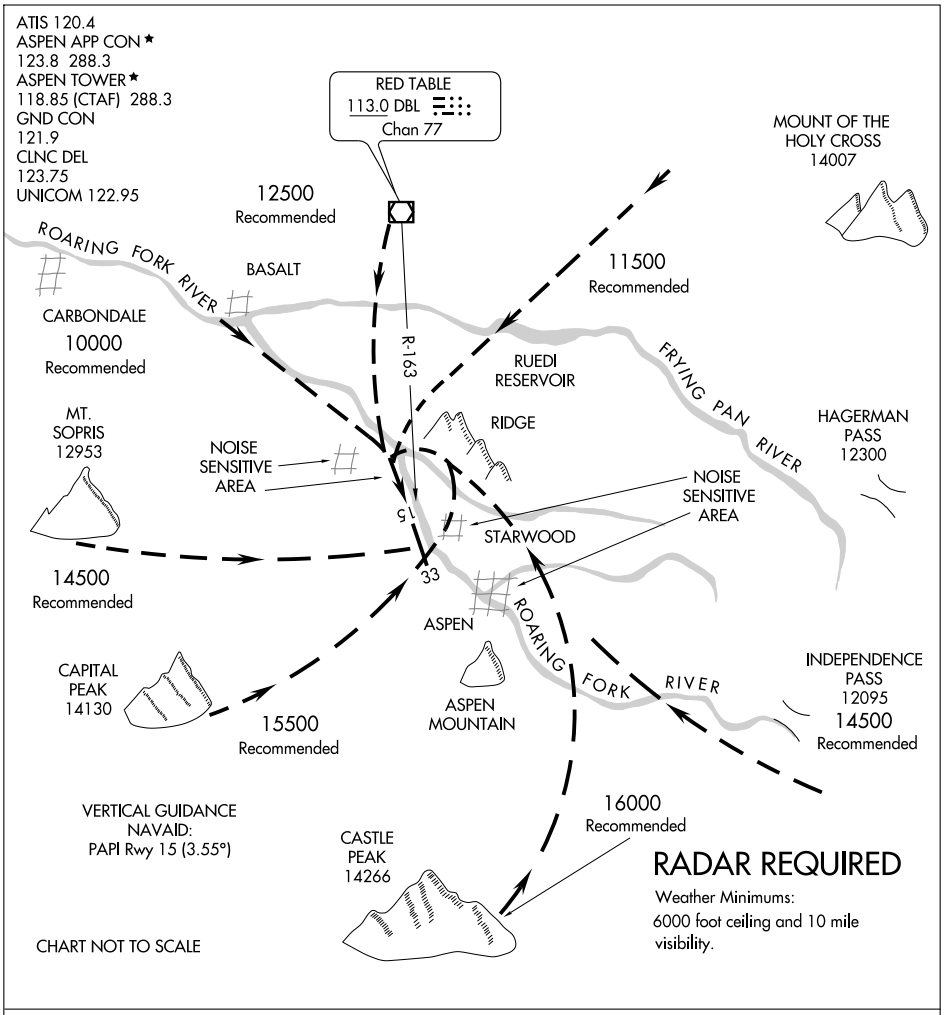
MEEKER TRANSITION (PITKN1.EKR)

RIFLE TRANSITION (PITKN1.RIL)

SW-1, 22 OCT 2009 to 19 NOV 2009

ROARING FORK VISUAL RWY 15

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)
ASPEN, COLORADO



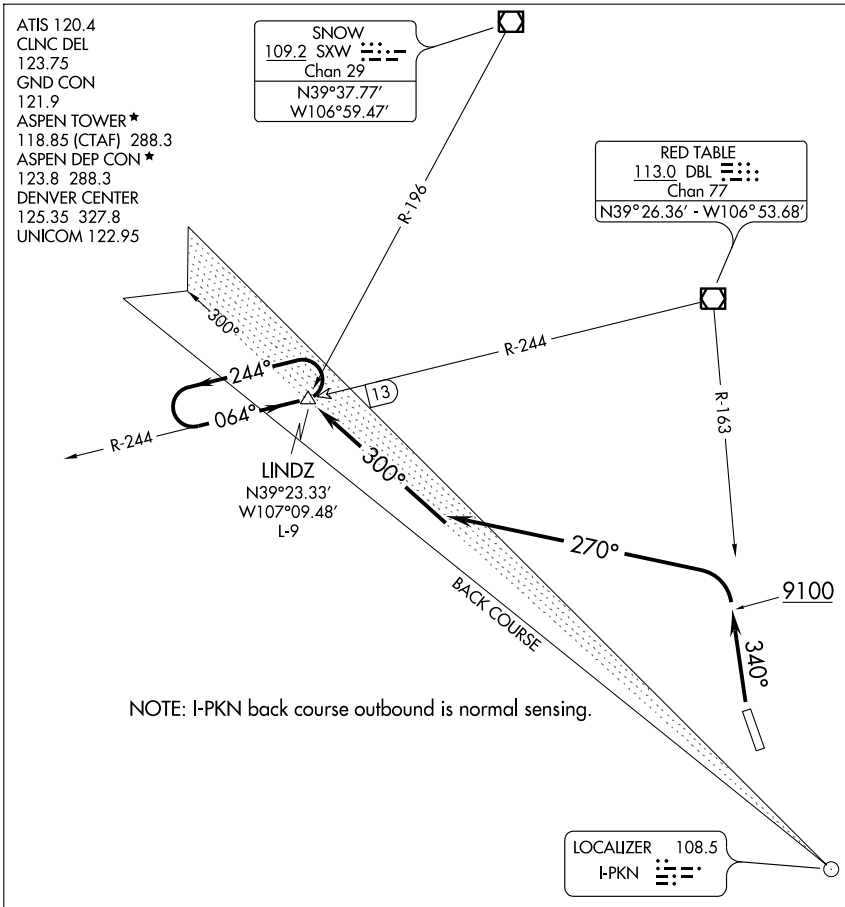
ROARING FORK VISUAL RWY 15

Procedure not authorized at night.
When visual approaches to Runway 15 are in progress, clearances will be given utilizing in part the following phraseology:
"(IDENT) cleared for a ROARING FORK VISUAL Approach to Runway 15."

SL-5889 (FAA)

SARDD ONE DEPARTURE (OBSTACLE)

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)
ASPEN, COLORADO



SW-1, 22 OCT 2009 to 19 NOV 2009

TAKE-OFF MINIMUMS

RWY 33: 400-1 with minimum climb of 460′ per NM to 14000 or 4300-3 for climb in visual conditions.
RWY 15: NA - terrain.

TAKE-OFF OBSTACLE NOTES

RWY 33: Multiple trees beginning 35′ from DER, 386′ right of centerline, up to 100′ AGL/7722′ MSL.
Multiple trees, bushes and terrain beginning 4′ from DER, 400′ left of centerline, 100′ AGL/7821′ MSL.
Multiple trees and bushes begining 3484′ from DER, 752′ left of centerline, up to 100′ AGL/8179′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climb heading 340° to 9100, then a climbing left turn to 16000 heading 270°, to intercept I-PKN NW course outbound to LINDZ INT/DBL 13 DME. Climb in LINDZ holding pattern to cross LINDZ at or above 16000 before proceeding enroute, or for climb in visual conditions: cross Aspen Airport northbound at or above 11900 then via DBL R-163 to DBL VOR/DME.

VOR/DME DBL	APP CRS	Rwy Idg	N/A
113.0	164°	TDZE	N/A
Chan 77		Apt Elev	7820

VOR/DME or GPS-C

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)

T NA — Obtain local altimeter setting on CTAF. When not received, procedure not authorized. Procedure not authorized at night.

MISSED APPROACH: Climbing right turn to 14000 via heading 300° to intercept and proceed via I-PKN northwest course (300°) and DBL VOR/DME R-244 to GLENO Int/DBL 22.7 DME and hold.

ATIS	ASPEN APP CON ★	ASPEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.4	123.8 288.3	118.85 (CTAF) L 288.3	121.9	123.75	122.95

MSA DBL 25 NM
200°
13100
15700
060°

NoPT for arrivals on DBL VOR/DME airway radials 297 clockwise 046.

109.2 SXW Chan 29
R-196
R-344
11166
11503
IAF
RED TABLE
113.0 DBL
Chan 77
164°
344°
1 min
13100
(3)
12038
11,000
9000
LINDZ
DBL 12.6
R-244
10866
(CFEJP)
DBL 3
MVFR EKR
Chan 99
10361
10695
244°
064°
R-134
GLENO
DBL 22.7
CROWS
INT
300°
R-205
10502
ALLIX
DBL 6
9819±
11020
11556
DBL
9.5
10366±
BACK COURSE
(MAFMU)
9383
11093
12953
10 NM
DUAL VHF NAVIGATION
RECEIVERS REQUIRED
12720
14130
12270
12914
LOCALIZER 108.5
I-PKN
12350
13,000

ELEV 7820 D

1%
2.0% UP
7795
7006 X 100
33

REIL Rwy 33 L
MIRL Rwy 15-33

14000	I-PKN	DBL	GLENO
300°	NW CRS 108.5	R-244 113.0	△

One Minute Holding Pattern

VOR/DME (CFEJP) DBL 3 — ALLIX DBL 6 — DBL 9.5 — (MAFMU) DBL 11

14000 ← 344° / 164° → 164° 13100 12200 10800

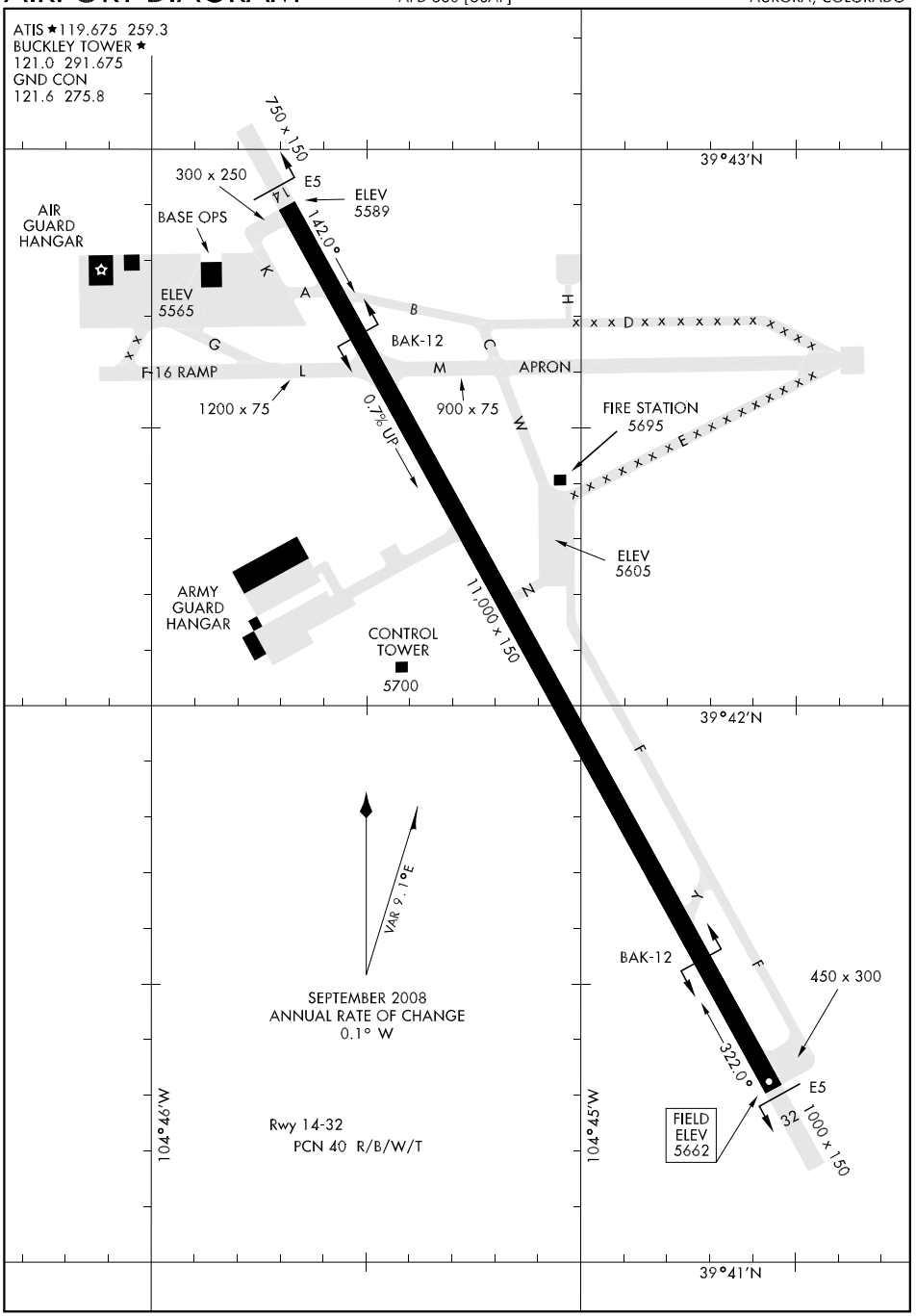
9.67° TCH 55

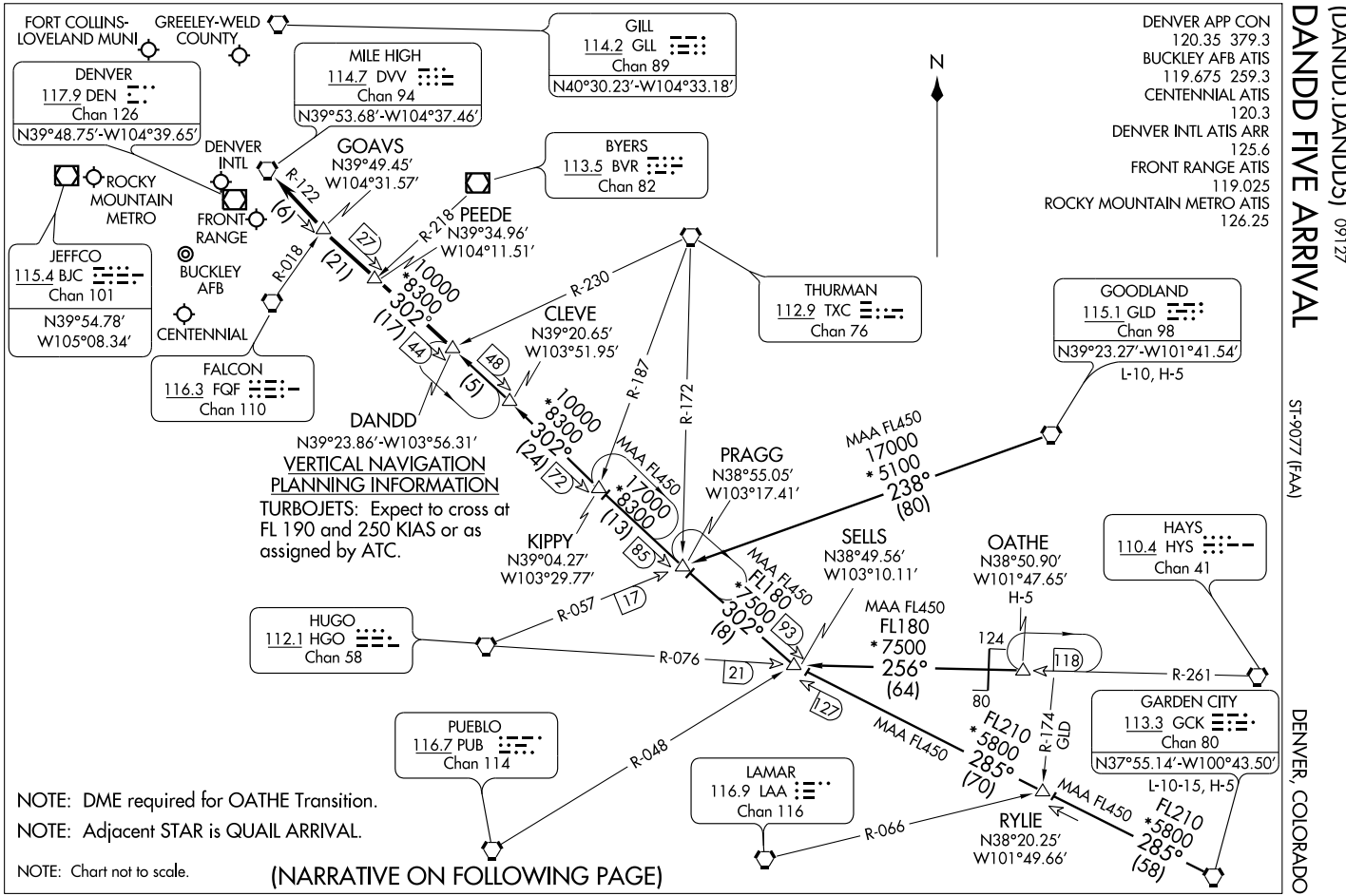
VGSI and descent angles not coincident.

3 NM — 3 NM — 3.5 NM — 1.5 — 1.4

CATEGORY	A	B	C	D
CIRCLING	10200-2	2380 (2400-2)	10200-3 2380 (2400-3)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009


ATIS ★119.675 259.3
BUCKLEY TOWER ★
121.0 291.675
GND CON
121.6 275.8
750 x 150
14
E5
300 x 250
ELEV 5589
BASE OPS
AIR GUARD HANGAR
142.0°
K
A
B
H
ELEV 5565
BAK-12
C
G
F16 RAMP
L
M
APRON
1200 x 75
900 x 75
0.7% UP
W
FIRE STATION 5695
ELEV 5605
ARMY GUARD HANGAR
CONTROL TOWER 5700
11,000 x 150
N
39°43'N
39°42'N
39°41'N
F
Y
VAR 9.1°E
SEPTEMBER 2008
ANNUAL RATE OF CHANGE
0.1° W
BAK-12
450 x 300
322.0°
E5
32
1000 x 150
FIELD ELEV 5662
Rwy 14-32
PCN 40 R/B/W/T
104°46'W
104°45'W


DANDD FIVE ARRIVAL
(DANDD.DANDD5) 09127
ST-9077 (FAA)
DENVER, COLORADO
DENVER APP CON
120.35 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
N
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
GILL
114.2 GLL
Chan 89
N40°30.23'-W104°33.18'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'-W104°37.46'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
DENVER INTL
GOAVS
N39°49.45'
W104°31.57'
BYERS
113.5 BVR
Chan 82
ROCKY MOUNTAIN METRO
FRONT RANGE
PEEDE
N39°34.96'
W104°11.51'
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
BUCKLEY AFB
CENTENNIAL
THURMAN
112.9 TXC
Chan 76
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
FALCON
116.3 FQF
Chan 110
CLEVE
N39°20.65'
W103°51.95'
DANDD
N39°23.86'-W103°56.31'
PRAGG
N38°55.05'
W103°17.41'
KIPPY
N39°04.27'
W103°29.77'
SELLS
N38°49.56'
W103°10.11'
OATHE
N38°50.90'
W101°47.65'
H-5
HAYS
110.4 HYS
Chan 41
HUGO
112.1 HGO
Chan 58
PUEBLO
116.7 PUB
Chan 114
LAMAR
116.9 LAA
Chan 116
RYLIE
N38°20.25'
W101°49.66'
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
R-122
(6)
R-218
(27)
(21)
R-018
10000
*8300
302°
(17)
44
48
(5)
R-230
R-187
R-172
10000
*8300
302°
(24)
72
MAA FL450
17000
*8300
(13)
85
MAA FL450
17000
*5100
238°
(80)
MAA FL450
FL180
*7500
302°
(8)
93
MAA FL450
FL180
*7500
256°
(64)
124
118
80
R-261
R-057
17
R-076
21
127
MAA FL450
FL210
*5800
285°
(70)
R-174
GLD
MAA FL450
FL210
*5800
285°
(58)
R-048
R-066
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at FL 190 and 250 KIAS or as assigned by ATC.
NOTE: DME required for OATHE Transition.
NOTE: Adjacent STAR is QUAIL ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

GARDEN CITY TRANSITION (GCK.DANDD5): From over GCK VORTAC via GCK R-285 and DVV R-122 to DANDD INT. Thence....

GOODLAND TRANSITION (GLD.DANDD5): From over GLD VORTAC via GLD R-238 and HGO R-057 to PRAGG INT; then via DVV R-122 to DANDD INT. Thence....

OATHE TRANSITION (OATHE.DANDD5): From over OATHE INT via HYS R-261 and HGO R-076 to SELLS INT; then via DVV R-122 to DANDD INT. Thence....

....From over DANDD INT via DVV R-122 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER FIVE DEPARTURE

ATIS
119.675 259.3
CLNC DEL
121.6 275.8
DENVER DEP CON
128.45 251.075

TAKE-OFF MINIMUMS:
Rwy 14, 32: See appropriate military directive.

CHEYENNE
113.1 CYS
Chan 78
N41°12.66′
W104°46.37′
L-12, H-3-5

SIDNEY
115.9 SNY
Chan 106
N41°05.80′
W102°58.98′
L-10-12, H-5

LARAMIE
117.6 LAR
Chan 123
N41°20.27′-W105°43.26′
L-9-12, H-3-5

ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41′-W109°00.92′
L-11, H-3

GILL
114.2 GLL
Chan 89
N40°30.23′
W104°33.18′
L-10, H-5

AKRON
114.4 AKO
Chan 91
N40°09.33′-W103°10.78′
L-10, H-5

KREMMLING
113.8 RLG
Chan 85
N40°00.16′
W106°26.55′
L-9-11, H-3-5

MILE HIGH
114.7 DVV
Chan 94
N39°53.68′
W104°37.46′
L-10, H-3-5

THURMAN
112.9 TXC
Chan 76
N39°41.90′
W103°12.90′
L-10, H-5

HAYES CENTER
117.7 HCT
Chan 124
N40°27.24′-W100°55.42′
L-10, H-5

MEEKER
115.2 EKR
Chan 99
N40°04.05′-W107°55.49′
L-9-11, H-3

N

BLACK FOREST
112.5 BRK
Chan 72
N38°56.67′-W104°38.01′
L-10, H-3-5

FALCON
116.3 FQF
Chan 110
N39°41.41′
W104°37.26′
L-10, H-5

GOODLAND
115.1 GLD
Chan 98
N39°23.27′-W101°41.54′
L-10, H-5

GRAND JUNCTION
112.4 JNC
Chan 71
N39°03.57′-W108°47.55′
L-9, H-3

DENVER
117.9 DEN
Chan 126
N39°48.75′ W104°39.65′
L-10, H-3-5

HUGO
112.1 HGO
Chan 58
N38°49.05′-W103°37.28′
L-10, H-5

BLUE MESA
114.9 HBU
Chan 96
N38°27.13′-W107°02.39′
L-9, H-3

PUEBLO
116.7 PUB
Chan 114
N38°17.66′-W104°25.77′
L-10, H-5

GARDEN CITY
113.3 GCK
Chan 80
N37°55.15′-W100°43.51′
L-10-15, H-5

(Continued on next page)

NOTE: RADAR REQUIRED
NOTE: Chart not to scale.

DENVER FIVE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

SW-1, 22 OCT 2009 to 19 NOV 2009

AURORA, COLORADO

HI-ILS RWY 32

LOC I-BKF	APCH CRS	Rwy ldg 11,000
109.7	ILS 320°	TDZE 5662
		Arpt Elev 5662

JAL-538 [USAF]

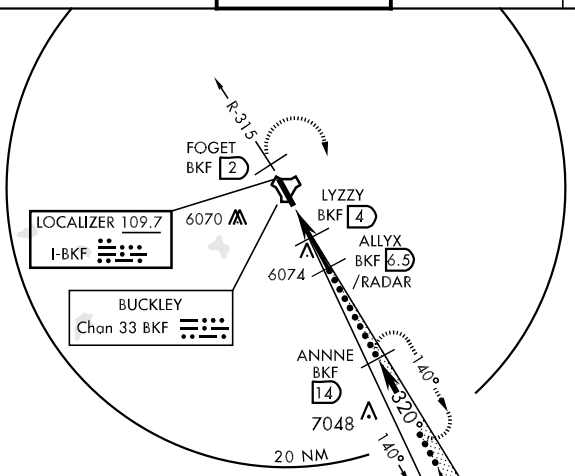
BUCKLEY AFB (BKF)

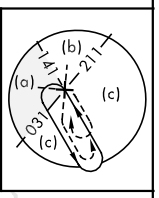
▼ * When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ miles.
** When ALS inop, increase CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.

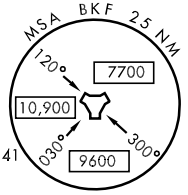
ALSF-1

MISSED APPROACH: Climb to 8200 via BKF R-315 to FOGET (2 DME),then climbing right turn to ANNNE (BKF R-140/14 DME) and hold.

ATIS ★	DENVER APP CON	BUCKLEY TOWER ★	GND CON	CLNC DEL
119.675 259.3	128.45 251.075	121.0 291.675	121.6 275.8	121.6 275.8



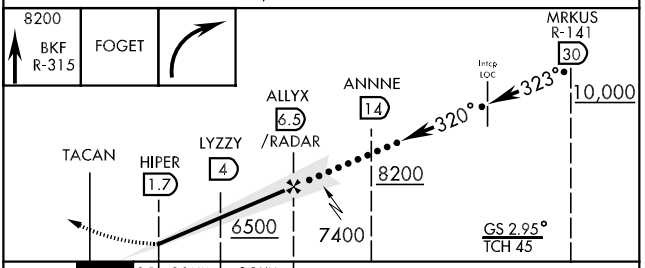


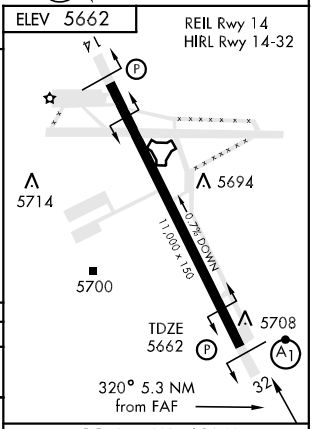


RADAR REQUIRED

NOT FOR CIVIL USE

EMERG SAFE ALT 100 NM 16,500





CATEGORY	C	D	E
S-ILS 32 *	5862/24	200	(200-½)
S-LOC 32 **	6280/60 618 (700-1¼)	6280-1½ 618 (700-1½)	6280-1¾ 618 (700-1¾)
CIRCLING	6280-1¾ 618 (700-1¾)	6300-2 638 (700-2)	6500-3 838 (900-3)

LOC FAF to MAP 4.8 NM

Knots	90	120	150	180	200
Min:Sec	3:12	2:24	1:55	1:36	1:26

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 14

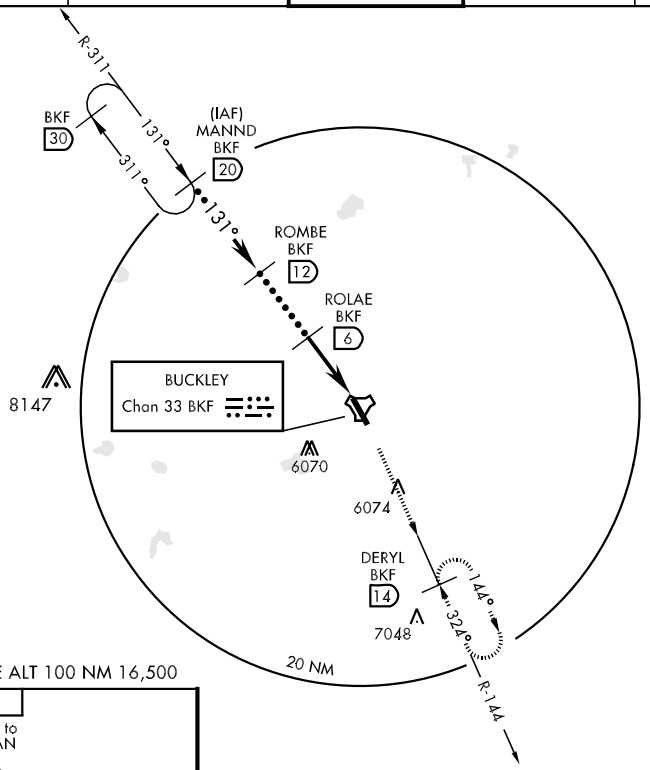
TACAN	APCH CRS	Rwy ldg	11,000
BKF Chan 33	131°	TDZE	5589
		Arpt Elev	5662

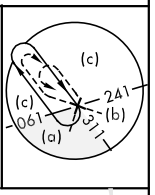
JAL-538 [USAF]

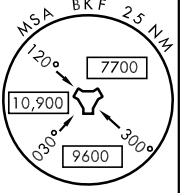
BUCKLEY AFB (BKF)

MISSED APPROACH: Climb to 8300 out R-144 to DERYL (BKF R-144/14 DME) and hold.

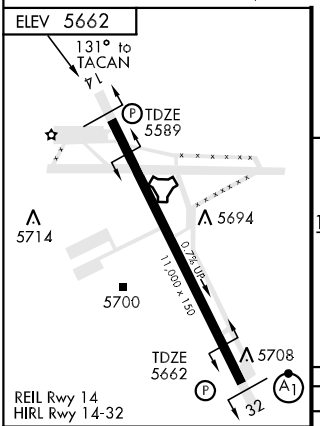
ATIS ★	DENVER APP CON	BUCKLEY TOWER ★	GND CON	CLNC DEL
119.675 259.3	128.45 251.075	121.0 291.675	121.6 275.8	121.6 275.8

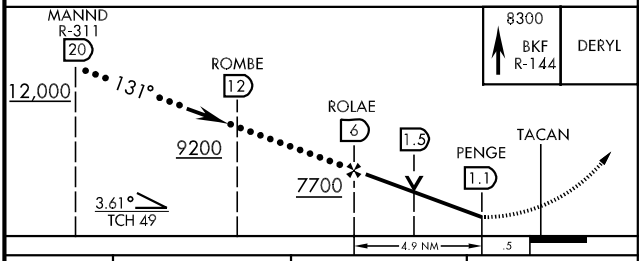






EMERG SAFE ALT 100 NM 16,500





FAF to MAP 4.9 NM

Knots	90	120	150	180	200
Min:Sec	3:12	2:24	1:55	1:36	1:26

CATEGORY	C	D	E
S-14	5980-1 318 (400-1)	5980-1¼ 318 (400-1¼)	5980-1½ 318 (400-1½)
CIRCLING	6220-1½ 558 (600-1½)	6300-2 638 (700-2)	6500-3 838 (900-3)

HI-TACAN RWY 32

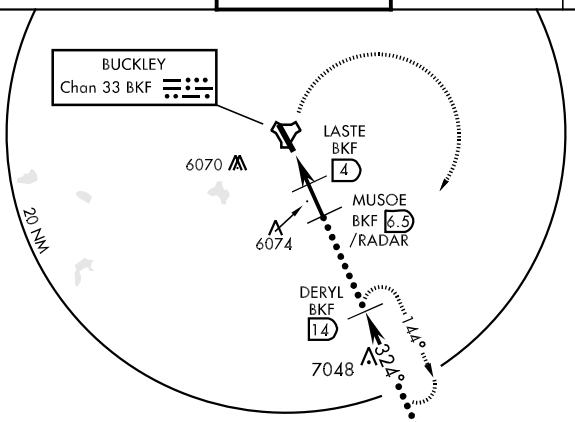
TACAN BKF Chan 33	APCH CRS 324°	Rwy ldg 11,000 TDZE 5662 Arpt Elev 5662	JAL-538 [USAF]	BUCKLEY AFB (KBKF)

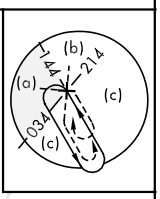
▼ * When ALS inop, increase CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.

ALSF-1 (A1)

MISSED APPROACH: Climbing right turn to 8300 to DERYL (BKF R-144/14 DME) and hold.

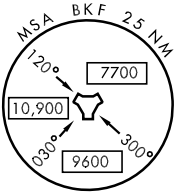
ATIS *	DENVER APP CON	BUCKLEY TOWER *	GND CON	CLNC DEL
119.675 259.3	128.45 251.075	121.0 291.675	121.6 275.8	121.6 275.8



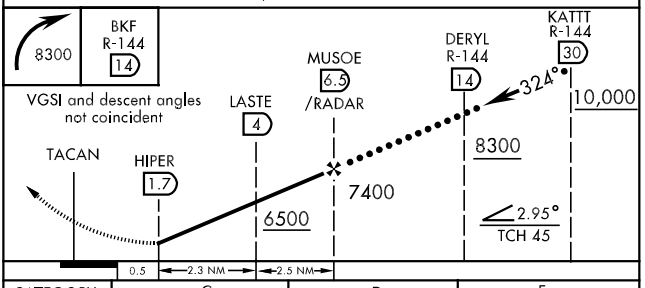


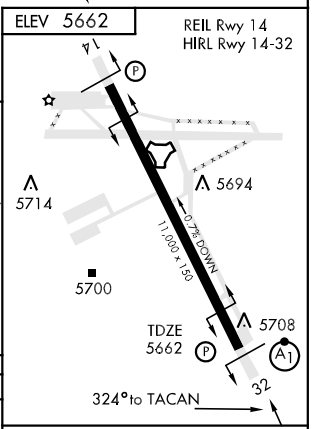
RADAR REQUIRED

NOT FOR CIVIL USE



EMERG SAFE ALT 100 NM 16,500





CATEGORY	C	D	E
S-32 *	6280/60 618 (700-1¼)	6280-1½ 618 (700-1½)	6280-1¾ 618 (700-1¾)
CIRCLING	6280-1 ¾ 618 (700-1¾)	6300-2 638 (700-2)	6500-3 838 (900-3)

LOC FAF to MAP 4.8 NM

Knots	90	120	150	180	200
Min:Sec	3:12	2:24	1:55	1:36	1:26

AURORA, COLORADO

ILS RWY 32

LOC I-BKF	APCH CRS	Rwy ldg	11,000
109.7	ILS 320°	TDZE	5662
		Arpt Elev	5662

AL-538 [USAF]

BUCKLEY AFB (BKF)

* When ALS inop, increase CAT ABCDE RVR to 40 and vis to ¾ miles.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1¾ miles, CAT D vis to 2 miles, and CAT E vis to 2¼ miles.

ALSF-1

MISSED APPROACH: Climb to 8200 via BKF R-315 to FOGET (2 DME) then climbing right turn to BKF R-140/14 DME (ANNNE) and hold.

ATIS ★	DENVER APP CON	BUCKLEY TOWER ★	GND CON	CLNC DEL
119.675 259.3	128.45 251.075	121.0 291.675	121.6 275.8	121.6 275.8

NOT FOR CIVIL USE

RADAR REQUIRED

BUCKLEY Chan 33 BKF

LOCALIZER 109.7 I-BKF

R-315

FOGET BKF 2

6070 LYZZY BKF 4

6074 ALLYX BKF 6.5 /RADAR

6236

320°

140°

10 NM

(IAF) ANNNE BKF 14

140°

320°

7048

R-140

MSA BKF 25 NM

120° 7700

10,900

030° 300°

9600

EMERG SAFE ALT 100 NM 16,500

8200 BKF R-315

FOGET

ANNNE R-140 14

ALLYX 6.5 /RADAR

LYZZY 4

HIPER 1.7

TACAN

320°

140° 8200

320°

6500

7400

GS 2.95° TCH 45

0.5 2.3 NM 2.5 NM

ELEV 5662

5714

5694

5700

11,000 × 150 GRVD

5708

TDZE 5662

32

HIRL Rwy 14-32

REIL Rwy 14

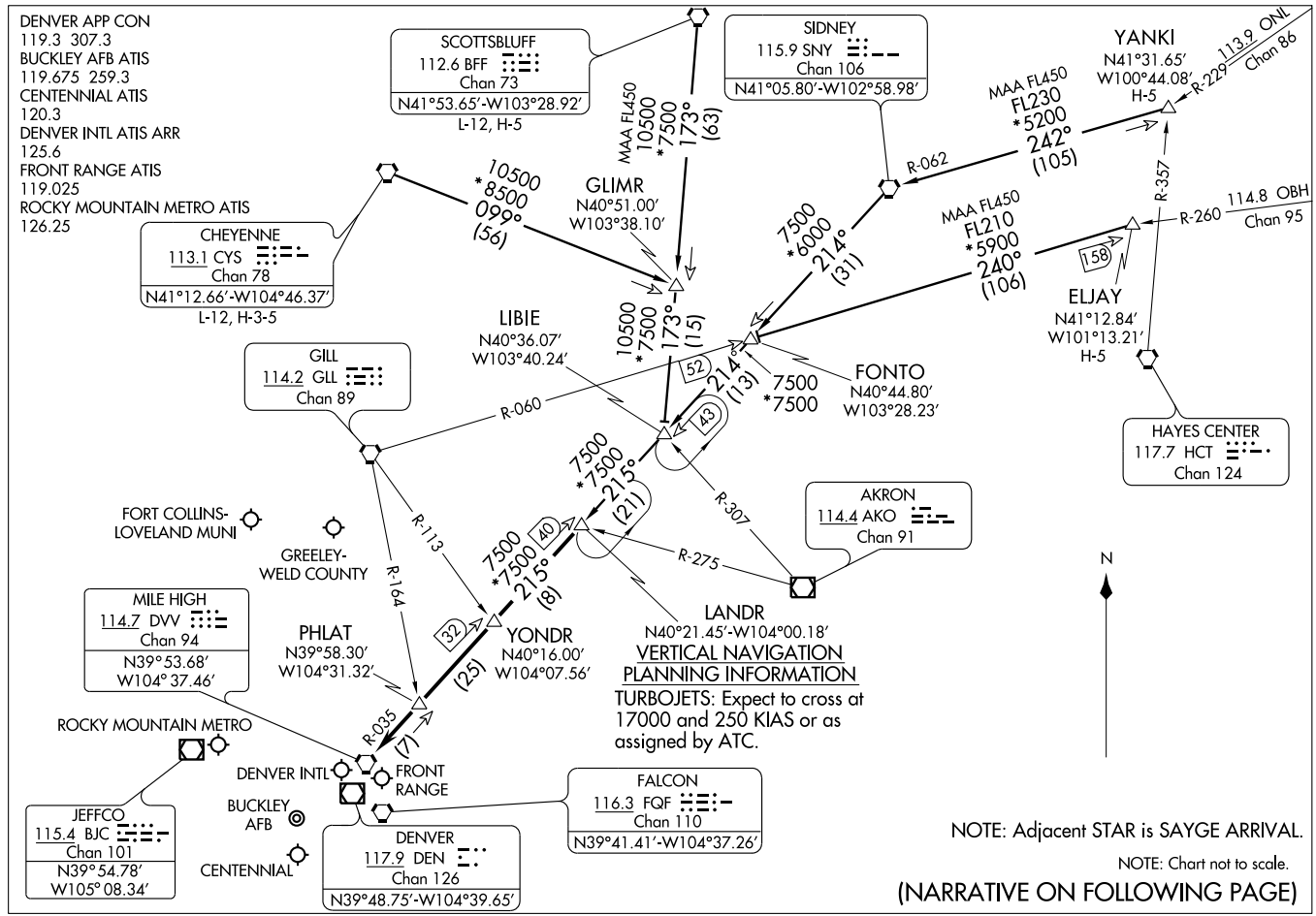
320° 5.3 NM from FAF

CATEGORY	A	B	C	D	E
S-ILS 32 *	5862/24 200 (200-½)				
S-LOC 32 **	6280/24 618 (700-½)		6280/60 618(700-1¼)	6280-1½ 618(700-1½)	6280-1¾ 618(700-1¾)
CIRCLING	6280-1 618 (700-1)		6280-1¾ 618(700-1¾)	6300-2 638(700-2)	6500-3 838 (900-3)

LOC FAF to MAP 4.8 NM

Knots	90	120	150	180	200
Min:Sec	3:12	2:24	1:55	1:36	1:26

SW-1, 22 OCT 2009 to 19 NOV 2009



LANDR FIVE ARRIVAL

(LANDR.LANDR5) 07298

ST-9077 (FAA)

DENVER, COLORADO

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.LANDR5): From over CYS VORTAC via CYS R-099 and BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

ELJAY TRANSITION (ELJAY.LANDR5): From over ELJAY INT via GLL R-060 to FONTO INT, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

SCOTTSBLUFF TRANSITION (BFF.LANDR5): From over BFF VORTAC via BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

YANKI TRANSITION (YANKI.LANDR5): From over YANKI INT via SNY R-062 to SNY VORTAC, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

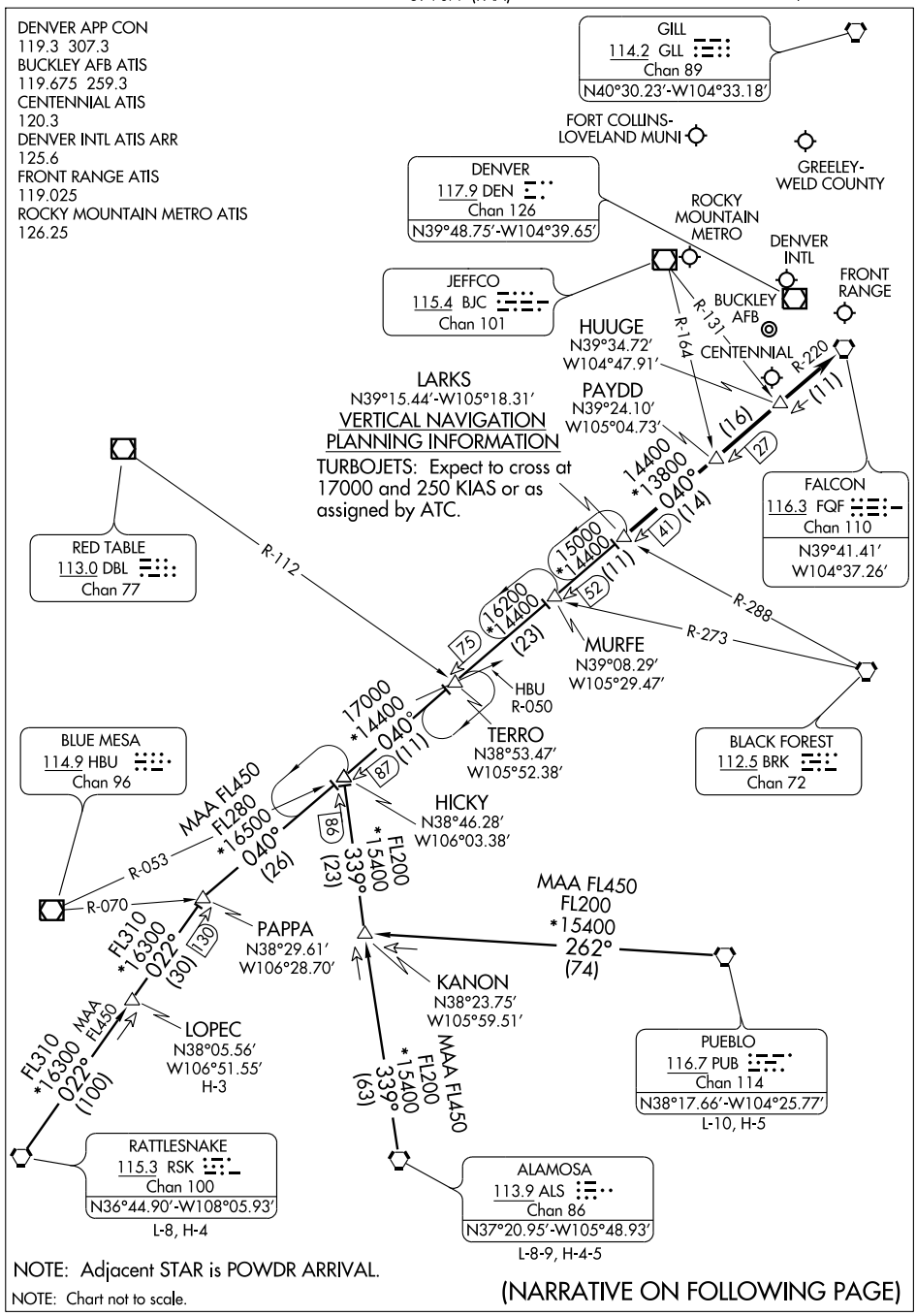
....From over LANDR INT via DVV R-035 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is POWDR ARRIVAL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ARRIVAL DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS6): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS6): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS6): From over PUB VORTAC via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS6): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

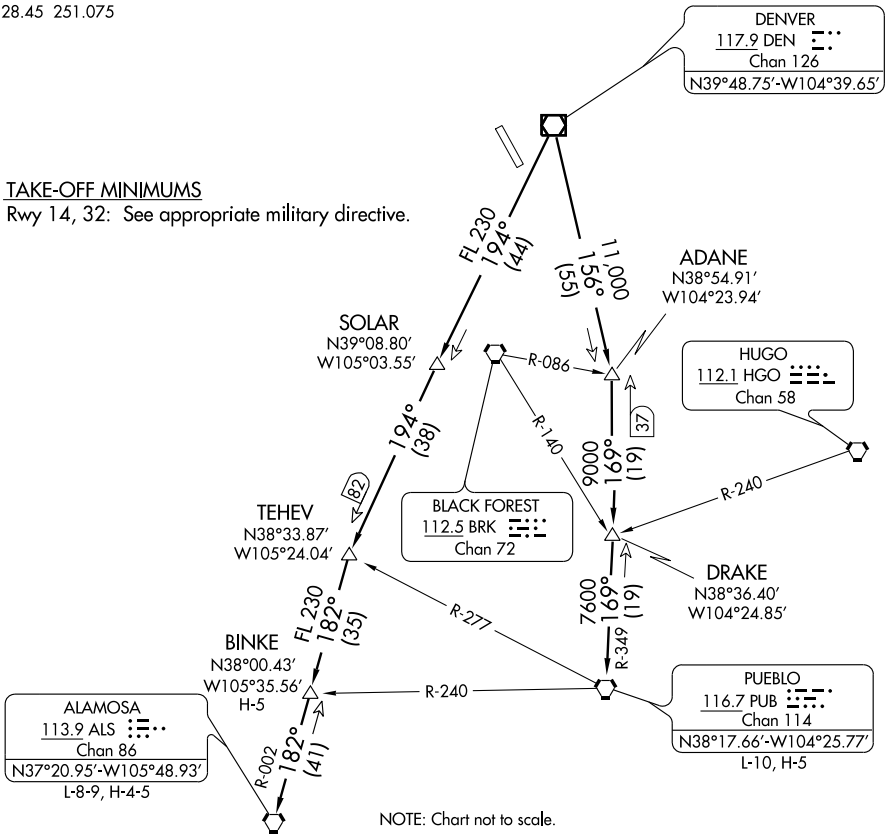
....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

PIKES FOUR DEPARTURE

SL-538 (FAA)

ATIS
119.675 259.3
CLNC DEL
121.6 275.8
DENVER DEP CON
128.45 251.075



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

ALAMOSA TRANSITION (PIKES4.ALS): From over DEN VOR/DME via DEN R-194 and ALS R-002 to ALS VORTAC.

BINKE TRANSITION (PIKES4.BINKE): From over DEN VOR/DME via DEN R-194 and ALS R-002 to BINKE INT.

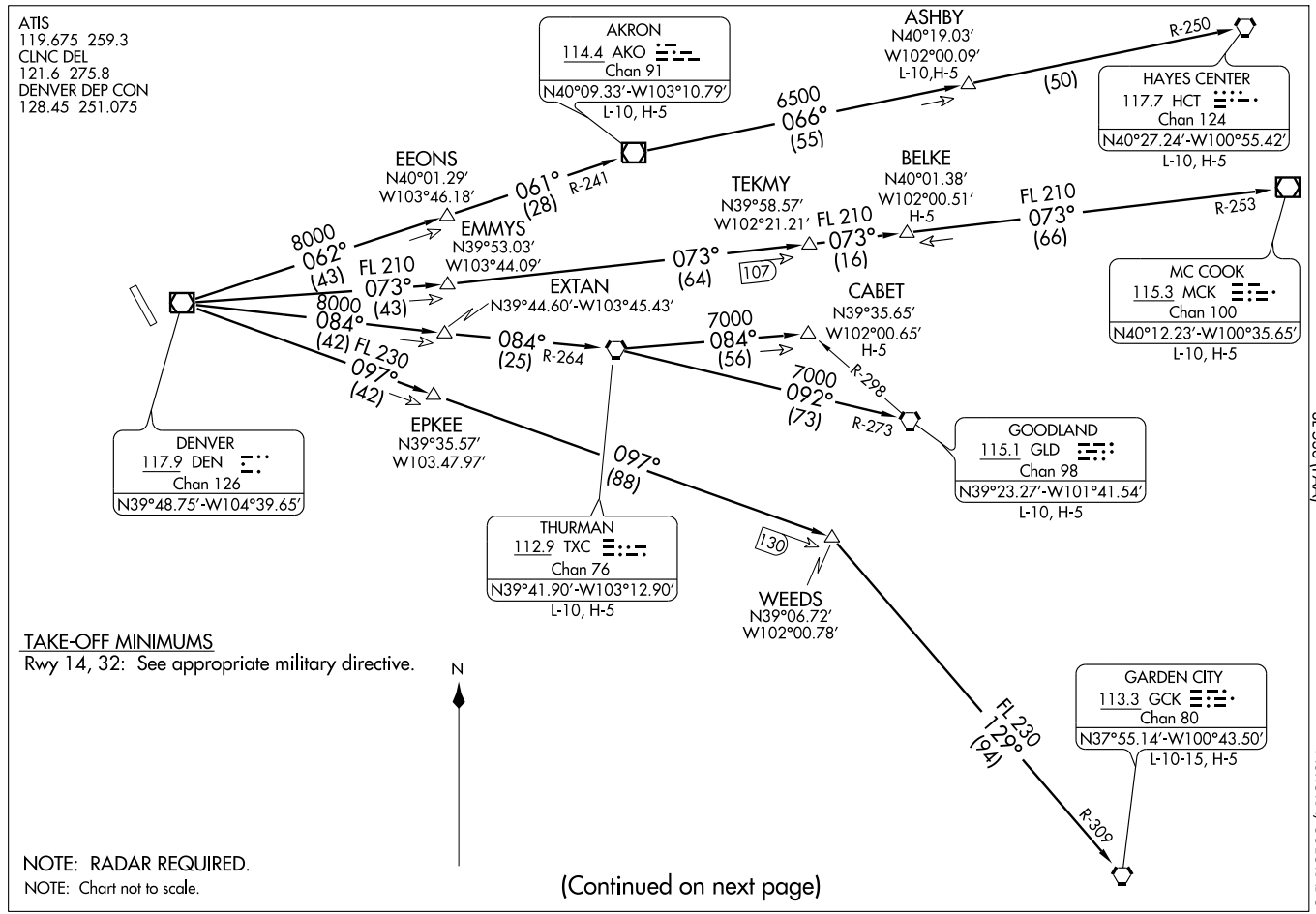
PUEBLO TRANSITION (PIKES4.PUB): From over DEN VOR/DME via DEN R-156 and PUB R-349 to PUB VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

PLAINS FOUR DEPARTURE

SL-538 (FAA)

AURORA/BUCKLEY AFB (BKF)
AURORA, COLORADO



PLAINS FOUR DEPARTURE SL-538 (FAA)

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

AKRON TRANSITION (PLAIN4.AKO): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME.

ASHBY TRANSITION (PLAIN4.ASHBY): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to ASHBY INT.

BELKE TRANSITION (PLAIN4.BELKE): From over DEN VOR/DME via DEN R-073 and MCK R-253 to BELKE INT.

CABET TRANSITION (PLAIN4.CABET): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-084 to CABET INT.

GARDEN CITY TRANSITION (PLAIN4.GCK): From over DEN VOR/DME via DEN R-097 and GCK R-309 to GCK VORTAC.

GOODLAND TRANSITION (PLAIN4.GLD): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-092 and GLD R-273 to GLD VORTAC.

HAYES CENTER TRANSITION (PLAIN4.HCT): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to HCT VORTAC.

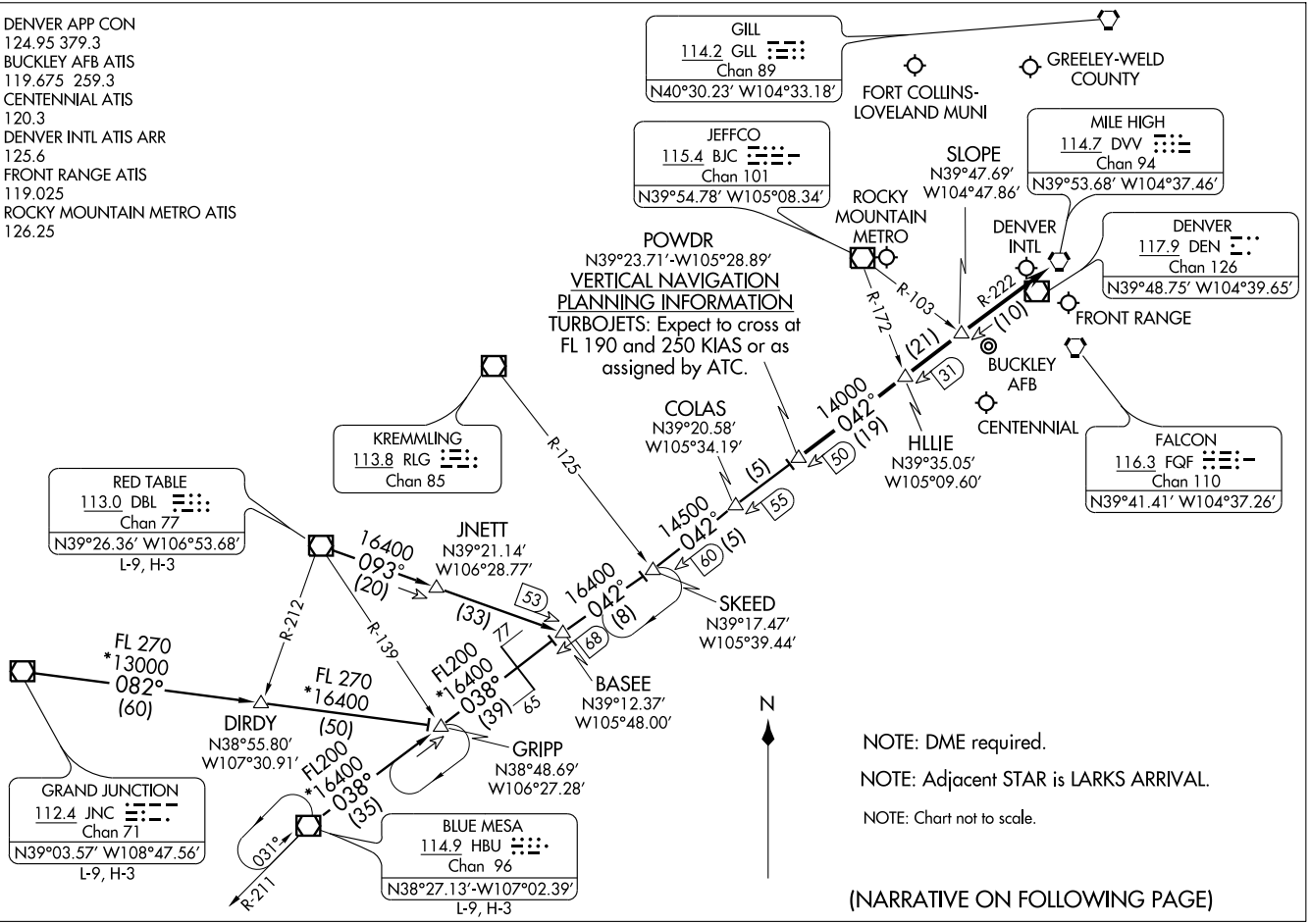
MCCOOK TRANSITION (PLAIN4.MCK): From over DEN VOR/DME via DEN R-073 and MCK R-253 to MCK VOR/DME.

THURMAN TRANSITION (PLAIN4.TXC): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC.

WEEDS TRANSITION (PLAIN4.WEEDS): From over DEN VOR/DME via DEN R-097 to WEEDS INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER APP CON
124.95 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25



POWDR SEVEN ARRIVAL

ARRIVAL DESCRIPTION

BLUE MESA TRANSITION (HBU.POWDR7): From over HBU VOR/DME via HBU R-038 and DVV R-222 to POWDR INT. Thence....

GRAND JUNCTION TRANSITION (JNC.POWDR7): From over JNC VORTAC via JNC R-082 to GRIPP INT; then via HBU R-038 and DVV R-222 to POWDR INT. Thence....

RED TABLE TRANSITION (DBL.POWDR7): From over DBL VOR/DME via DBL R-093 and DVV R-222 to POWDR INT. Thence....

....from over POWDR INT via DVV VORTAC R-222 to HLLIE, then via DVV VORTAC R-222 to SLOPE, then via DVV VORTAC R-222 to DVV. Expect radar vectors to the final approach course at or before DVV VORTAC.

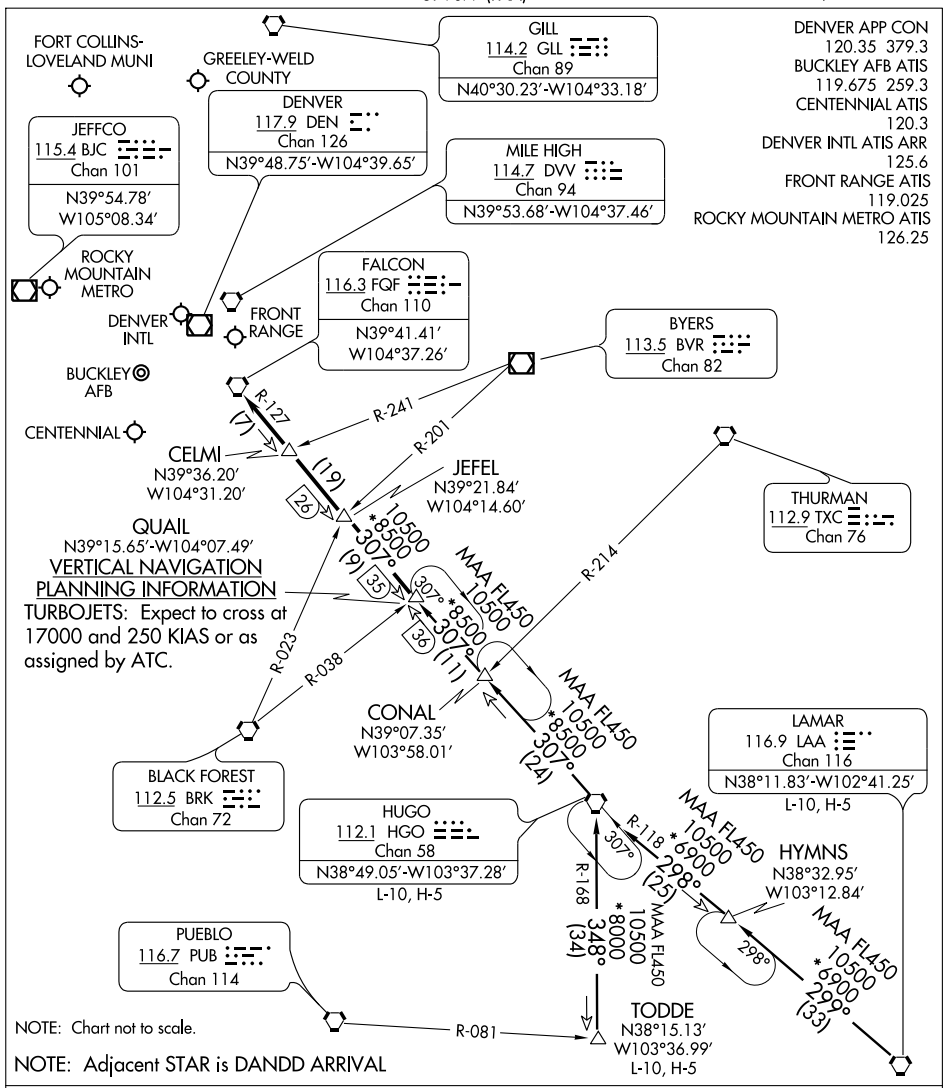
SW-1, 22 OCT 2009 to 19 NOV 2009

(QUAIL.QUAIL6) 09127

QUAIL SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is DANDD ARRIVAL

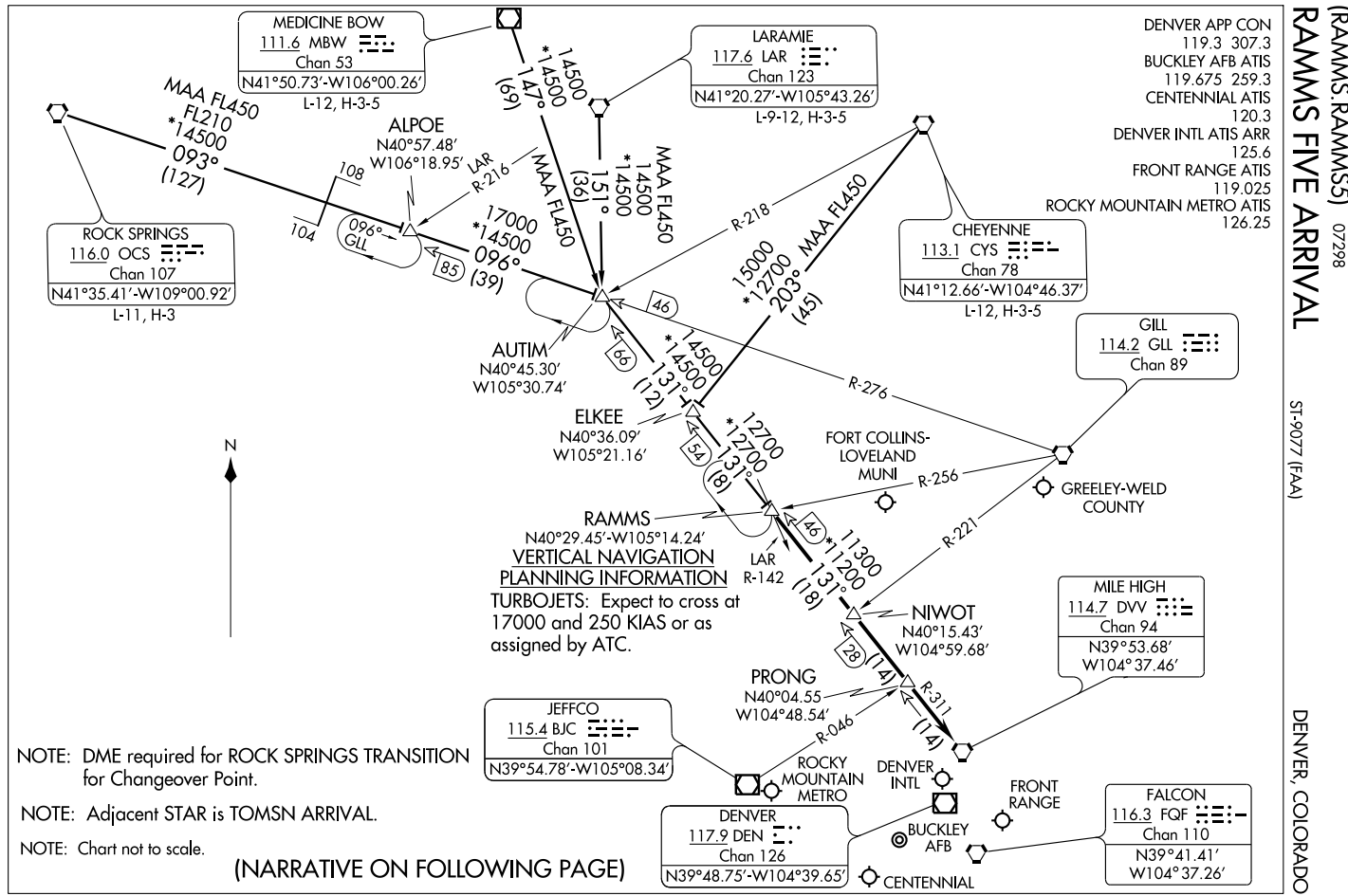
HUGO TRANSITION (HGO.QUAIL6): From over HGO VORTAC via HGO R-307 to CONAL INT; then via 306° course to QUAIL INT. Thence....

LAMAR TRANSITION (LAA.QUAIL6): From over LAA VORTAC via LAA R-299 to HYMNS INT; then via 298° course to HGO VORTAC; then via HGO R-307 to CONAL INT then via 306° course to to QUAIL INT. Thence....

TODDE TRANSITION (TODDE.QUAIL6): From over TODDE INT via HGO R-168 to HGO VORTAC; then via HGO R-307 to QUAIL INT. Thence....

....From over QUAIL INT via HGO R-307 and FQF R-127 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


RAMMS FIVE ARRIVAL (RAMMS.RAMMS5) 07298
DENVER, COLORADO
ST-9077 (FAA)
DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
MEDICINE BOW
111.6 MBW
Chan 53
N41°50.73'-W106°00.26'
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27'-W105°43.26'
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41'-W109°00.92'
L-11, H-3
CHEYENNE
113.1 CYS
Chan 78
N41°12.66'-W104°46.37'
L-12, H-3-5
GILL
114.2 GLL
Chan 89
JEFFCO
115.4 BJC
Chan 101
N39°54.78'-W105°08.34'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'
W104°37.46'
FALCON
116.3 FQF
Chan 110
N39°41.41'
W104°37.26'
ALPOE
N40°57.48'
W106°18.95'
AUTIM
N40°45.30'
W105°30.74'
ELKEE
N40°36.09'
W105°21.16'
RAMMS
N40°29.45'-W105°14.24'
NIWOT
N40°15.43'
W104°59.68'
PRONG
N40°04.55
W104°48.54'
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
ROCKY MOUNTAIN METRO
DENVER INTL
FRONT RANGE
BUCKLEY AFB
CENTENNIAL
MAA FL450
FL210
*14500
093°
(127)
147°
(69)
*14500
14500
151°
(36)
14500
*14500
MAA FL450
R-218
MAA FL450
15000
*12700
203°
(45)
108
104
LAR
R-216
096°
GLL
17000
*14500
096°
(39)
85
46
66
14500
*14500
131°
(12)
R-276
54
12700
*12700
131°
(8)
R-256
R-221
46
11300
*11200
131°
(18)
LAR
R-142
28
(14)
R-311
(14)
R-046
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at 17000 and 250 KIAS or as assigned by ATC.
NOTE: DME required for ROCK SPRINGS TRANSITION for Changeover Point.
NOTE: Adjacent STAR is TOMSN ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
N

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.RAMMS5): From over CYS VORTAC via CYS R-203 and DVV R-311 to RAMMS INT. Thence....

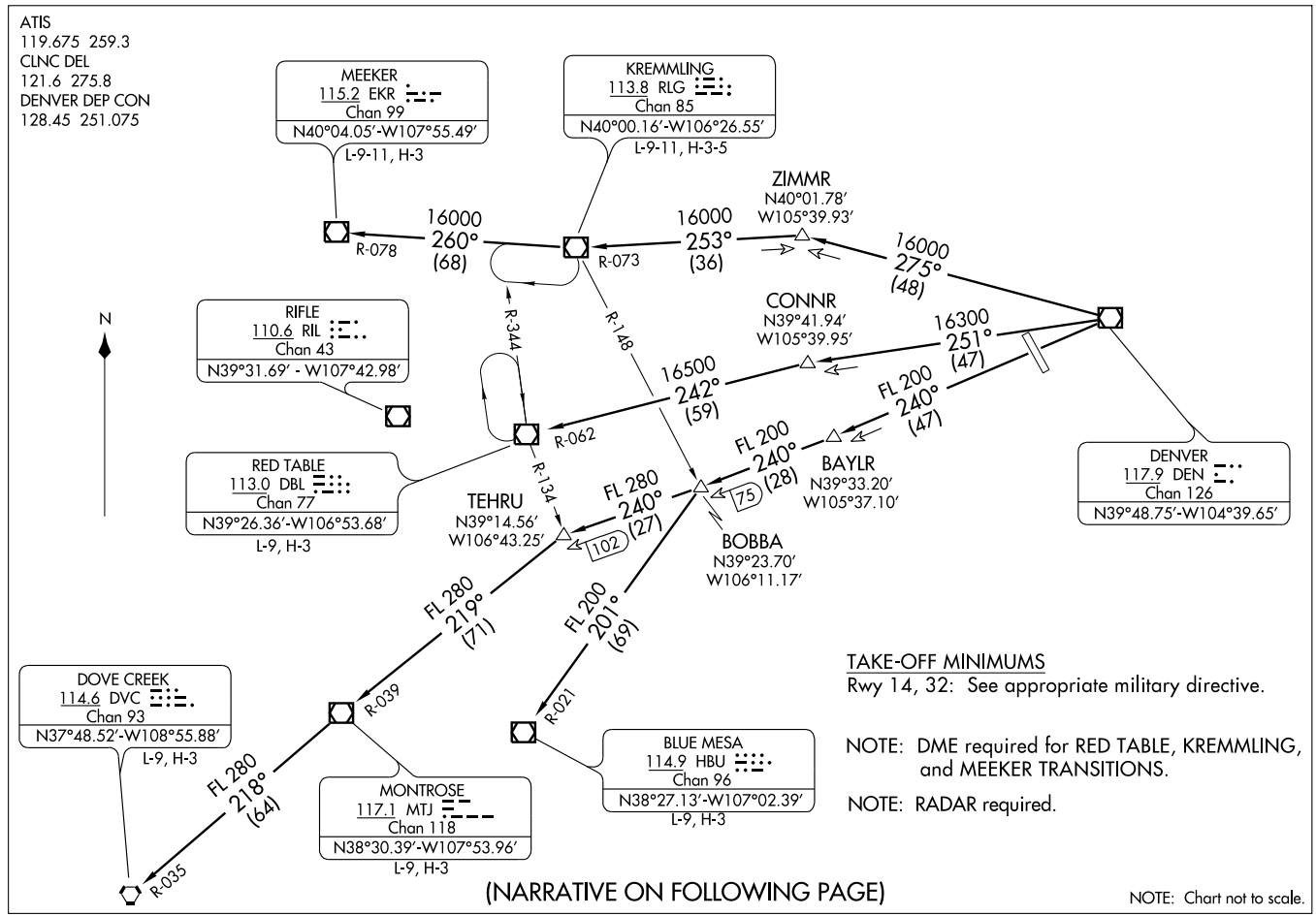
LARAMIE TRANSITION (LAR.RAMMS5): From over LAR VORTAC via LAR R-151 and DVV R-311 to RAMMS INT. Thence....

MEDICINE BOW TRANSITION (MBW.RAMMS5): From over MBW VOR/DME via MBW R-147 and DVV R-311 to RAMMS INT. Thence....

ROCK SPRINGS TRANSITION (OCS.RAMMS5): From over OCS VORTAC via OCS R-093 and GLL R-276 to AUTIM INT, then via DVV R-311 to RAMMS INT. Thence....

....From over RAMMS INT via DVV R-311 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



ROCKIES SEVEN DEPARTURE (ROCKI7.DEN) 09239

SL-538 (FAA)

AURORA/BUCKLEY AFB (BKF)
AURORA, COLORADO

ROCKIES SEVEN DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

BLUE MESA (HI) TRANSITION (ROCKI7.HBU): From over DEN VOR/DME via DEN R-240 and HBU R-021 to HBU VOR/DME.

DOVE CREEK (HI) TRANSITION (ROCKI7.DVC): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME, then via MTJ R-218 and DVC R-035 to DVC VORTAC.

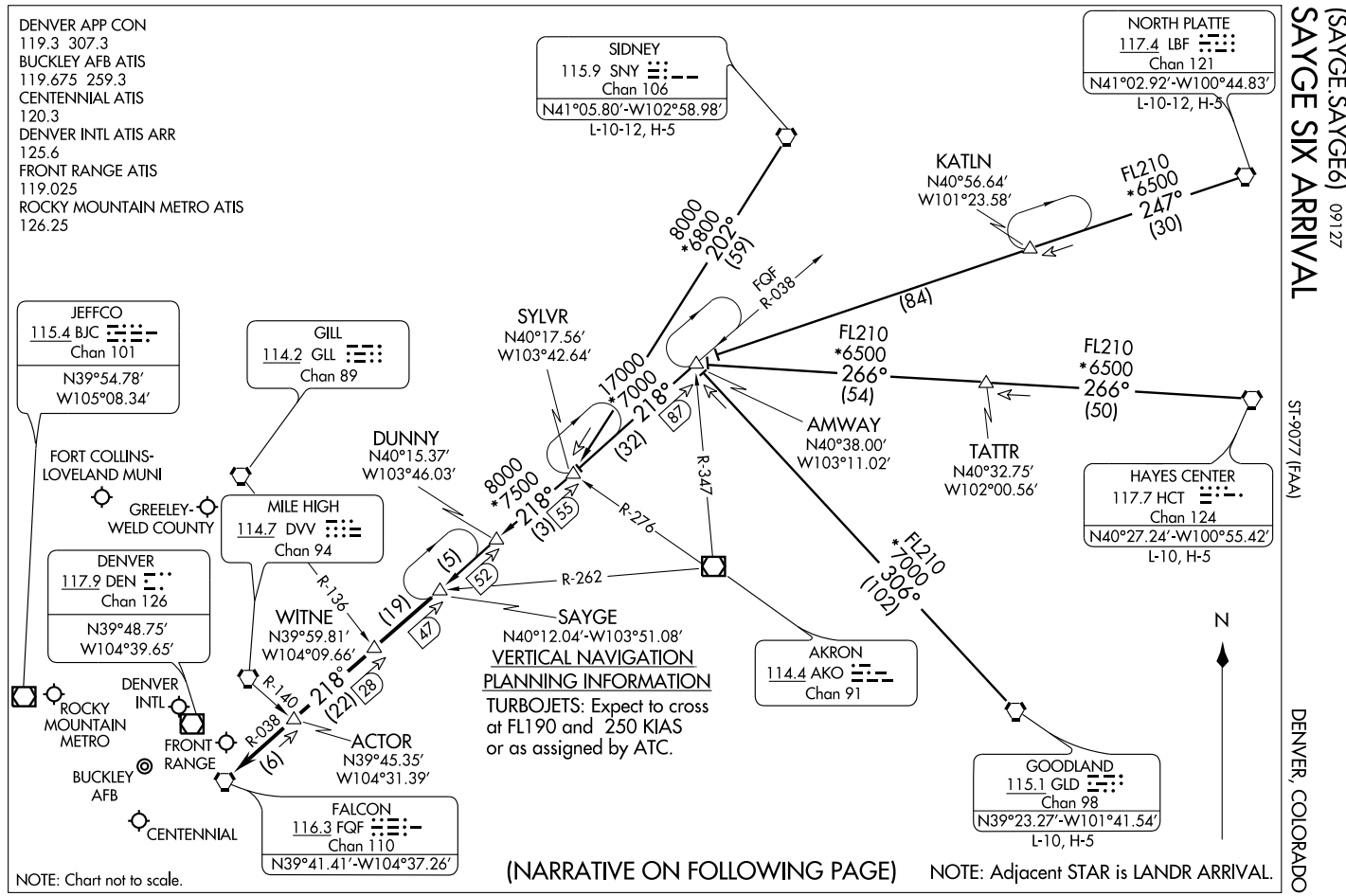
KREMMLING TRANSITION (ROCKI7.RLG): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME.

MEEKER TRANSITION (ROCKI7.EKR): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME, then via RLG R-260 and EKR R-078 to EKR VOR/DME.

MONTROSE TRANSITION (ROCKI7.MTJ): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME.

RED TABLE TRANSITION (ROCKI7.DBL): From over DEN VOR/DME via DEN R-251 and DBL R-062 to DBL VOR/DME.

SW-1, 22 OCT 2009 to 19 NOV 2009


DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
SIDNEY
115.9 SNY
Chan 106
N41°05.80'-W102°58.98'
L-10-12, H-5
NORTH PLATTE
117.4 LBF
Chan 121
N41°02.92'-W100°44.83'
L-10-12, H-5
KATLN
N40°56.64'
W101°23.58'
8000
*6800
202°
(59)
FQF
R-038
(84)
FL210
*6500
247°
(30)
SYLVR
N40°17.56'
W103°42.64'
17000
*7000
218°
(32)
87
FL210
*6500
266°
(54)
FL210
*6500
266°
(50)
AMWAY
N40°38.00'
W103°11.02'
TATTR
N40°32.75'
W102°00.56'
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
GILL
114.2 GLL
Chan 89
FORT COLLINS-
LOVELAND MUNI
GREELEY-
WELD COUNTY
MILE HIGH
114.7 DVV
Chan 94
DUNNY
N40°15.37'
W103°46.03'
8000
*7500
218°
(3)
55
R-347
R-276
R-262
(5)
52
DENVER
117.9 DEN
Chan 126
N39°48.75'
W104°39.65'
R-136
WITNE
N39°59.81'
W104°09.66'
(19)
47
SAYGE
N40°12.04'-W103°51.08'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS: Expect to cross
at FL190 and 250 KIAS
or as assigned by ATC.
FL210
*7000
306°
(102)
AKRON
114.4 AKO
Chan 91
N
DENVER
INTL
ROCKY
MOUNTAIN
METRO
FRONT
RANGE
R-140
218°
(22)
28
R-038
(6)
ACTOR
N39°45.35'
W104°31.39'
BUCKLEY
AFB
CENTENNIAL
FALCON
116.3 FQF
Chan 110
N39°41.41'-W104°37.26'
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Adjacent STAR is LANDR ARRIVAL.
(SAYGE.SAYGE6) 09127
SAYGE SIX ARRIVAL
ST-9077 (FAA)
DENVER, COLORADO

SAYGE SIX ARRIVAL

ARRIVAL DESCRIPTION

GOODLAND TRANSITION (GLD.SAYGE6): From over GLD VORTAC via GLD R-306 and FQF R-038 to SAYGE INT. Thence....

HAYES CENTER TRANSITION (HCT.SAYGE6): From over HCT VORTAC via HCT R-266 and FQF R-038 to SAYGE INT. Thence....

NORTH PLATTE TRANSITION (LBF.SAYGE6): From over LBF VORTAC via LBF R-247 and FQF R-038 to SAYGE INT. Thence....

SIDNEY TRANSITION (SNY.SAYGE6): From over SNY VORTAC via SNY R-202 and FQF R-038 to SAYGE INT. Thence....

....From over SAYGE INT via FQF R-038 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 32

TACAN BKF Chan 33	APCH CRS 324°	Rwy ldg 11,000 TDZE 5662 Arpt Elev 5662	AL-538 [USAF]	BUCKLEY AFB (KBKF)

▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.

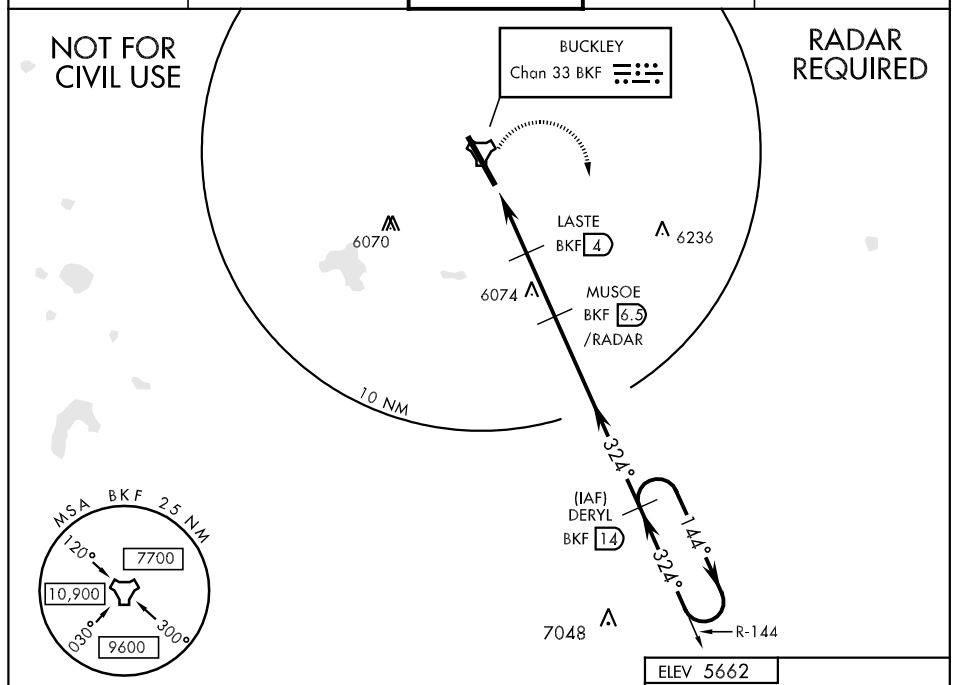
ALSF-1

MISSED APPROACH: Climbing right turn to 8300 to DERYL (BKF R-144/14 DME) and hold.

ATIS ★	DENVER APP CON	BUCKLEY TOWER ★	GND CON	CLNC DEL
119.675 259.3	128.45 251.075	121.0 291.675	121.6 275.8	121.6 275.8

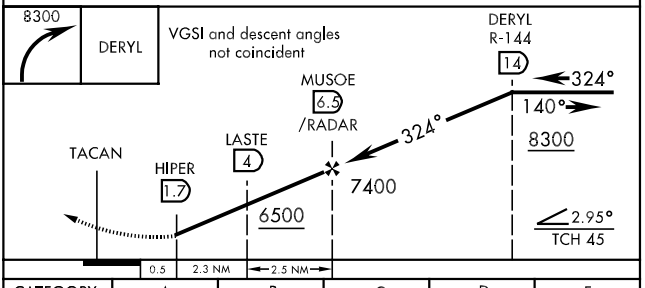
NOT FOR CIVIL USE

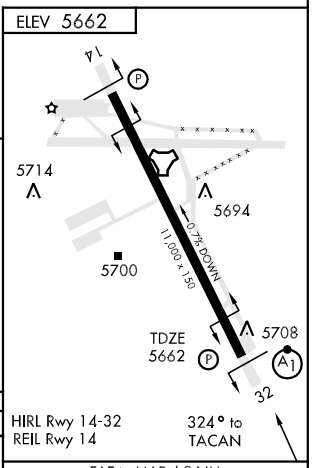
RADAR REQUIRED



SW-1, 22 OCT 2009 to 19 NOV 2009

EMERG SAFE ALT 100 NM 16,500





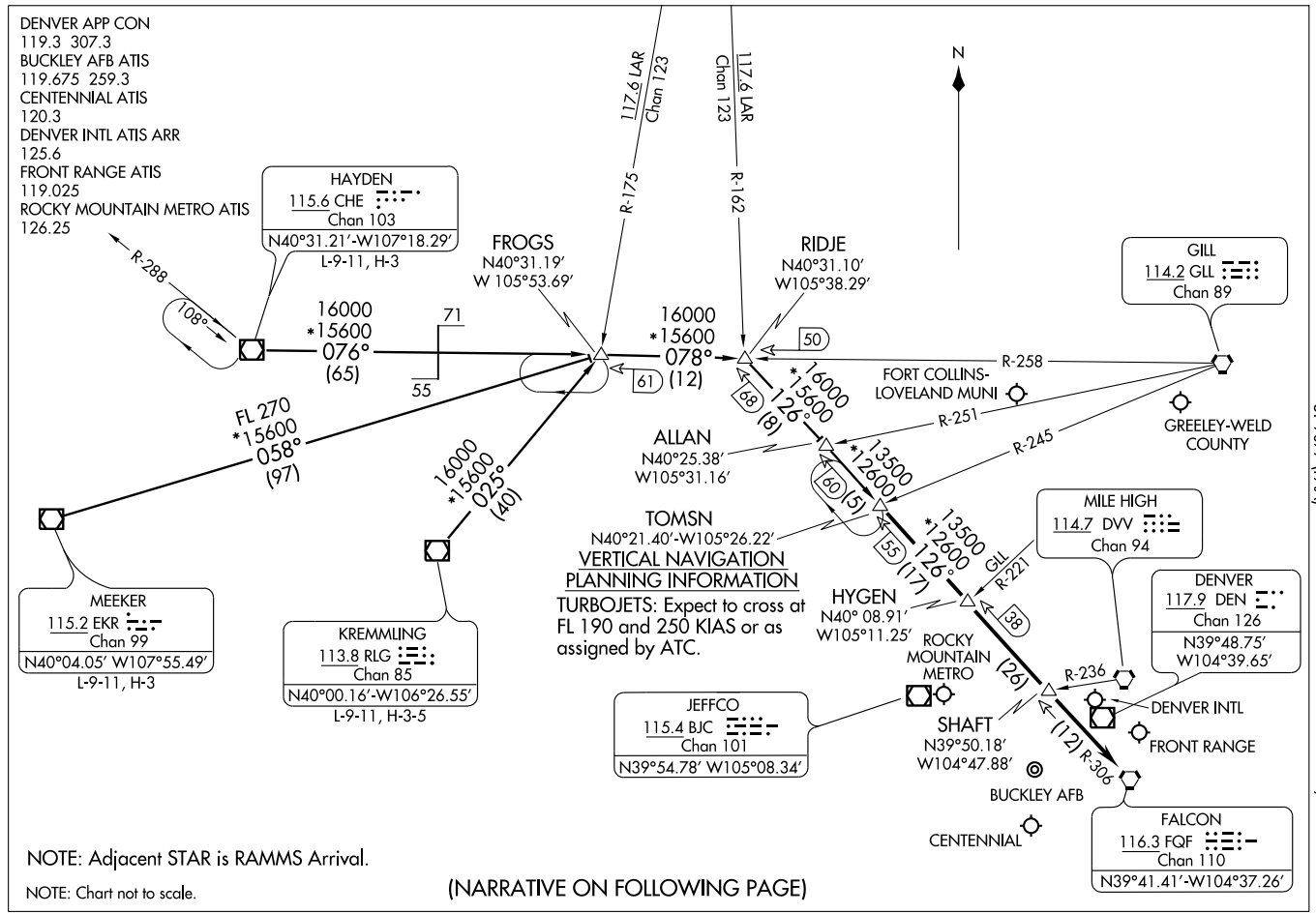
CATEGORY	A	B	C	D	E
S-32 *	6280/24 618 (700-½)		6280/60 618(700-1¼)	6280-1½ 618(700-1½)	6280-1¾ 618(700-1¾)
CIRCLING	6280-1 618 (700-1)		6280-1¾ 618(700-1¾)	6300-2 638(700-2)	6500-3 838 (900-3)

HIRL Rwy 14-32
REIL Rwy 14

324° to TACAN

FAF to MAP 4.8 NM

Knots	90	120	150	180	200
Min:Sec	3:12	2:24	1:55	1:36	1:26



(TOMSN.TOMSN4) 07298

TOMSN FOUR ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO

TOMSN FOUR ARRIVAL

ARRIVAL DESCRIPTION

HAYDEN TRANSITION (CHE.TOMSN4): From over CHE VOR/DME via CHE R-076 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

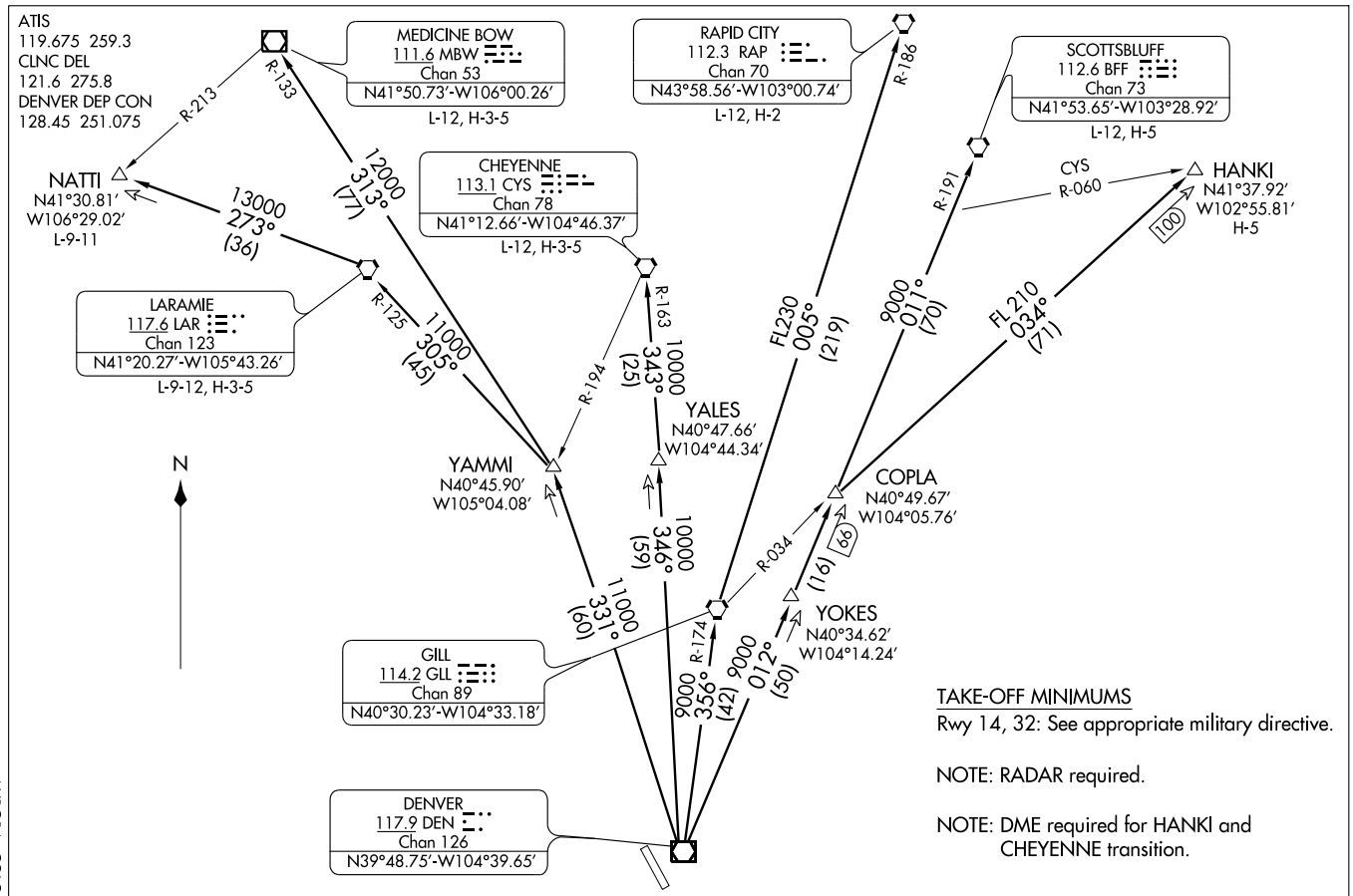
KREMMLING TRANSITION (RLG.TOMSN4): From over RLG VOR/DME via RLG R-025 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

MEEKER TRANSITION (EKR.TOMSN4): From over EKR VOR/DME via EKR R-058 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

....From over TOMSN INT via FQF R-306 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

YELLOWSTONE SIX DEPARTURE



YELLOWSTONE SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition.
Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

CHEYENNE TRANSITION (YELLO6.CYS): From over DEN VOR/DME via DEN R-346 and CYS R-163 to CYS VORTAC.

HANKI TRANSITION (YELLO6.HANKI): From over DEN VOR/DME via DEN R-012 and GLL R-034 to HANKI INT.

LARAMIE TRANSITION (YELLO6.LAR): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC.

MEDICINE BOW TRANSITION (YELLO6.MBW): From over DEN VOR/DME via DEN R-331 and MBW R-133 to MBW VOR/DME.

NATTI TRANSITION (YELLO6.NATTI): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC, then via LAR R-273 to NATTI INT.

RAPID CITY TRANSITION (YELLO6.RAP): From over DEN VOR/DME via DEN R-356 and GLL R-174 to GLL VORTAC, then via GLL R-005 and RAP R-186 to RAP VORTAC.

SCOTTSBLUFF TRANSITION (YELLO6.BFF): From over DEN VOR/DME via DEN R-012 and BFF R-191 to BFF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

BUENA VISTA, COLORADO

AL-9302 (FAA)

APP CRS	Rwy Idg	8300
331°	TDZE	7921
	Apt Elev	7946

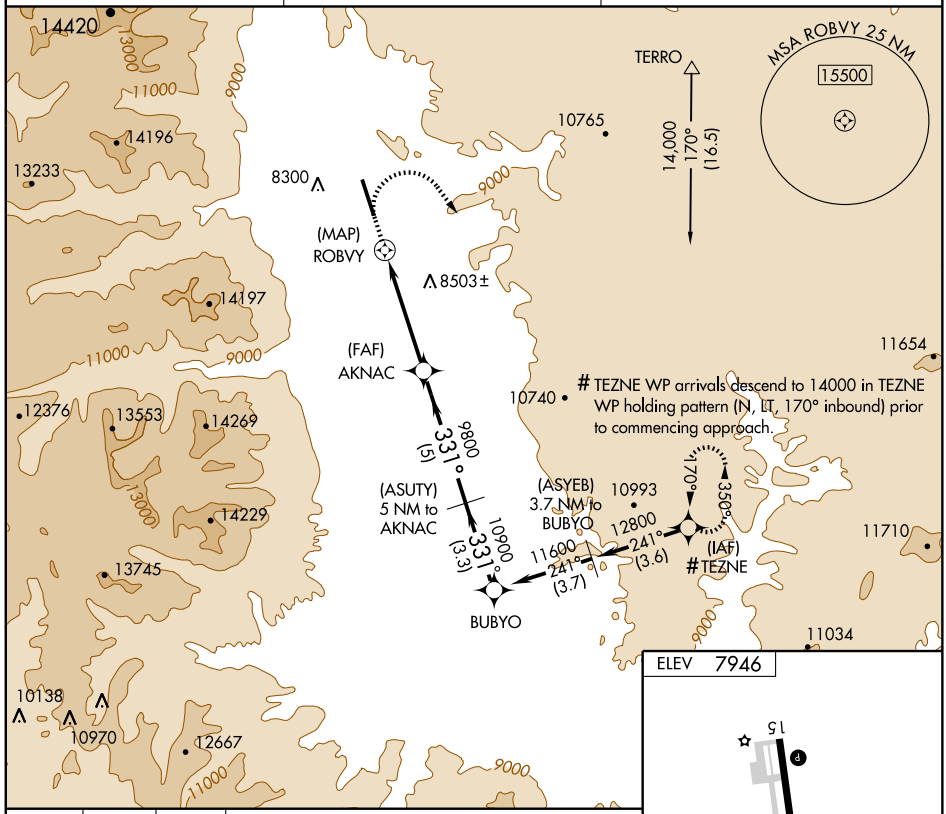
GPS RWY 33

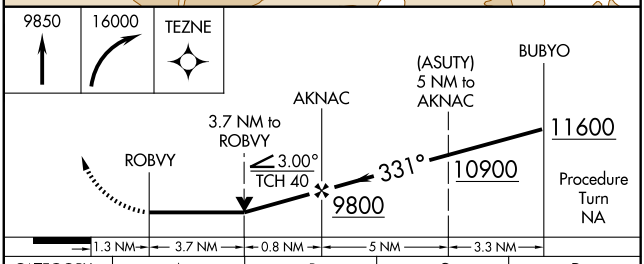
BUENA VISTA/CENTRAL COLORADO RGNL (AEJ)

T NA — Obtain local altimeter setting on CTAF, when not received, procedure not authorized. Circling not authorized northeast of Rwy 15-33.

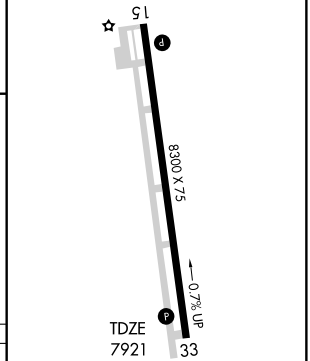
MISSED APPROACH: Climb to 9850, then climbing right turn to 16000 direct TEZNE WP and hold.

AWOS-3	DENVER CENTER	UNICOM
132.925	119.85 363.15	122.8 (CTAF)





CATEGORY	A	B	C	D
S-33	9540-1½	1619 (1600-1½)	9540-3 1619 (1600-3)	NA
CIRCLING	9540-1½	1594 (1600-1½)	9540-3 1594 (1600-3)	NA

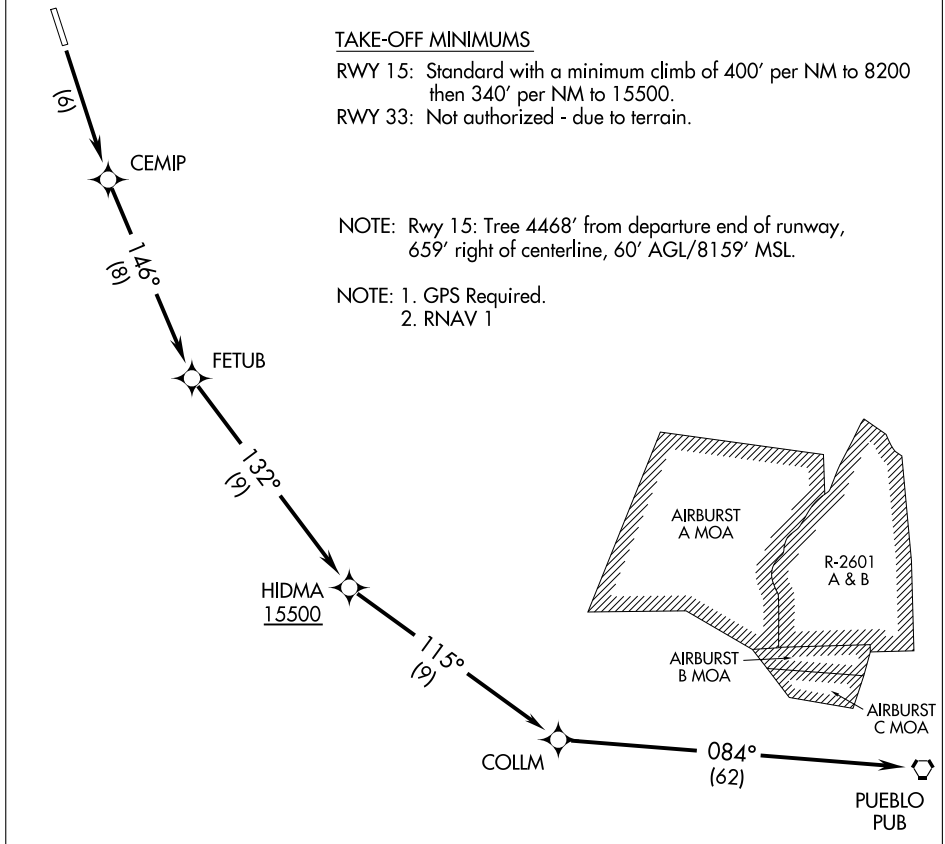


MIRL Rwy 15-33 (L)

SW-1, 22 OCT 2009 to 19 NOV 2009

PUEBLO ONE DEPARTURE (RNAV) (OBSTACLE)

DENVER CENTER
119.85 363.15
UNICOM 122.8 (CTAF)



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 15: Climb direct CEMIP WP, then via 146° track to FETUB WP then via 132° track to cross HIDMA WP at or above 15500′, then via depicted route to PUB VORTAC.

TAKE-OFF RUNWAY 33: Not authorized.

SW-1, 22 OCT 2009 to 19 NOV 2009

BURLINGTON, COLORADO AL-6895 (FAA)

LOC/DME I-OBG	APP CRS	Rwy Idg	5201
111.9	330°	TDZE	4203
Chan 56		Apt Elev	4217

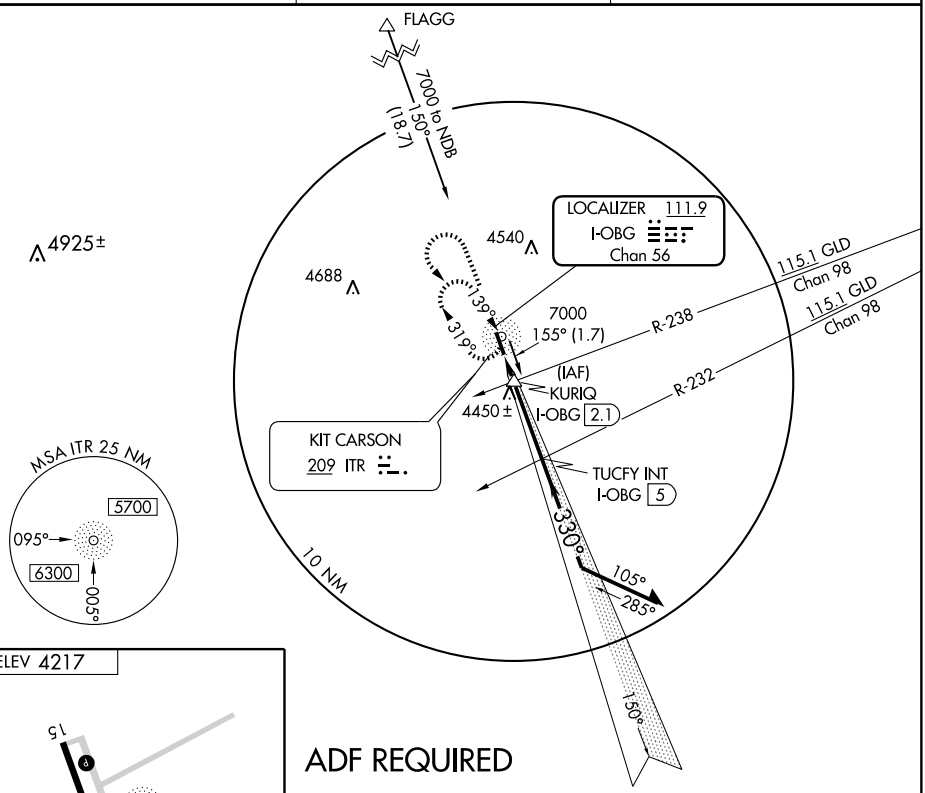
LOC RWY 33

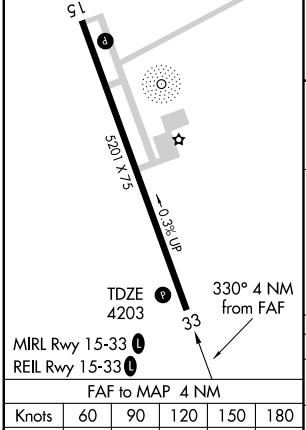
BURLINGTON/ KIT CARSON COUNTY (ITR)

NA Use of I-OBG DME required for procedure entry from ITR NDB.

MISSED APPROACH: Climb to 5000, then climbing left turn to 7000 direct ITR NDB and hold.

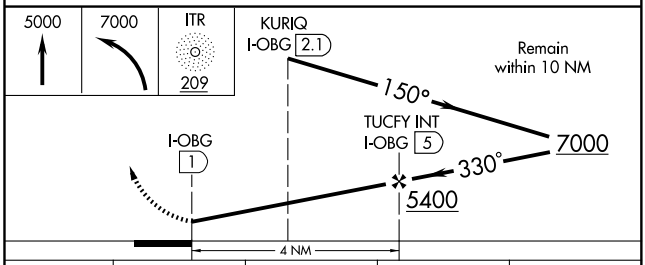
ASOS	DENVER CENTER	UNICOM
135.225	132.5 379.15	122.8 (CTAF) L





FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20



CATEGORY	A	B	C	D
S-33	4640-1 437 (500-1)		4640-1¼ 437 (500-1¼)	4640-1½ 437 (500-1½)
CIRCLING	4640-1 423 (500-1)	4680-1 463 (500-1)	4680-1½ 463 (500-1½)	4800-2 583 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

NDB ITR	APP CRS	Rwy Idg	5201
209	139°	TDZE	4217
		Apt Elev	4217

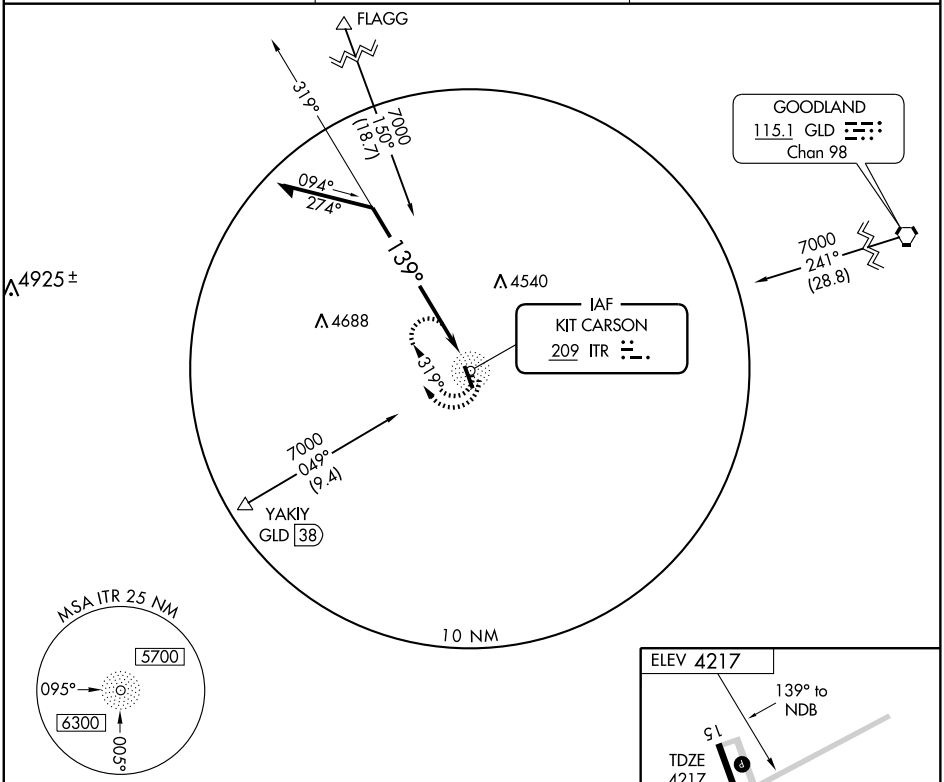
NDB RWY 15

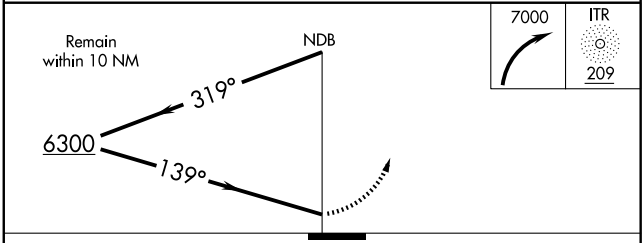
BURLINGTON/ KIT CARSON COUNTY (ITR)

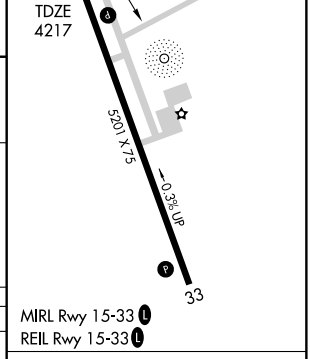
NA

MISSED APPROACH: Climbing right turn to 7000 in ITR NDB holding pattern.

ASOS	DENVER CENTER	UNICOM
135.225	132.5 379.15	122.8 (CTAF) L







MIRL Rwy 15-33 L
REIL Rwy 15-33 L

CATEGORY	A	B	C	D
S-15	4820-1	603 (700-1)	4820-1¾ 603 (700-1¾)	4820-2 603 (700-2)
CIRCLING	4820-1	603 (700-1)	4820-1¾ 603 (700-1¾)	4820-2 603 (700-2)

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 72999 W15A	APP CRS 150°	Rwy Idg 5201 TDZE 4219 Apt Elev 4219

RNAV (GPS) RWY 15

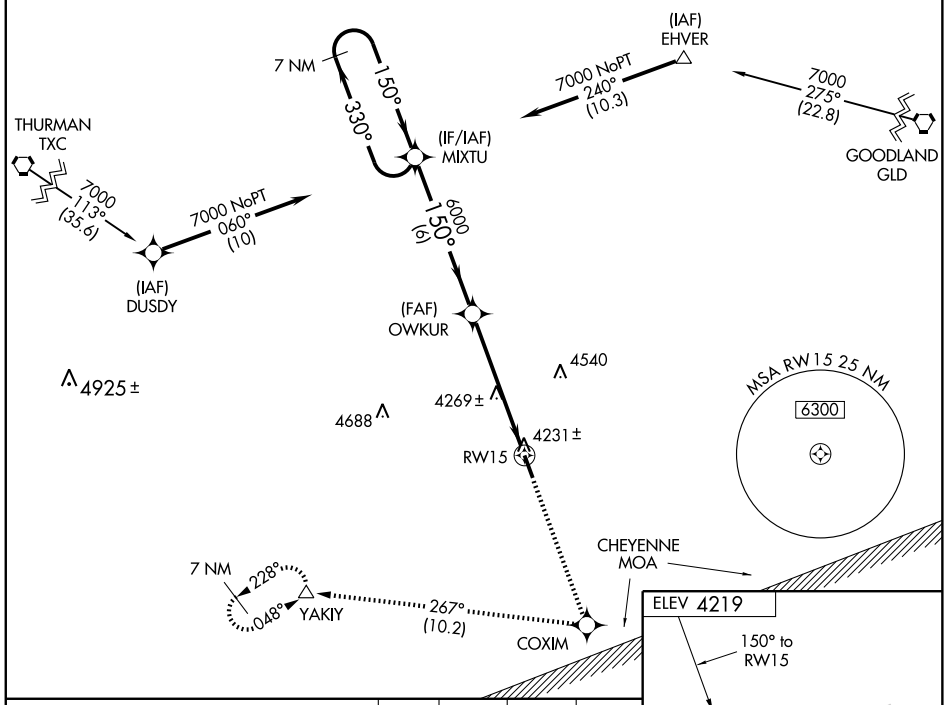
BURLINGTON/ KIT CARSON COUNTY (ITR)

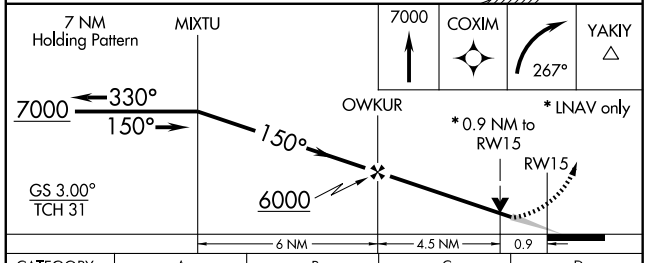
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -23°C (-9°F)

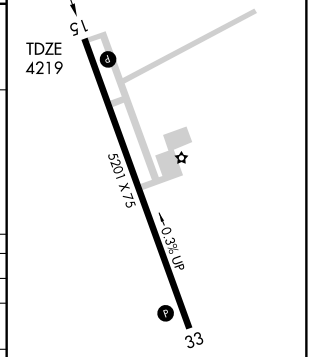
MISSED APPROACH: Climb to 7000 direct COXIM and right turn via 267° track to YAKIY, and hold, continue climb-in-hold to 7000.

ASOS	DENVER CENTER	UNICOM
135.225	132.5 379.15	122.8 (CTAF) L

Procedure NA for arrival at TXC VORTAC via V148 southwest bound;
For arrival at GLD VORTAC via V108 northeast bound and V132 southeast bound.







CATEGORY	A	B	C	D
LPV DA	4469-1 250 (300-1)			
LNAV/ VNAV DA	4481-1 262 (300-1)			
LNAV MDA	4520-1 301 (400-1)			
CIRCLING	4580-1 361 (400-1)	4680-1 461 (500-1)	4680-1½ 461 (500-1½)	4780-2 561 (600-2)

MIRL Rwy 15-33 L
REIL Rwy 15-33 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5399
290°	TDZE	5404
	Apt Elev	5439

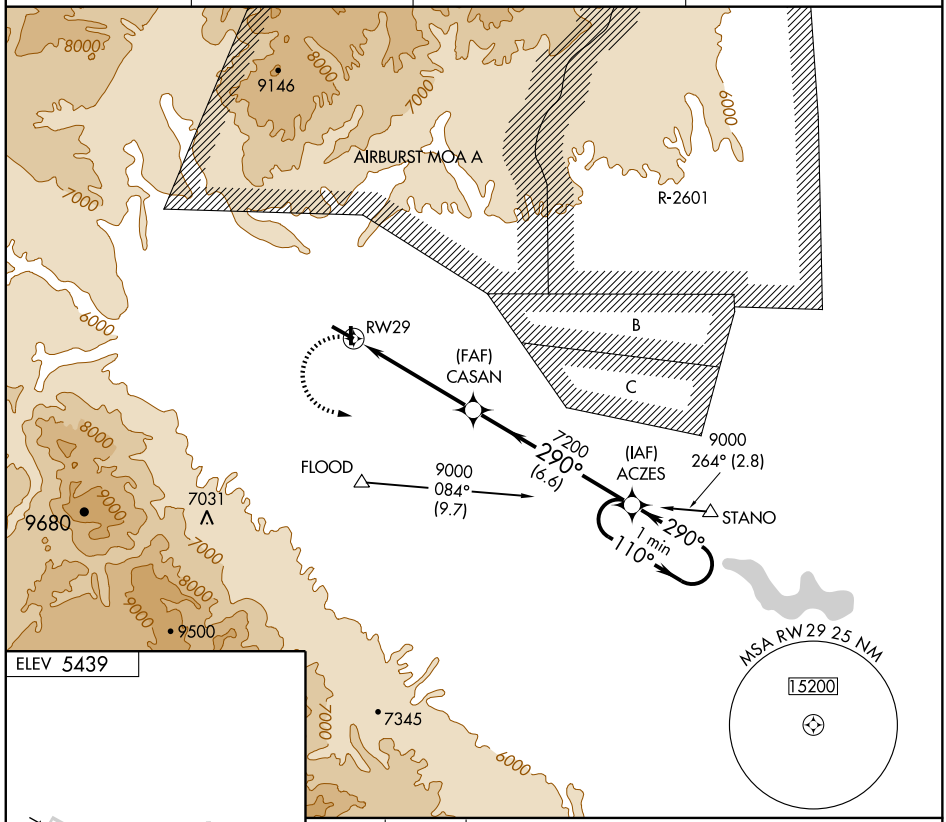
GPS RWY 29

CANON CITY/ FREMONT COUNTY (1V6)

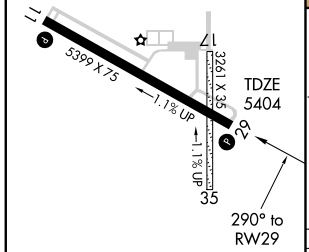
Use Pueblo Memorial altimeter setting.

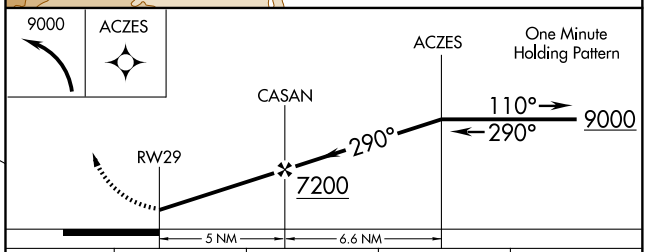
MISSED APPROACH: Climbing left turn to 9000 direct ACZES WP and hold.

AWOS-3	DENVER APP CON	DENVER CENTER	UNICOM
120.025	120.1 290.5	128.375 379.95	122.8 (CTAF) L



ELEV 5439





CATEGORY	A	B	C	D
S-29	6140-1 736 (800-1)		6140-2 736 (800-2)	6140-2¼ 736 (800-2¼)
CIRCLING	6200-1 761 (800-1)	6200-1¼ 761 (800-1¼)	6200-2¼ 761 (800-2¼)	6320-3 881 (900-3)

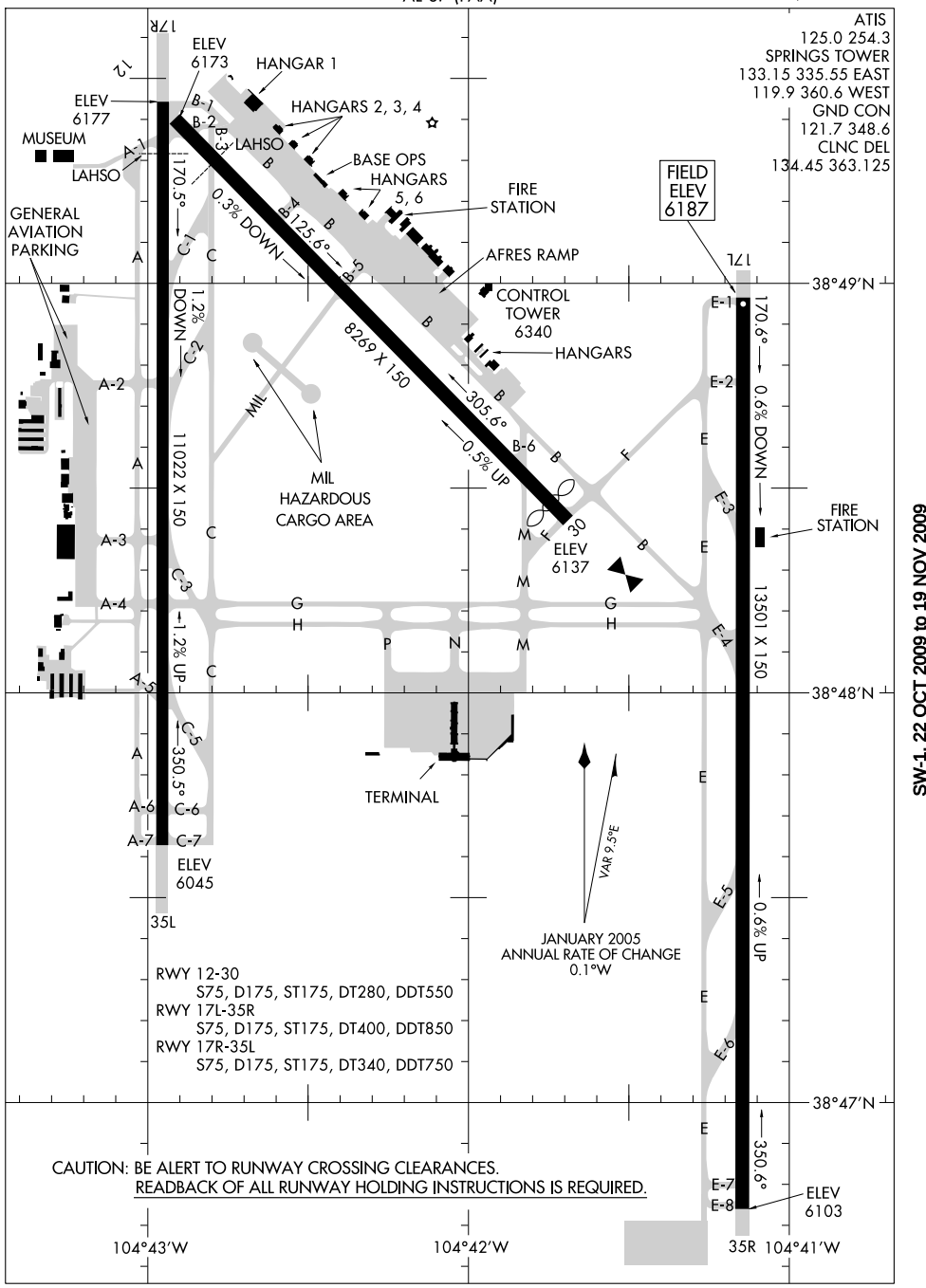
REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

SW-1, 22 OCT 2009 to 19 NOV 2009

09127

AIRPORT DIAGRAM

COLORADO SPRINGS/ CITY OF COLORADO SPRINGS MUNI (COS)
AL-87 (FAA)
COLORADO SPRINGS, COLORADO



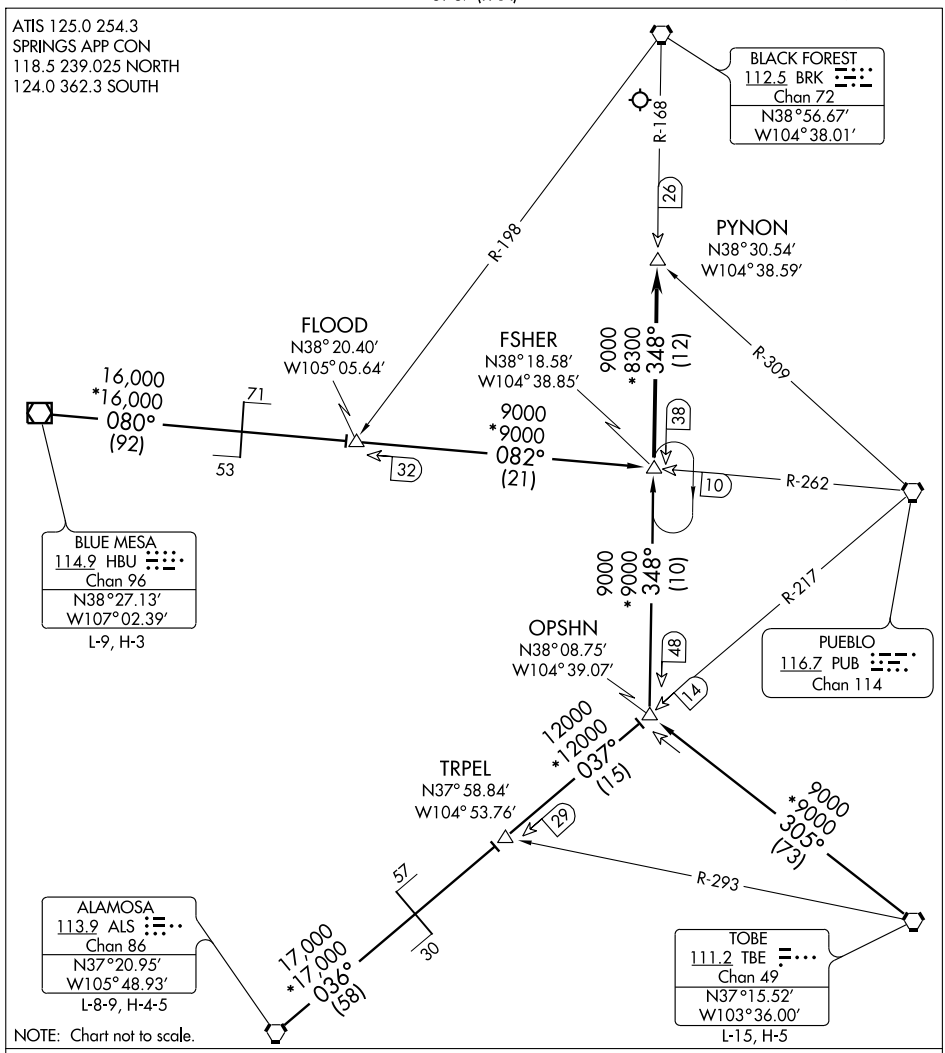
SW-1, 22 OCT 2009 to 19 NOV 2009

(FSHER.DBRY1) 07298

DEBERRY ONE ARRIVAL

ST-87 (FAA)

CITY OF COLORADO SPRINGS MUNI
COLORADO SPRINGS, COLORADO



SW-1, 22 OCT 2009 to 19 NOV 2009

ALAMOSA TRANSITION (ALS.DBRY1): From over ALS VORTAC via ALS R-036 and PUB R-217 to OPSHN INT, then via BRK R-168 to FSHER INT. Thence. . . .

BLUE MESA TRANSITION (HBU.DBRY1): From over HBU VOR/DME via HBU R-080 and PUB R-262 to FSHER INT. Thence. . . .

TOBE TRANSITION (TBE.DBRY1): From over TBE VORTAC via TBE R-305 and BRK R-168 to FSHER INT. Thence. . . .

. . . .From over FSHER INT via the BRK R-168 to PYNON INT. Expect radar vectors to the final approach course at or before PYNON INT.

LOST COMMUNICATIONS: Proceed to BRK VORTAC.

LOC/DME I-LPI	APP CRS	Rwy Idg	13501
109.1	168°	TDZE	6187
Chan 28		Apt Elev	6187

ILS or LOC RWY 17L

COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)

MALSR

MISSED APPROACH: Climb to 7200, then climbing left turn to 10000 via heading 030° and BRK VORTAC R-086 to KETLE Int and hold.

ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125

RADAR REQUIRED

MOGAL INT I-LPI 21.9

9000 168° (7.5)

AWONE INT I-LPI 14.4

ROCCK INT I-LPI 10

HUMPE INT I-LPI 5.9

TUNTE I-LPI 2.9

LOCALIZER 109.1 I-LPI Chan 28

BLACK FOREST 112.5 BRK Chan 72

KETLE BRK 12

MSA BRK 25 NM 140° 9100 15400 360°

116.7 PUB R-351 Chan 114

ELEV 6187 168° 7.6 NM from FAF

TDZE 6187

6340

6239 ±

35L 35R

MIRL Rwy 12-30

HIRL Rwys 17R-35L and 17L-35R

REIL Rwys 12, 17R, 30 and 35R

TDZ/CL Rwys 17L and 35R

Use I-LPI DME when on LOC course.

*LOC only

7200	10000	BRK	KETLE
	030°	R-086 112.5	△

VGSI and ILS glidepath not coincident.

Procedure Turn NA

GS 3.00° TCH 57

7.5 NM 4.4 NM 4.1 NM 3 NM 0.5

CATEGORY	A	B	C	D
S-ILS 17L	6387/18 200 (200-½)			
S-LOC 17L	6820/24 633 (700-½)		6820/60 633 (700-1¼)	6820-1½ 633 (700-1½)
CIRCLING	6820-1 633 (700-1)		6820-1¾ 633 (700-1¾)	6840-2 653 (700-2)

FAF to MAP 7.1 NM

Knots	60	90	120	150	180
Min:Sec	7:06	4:44	3:33	2:50	2:22

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-COS	APP CRS	Rwy Idg	11022
109.9	348°	TDZE	6075
		Apt Elev	6187

ILS or LOC RWY 35L

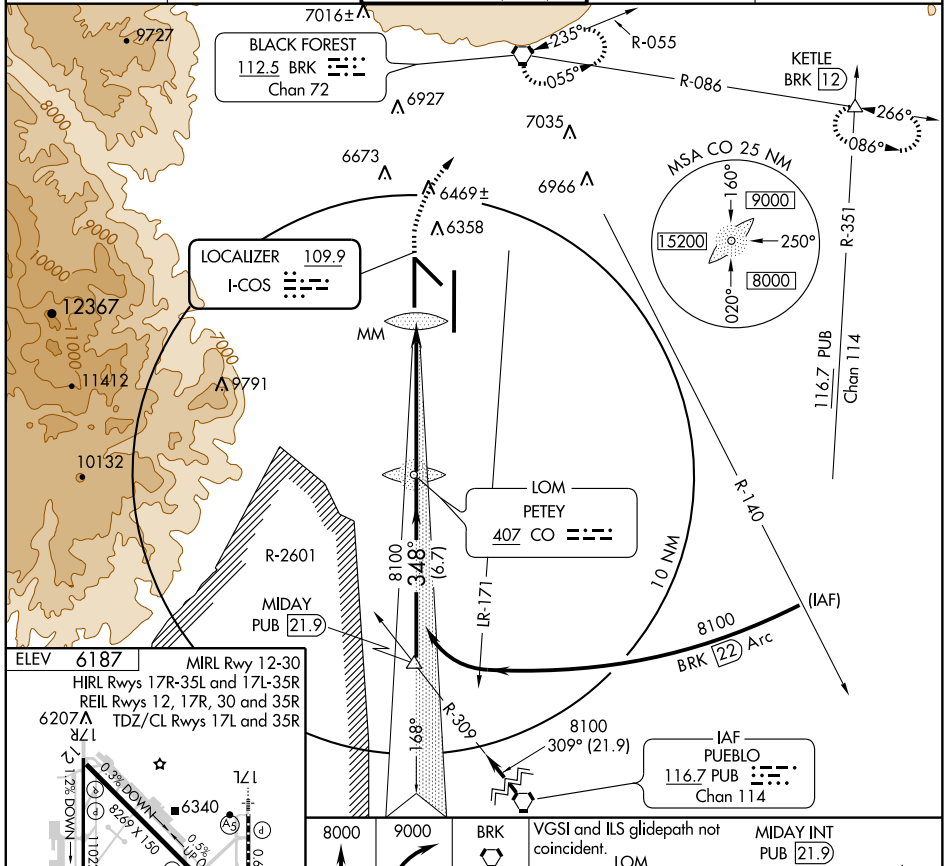
COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)

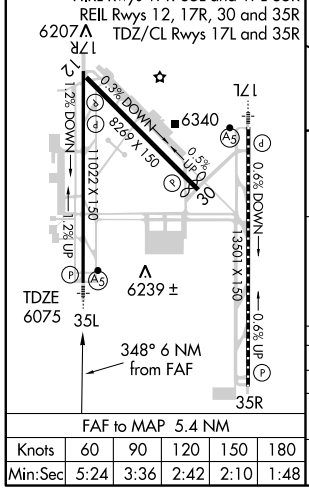
Radar monitoring required when R-2601 in use. Cat D S-LOC 35L visibility increased to RVR 5000 for inoperative ALSF. *RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 8000, then climbing right turn to 9000 direct BRK VORTAC and hold. (TACAN only aircraft continue to KETLE 12 DME and hold E, LT, 266° inbound.)

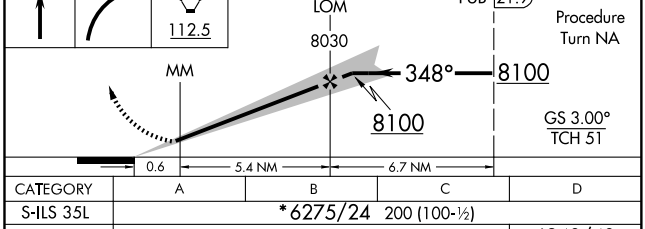
ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125





FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-ILS 35L	*6275/24 200 (100-½)			
S-LOC 35L	6340/24 265 (200-½)			6340/40 265 (200-¾)
CIRCLING	6740-1 553 (600-1)	6760-1 573 (600-1)	6760-1½ 573 (600-1½)	6840-2 653 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-AHI	APP CRS	Rwy Idg	13501
109.1	348°	TDZE	6118
Chan 28		Apt Elev	6187

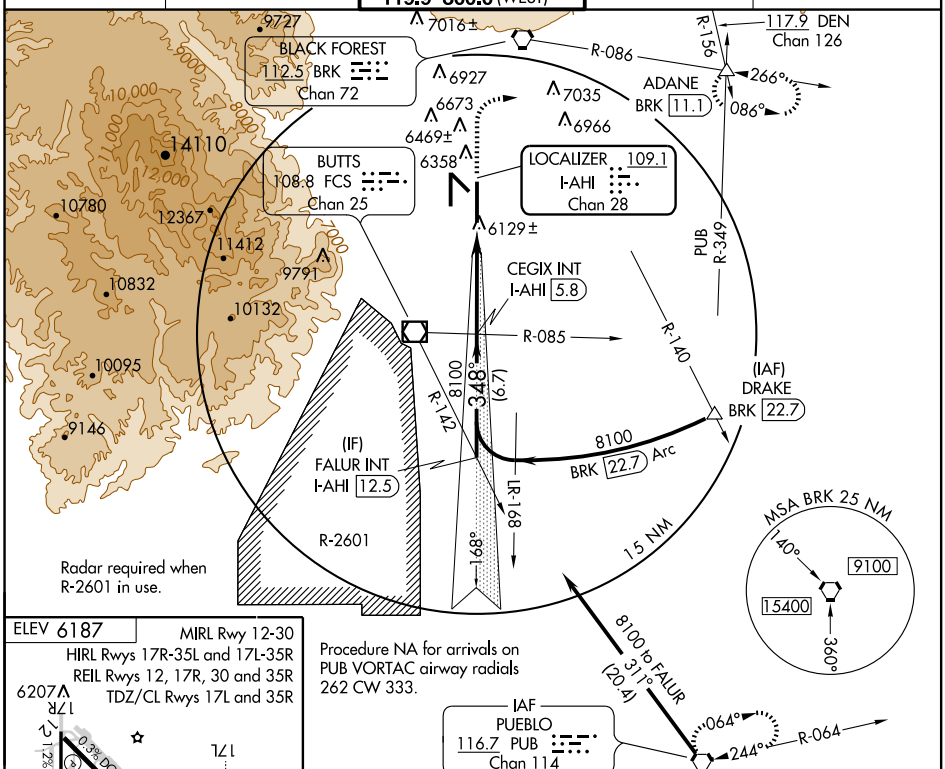
ILS or LOC RWY 35R

COLORADO SPRINGS/ CITY OF COLORADO SPRINGS MUNI (COS)

If local altimeter setting not received, use Centennial altimeter setting and increase all DAs/MDAs 160 feet.

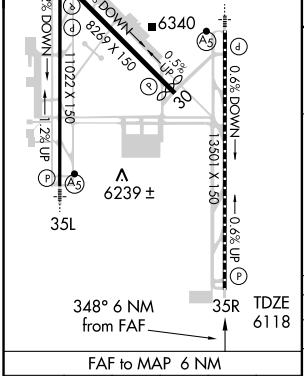
MISSED APPROACH: Climb to 6600 then climbing right turn to 10000 via heading 047°and BRK VORTAC R-086 to ADANE INT/ BRK 11.1 DME and hold, continue climb-in-hold to 10000.

ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125

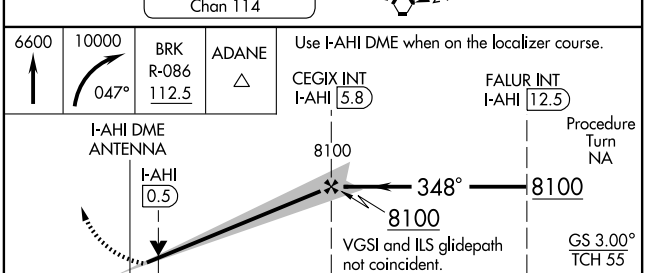


ELEV 6187

MIRL Rwy 12-30
HIRL Rwys 17R-35L and 17L-35R
REIL Rwys 12, 17R, 30 and 35R
TDZ/CL Rwys 17L and 35R



FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00



CATEGORY	A	B	C	D
S-ILS 35R	6318-¾ 200 (200-¾)			
S-LOC 35R	6380-1 262 (200-1)			
CIRCLING	6740-1 553 (600-1)	6760-1 573 (600-1)	6760-1½ 573 (600-1½)	6840-2 653 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

LOM CO	APP CRS	Rwy Idg	11022
407	348°	TDZE	6075
		Apt Elev	6187

NDB RWY 35L

COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)

Radar monitoring required when R-2601 in use.

MALSR

MISSED APPROACH: Climb to 8000, then climbing right turn to 9000 direct BRK VORTAC and hold.

ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125

BLACK FOREST
112.5 BRK
Chan 72

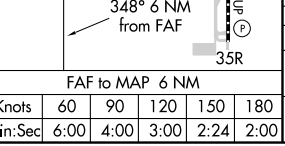
7016±
9727
6927
6673
6469±
6358
6209±
7035
6966
14110
12367
11412
9791
10132
MM
11000
182°
(15.5)
235°
055°
R-055

MSA CO 25 NM
160°
9000
15200
250°
8000
020°

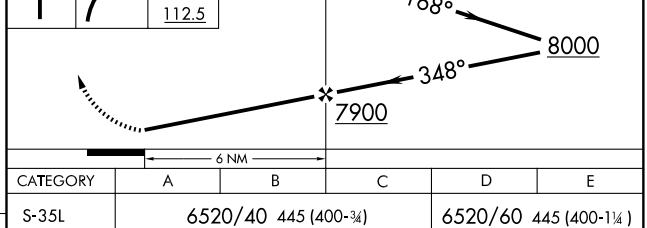
LOM/IAF
PETEY
407 CO

7900
348°
(6.7)
10 NM
R-2601
MIDAY
PUB 21.9
R-309
8000 NoPT
309° (21.9)
123°
303°
168°
IAF
PUEBLO
116.7 PUB
Chan 114

ELEV 6187
MIRL Rwy 12-30
HIRL Rwys 17R-35L and 17L-35R
REIL Rwys 12, 17R, 30 and 35R
6207 TDZ/CL Rwys 17L and 35R



8000	9000	BRK
		112.5



FAF to MAP 6 NM

Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

CATEGORY	A	B	C	D	E
S-35L	6520/40 445 (400-¾)			6520/60 445 (400-1¼)	
CIRCLING	6740-1 553 (600-1)	6760-1 573 (600-1)	6760-1½ 573 (600-1½)	6840-2 653 (700-2)	7140-3 953 (1000-3)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	13501
168°	TDZE	6187
	Apt Elev	6187

RNAV (GPS) RWY 17L

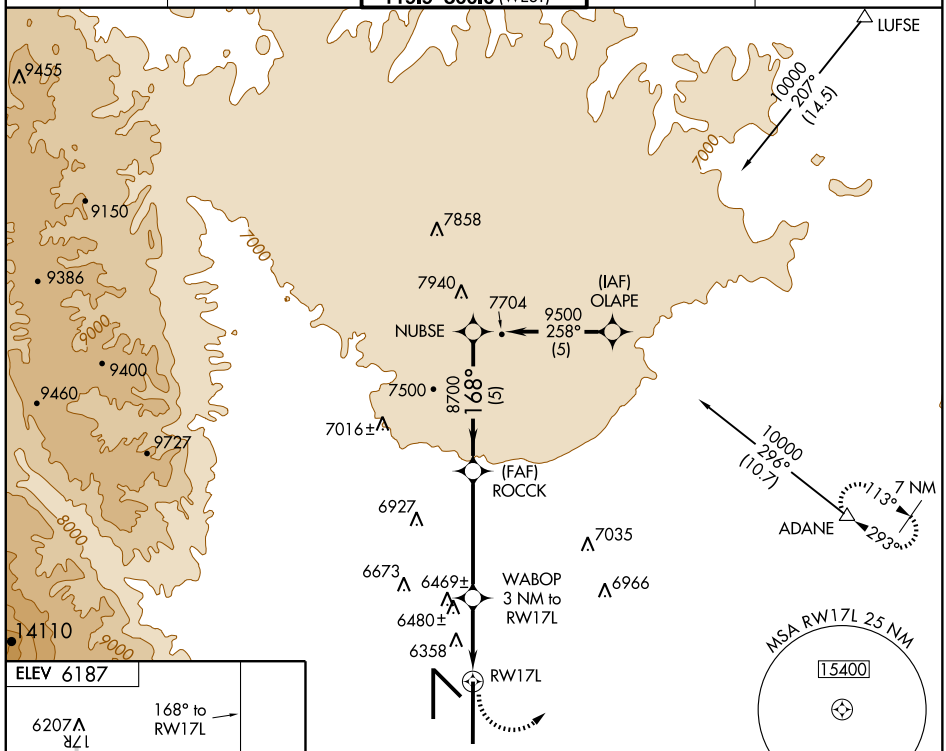
COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)

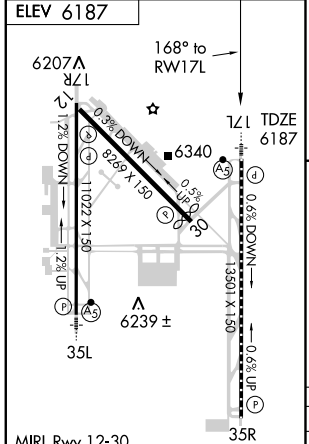
DME/DME RNP-0.3 NA.

MALSR

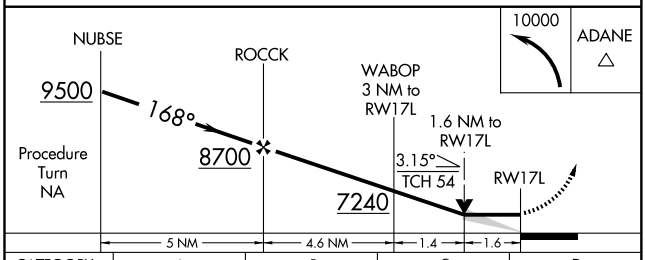
MISSED APPROACH: Climbing left turn to 10000 direct ADANE and hold.

ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125





MIRL Rwy 12-30
HIRL Rwys 17R-35L and 17L-35R
REIL Rwys 12, 17R, 30 and 35R
TDZ/CL Rwys 17L and 35R



CATEGORY	A	B	C	D
LNAV MDA	6740/24 553 (600-½)		6740/50 553 (600-1)	6740/60 553 (600-1¼)
CIRCLING	6740-1 556 (600-1)		6740-1½ 556 (600-1½)	6800-2 613 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 72800 W17A	APP CRS 168°	Rwy Idg 11022 TDZE 6177 Apt Elev 6187

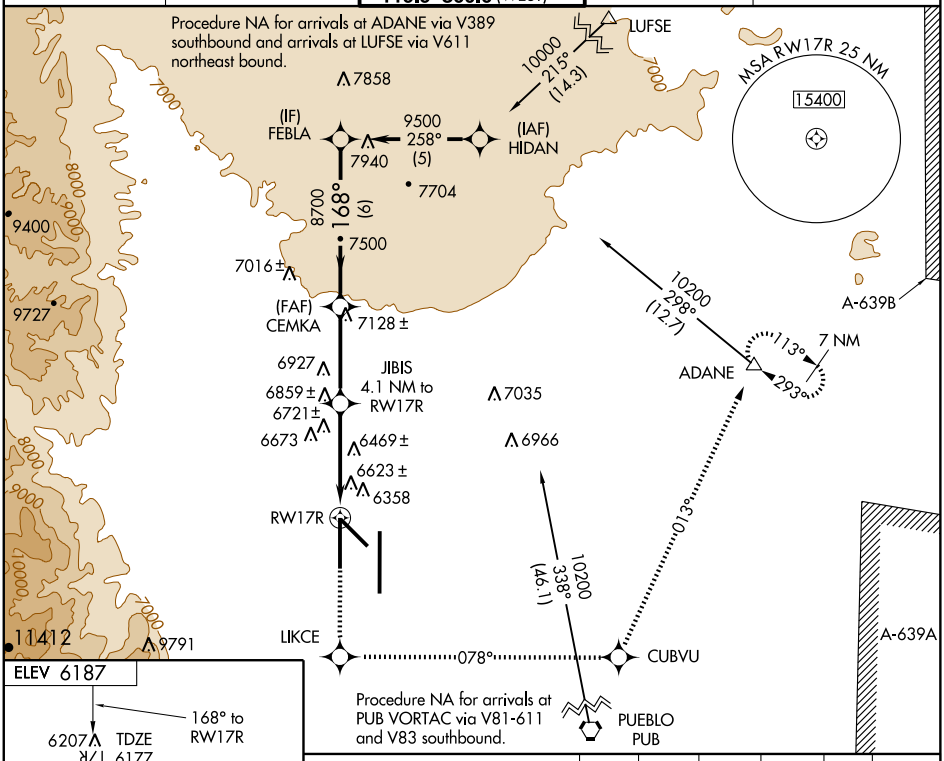
RNAV (GPS) RWY 17R

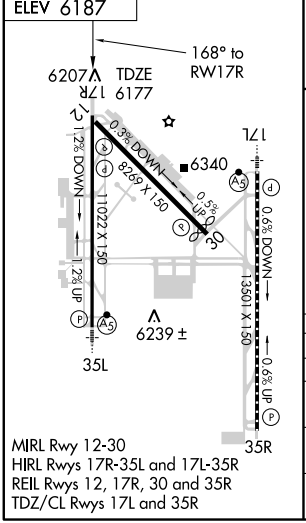
COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)

DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 37°C (99°F).

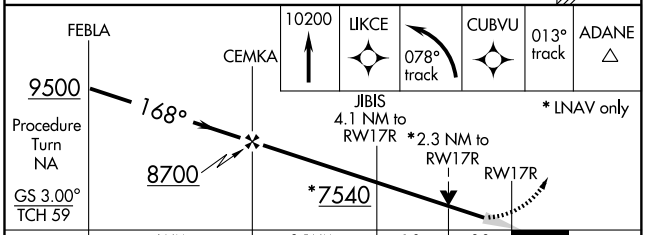
MISSED APPROACH: Climb to 10200 direct LIKCE and left turn via 078° track to CUBVU and 013° track to ADANE and hold.

ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125





MIRL Rwy 12-30
HIRL Rwys 17R-35L and 17L-35R
REIL Rwys 12, 17R, 30 and 35R
TDZ/CL Rwys 17L and 35R



CATEGORY	A	B	C	D
LPV DA	6537-1¼ 360 (400-1¼)			
LNAV/VNAV DA	6742-2 565 (600-2)			
LNAV MDA	6980-1 803 (800-1)	6980-1¼ 803 (800-1¼)	6980-2¼ 803 (800-2¼)	6980-2½ 803 (800-2½)
CIRCLING	6980-1 793 (800-1)	6980-1¼ 793 (800-1¼)	6980-2¼ 793 (800-2¼)	6980-2½ 793 (800-2½)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7914
303°	TDZE	6156
	Apt Elev	6187

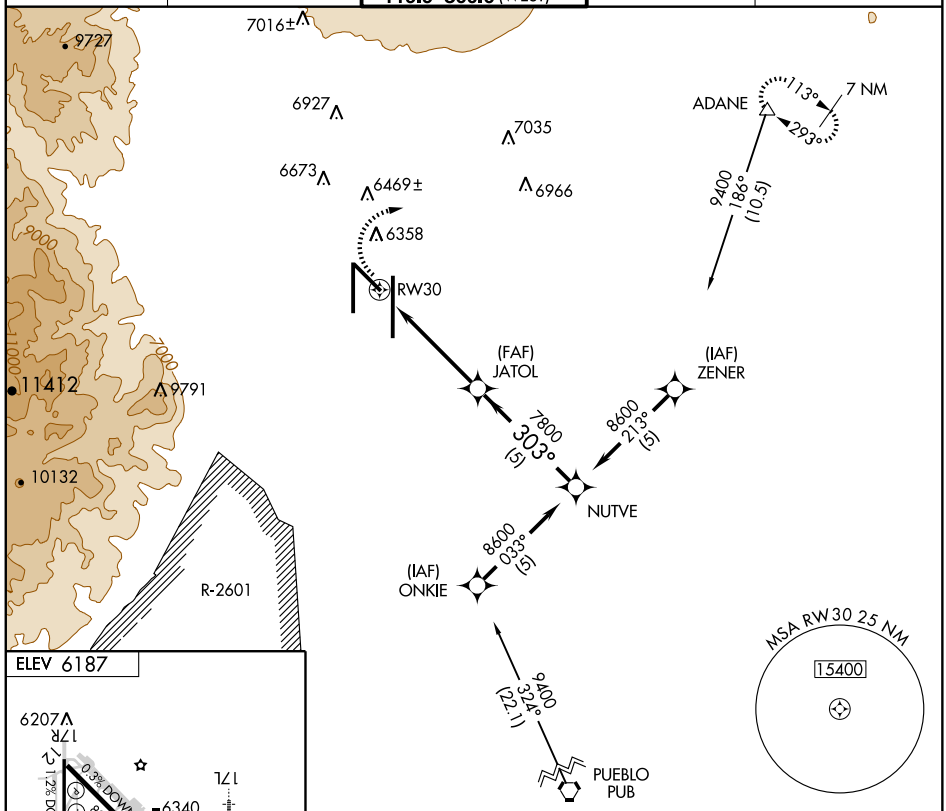
RNAV (GPS) RWY 30

COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)

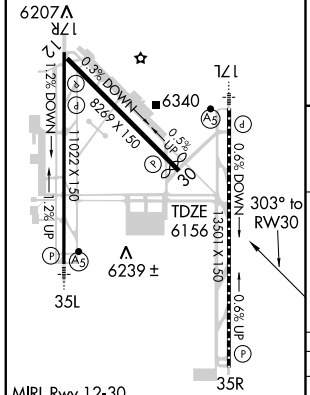
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 10000 direct ADANE and hold.

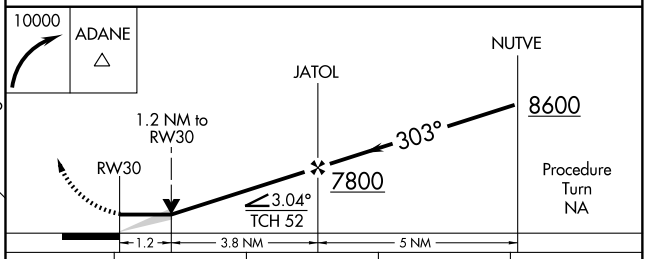
ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125



ELEV 6187



MIRL Rwy 12-30
HIRL Rwys 17R-35L and 17L-35R
REIL Rwys 12, 17R, 30 and 35R
TDZ/CL Rwys 17L and 35R



CATEGORY	A	B	C	D
LNAV MDA	6580-1 424 (400-1)		6580-1¼ 424 (400-1¼)	
CIRCLING	6740-1 553 (600-1)		6740-1½ 553 (600-1½)	6800-2 613 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 53602 W35A	APP CRS 348°	Rwy Idg 13501 TDZE 6118 Apt Elev 6187

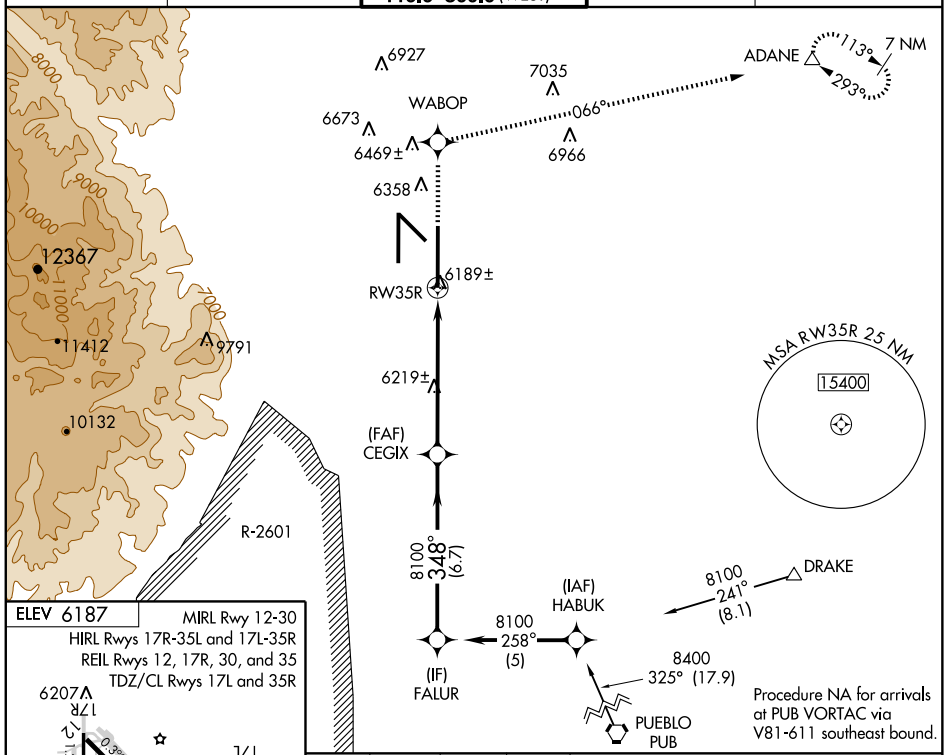
RNAV (GPS) RWY 35R

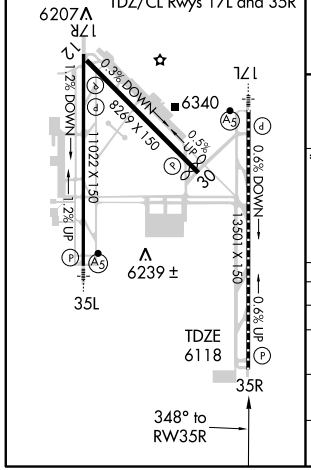
COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)

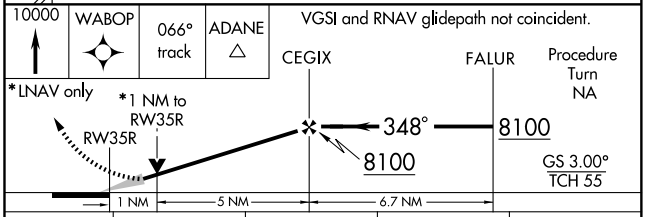
Baro-VNAV NA when using Centennial altimeter setting. If local altimeter setting not received, use Centennial altimeter setting and increase all DAs/MDAs 160 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 37°C (98°F).
DME/DME RNP -0.3 NA. VDP NA when using Centennial altimeter setting.

MISSED APPROACH: Climb to 10000 direct WABOP and via 066° track to ADANE and hold, continue climb-in-hold to 10000.

ATIS	SPRINGS APP CON	SPRINGS TOWER	GND CON	CLNC DEL
125.0 254.3	118.5 239.025	133.15 335.55 (EAST) 119.9 360.6 (WEST)	121.7 348.6	134.45 363.125

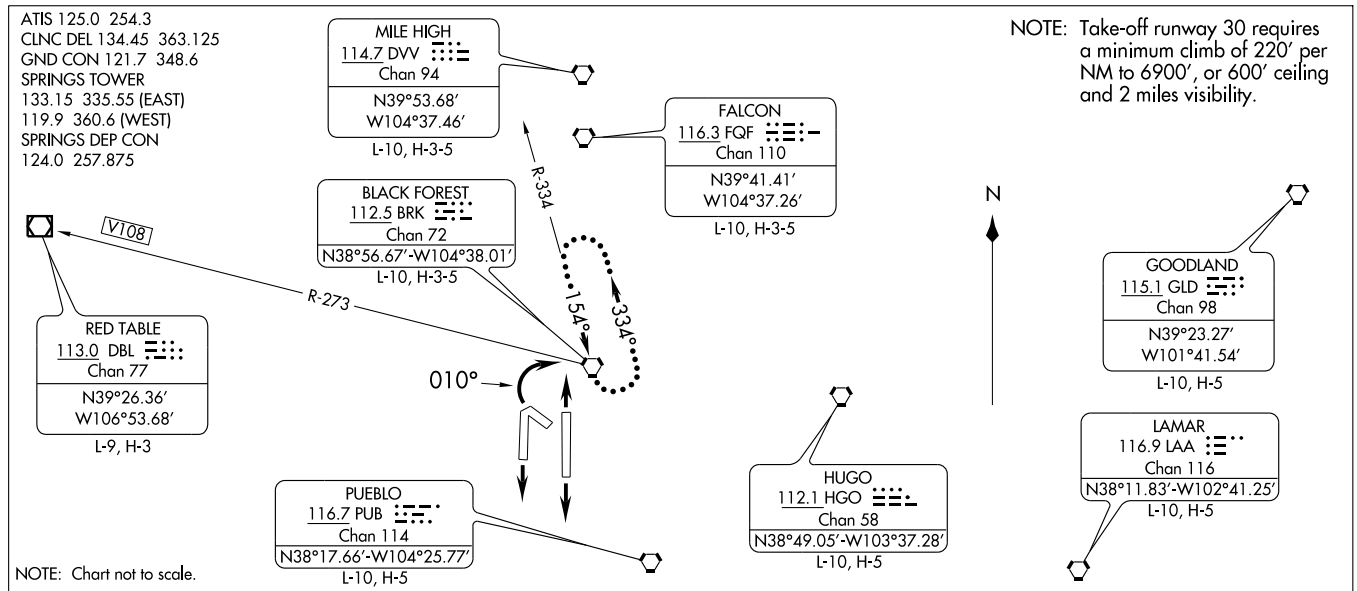






CATEGORY	A	B	C	D
LPV DA	6368-1 250 (200-1)			
LNAV/VNAV DA	6459-1¼ 341 (300-1¼)			
LNAV MDA	6480-1 362 (300-1)			6480-1¼ 362 (300-1¼)
CIRCLING	6740-1 553 (600-1)	6760-1 573 (600-1)	6760-1½ 573 (600-1½)	6840-2 653 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 12, 17R/L, 35R/L: Fly runway/assigned heading for radar vectors to filed/assigned route.
Thence . . . .
TAKE-OFF RUNWAY 30: Turn right within 2 NM heading 010° or assigned heading for radar vectors to filed/assigned route.
Thence . . . .

. . . . Maintain 10,000′. Expect clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If not in contact with ATC within 1 minute after departure from runways 12 and 17L/R turn left, from runways 30 and 35L/R turn right. All aircraft climb to filed altitude via direct BRK VORTAC, thence via filed/assigned route. Aircraft filed V108 westbound: continue climb in holding pattern to cross BRK VORTAC at or above 14,000′.

APP CRS	Rwy Idg	7205
024°	TDZE	5918
	Apt Elev	5918

RNAV (GPS) RWY 3

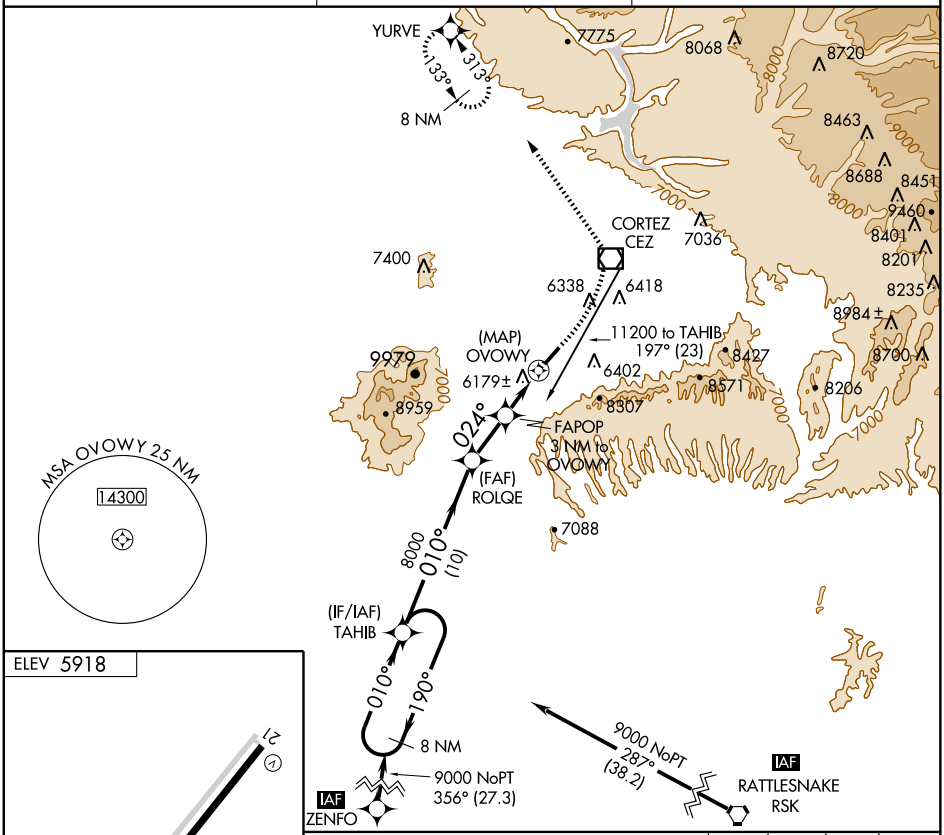
CORTEZ MUNI (CEZ)

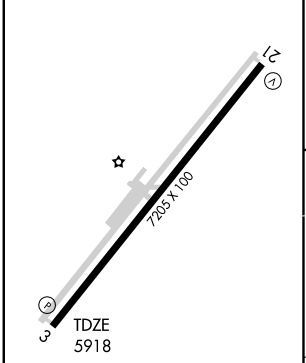
T
NA

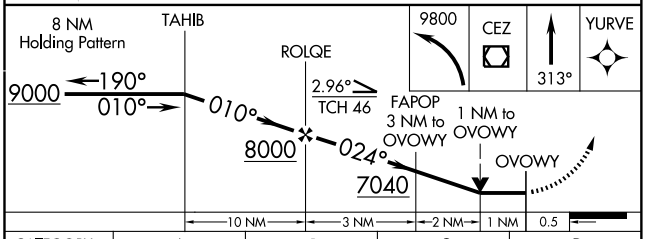
IAF ARM APPROACH MODE PRIOR TO IAF.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 9800 via left turn direct CEZ VOR/DME and 313° track to YURVE WP and hold.

ASOS	DENVER CENTER	UNICOM
135.625	118.575 348.7	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	6440-1 522 (600-1)		6440-1½ 522 (600-1½)	6440-1¾ 522 (600-1¾)
CIRCLING	6560-1 642 (700-1)		6600-2 682 (700-2)	6800-3 882 (900-3)

REIL Rwy 3
REIL Rwy 21 L
MIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7205
210°	TDZE	5913
	Apt Elev	5918

RNAV (GPS) Y RWY 21

CORTEZ MUNI (CEZ)

DME/DME RNP-0.3 NA.
When VGSI inop, procedure NA at night.

MISSED APPROACH: Climbing right turn to 9800 direct YURVE and hold.

ASOS	DENVER CENTER	UNICOM
135.625	118.575 348.7	122.8 (CTAF) L

Procedure NA for arrivals at YURVE via V68-391 northwest bound.

YURVE
133° 313° 8 NM
10500 091° (6.5)
7775
DOLRR
10500 119° (5)
HAVWU
12200 185° (25)
(IAF) REMAE
9100 108° (5.1)
(IF) OKALE
8500 210° (3.8)
PAMUE
8000 210° (3.2)
(FAF) ATEMY
6338
6291±
6418
NATGE 2.5 NM to RW21
6404
RW21
7226
7036
(IAF) TANRE
9100 312° (10)
11100 139° (4.2)
MANCA
8427
8571
8307
8206
8984±
8700
8201
8491
9460
8463
8688
8451
8720
8068
7400
9979
8959
7088
MSA RW21 25 NM
14500

CAUTION: Highway lights located between FAF and runway are aligned with approach area.

ELEV 5918

210° to RW21

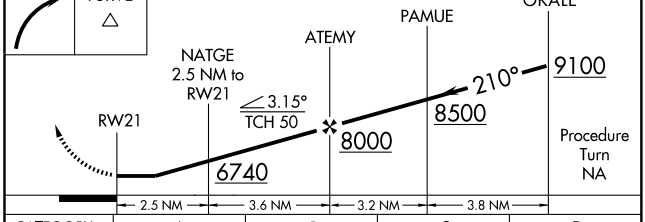
TDZE 5913

7205 X 100

REIL Rwy 3
REIL Rwy 21 L
MIRL Rwy 3-21 L

9800 YURVE

VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
LNAV MDA	6560-1 647 (700-1)		6560-1¾ 647 (700-1¾)	6560-2 647 (700-2)
CIRCLING	6560-1 642 (700-1)		6600-2 682 (700-2)	6800-3 882 (900-3)

SW-1, 22 OCT 2009 to 19 NOV 2009

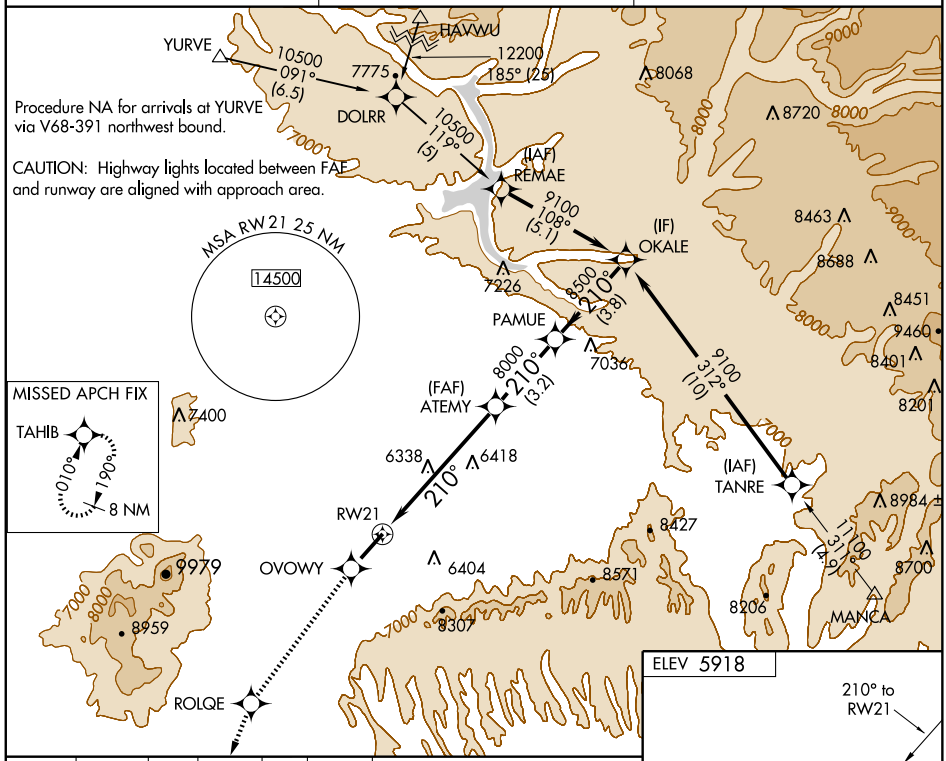
WAAS CH 99699 W21A	APP CRS 210°	Rwy Idg 7205 TDZE 5913 Apt Elev 5918

RNAV (GPS) Z RWY 21
CORTEZ MUNI (CEZ)

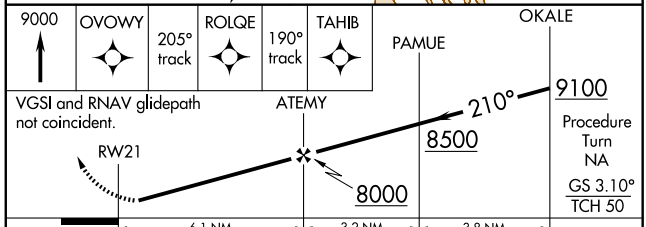
DME/DME RNP-0.3 NA.
When VGSI inoperative, procedure NA at night.

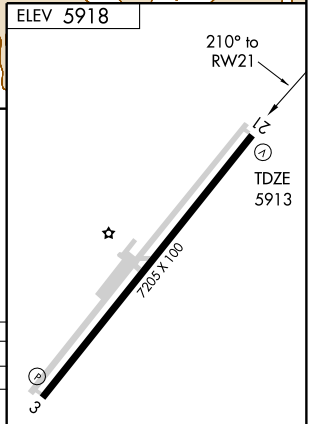
MISSED APPROACH: Climb to 9000 direct OVOWY and via 205° track to ROLQE and via 190° track to TAHIB and hold.

ASOS	DENVER CENTER	UNICOM
135.625	118.575 348.7	122.8 (CTAF) L



9000	OVOWY	205° track	ROLQE	190° track	TAHIB





CATEGORY	A	B	C	D
LPV DA	6215-1 302 (300-1)			
LNAV/VNAV DA	NA			
LNAV MDA	7140-1¼ 1227 (1300-1¼)	7140-1½ 1227 (1300-1½)	7140-3 1227 (1300-3)	
CIRCLING	7140-1¼ 1222 (1300-1¼)	7140-1½ 1222 (1300-1½)	7140-3 1222 (1300-3)	

REIL Rwy 3
REIL Rwy 21 L
MIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009

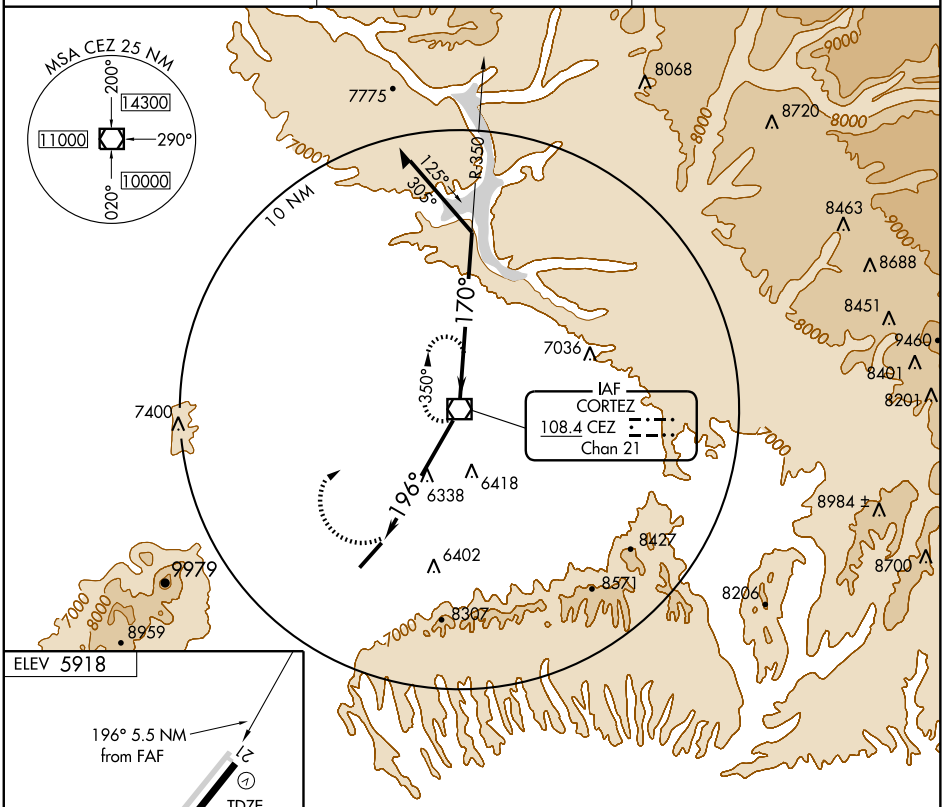
VOR/DME CEZ	APP CRS	Rwy Idg	7205
108.4	196°	TDZE	5913
Chan 21		Apt Elev	5918

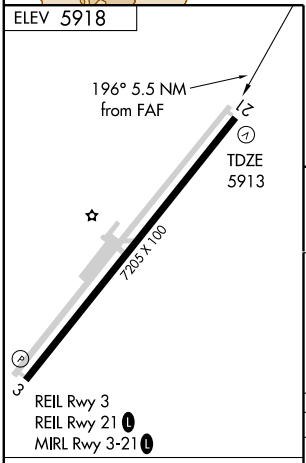
VOR RWY 21
CORTEZ MUNI (CEZ)

CAUTION: Highway lights located between facility and runway are aligned with approach area.

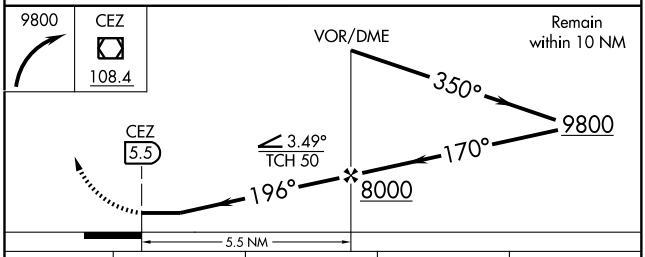
MISSED APPROACH: Climbing right turn to 9800 direct to CEZ VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
135.625	118.575 348.7	122.8 (CTAF) L





FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-21	6600-1 687 (700-1)		6600-2 687 (700-2)	6600-2¼ 687 (700-2¼)
CIRCLING	6600-1 682 (700-1)		6600-2 682 (700-2)	6800-3 882 (900-3)

SW-1, 22 OCT 2009 to 19 NOV 2009

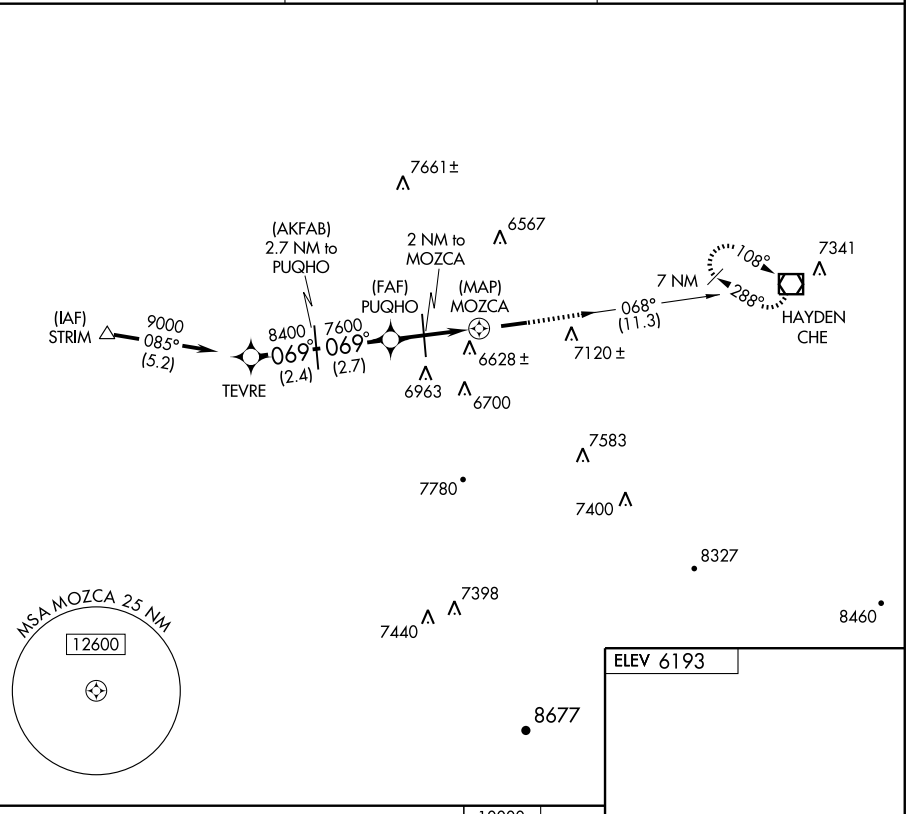
APP CRS	Rwy Idg	5600
069°	TDZE	6188
	Apt Elev	6193

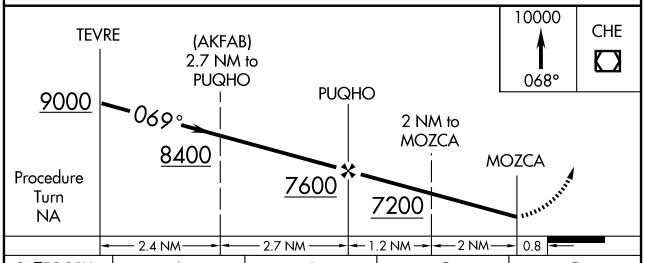
GPS RWY 7
CRAIG-MOFFAT (CAG)

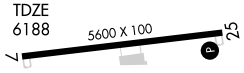
T
A NA

MISSED APPROACH: Climb to 10000 via 068° course to CHE VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
135.425	120.475 235.975	122.8 (CTAF) L







ELEV 6193

CATEGORY	A	B	C	D
S-7	6940-1 752 (800-1)	6940-1¼ 752 (800-1¼)	6940-2¼ 752 (800-2¼)	6940-2½ 752 (800-2½)
CIRCLING	7220-1¼ 1027 (1100-1¼)	7320-1½ 1127 (1200-1½)	7420-3 1227 (1300-3)	

REIL Rwys 7 and 25 L
MIRL Rwy 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

CRAIG, COLORADO AL-6338 (FAA)

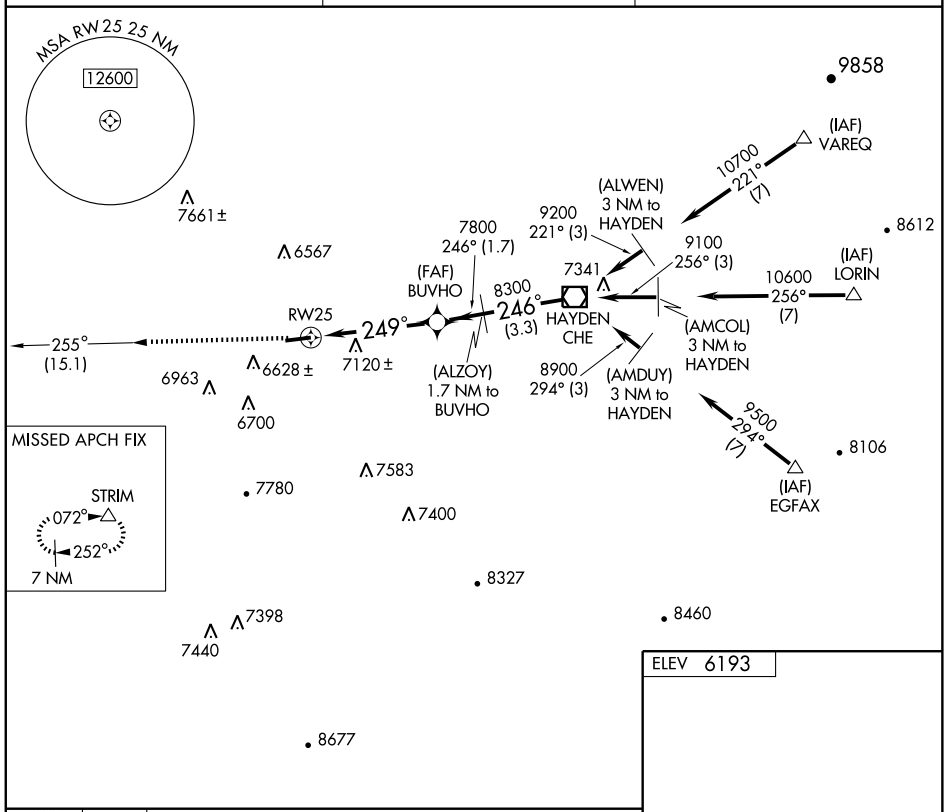
APP CRS	Rwy Idg	5600
249°	TDZE	6193
	Apt Elev	6193

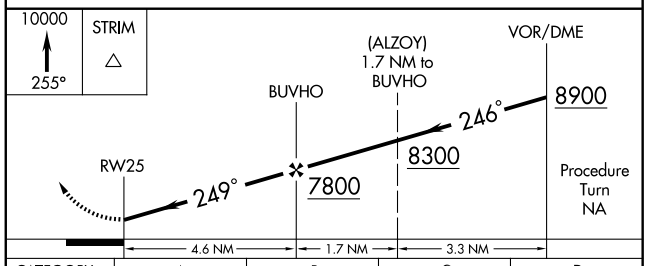
GPS RWY 25
CRAIG-MOFFAT (CAG)

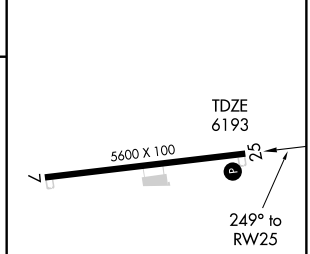
T
NA

MISSED APPROACH: Climb to 10000 via 255° course to STRIM WP and hold.

ASOS	DENVER CENTER	UNICOM
135.425	120.475 235.975	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-25	7380-1¼ 1187 (1200-1¼)	7380-1½ 1187 (1200-1½)	7380-3	1187 (1200-3)
CIRCLING	7380-1¼ 1187 (1200-1¼)	7380-1½ 1187 (1200-1½)	7420-3	1227 (1300-3)

REIL Rwys 7 and 25 L
MIRL Rwy 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

CRAIG, COLORADO

AL-6338 (FAA)

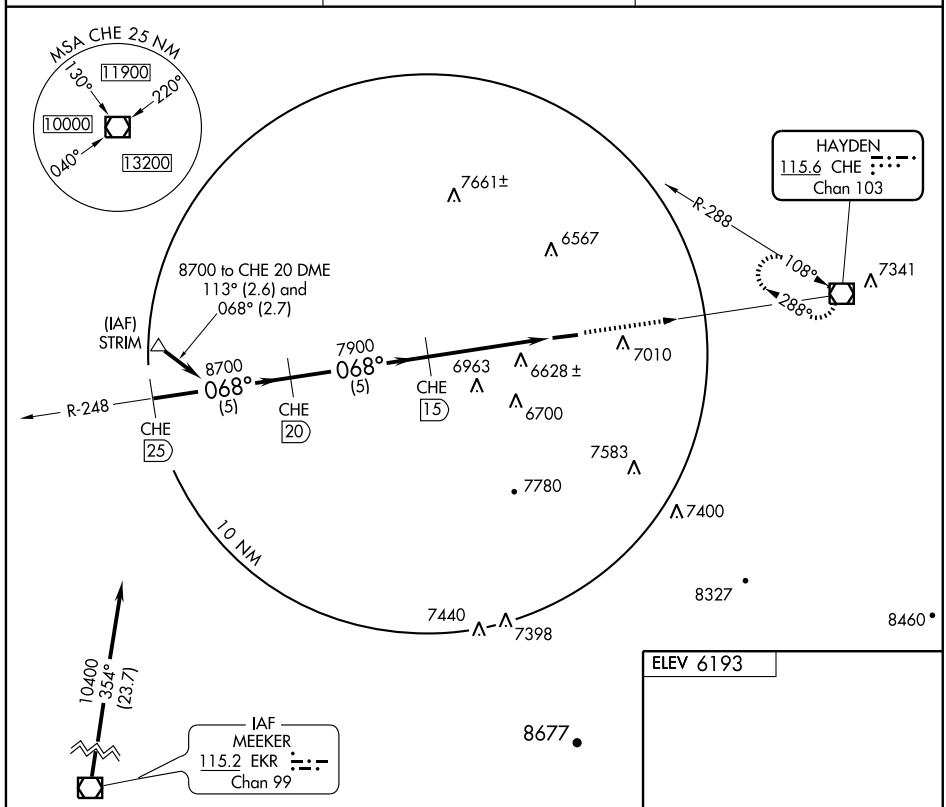
VOR/DME CHE	APP CRS	Rwy Idg	5600
115.6	068°	TDZE	6193
Chan 103		Apt Elev	6193

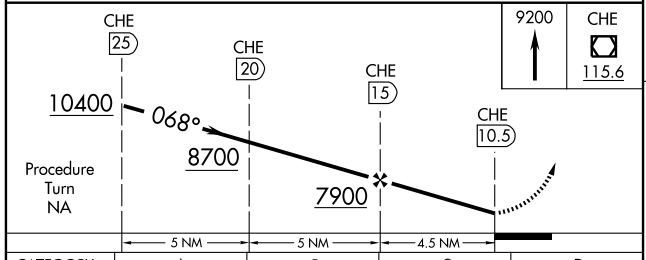
VOR/DME RWY 7

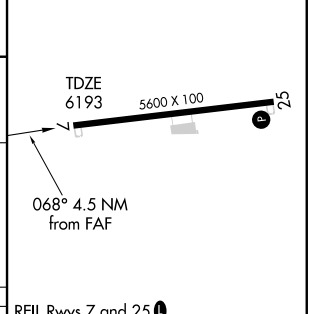
CRAIG-MOFFAT (CAG)

MISSED APPROACH: Climb to 9200 direct CHE VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
135.425	120.475 235.975	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-7	7220-1¼ 1027 (1100-1¼)	7220-1½ 1027 (1100-1½)	7220-3 1027 (1100-3)	
CIRCLING	7220-1¼ 1027 (1100-1¼)	7320-1½ 1127 (1200-1½)	7420-3 1227 (1300-3)	

REIL Rwys 7 and 25 L

MIRL Rwy 7-25 L

Knots	60	90	120	150	180
Min:Sec					

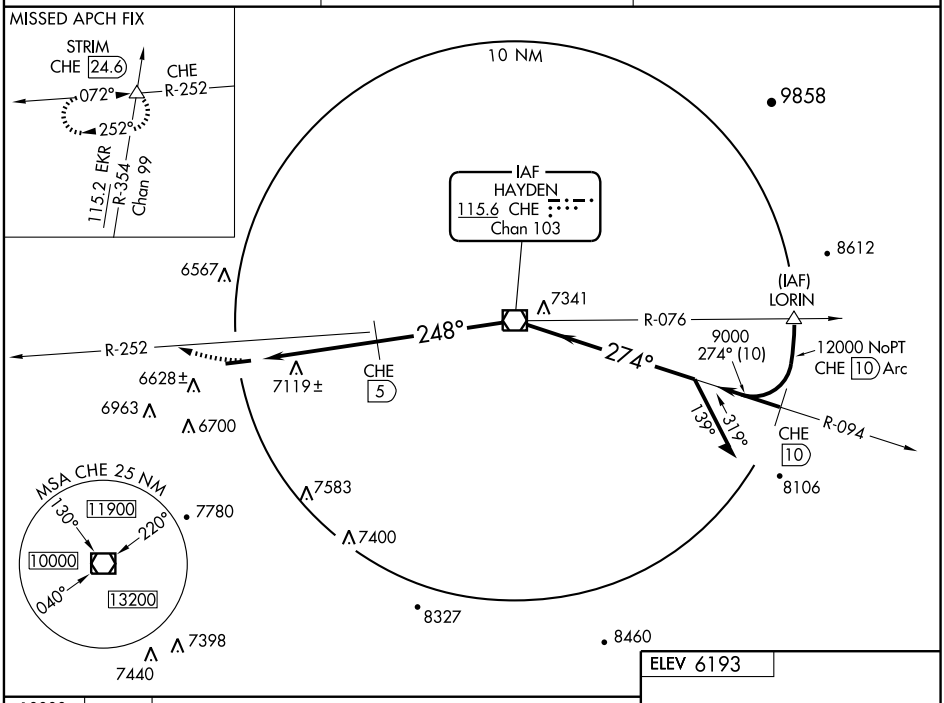
SW-1, 22 OCT 2009 to 19 NOV 2009

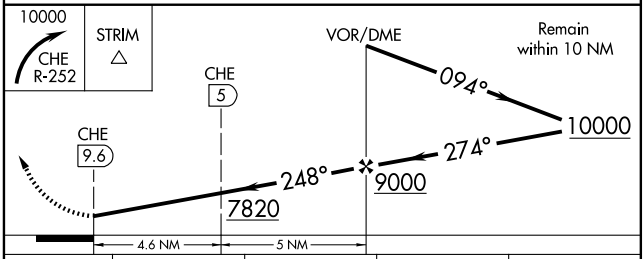
VOR/DME CHE 115.6 Chan 103	APP CRS 248°	Rwy Idg 5600 TDZE 6192 Apt Elev 6193

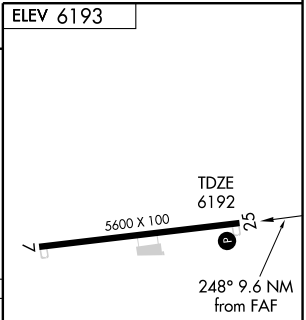
VOR RWY 25
CRAIG-MOFFAT (CAG)

MISSED APPROACH: Climbing right to 10000 via CHE R-252 to STRIM Int and hold.

ASOS	DENVER CENTER	UNICOM
135.425	120.475 235.975	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-25	7820-1¼ 1628 (1700-1¼)	7820-1½ 1628 (1700-1½)	7820-3	1628 (1700-3)
CIRCLING	7820-1¼ 1627 (1700-1¼)	7820-1½ 1627 (1700-1½)	7820-3	1627 (1700-3)
DME MINIMA				
S-25	7380-1¼ 1188 (1200-1¼)	7380-1½ 1188 (1200-1½)	7380-3	1188 (1200-3)
CIRCLING	7380-1¼ 1187 (1200-1¼)	7380-1½ 1187 (1200-1½)	7420-3	1227 (1300-3)

REIL Rwys 7 and 25 L
MIRL Rwy 7-25 L

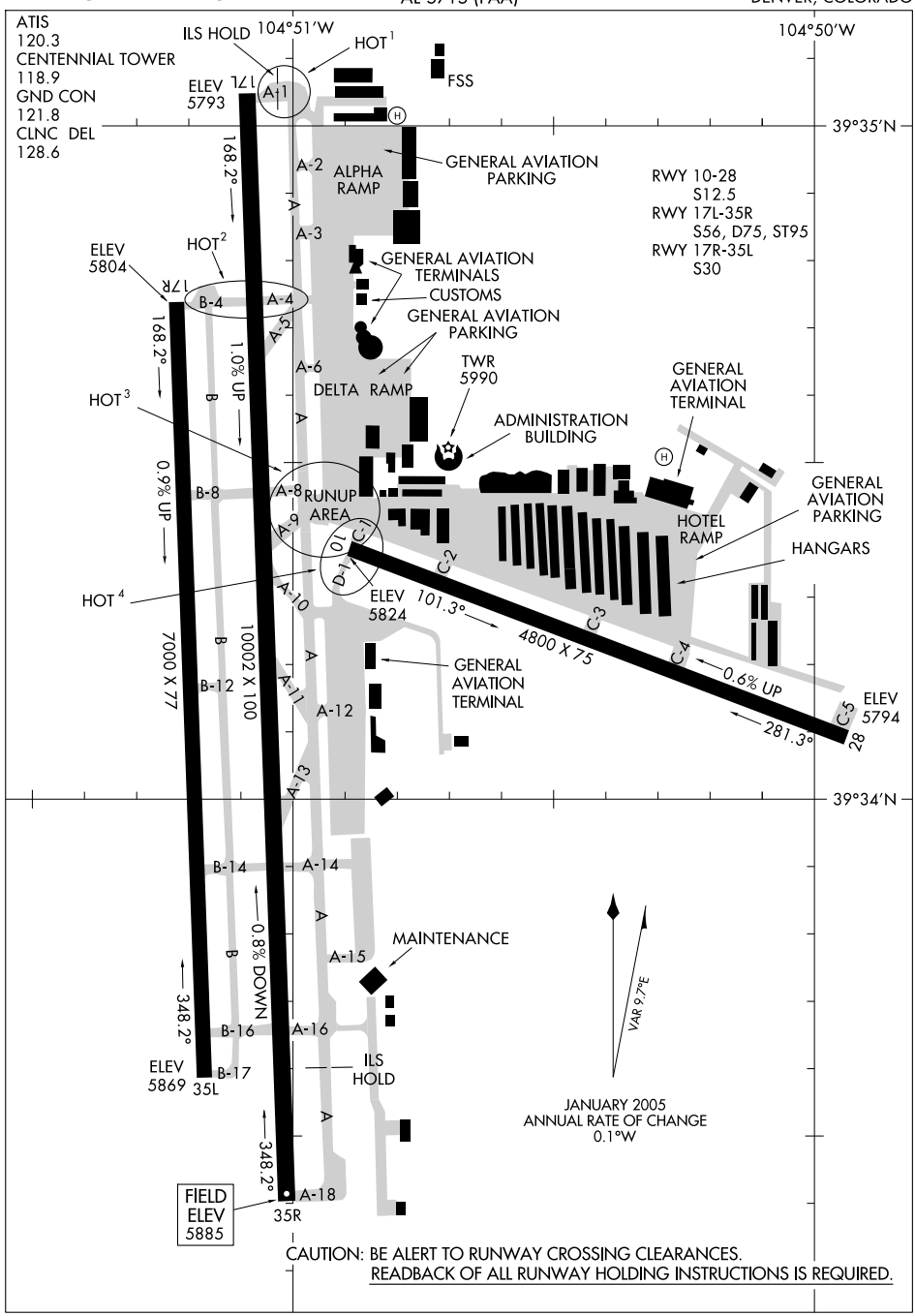
FAF to MAP 9.6 NM					
Knots	60	90	120	150	180
Min:Sec	9:36	6:24	4:48	3:50	3:12

SW-1, 22 OCT 2009 to 19 NOV 2009

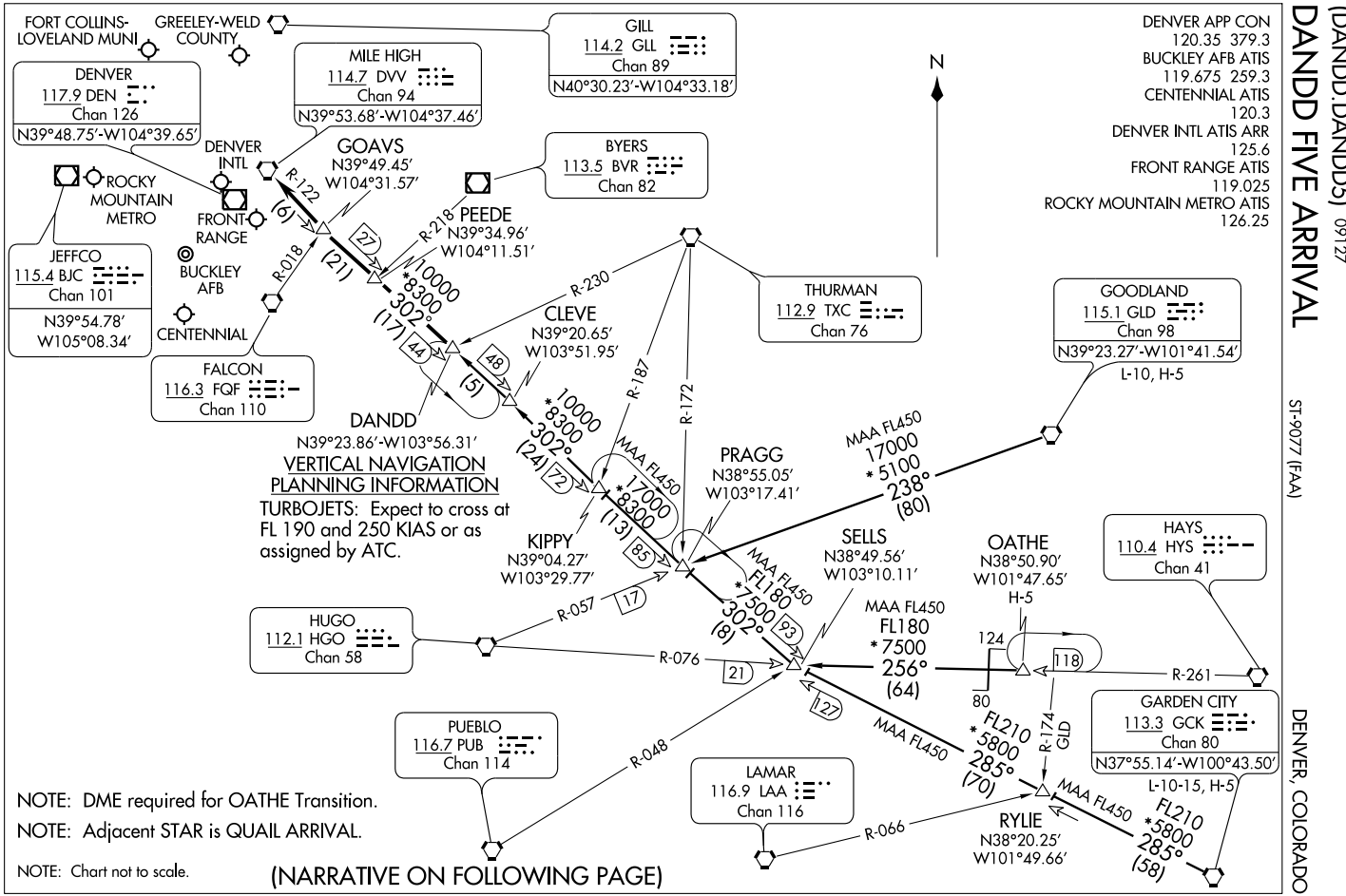
AIRPORT DIAGRAM

AL-5715 (FAA)

DENVER/ CENTENNIAL (APA)
DENVER, COLORADO



SW-1, 22 OCT 2009 to 19 NOV 2009


DANDD FIVE ARRIVAL
(DANDD.DANDD5) 09127
ST-9077 (FAA)
DENVER, COLORADO
DENVER APP CON
120.35 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
N
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
GILL
114.2 GLL
Chan 89
N40°30.23'-W104°33.18'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'-W104°37.46'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
DENVER INTL
GOAVS
N39°49.45'
W104°31.57'
BYERS
113.5 BVR
Chan 82
ROCKY MOUNTAIN METRO
FRONT RANGE
PEEDE
N39°34.96'
W104°11.51'
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
BUCKLEY AFB
CENTENNIAL
THURMAN
112.9 TXC
Chan 76
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
FALCON
116.3 FQF
Chan 110
CLEVE
N39°20.65'
W103°51.95'
DANDD
N39°23.86'-W103°56.31'
PRAGG
N38°55.05'
W103°17.41'
KIPPY
N39°04.27'
W103°29.77'
SELLS
N38°49.56'
W103°10.11'
OATHE
N38°50.90'
W101°47.65'
H-5
HAYS
110.4 HYS
Chan 41
HUGO
112.1 HGO
Chan 58
PUEBLO
116.7 PUB
Chan 114
LAMAR
116.9 LAA
Chan 116
RYLIE
N38°20.25'
W101°49.66'
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
R-122
(6)
R-218
(27)
(21)
R-018
10000
*8300
302°
(17)
44
48
(5)
R-230
R-187
R-172
10000
*8300
302°
(24)
72
MAA FL450
17000
*8300
(13)
85
MAA FL450
17000
*5100
238°
(80)
MAA FL450
FL180
*7500
302°
(8)
93
MAA FL450
FL180
*7500
256°
(64)
124
118
80
R-261
R-057
17
R-076
21
127
MAA FL450
FL210
*5800
285°
(70)
R-174
GLD
MAA FL450
FL210
*5800
285°
(58)
R-048
R-066
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at FL 190 and 250 KIAS or as assigned by ATC.
NOTE: DME required for OATHE Transition.
NOTE: Adjacent STAR is QUAIL ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

GARDEN CITY TRANSITION (GCK.DANDD5): From over GCK VORTAC via GCK R-285 and DVV R-122 to DANDD INT. Thence....

GOODLAND TRANSITION (GLD.DANDD5): From over GLD VORTAC via GLD R-238 and HGO R-057 to PRAGG INT; then via DVV R-122 to DANDD INT. Thence....

OATHE TRANSITION (OATHE.DANDD5): From over OATHE INT via HYS R-261 and HGO R-076 to SELLS INT; then via DVV R-122 to DANDD INT. Thence....

....From over DANDD INT via DVV R-122 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER FIVE DEPARTURE

DENVER/ CENTENNIAL (APA)
DENVER, COLORADO

ATIS 120.3
CLNC DEL
128.6
DENVER DEP CON
132.75 269.3

TAKE-OFF MINIMUMS

Rwy 10, 28, 35L, 35R: Standard.
Rwy 17L, 17R: 600-2 or standard with minimum climb of 240′ per NM to 6600′.

CHEYENNE
113.1 CYS
Chan 78
N41°12.66′ W104°46.37′
L-12, H-3-5

SIDNEY
115.9 SNY
Chan 106
N41°05.80′ W102°58.98′
L-10-12, H-5

LARAMIE
117.6 LAR
Chan 123
N41°20.27′-W105°43.26′
L-9-12, H-3-5

ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41′-W109°00.92′
L-11, H-3

GILL
114.2 GLL
Chan 89
N40°30.23′ W104°33.18′
L-10, H-5

KREMMLING
113.8 RLG
Chan 85
N40°00.16′ W106°26.55′
L-9-11, H-3-5

MILE HIGH
114.7 DVV
Chan 94
N39°53.68′ W104°37.46′
L-10, H-3-5

AKRON
114.4 AKO
Chan 91
N40°09.33′-W103°10.78′
L-10, H-5

THURMAN
112.9 TXC
Chan 76
N39°41.90′ W103°12.90′
L-10, H-5

HAYES CENTER
117.7 HCT
Chan 124
N40°27.24′-W100°55.42′
L-10, H-5

MEEKER
115.2 EKR
Chan 99
N40°04.05′-W107°55.49′
L-9-11, H-3

N

DENVER
117.9 DEN
Chan 126
N39°48.75′ W104°39.65′
L-10, H-3-5

FALCON
116.3 FQF
Chan 110
N39°41.41′ W104°37.26′
L-10, H-5

GOODLAND
115.1 GLD
Chan 98
N39°23.27′-W101°41.54′
L-10, H-5

GRAND JUNCTION
112.4 JNC
Chan 71
N39°03.57′-W108°47.55′
L-9, H-3

BLACK FOREST
112.5 BRK
Chan 72
N38°56.67′-W104°38.01′
L-10, H-3-5

HUGO
112.1 HGO
Chan 58
N38°49.05′-W103°37.28′
L-10, H-5

BLUE MESA
114.9 HBU
Chan 96
N38°27.13′-W107°02.39′
L-9, H-3

PUEBLO
116.7 PUB
Chan 114
N38°17.66′-W104°25.77′
L-10, H-5

GARDEN CITY
113.3 GCK
Chan 80
N37°55.15′-W100°43.51′
L-10-15, H-5

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DENVER FIVE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO AL-5715 (FAA)

LOC/DME I-APA	APP CRS	Rwy Idg 35R	10002	Rwy Idg 35L	7000
111.3	347°	TDZE	5885	TDZE	5869
Chan 50		Apt Elev	5885	Apt Elev	5885

ILS or LOC RWY 35R

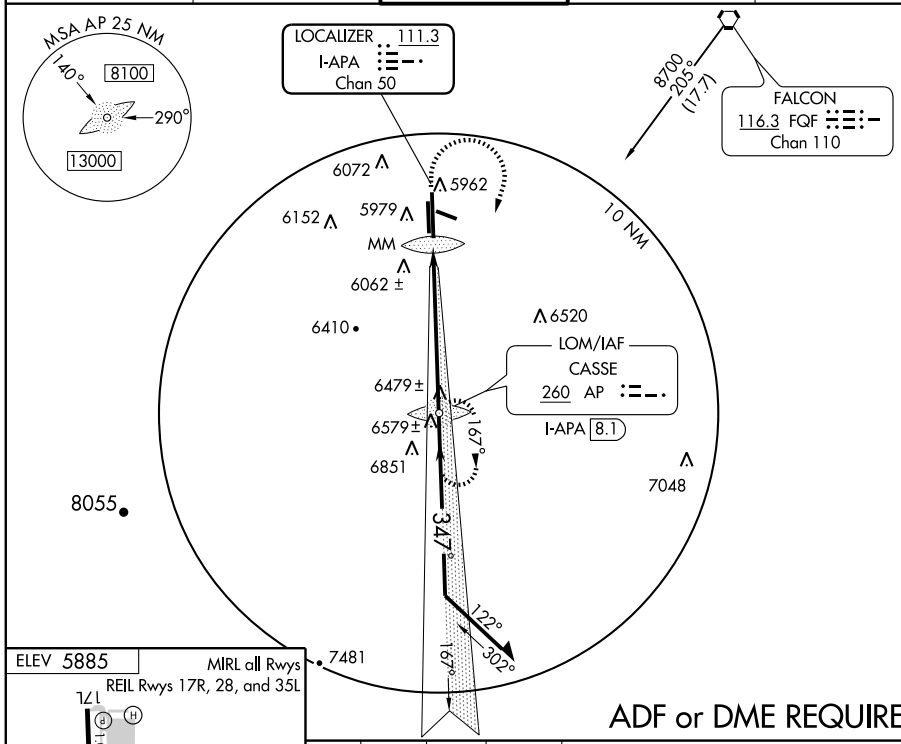
DENVER/ CENTENNIAL (APA)

For inoperative MALSR, increase S-LOC CAT A visibility to 1 mile.
Circling to Rwy 10 not authorized at night.
ADF required until established on localizer inbound, maintain 9000 until 13 DME.

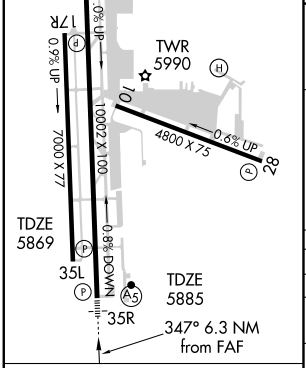
MALSR

MISSED APPROACH: Climb to 6900, then climbing right turn to 9000 to intercept I-APA South course to CASSE LOM/I-APA 8.1 DME and hold.

ATIS	DENVER APP CON	CENTENNIAL TOWER	GND CON	CLNC DEL
120.3	132.75 269.3	118.9	121.8	128.6

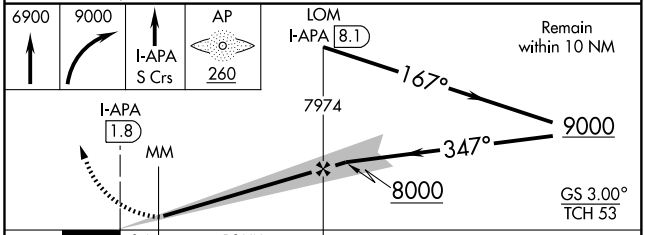


ADF or DME REQUIRED



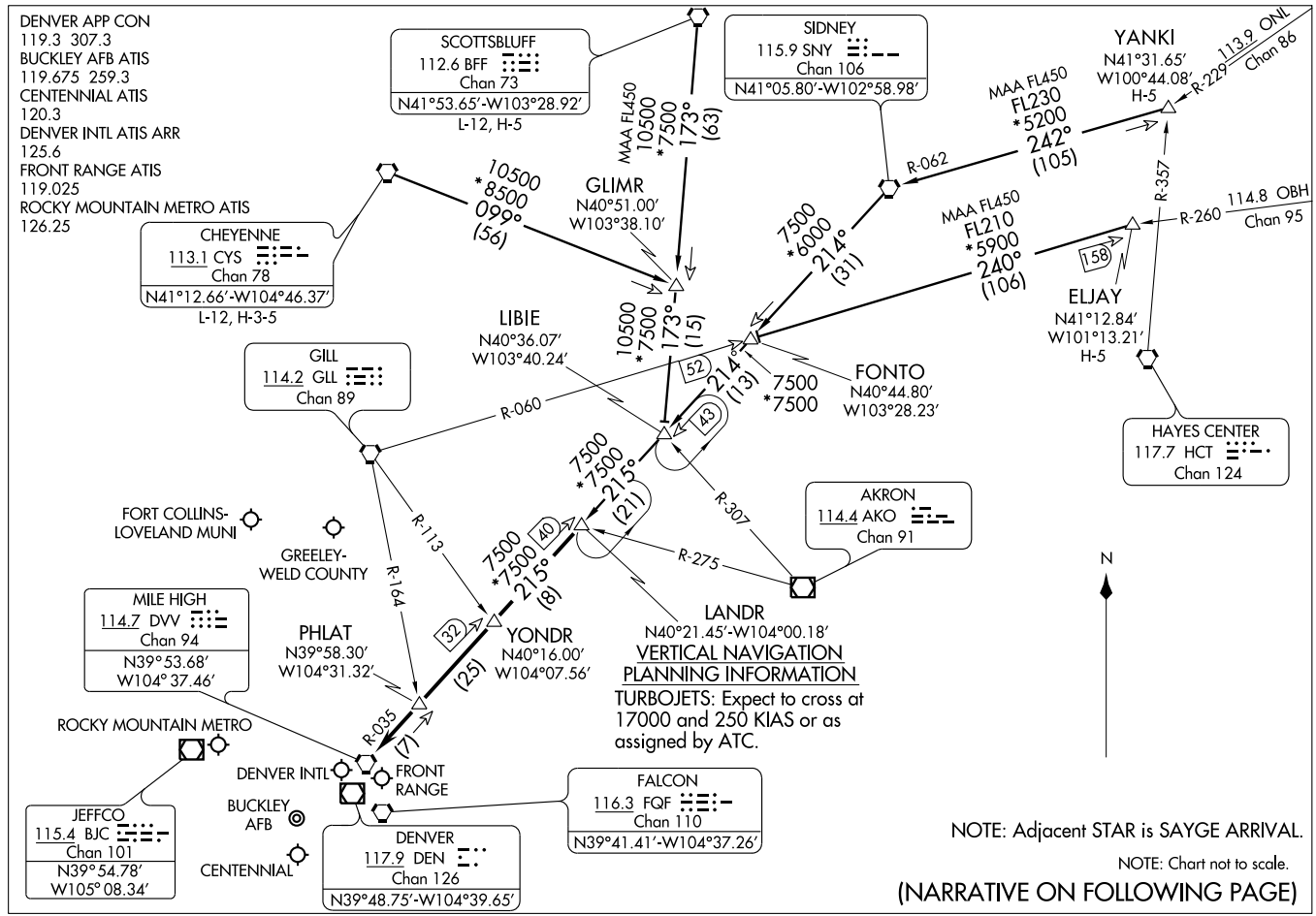
FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06



CATEGORY	A	B	C	D
S-ILS 35R	6085-½ 200 (200-½)			
S-LOC 35R	6760-¾ 875 (900-¾)		6760-2 875 (900-2)	6760-2¼ 875 (900-2¼)
SIDESTEP RWY 35L	6760-1¼ 891 (900-1¼)		6760-2¾ 891 (900-2¾)	6760-3 891 (900-3)
CIRCLING	6760-1 875 (900-1)	6760-1¼ 875 (900-1¼)	6760-2½ 875 (900-2½)	6760-2¾ 875 (900-2¾)

SW-1, 22 OCT 2009 to 19 NOV 2009



LANDR FIVE ARRIVAL

(LANDR.LANDR5) 07298

ST-9077 (FAA)

DENVER, COLORADO

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.LANDR5): From over CYS VORTAC via CYS R-099 and BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

ELJAY TRANSITION (ELJAY.LANDR5): From over ELJAY INT via GLL R-060 to FONTO INT, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

SCOTTSBLUFF TRANSITION (BFF.LANDR5): From over BFF VORTAC via BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

YANKI TRANSITION (YANKI.LANDR5): From over YANKI INT via SNY R-062 to SNY VORTAC, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

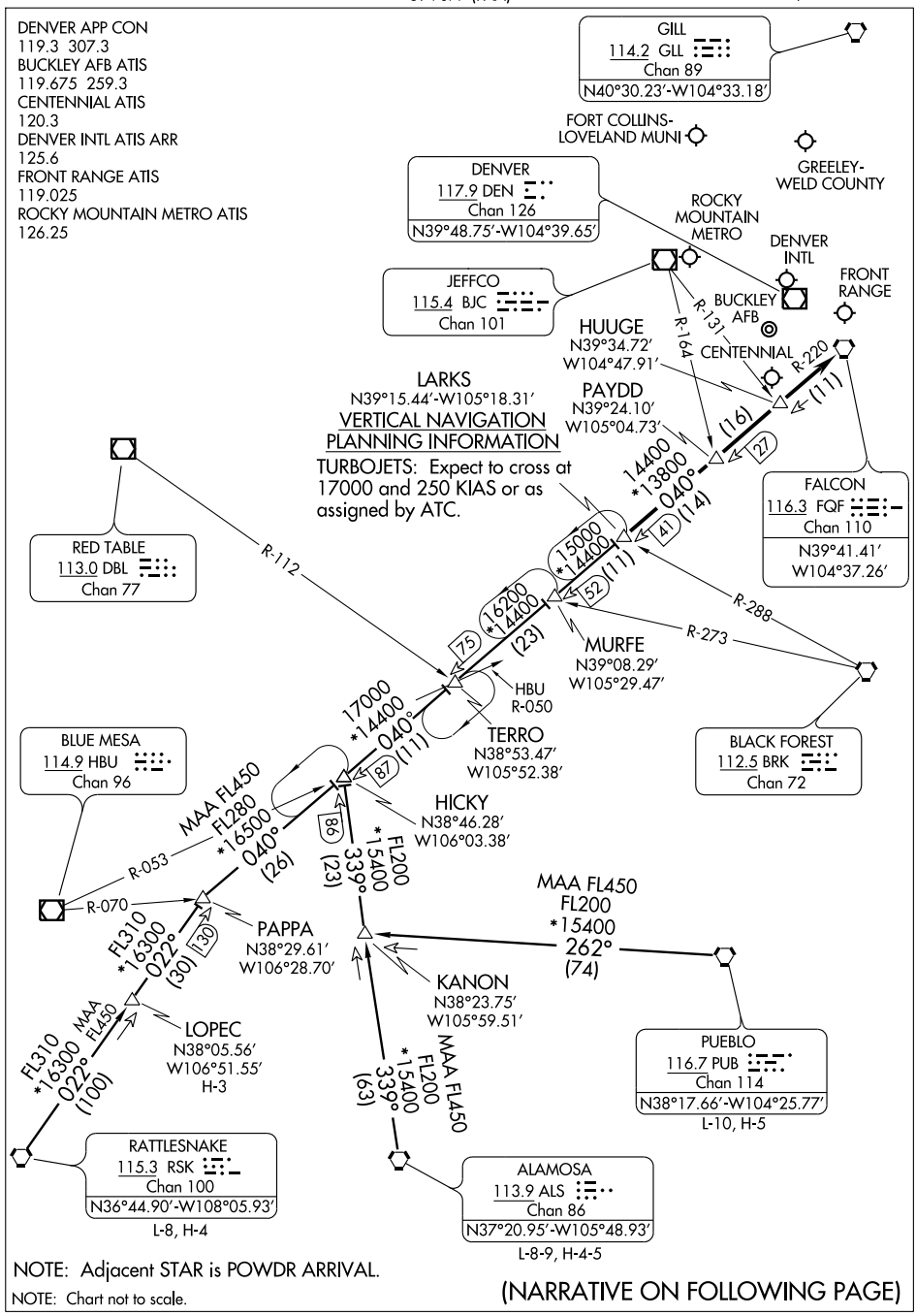
....From over LANDR INT via DVV R-035 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is POWDR ARRIVAL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ARRIVAL DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS6): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS6): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS6): From over PUB VORTAC via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS6): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOM AP	APP CRS	Rwy Idg	10002
260	347°	TDZE	5885
		Apt Elev	5885

NDB RWY 35R

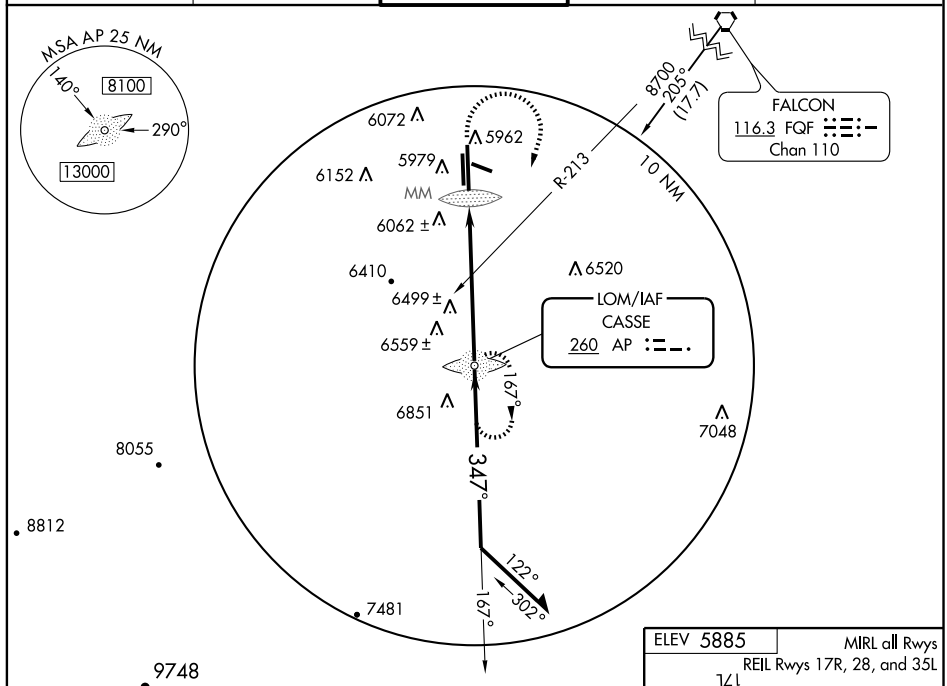
DENVER/ CENTENNIAL (APA)

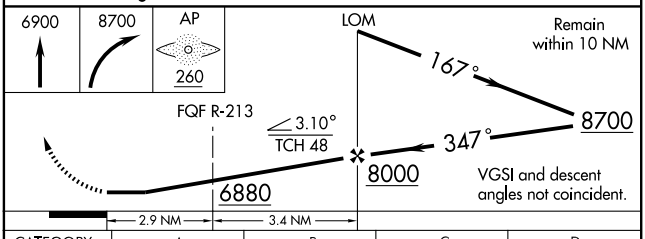
T A * For inoperative MALSR, increase S-35R Cat A visibility to 1¼, increase S-35R Cat B visibility to 1½.
For inoperative MALSR, increase S-35R Cat A, B visibility to 1¼. Circling to Rwy 10 not authorized at night.

MALSR (A5)

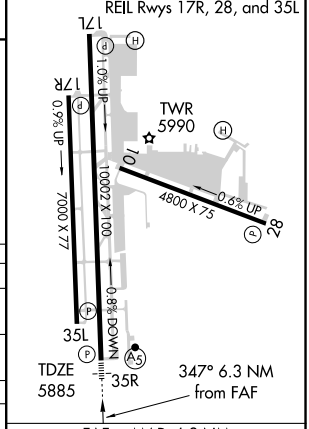
MISSED APPROACH: Climb to 6900, then climbing right turn to 8700 direct AP LOM and hold.

ATIS	DENVER APP CON	CENTENNIAL TOWER	GND CON	CLNC DEL
120.3	132.75 269.3	118.9	121.8	128.6





CATEGORY	A	B	C	D
S-35R *	6880-¾ 995 (1000-¾)	6880-1 995 (1000-1)	6880-2½ 995 (1000-2½)	6880-2¾ 995 (1000-2¾)
CIRCLING	6880-1¼ 995 (1000-1¼)	6880-1½ 995 (1000-1½)	6880-3 995 (1000-3)	
VOR MINIMUMS				
S-35R #	6780-¾ 895 (900-¾)		6780-2¼ 895 (900-2¼)	6780-2¾ 895 (900-2¾)
CIRCLING	6780-1¼ 895 (900-1¼)		6780-2¾ 895 (900-2¾)	6780-3 895 (900-3)



FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

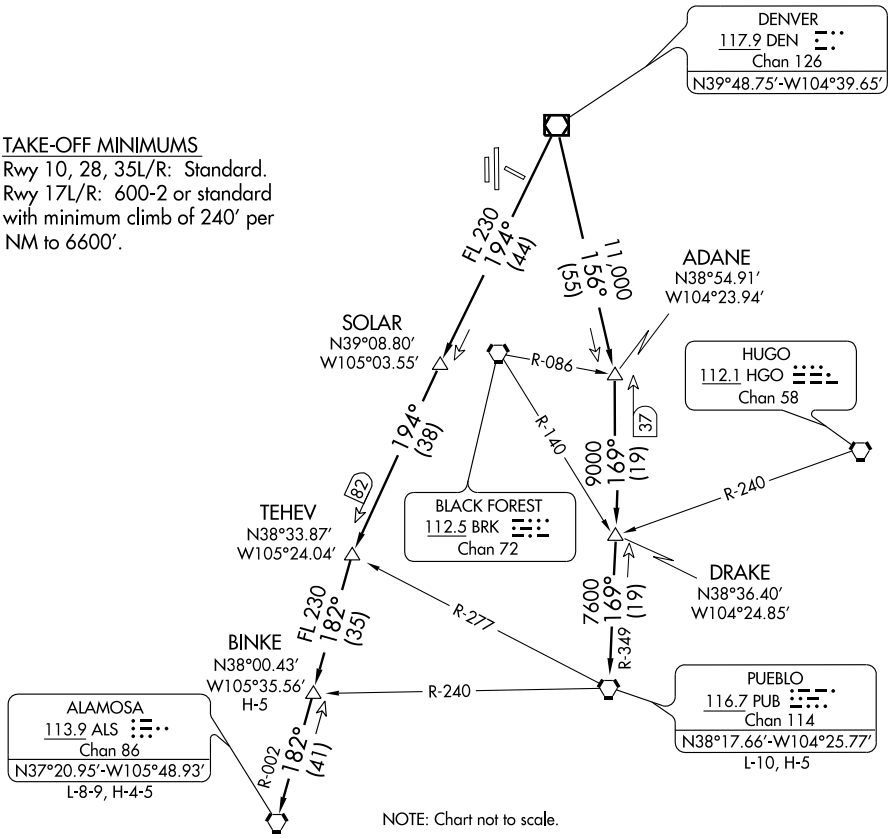
SW-1, 22 OCT 2009 to 19 NOV 2009

PIKES FOUR DEPARTURE

SL-5715 (FAA)

ATIS 120.3
CLNC DEL
128.6
DENVER DEP CON
132.75 269.3

TAKE-OFF MINIMUMS
Rwy 10, 28, 35L/R: Standard.
Rwy 17L/R: 600-2 or standard with minimum climb of 240′ per NM to 6600′.



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

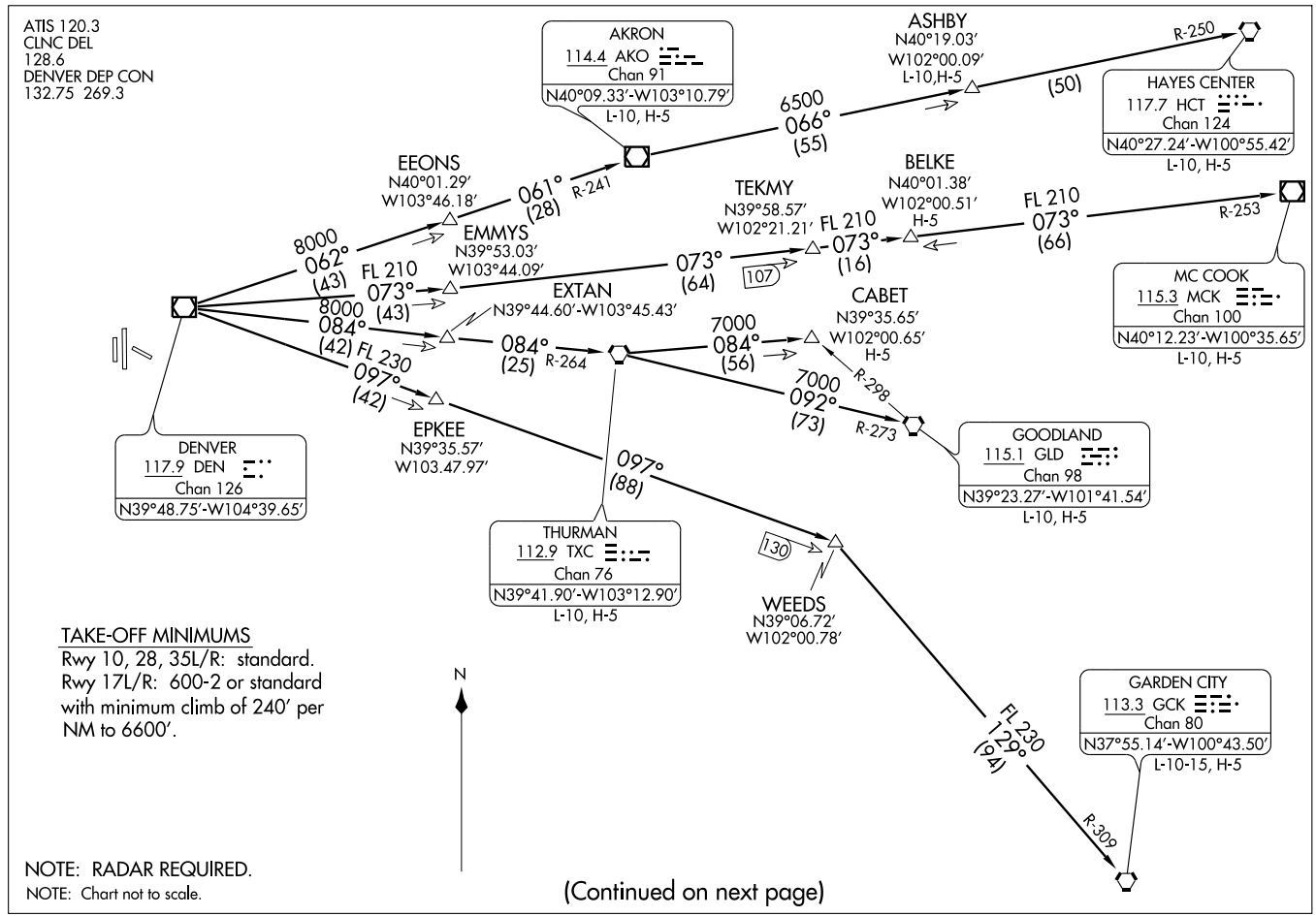
LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

ALAMOSA TRANSITION (PIKES4.ALS): From over DEN VOR/DME via DEN R-194 and ALS R-002 to ALS VORTAC.

BINKE TRANSITION (PIKES4.BINKE): From over DEN VOR/DME via DEN R-194 and ALS R-002 to BINKE INT.

PUEBLO TRANSITION (PIKES4.PUB): From over DEN VOR/DME via DEN R-156 and PUB R-349 to PUB VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


ATIS 120.3
CLNC DEL
128.6
DENVER DEP CON
132.75 269.3
AKRON
114.4 AKO
Chan 91
N40°09.33'-W103°10.79'
L-10, H-5
ASHBY
N40°19.03'
W102°00.09'
L-10,H-5
R-250
(50)
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
6500
066°
(55)
EEONS
N40°01.29'
W103°46.18'
061°
(28)
R-241
BELKE
N40°01.38'
W102°00.51'
H-5
TEKMY
N39°58.57'
W102°21.21'
FL 210
073°
(16)
FL 210
073°
(66)
R-253
MC COOK
115.3 MCK
Chan 100
N40°12.23'-W100°35.65'
L-10, H-5
8000
062°
(43)
EMMYS
N39°53.03'
W103°44.09'
FL 210
073°
(43)
073°
(64)
107
EXTAN
N39°44.60'-W103°45.43'
8000
084°
(42)
FL 230
097°
(42)
084°
(25)
R-264
7000
084°
(56)
CABET
N39°35.65'
W102°00.65'
H-5
R-298
7000
092°
(73)
R-273
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
EPKEE
N39°35.57'
W103.47.97'
097°
(88)
THURMAN
112.9 TXC
Chan 76
N39°41.90'-W103°12.90'
L-10, H-5
130
WEEDS
N39°06.72'
W102°00.78'
FL 230
129°
(94)
R-309
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
TAKE-OFF MINIMUMS
Rwy 10, 28, 35L/R: standard.
Rwy 17L/R: 600-2 or standard with minimum climb of 240' per NM to 6600'.
N
NOTE: RADAR REQUIRED.
NOTE: Chart not to scale.
(Continued on next page)

PLAINS FOUR DEPARTURE SL-5715 (FAA)

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

AKRON TRANSITION (PLAIN4.AKO): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME.

ASHBY TRANSITION (PLAIN4.ASHBY): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to ASHBY INT.

BELKE TRANSITION (PLAIN4.BELKE): From over DEN VOR/DME via DEN R-073 and MCK R-253 to BELKE INT.

CABET TRANSITION (PLAIN4.CABET): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-084 to CABET INT.

GARDEN CITY TRANSITION (PLAIN4.GCK): From over DEN VOR/DME via DEN R-097 and GCK R-309 to GCK VORTAC.

GOODLAND TRANSITION (PLAIN4.GLD): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-092 and GLD R-273 to GLD VORTAC.

HAYES CENTER TRANSITION (PLAIN4.HCT): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to HCT VORTAC.

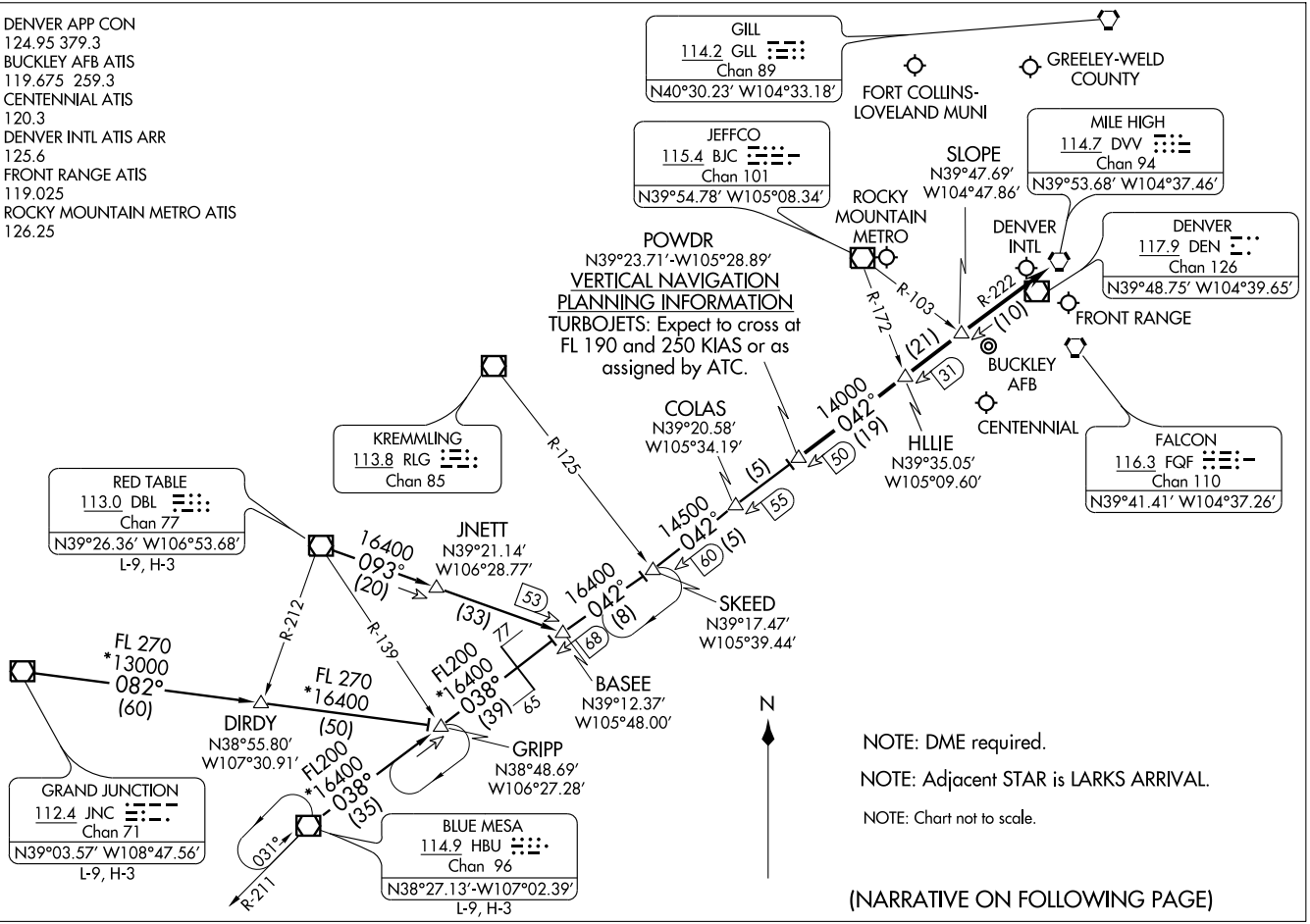
MCCOOK TRANSITION (PLAIN4.MCK): From over DEN VOR/DME via DEN R-073 and MCK R-253 to MCK VOR/DME.

THURMAN TRANSITION (PLAIN4.TXC): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC.

WEEDS TRANSITION (PLAIN4.WEEDS): From over DEN VOR/DME via DEN R-097 to WEEDS INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER APP CON
124.95 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25



POWDR SEVEN ARRIVAL

ARRIVAL DESCRIPTION

BLUE MESA TRANSITION (HBU.POWDR7): From over HBU VOR/DME via HBU R-038 and DVV R-222 to POWDR INT. Thence....

GRAND JUNCTION TRANSITION (JNC.POWDR7): From over JNC VORTAC via JNC R-082 to GRIPP INT; then via HBU R-038 and DVV R-222 to POWDR INT. Thence....

RED TABLE TRANSITION (DBL.POWDR7): From over DBL VOR/DME via DBL R-093 and DVV R-222 to POWDR INT. Thence....

....from over POWDR INT via DVV VORTAC R-222 to HLLIE, then via DVV VORTAC R-222 to SLOPE, then via DVV VORTAC R-222 to DVV. Expect radar vectors to the final approach course at or before DVV VORTAC.

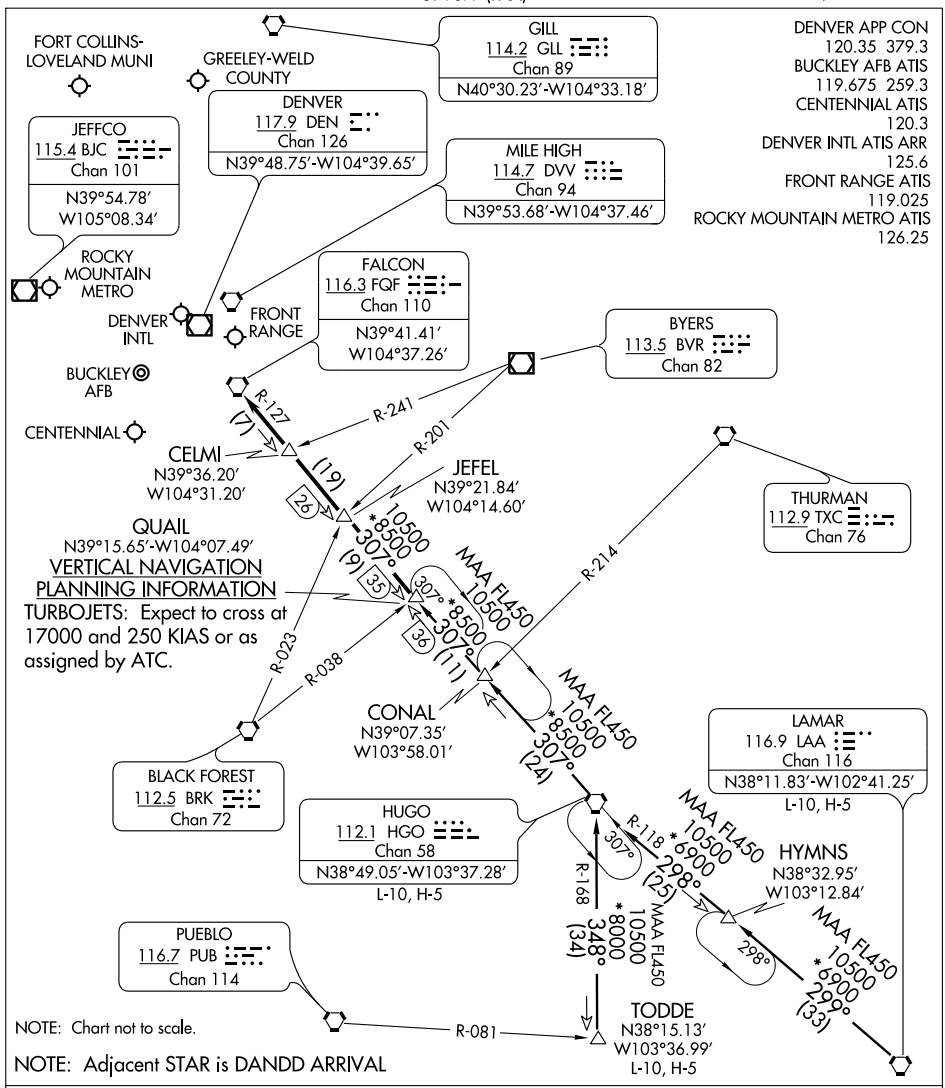
SW-1, 22 OCT 2009 to 19 NOV 2009

(QUAIL.QUAIL6) 09127

QUAIL SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is DANDD ARRIVAL

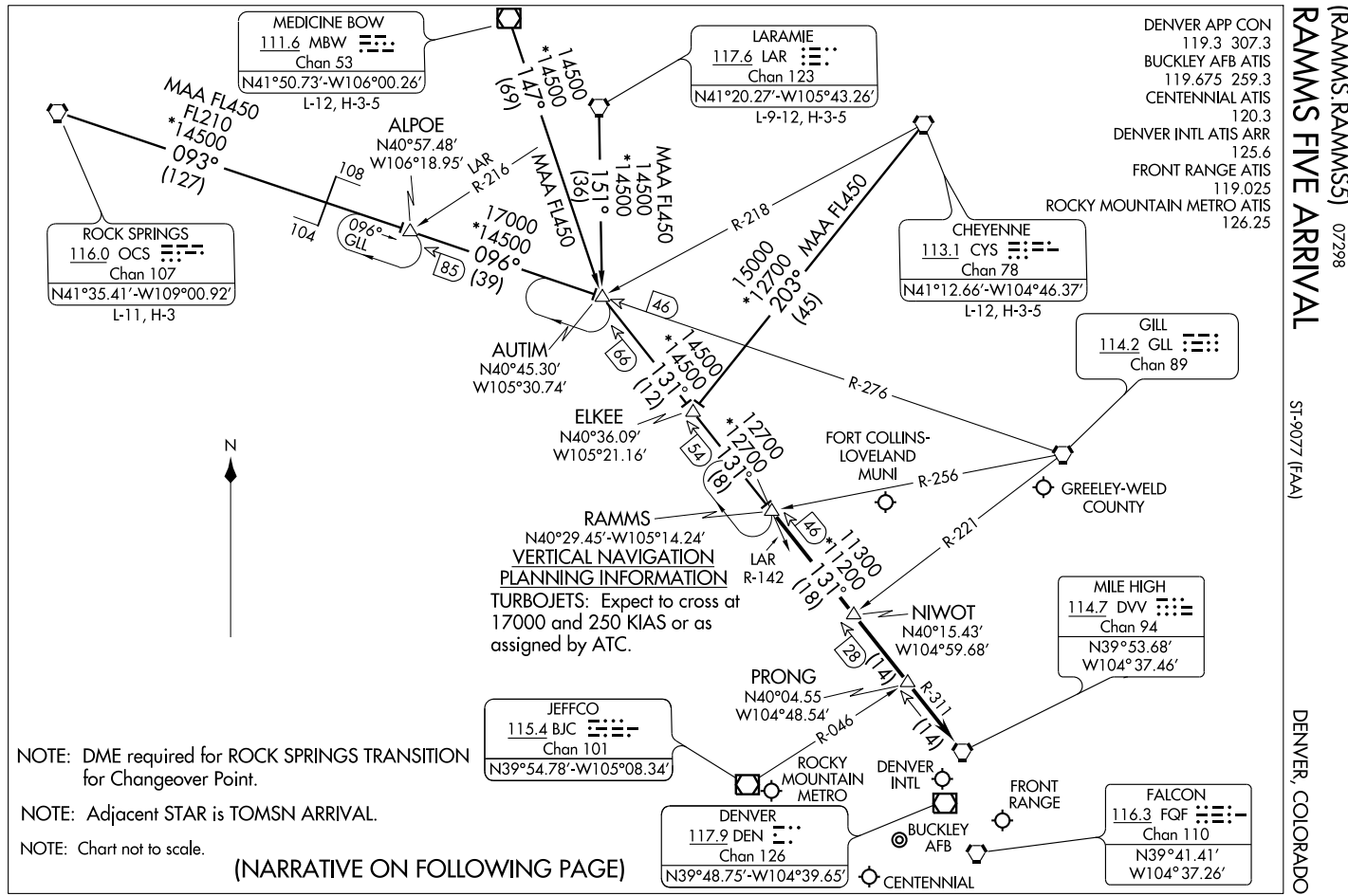
HUGO TRANSITION (HGO.QUAIL6): From over HGO VORTAC via HGO R-307 to CONAL INT; then via 306° course to QUAIL INT. Thence....

LAMAR TRANSITION (LAA.QUAIL6): From over LAA VORTAC via LAA R-299 to HYMNS INT; then via 298° course to HGO VORTAC; then via HGO R-307 to CONAL INT then via 306° course to to QUAIL INT. Thence....

TODDE TRANSITION (TODDE.QUAIL6): From over TODDE INT via HGO R-168 to HGO VORTAC; then via HGO R-307 to QUAIL INT. Thence....

....From over QUAIL INT via HGO R-307 and FQF R-127 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


RAMMS FIVE ARRIVAL (RAMMS.RAMMS5) 07298
DENVER, COLORADO
ST-9077 (FAA)
DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
MEDICINE BOW
111.6 MBW
Chan 53
N41°50.73'-W106°00.26'
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27'-W105°43.26'
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41'-W109°00.92'
L-11, H-3
CHEYENNE
113.1 CYS
Chan 78
N41°12.66'-W104°46.37'
L-12, H-3-5
GILL
114.2 GLL
Chan 89
JEFFCO
115.4 BJC
Chan 101
N39°54.78'-W105°08.34'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'
W104°37.46'
FALCON
116.3 FQF
Chan 110
N39°41.41'
W104°37.26'
ALPOE
N40°57.48'
W106°18.95'
AUTIM
N40°45.30'
W105°30.74'
ELKEE
N40°36.09'
W105°21.16'
RAMMS
N40°29.45'-W105°14.24'
NIWOT
N40°15.43'
W104°59.68'
PRONG
N40°04.55
W104°48.54'
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
ROCKY MOUNTAIN METRO
DENVER INTL
FRONT RANGE
BUCKLEY AFB
CENTENNIAL
MAA FL450
FL210
*14500
093°
(127)
147°
(69)
*14500
14500
151°
(36)
14500
*14500
MAA FL450
R-218
MAA FL450
15000
*12700
203°
(45)
108
104
LAR
R-216
096°
GLL
17000
*14500
096°
(39)
85
46
66
14500
*14500
131°
(12)
R-276
54
12700
*12700
131°
(8)
R-256
R-221
46
11300
*11200
131°
(18)
LAR
R-142
28
(14)
R-311
(14)
R-046
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at 17000 and 250 KIAS or as assigned by ATC.
NOTE: DME required for ROCK SPRINGS TRANSITION for Changeover Point.
NOTE: Adjacent STAR is TOMSN ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
N

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.RAMMS5): From over CYS VORTAC via CYS R-203 and DVV R-311 to RAMMS INT. Thence....

LARAMIE TRANSITION (LAR.RAMMS5): From over LAR VORTAC via LAR R-151 and DVV R-311 to RAMMS INT. Thence....

MEDICINE BOW TRANSITION (MBW.RAMMS5): From over MBW VOR/DME via MBW R-147 and DVV R-311 to RAMMS INT. Thence....

ROCK SPRINGS TRANSITION (OCS.RAMMS5): From over OCS VORTAC via OCS R-093 and GLL R-276 to AUTIM INT, then via DVV R-311 to RAMMS INT. Thence....

....From over RAMMS INT via DVV R-311 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	4800
CH 82107	280°	TDZE	5813
W28A		Apt Elev	5885

RNAV (GPS) RWY 28

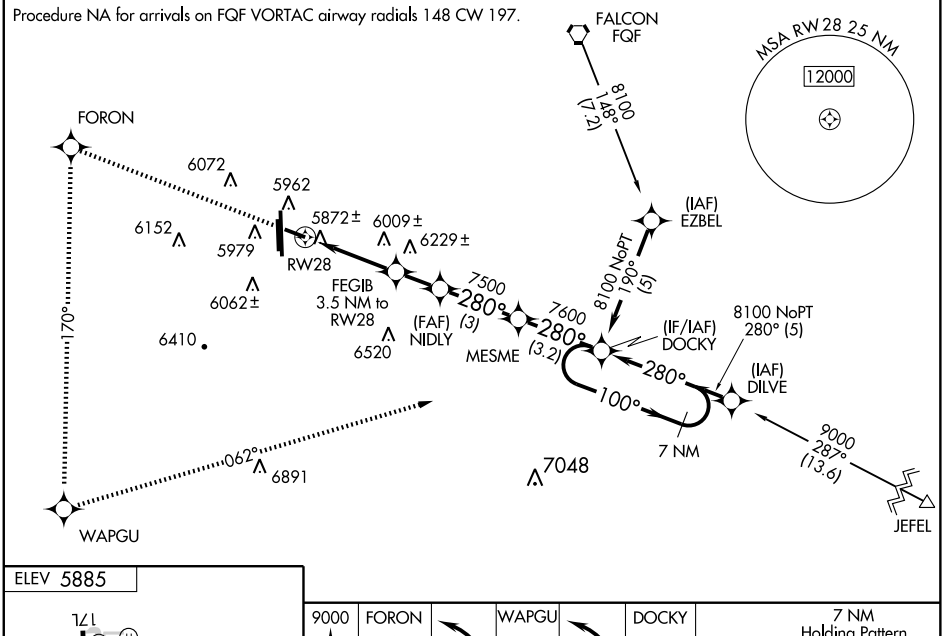
DENVER/ CENTENNIAL (APA)

When local altimeter setting not received, use Denver Intl altimeter setting and increase all DA 108 feet and all MDA 120 feet; increase LPV all Cats visibility ¼ mile, increase LNAV/VNAV all Cats visibility ½ mile, LNAV Cats C/D visibility ¼ mile and circling Cat C visibility ½ mile, and Cat D visibility ¼ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 37°C (98°F). VDP and Baro VNAV NA when using Denver Intl altimeter setting. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

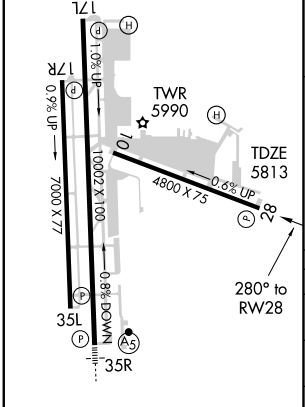
MISSED APPROACH: Climb to 9000 direct FORON and left turn via 170° track to WAPGU and left turn via 062° track to DOCKY and hold.

ATIS	DENVER APP CON	CENTENNIAL TOWER	GND CON	CLNC DEL
120.3	132.75 269.3	118.9	121.8	128.6

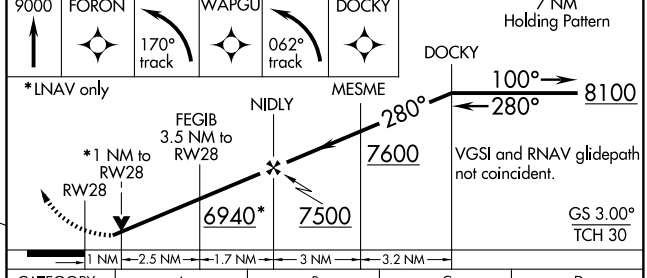
Procedure NA for arrivals on FQF VORTAC airway radials 148 CW 197.



ELEV 5885



MIRL all Rwys
REIL Rwys 17R, 28, and 35L



CATEGORY	A	B	C	D
LPV DA	6104-1¼ 291 (300-1¼)			
LNAV/ VNAV DA	6152-1¼ 339 (300-1¼)			
LNAV MDA	6260-1 447 (400-1)		6260-1¼ 447 (400-1¼)	6260-1½ 447 (400-1½)
CIRCLING	6440-1 555 (600-1)		6440-1½ 555 (600-1½)	6560-2¼ 675 (700-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10002
CH 93508	347°	TDZE	5885
W35A		Apt Elev	5885

RNAV (GPS) RWY 35R

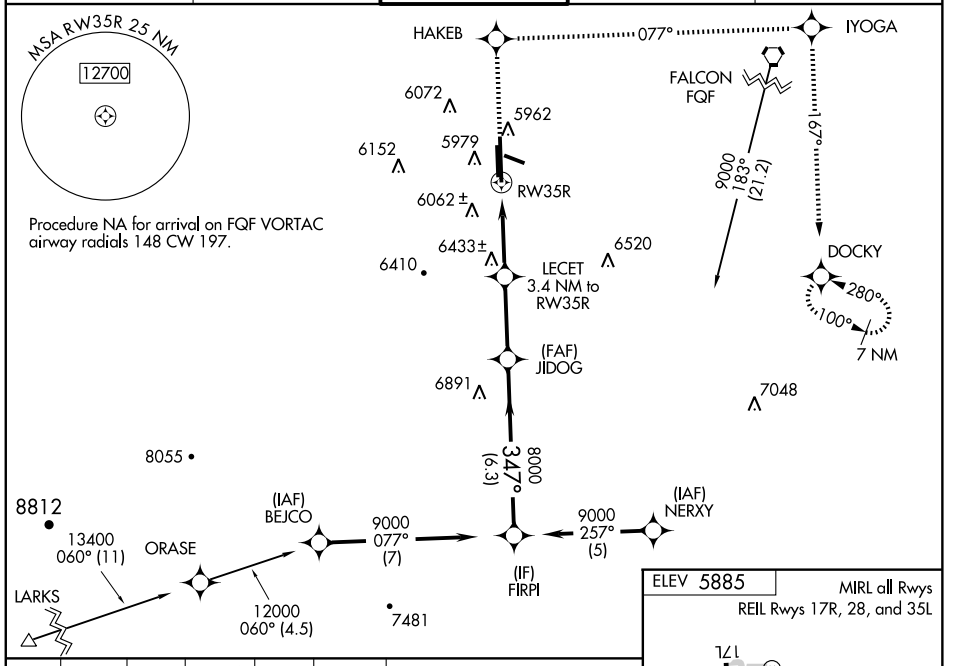
DENVER/ CENTENNIAL (APA)

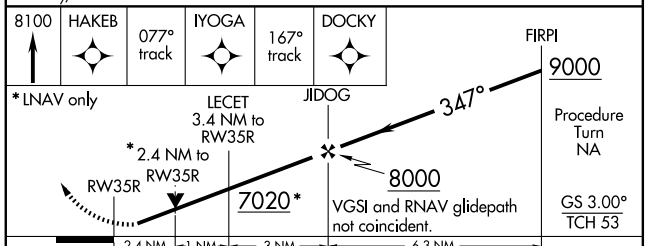
When local altimeter setting not received, use Denver Intl altimeter setting and increase all DA 108 feet and all MDA 120 feet; increase LNAV Cat C/D visibility ¼ mile and circling Cats A/C/D visibility ¼ mile. For inoperative MALSR increase LPV all Cats visibility to 1¼ mile. For inoperative MALSR increase LNAV Cat A visibility to 1. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 37°C (98°F). Inoperative table does not apply to LPV and LNAV/VNAV. Visibility reduction by helicopters NA.
VDP and Baro-VNAV NA when using Denver Intl altimeter setting.
Circling to Rwy 10 NA at night. DME/DME RNP-0.3 NA.

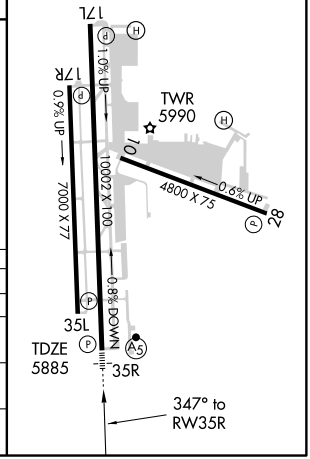
MALSR

MISSED APPROACH: Climb to 8100 direct HAKEB and via 077° track to IYOGA and via 167° track to DOCKY and hold.

ATIS	DENVER APP CON	CENTENNIAL TOWER	GND CON	CLNC DEL
120.3	132.75 269.3	118.9	121.8	128.6





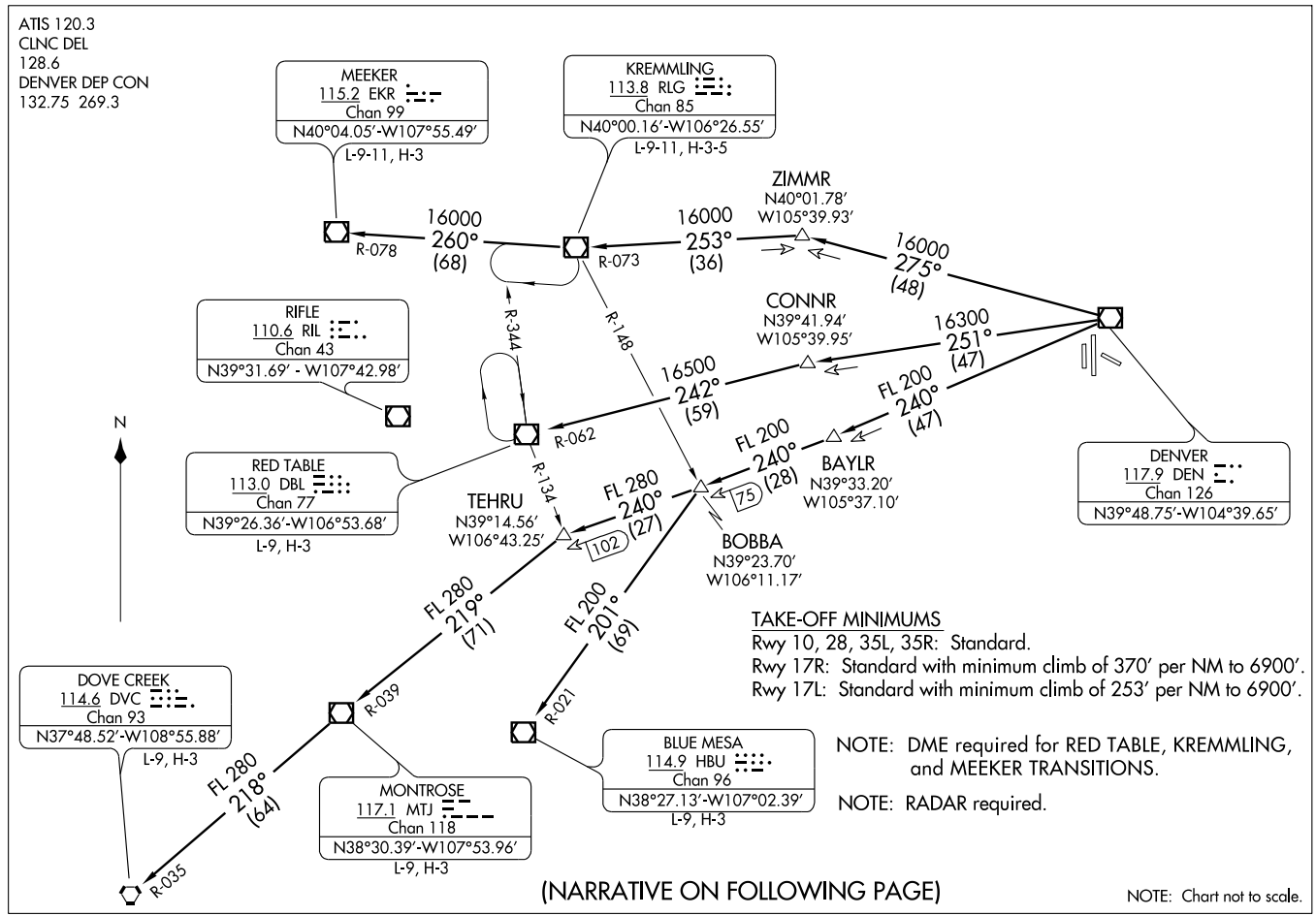


CATEGORY	A	B	C	D
LPV DA	6140-¾ 255 (300-¾)			
LNAV/VNAV DA	6925-4 1040 (1100-4)			
LNAV MDA	6700-¾ 815 (900-¾)		6700-2 815 (900-2)	6700-2¼ 815 (900-2¼)
CIRCLING	6700-1 815 (900-1)	6700-1¼ 815 (900-1¼)	6700-2½ 815 (900-2½)	6700-2¾ 815 (900-2¾)

SW-1, 22 OCT 2009 to 19 NOV 2009

ROCKIES SEVEN DEPARTURE

SL-5715 (FAA)



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

BLUE MESA (HI) TRANSITION (ROCKI7.HBU): From over DEN VOR/DME via DEN R-240 and HBU R-021 to HBU VOR/DME.

DOVE CREEK (HI) TRANSITION (ROCKI7.DVC): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME, then via MTJ R-218 and DVC R-035 to DVC VORTAC.

KREMMLING TRANSITION (ROCKI7.RLG): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME.

MEEKER TRANSITION (ROCKI7.EKR): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME, then via RLG R-260 and EKR R-078 to EKR VOR/DME.

MONTROSE TRANSITION (ROCKI7.MTJ): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME.

RED TABLE TRANSITION (ROCKI7.DBL): From over DEN VOR/DME via DEN R-251 and DBL R-062 to DBL VOR/DME.

TAKE-OFF OBSTACLE NOTES

RWY 10: Terrain beginning 238′ from DER, 30′ right of centerline, up to 5859′ MSL.
Fences beginning 1211′ from DER, 233′ right of centerline, up to 8′ AGL/5841′ MSL.
Multiple bushes beginning 1378′ from DER, 284′ right of centerline, up to 6′ AGL/5840′ MSL.
Multiple roads with vehicles beginning 198′ from DER, 404′ left of centerline, up to 15′ AGL/5835′ MSL.
Terrain 1357′ from DER, 253′ left of centerline, 5829′ MSL.

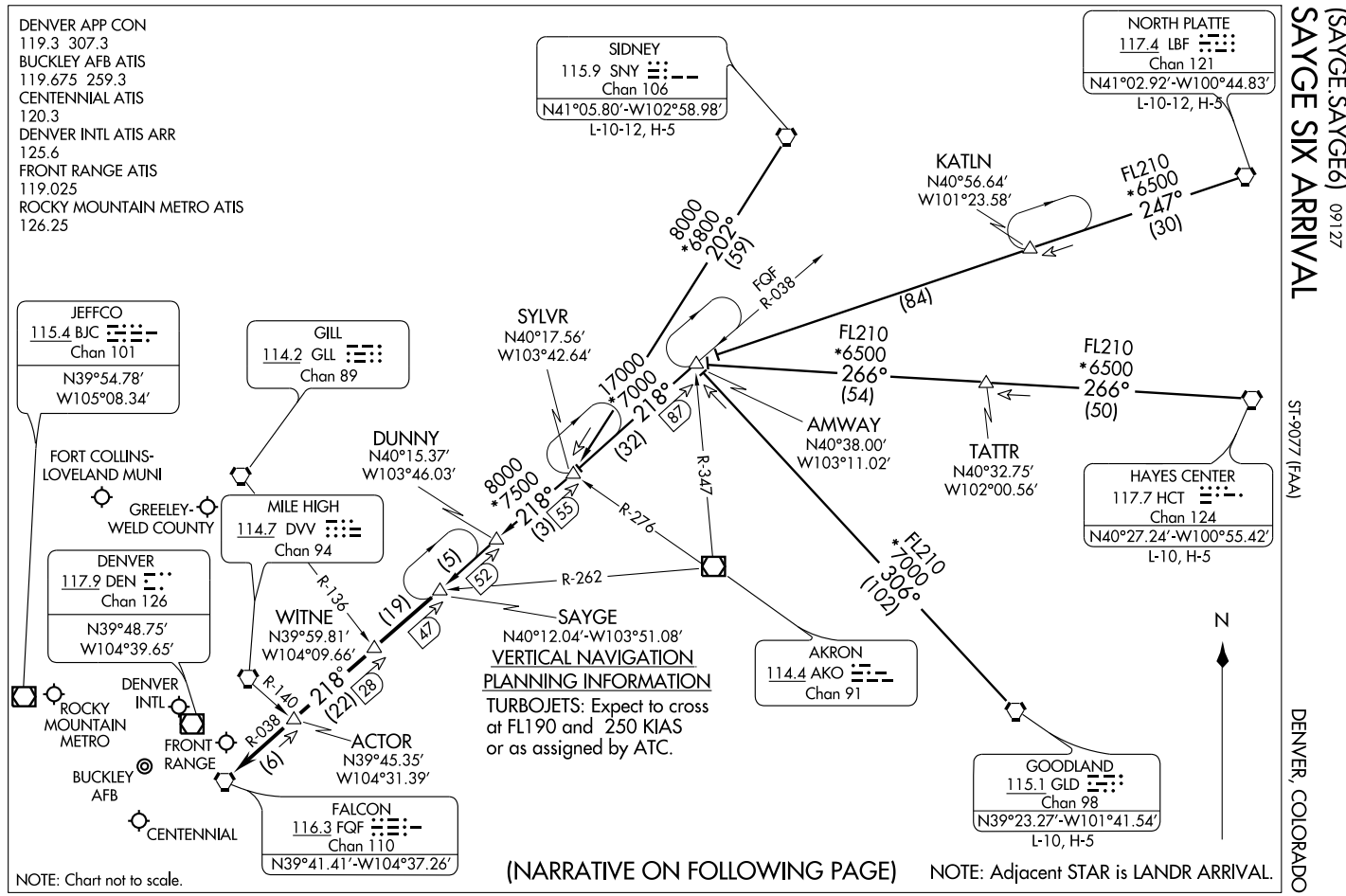
RWY 28: Terrain beginning 89′ from DER, from 513′ left to 137′ right of centerline, up to 5849′ MSL.
Windsock 100′ from DER, 183′ left of centerline, 15′ AGL/5832′ MSL.
Multiple trees beginning 1640′ from DER, 731′ left of centerline, up to 100′ AGL/5959′ MSL.

RWY 35L: Terrain beginning 54′ from DER, 110′ right of centerline, up to 5829′ MSL.

RWY 17R: Terrain 181′ from DER, 496′ right of centerline, 5887′ MSL.
Fence 538′ from DER, 196′ right of centerline, 8′ AGL/5889′ MSL.
Multiple trees beginning 562′ from DER, 61′ right of centerline, up to 16′ AGL/5976′ MSL.
Multiple light poles beginning 2362′ from DER, 256′ right of centerline, up to 30′ AGL/5942′ MSL.
Vehicles on roads beginning 2812′ from DER, on centerline, up to 17′ AGL/5946′ MSL.
Obstruction light on building 3282′ from DER, 842′ right of centerline, 90′ AGL/6021′ MSL.

RWY 17L: Multiple trees beginning 2968′ from DER, 761′ right of centerline, 100′ AGL/5976′ MSL.

SW-1, 22 OCT 2009 to 19 NOV 2009


DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
SIDNEY
115.9 SNY
Chan 106
N41°05.80'-W102°58.98'
L-10-12, H-5
NORTH PLATTE
117.4 LBF
Chan 121
N41°02.92'-W100°44.83'
L-10-12, H-5
KATLN
N40°56.64'
W101°23.58'
8000
*6800
202°
(59)
FQF
R-038
(84)
FL210
*6500
247°
(30)
SYLVR
N40°17.56'
W103°42.64'
17000
*7000
218°
(32)
87
FL210
*6500
266°
(54)
FL210
*6500
266°
(50)
AMWAY
N40°38.00'
W103°11.02'
TATTR
N40°32.75'
W102°00.56'
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
GILL
114.2 GLL
Chan 89
FORT COLLINS-
LOVELAND MUNI
GREELEY-
WELD COUNTY
MILE HIGH
114.7 DVV
Chan 94
DUNNY
N40°15.37'
W103°46.03'
8000
*7500
218°
(3)
55
R-347
R-276
R-262
(5)
52
DENVER
117.9 DEN
Chan 126
N39°48.75'
W104°39.65'
R-136
WITNE
N39°59.81'
W104°09.66'
(19)
47
SAYGE
N40°12.04'-W103°51.08'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS: Expect to cross
at FL190 and 250 KIAS
or as assigned by ATC.
FL210
*7000
306°
(102)
AKRON
114.4 AKO
Chan 91
N
DENVER
INTL
ROCKY
MOUNTAIN
METRO
FRONT
RANGE
R-140
218°
(22)
28
R-038
(6)
ACTOR
N39°45.35'
W104°31.39'
BUCKLEY
AFB
CENTENNIAL
FALCON
116.3 FQF
Chan 110
N39°41.41'-W104°37.26'
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Adjacent STAR is LANDR ARRIVAL.
(SAYGE.SAYGE6) 09127
SAYGE SIX ARRIVAL
ST-9077 (FAA)
DENVER, COLORADO

SAYGE SIX ARRIVAL

ARRIVAL DESCRIPTION

GOODLAND TRANSITION (GLD.SAYGE6): From over GLD VORTAC via GLD R-306 and FQF R-038 to SAYGE INT. Thence....

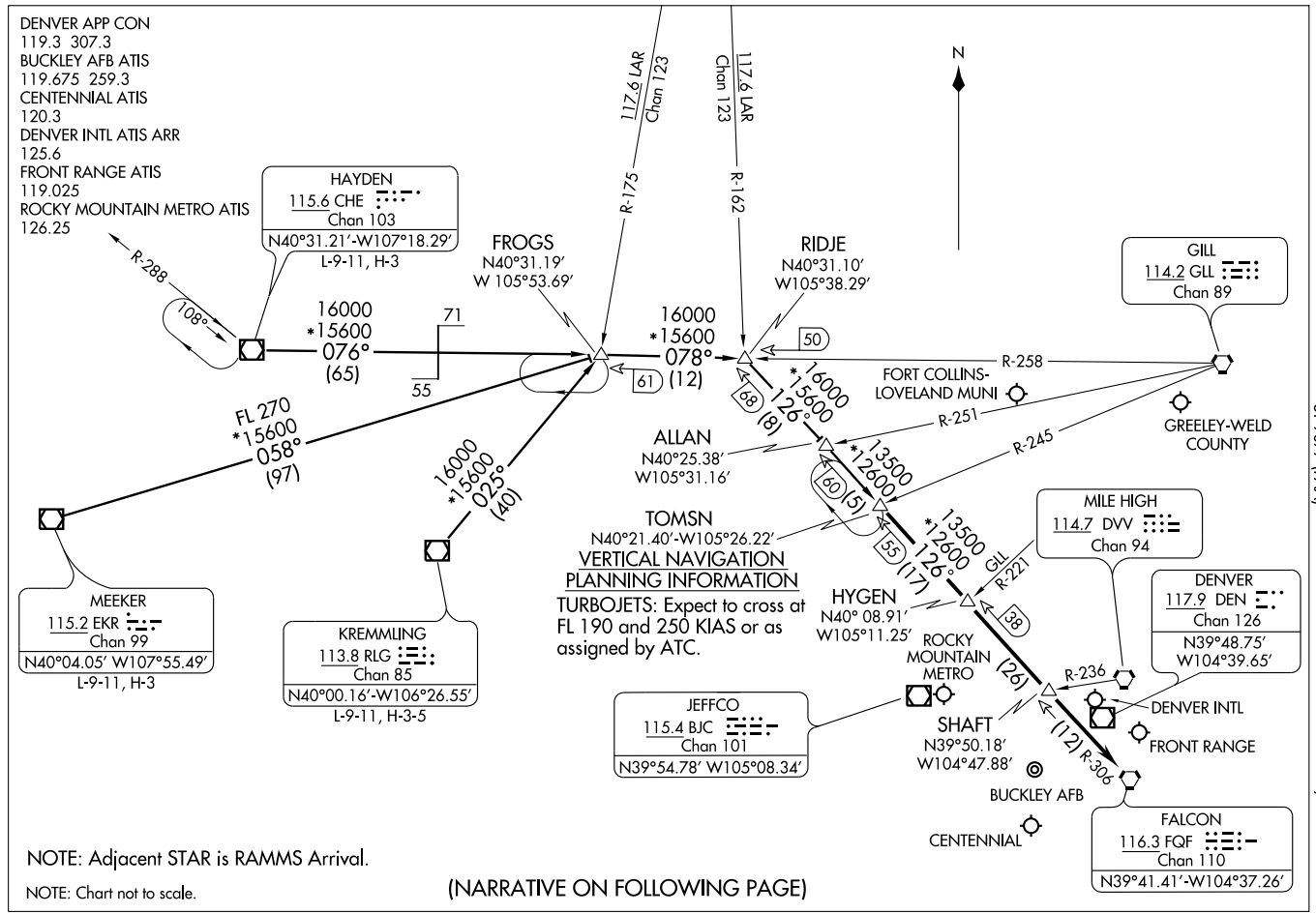
HAYES CENTER TRANSITION (HCT.SAYGE6): From over HCT VORTAC via HCT R-266 and FQF R-038 to SAYGE INT. Thence....

NORTH PLATTE TRANSITION (LBF.SAYGE6): From over LBF VORTAC via LBF R-247 and FQF R-038 to SAYGE INT. Thence....

SIDNEY TRANSITION (SNY.SAYGE6): From over SNY VORTAC via SNY R-202 and FQF R-038 to SAYGE INT. Thence....

....From over SAYGE INT via FQF R-038 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



(TOMSN.TOMSN4) 07298

TOMSN FOUR ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO

TOMSN FOUR ARRIVAL

ARRIVAL DESCRIPTION

HAYDEN TRANSITION (CHE.TOMSN4): From over CHE VOR/DME via CHE R-076 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

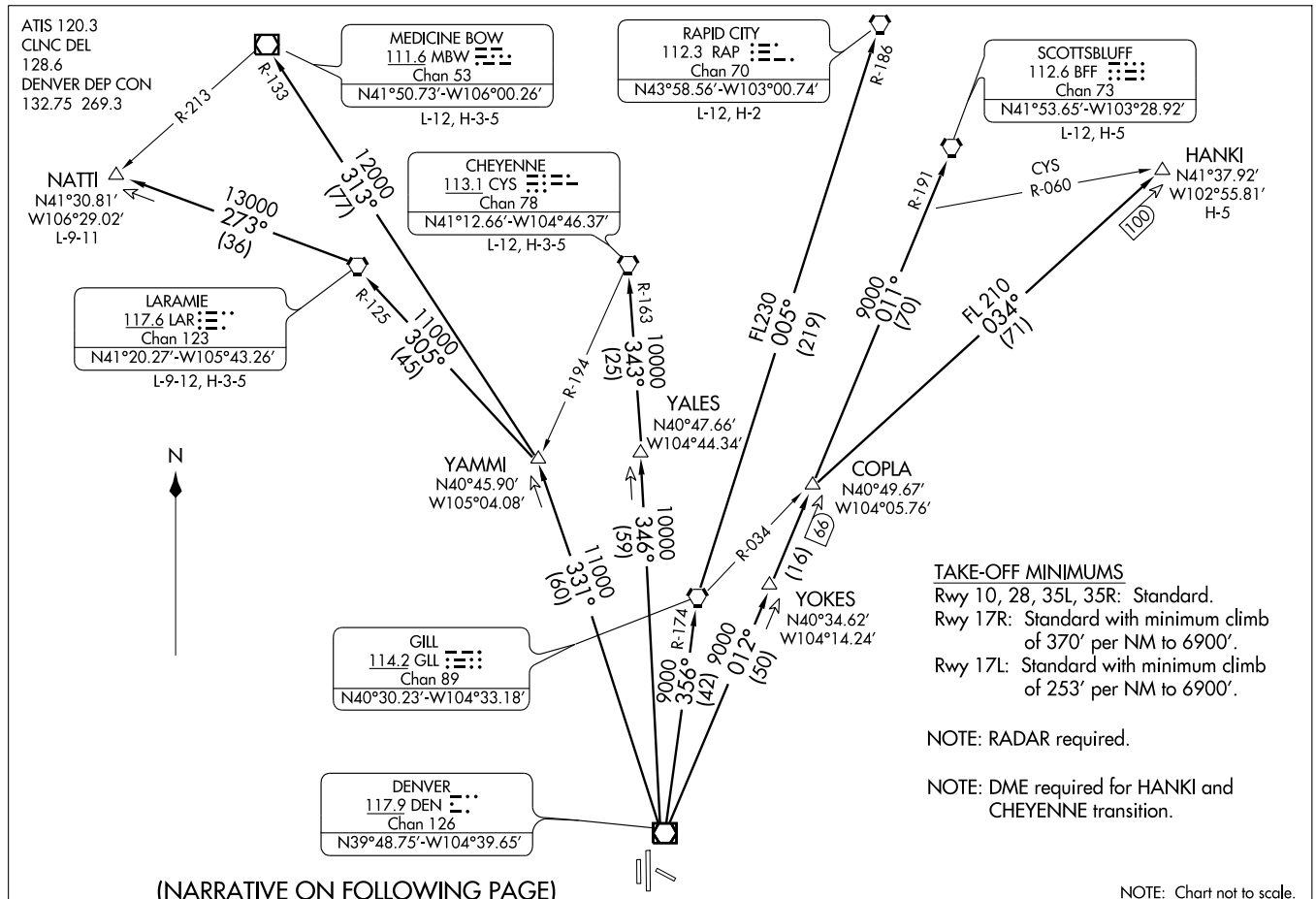
KREMMLING TRANSITION (RLG.TOMSN4): From over RLG VOR/DME via RLG R-025 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

MEEKER TRANSITION (EKR.TOMSN4): From over EKR VOR/DME via EKR R-058 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

....From over TOMSN INT via FQF R-306 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

YELLOWSTONE SIX DEPARTURE



TAKE-OFF MINIMUMS

Rwy 10, 28, 35L, 35R: Standard.

Rwy 17R: Standard with minimum climb of 370′ per NM to 6900′.

Rwy 17L: Standard with minimum climb of 253′ per NM to 6900′.

NOTE: RADAR required.

NOTE: DME required for HANKI and CHEYENNE transition.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

YELLOWSTONE SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition.
Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

CHEYENNE TRANSITION (YELLO6.CYS): From over DEN VOR/DME via DEN R-346 and CYS R-163 to CYS VORTAC.

HANKI TRANSITION (YELLO6.HANKI): From over DEN VOR/DME via DEN R-012 and GLL R-034 to HANKI INT.

LARAMIE TRANSITION (YELLO6.LAR): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC.

MEDICINE BOW TRANSITION (YELLO6.MBW): From over DEN VOR/DME via DEN R-331 and MBW R-133 to MBW VOR/DME.

NATTI TRANSITION (YELLO6.NATTI): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC, then via LAR R-273 to NATTI INT.

RAPID CITY TRANSITION (YELLO6.RAP): From over DEN VOR/DME via DEN R-356 and GLL R-174 to GLL VORTAC, then via GLL R-005 and RAP R-186 to RAP VORTAC.

SCOTTSBLUFF TRANSITION (YELLO6.BFF): From over DEN VOR/DME via DEN R-012 and BFF R-191 to BFF VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 10: Terrain beginning 238′ from DER, 30′ right of centerline, up to 5859′ MSL.
Fences beginning 1211′ from DER, 233′ right of centerline, up to 8′ AGL/5841′ MSL.
Multiple bushes beginning 1378′ from DER, 284′ right of centerline, up to 6′ AGL/5840′ MSL.
Multiple roads with vehicles beginning 198′ from DER, 404′ left of centerline, up to 15′ AGL/5835′ MSL.
Terrain 1357′ from DER, 253′ left of centerline, 5829′ MSL.

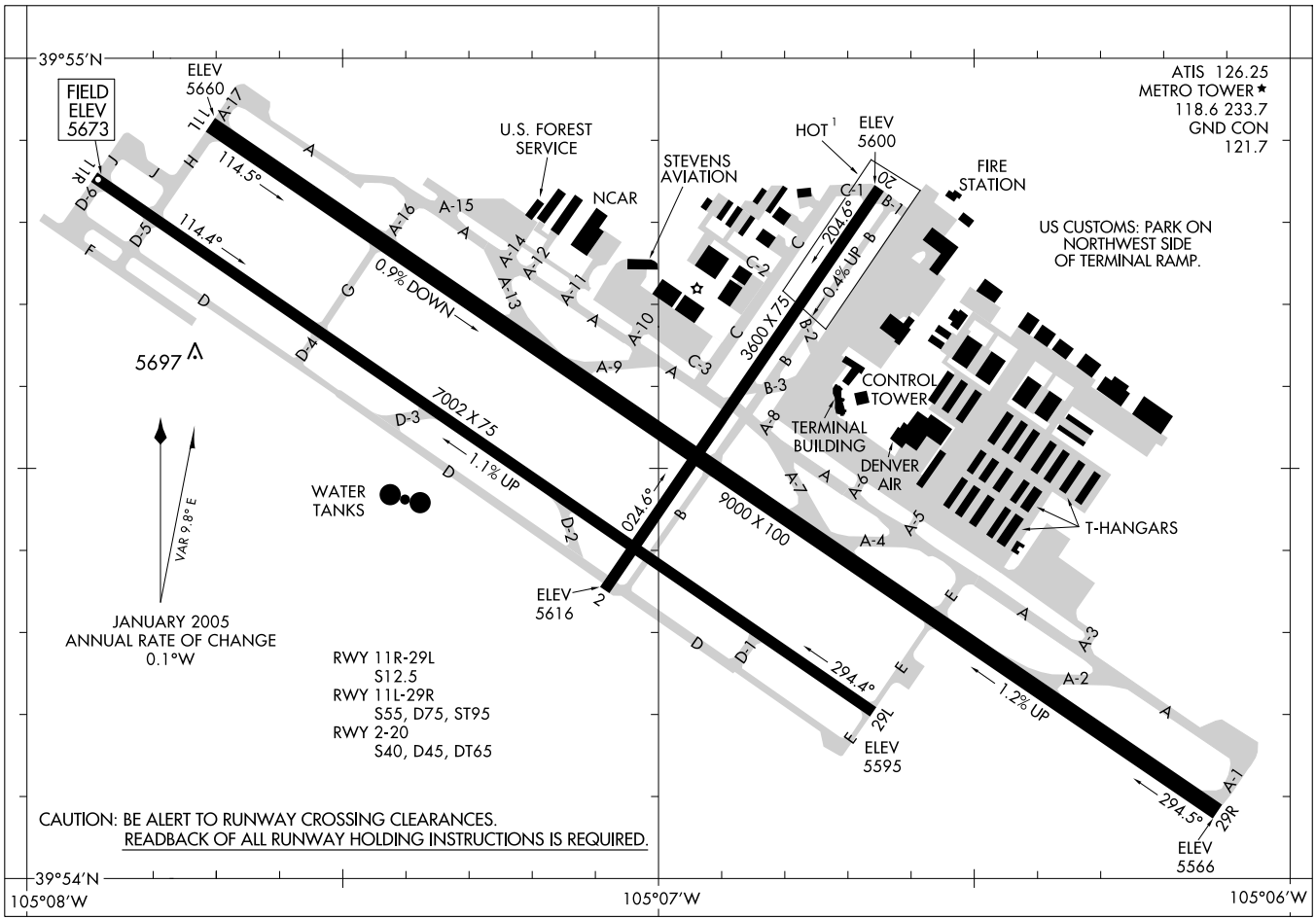
RWY 28: Terrain beginning 89′ from DER, from 513′ left to 137′ right of centerline, up to 5849′ MSL.
Windsock 100′ from DER, 183′ left of centerline, 15′ AGL/5832′ MSL.
Multiple trees beginning 1640′ from DER, 731′ left of centerline, up to 100′ AGL/5959′ MSL.

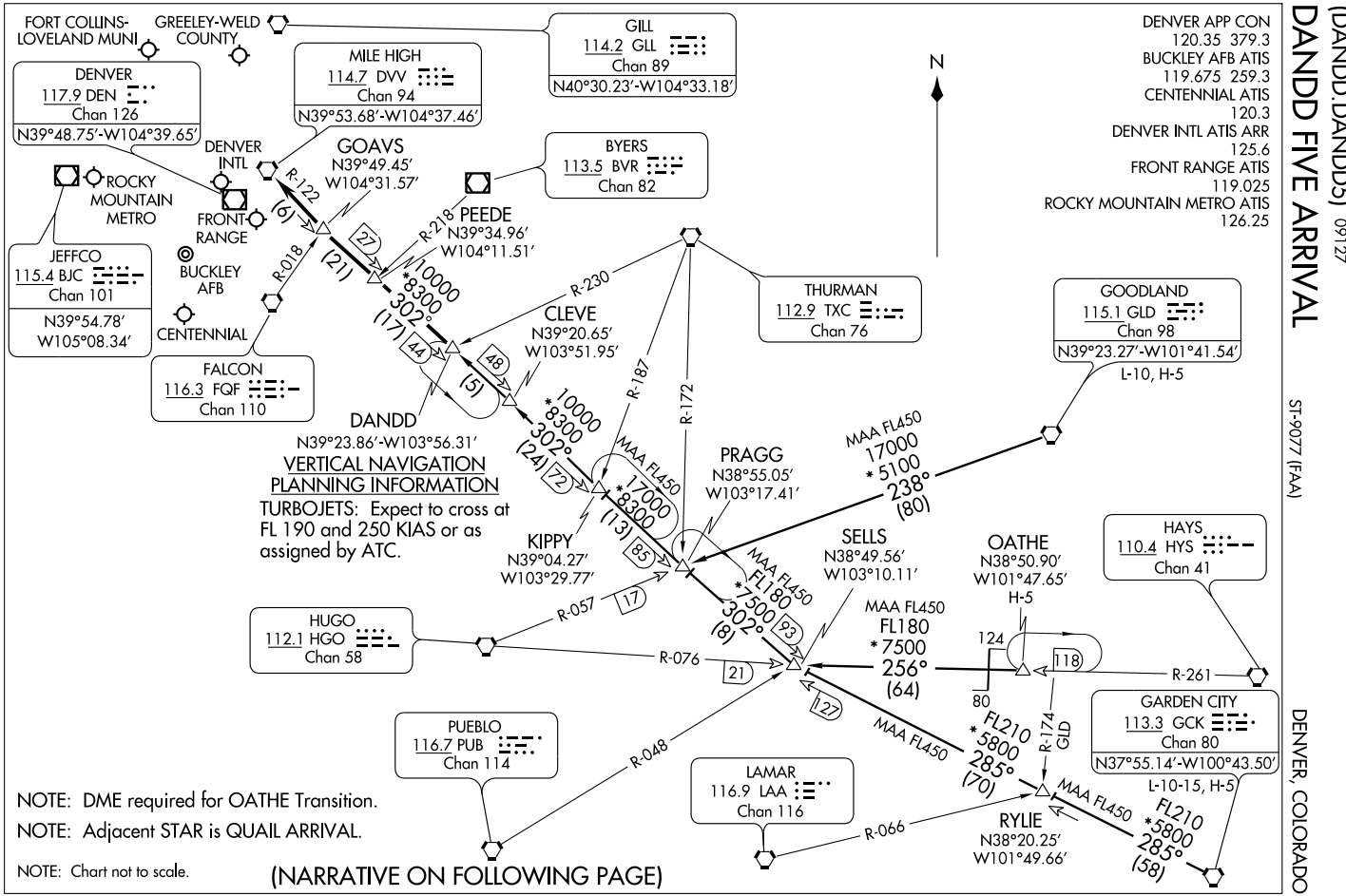
RWY 35L: Terrain beginning 54′ from DER, 110′ right of centerline, up to 5829′ MSL.

RWY 17R: Terrain 181′ from DER, 496′ right of centerline, 5887′ MSL.
Fence 538′ from DER, 196′ right of centerline, 8′ AGL/5889′ MSL.
Multiple trees beginning 562′ from DER, 61′ right of centerline, up to 16′ AGL/5976′ MSL.
Multiple light poles beginning 2362′ from DER, 256′ right of centerline, up to 30′ AGL/5942′ MSL.
Vehicles on roads beginning 2812′ from DER, on centerline, up to 17′ AGL/5946′ MSL.
Obstruction light on building 3282′ from DER, 842′ right of centerline, 90′ AGL/6021′ MSL.

RWY 17L: Multiple trees beginning 2968′ from DER, 761′ right of centerline, 100′ AGL/5976′ MSL.

SW-1, 22 OCT 2009 to 19 NOV 2009


39°55′N
105°08′W
105°07′W
105°06′W
39°54′N
FIELD ELEV 5673
ELEV 5660
ELEV 5600
HOT 1
ATIS 126.25
METRO TOWER ★
118.6 233.7
GND CON
121.7
U.S. FOREST SERVICE
NCAR
STEVENS AVIATION
FIRE STATION
US CUSTOMS: PARK ON NORTHWEST SIDE OF TERMINAL RAMP.
CONTROL TOWER
TERMINAL BUILDING
DENVER AIR
T-HANGARS
WATER TANKS
5697
114.5°
114.4°
0.9% DOWN
7002 X 75
1.1% UP
3600 X 75
204.6°
0.4% UP
024.6°
9000 X 100
294.4°
1.2% UP
294.5°
ELEV 5616
ELEV 5595
ELEV 5566
VAR 9.8° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
RWY 11R-29L
S12.5
RWY 11L-29R
S55, D75, ST95
RWY 2-20
S40, D45, DT65
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.


DANDD FIVE ARRIVAL
(DANDD.DANDD5) 09127
ST-9077 (FAA)
DENVER, COLORADO
DENVER APP CON
120.35 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
N
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
GILL
114.2 GLL
Chan 89
N40°30.23'-W104°33.18'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'-W104°37.46'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
DENVER INTL
GOAVS
N39°49.45'
W104°31.57'
BYERS
113.5 BVR
Chan 82
ROCKY MOUNTAIN METRO
FRONT RANGE
PEEDE
N39°34.96'
W104°11.51'
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
BUCKLEY AFB
CENTENNIAL
THURMAN
112.9 TXC
Chan 76
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
FALCON
116.3 FQF
Chan 110
CLEVE
N39°20.65'
W103°51.95'
DANDD
N39°23.86'-W103°56.31'
PRAGG
N38°55.05'
W103°17.41'
KIPPY
N39°04.27'
W103°29.77'
SELLS
N38°49.56'
W103°10.11'
OATHE
N38°50.90'
W101°47.65'
H-5
HAYS
110.4 HYS
Chan 41
HUGO
112.1 HGO
Chan 58
PUEBLO
116.7 PUB
Chan 114
LAMAR
116.9 LAA
Chan 116
RYLIE
N38°20.25'
W101°49.66'
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
R-122
(6)
R-218
(27)
(21)
R-018
10000
*8300
302°
(17)
44
48
(5)
R-230
R-187
R-172
10000
*8300
302°
(24)
72
MAA FL450
17000
*8300
(13)
85
MAA FL450
17000
*5100
238°
(80)
MAA FL450
FL180
*7500
302°
(8)
93
MAA FL450
FL180
*7500
256°
(64)
124
118
80
R-261
R-057
17
R-076
21
127
MAA FL450
FL210
*5800
285°
(70)
R-174
GLD
MAA FL450
FL210
*5800
285°
(58)
R-048
R-066
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at FL 190 and 250 KIAS or as assigned by ATC.
NOTE: DME required for OATHE Transition.
NOTE: Adjacent STAR is QUAIL ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

GARDEN CITY TRANSITION (GCK.DANDD5): From over GCK VORTAC via GCK R-285 and DVV R-122 to DANDD INT. Thence....

GOODLAND TRANSITION (GLD.DANDD5): From over GLD VORTAC via GLD R-238 and HGO R-057 to PRAGG INT; then via DVV R-122 to DANDD INT. Thence....

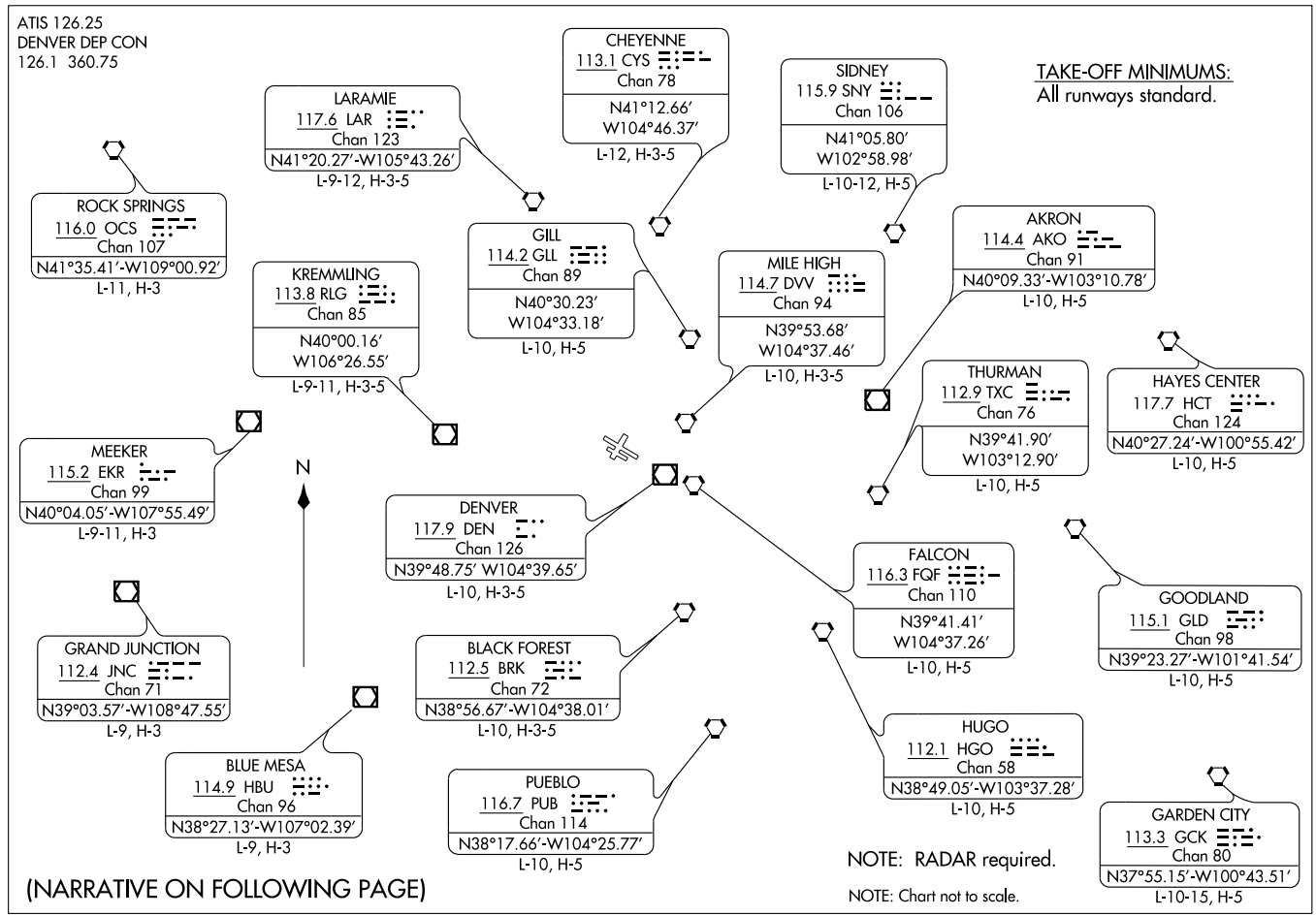
OATHE TRANSITION (OATHE.DANDD5): From over OATHE INT via HYS R-261 and HGO R-076 to SELLS INT; then via DVV R-122 to DANDD INT. Thence....

....From over DANDD INT via DVV R-122 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER FIVE DEPARTURE

DENVER/ROCKY MOUNTAIN METROPOLITAN (BJC)
SL-5612 (FAA)
DENVER, COLORADO



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7002
292°	TDZE	5628
	Apt Elev	5673

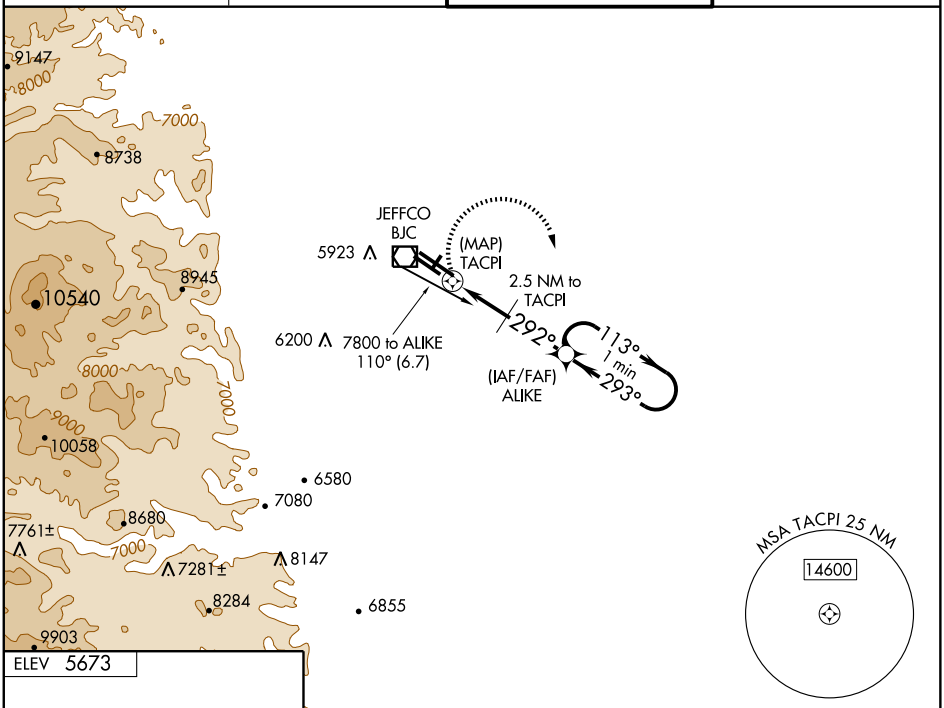
GPS RWY 29L

DENVER/ROCKY MOUNTAIN METROPOLITAN (BJC)

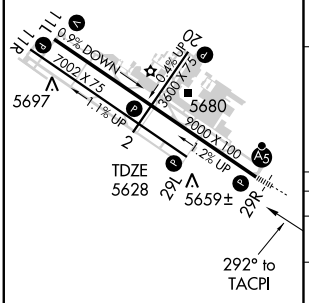
T
NA When control tower closed, use Denver Intl altimeter setting. DME/DME RNP-0.3 NA

MISSED APPROACH: Climbing right turn to 7000 direct ALIKE WP and hold.

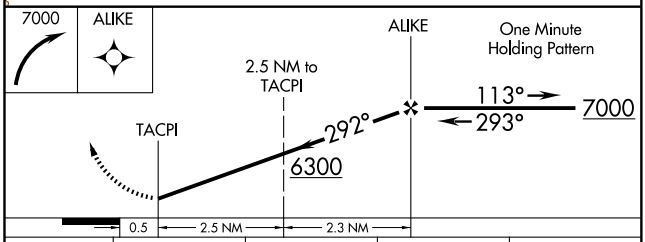
ATIS	DENVER APP CON	METRO TOWER★	GND CON
126.25	126.1 360.75	118.6 (CTAF) L 233.7	121.7



ELEV 5673



REIL Rwys 11L, 11R and 29L L
MIRL Rwys 2-20, 11R-29L and 11L-29R L



CATEGORY	A	B	C	D
S-29L	6040-1 412 (400-1)		6040-1¼ 412 (400-1¼)	
CIRCLING	6180-1 507 (600-1)		6240-1½ 567 (600-1½)	6240-2 567 (600-2)
DENVER INTL ALTIMETER SETTING MINIMUMS				
S-29L	6120-1 492 (500-1)		6120-1¼ 492 (500-1¼)	6120-1½ 492 (500-1½)
CIRCLING	6260-1 587 (600-1)		6320-1¾ 647 (700-1¾)	6320-2 647 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9000
293°	TDZE	5599
	Apt Elev	5673

GPS RWY 29R

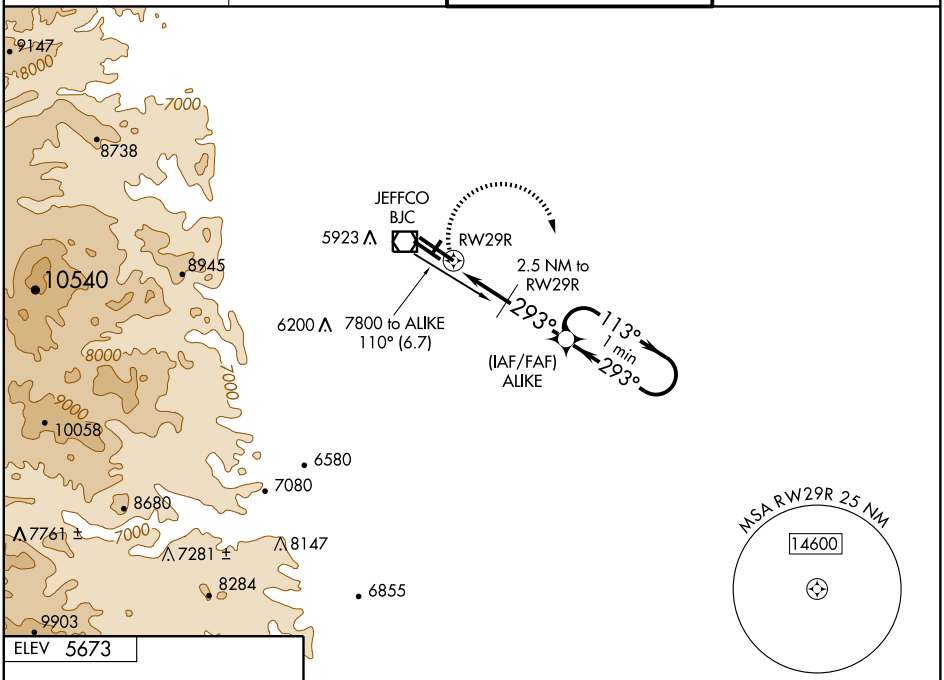
DENVER/ROCKY MOUNTAIN METROPOLITAN (BJC)

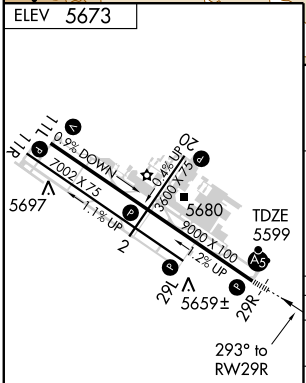
T ANA When control tower closed, use Denver Intl altimeter setting. For inoperative MALSR, increase S-29R Cat. D visibility to 1¼ mile. Inoperative table does not apply to S-29R Cat. D. DME/DME RNP -0.3 NA.

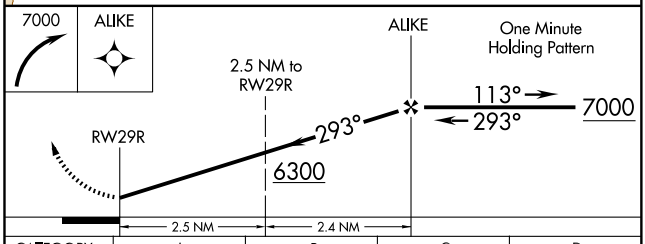
MALSR

MISSED APPROACH: Climbing right turn to 7000 direct ALIKE WP and hold.

ATIS	DENVER APP CON	METRO TOWER★	GND CON
126.25	126.1 360.75	118.6 (CTAF) L 233.7	121.7







CATEGORY	A	B	C	D
S-29R	6000-½ 401 (400-½)		6000-¾ 401 (400-¾)	6000-1 401 (400-1)
CIRCLING	6180-1 507 (600-1)		6240-1½ 567 (600-1½)	6240-2 567 (600-2)
DENVER INTL ALTIMETER SETTING MINIMUMS				
S-29R	6100-½ 501 (500-½)		6100-1 501 (500-1)	
CIRCLING	6260-1 587 (600-1)		6320-1¾ 647 (700-1¾)	6320-2 647 (700-2)

REIL Rwys 11L, 11R and 29L L
MIRL Rwys 2-20, 11R-29L and 11L-29R L

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-BJC	APP CRS				
111.7	293°	Rwy 29R ldg	9000	Rwy 29L ldg	7002
		TDZE	5595	TDZE	5625
		Apt Elev	5670	Apt Elev	5670

DENVER/ ROCKY MOUNTAIN METROPOLITAN (BJC) ILS or LOC RWY 29R

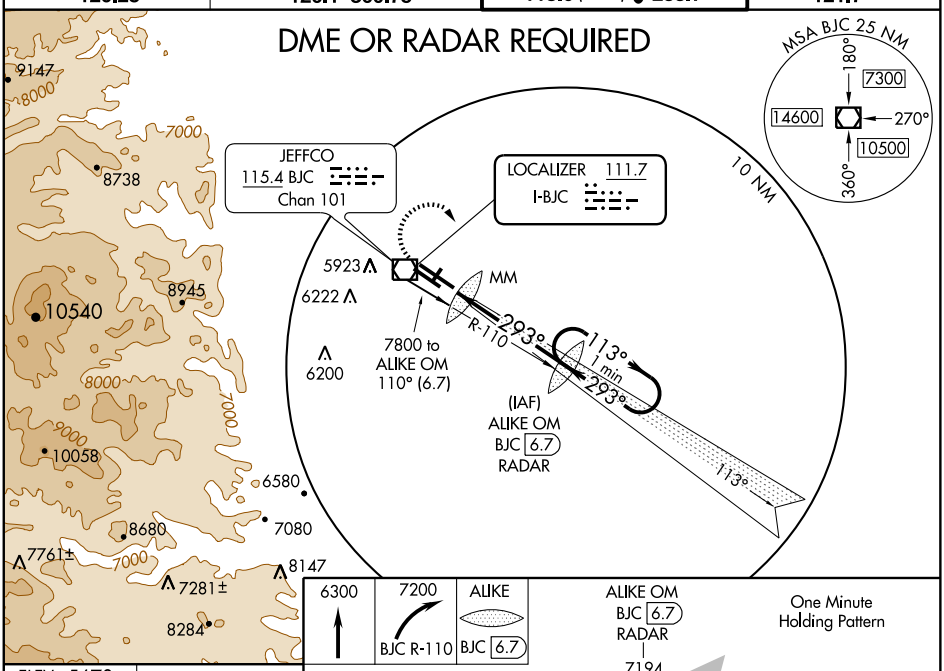
When control tower closed use Denver Intl altimeter setting. For inoperative MALSR, increase S-LOC 29R Cat. D visibility ¼ mile; and increase Denver Intl altimeter setting S-ILS 29R Cats. A, B, C, D visibility ½ mile.

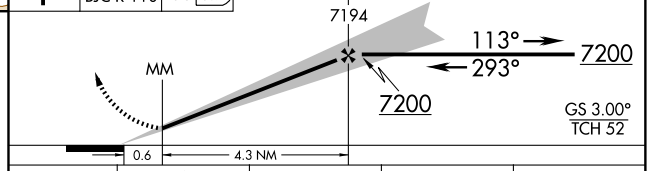
MALSR

MISSED APPROACH: Climb to 6300 then climbing right turn to 7200 via BJC VOR/DME R-110 to Alike OM/BJC 6.7 DME/RADAR and hold.

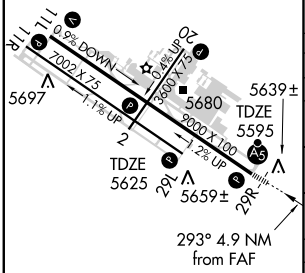
ATIS	DENVER APP CON	METRO TOWER ★	GND CON
126.25	126.1 360.75	118.6 (CTAF) L 233.7	121.7

DME OR RADAR REQUIRED





ELEV 5670

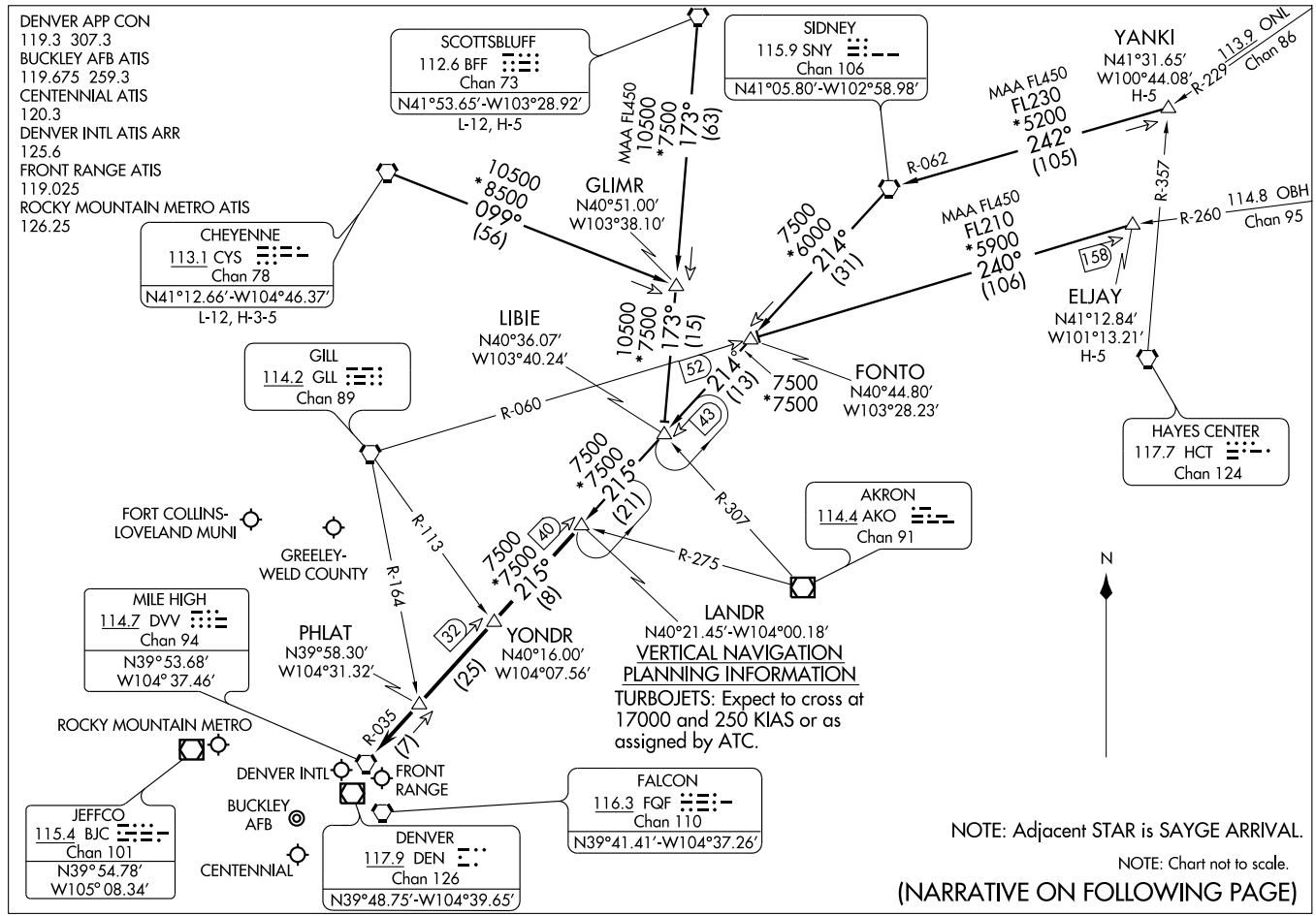


REIL Rwys 11L, 11R and 29L L
MIRL Rwys 2-20, 11R-29L and 11L-29R L

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

CATEGORY	A	B	C	D
S-ILS 29R	5795-½ 200 (200-½)			
S-LOC 29R	5900-½ 305 (300-½)			5900-¾ 305 (300-¾)
SIDESTEP 29L	5920-1 295 (300-1)		5920-1½ 295 (300-1½)	5920-2 295 (300-2)
CIRCLING	6180-1 510 (600-1)		6240-1½ 570 (600-1½)	6240-2 570 (600-2)
DENVER INTL ALTIMETER SETTING MINIMUMS				
S-ILS 29R	5877-½ 282 (300-½)			
S-LOC 29R	5980-½ 385 (400-½)			5980-¾ 385 (400-¾)
SIDESTEP 29L	6000-1 375 (400-1)		6000-1½ 375 (400-1½)	6000-2 375 (400-2)
CIRCLING	6260-1 590 (600-1)		6320-1¾ 650 (700-1¾)	6320-2 650 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009



LANDR FIVE ARRIVAL

(LANDR.LANDR5) 07298

ST-9077 (FAA)

DENVER, COLORADO

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.LANDR5): From over CYS VORTAC via CYS R-099 and BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

ELJAY TRANSITION (ELJAY.LANDR5): From over ELJAY INT via GLL R-060 to FONTO INT, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

SCOTTSBLUFF TRANSITION (BFF.LANDR5): From over BFF VORTAC via BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

YANKI TRANSITION (YANKI.LANDR5): From over YANKI INT via SNY R-062 to SNY VORTAC, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

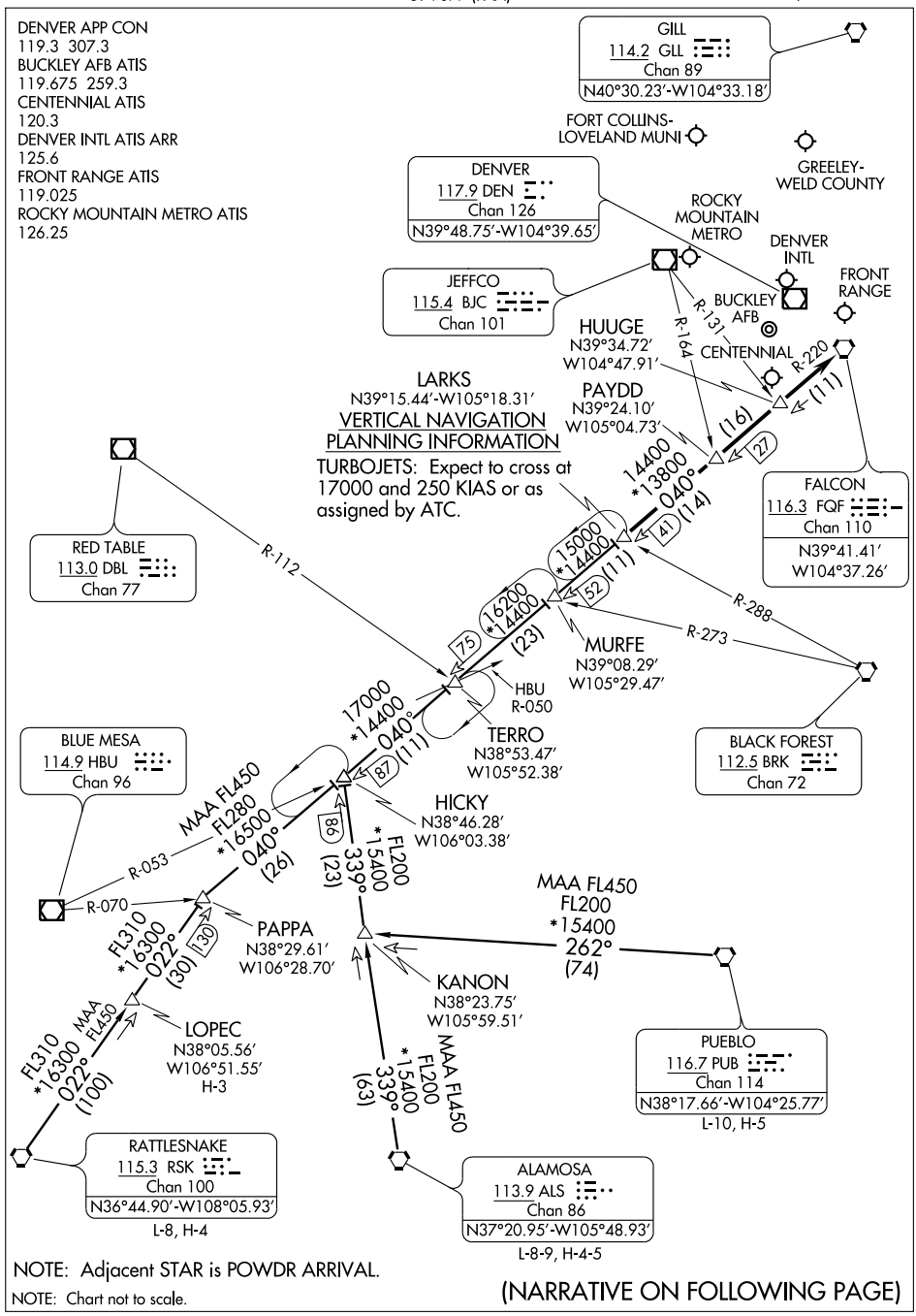
....From over LANDR INT via DVV R-035 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is POWDR ARRIVAL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ARRIVAL DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS6): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS6): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS6): From over PUB VORTAC via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS6): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

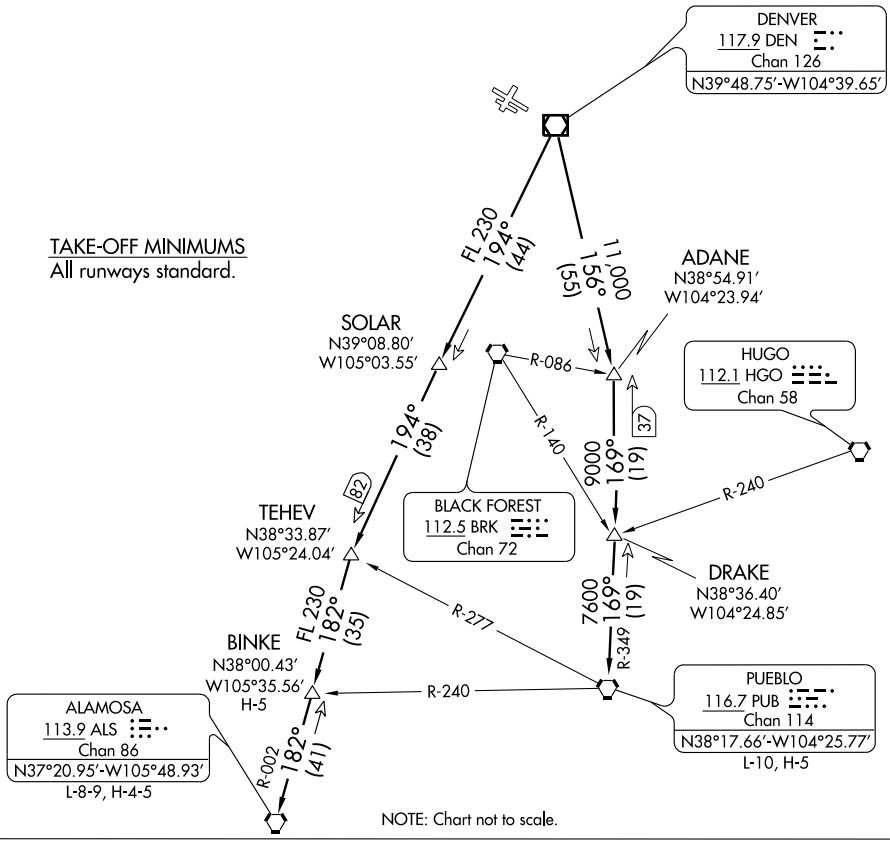
....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

PIKES FOUR DEPARTURE

ATIS 126.25
DENVER DEP CON
126.1 360.75

TAKE-OFF MINIMUMS
All runways standard.



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

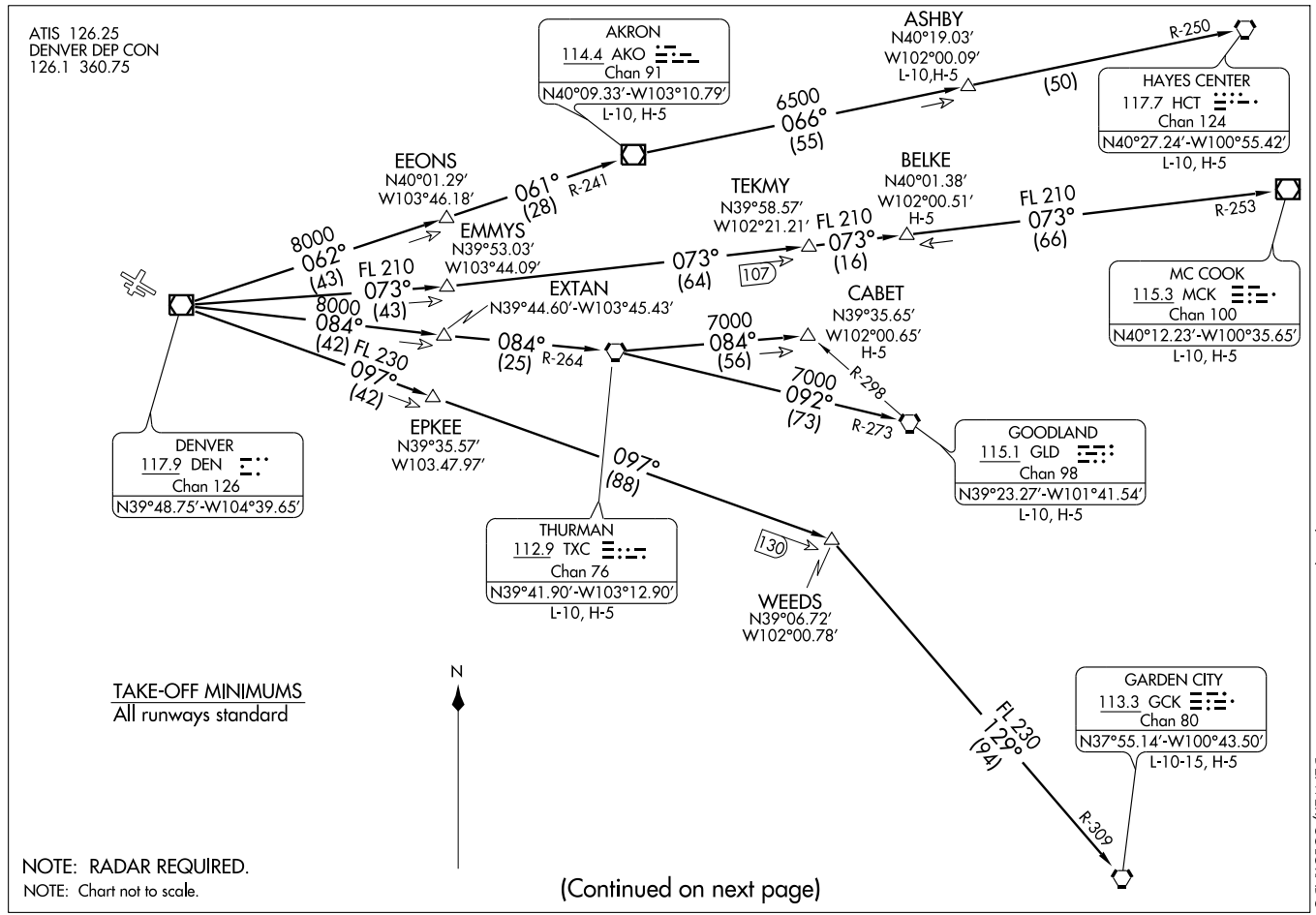
LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

ALAMOSA TRANSITION (PIKES4.ALS): From over DEN VOR/DME via DEN R-194 and ALS R-002 to ALS VORTAC.

BINKE TRANSITION (PIKES4.BINKE): From over DEN VOR/DME via DEN R-194 and ALS R-002 to BINKE INT.

PUEBLO TRANSITION (PIKES4.PUB): From over DEN VOR/DME via DEN R-156 and PUB R-349 to PUB VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



PLAINS FOUR DEPARTURE (PLAIN4.DEN) 07298

DENVER/ROCKY MOUNTAIN METROPOLITAN (BJC)
SL-5612 (FAA)
DENVER, COLORADO

PLAINS FOUR DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

AKRON TRANSITION (PLAIN4.AKO): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME.

ASHBY TRANSITION (PLAIN4.ASHBY): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to ASHBY INT.

BELKE TRANSITION (PLAIN4.BELKE): From over DEN VOR/DME via DEN R-073 and MCK R-253 to BELKE INT.

CABET TRANSITION (PLAIN4.CABET): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-084 to CABET INT.

GARDEN CITY TRANSITION (PLAIN4.GCK): From over DEN VOR/DME via DEN R-097 and GCK R-309 to GCK VORTAC.

GOODLAND TRANSITION (PLAIN4.GLD): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-092 and GLD R-273 to GLD VORTAC.

HAYES CENTER TRANSITION (PLAIN4.HCT): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to HCT VORTAC.

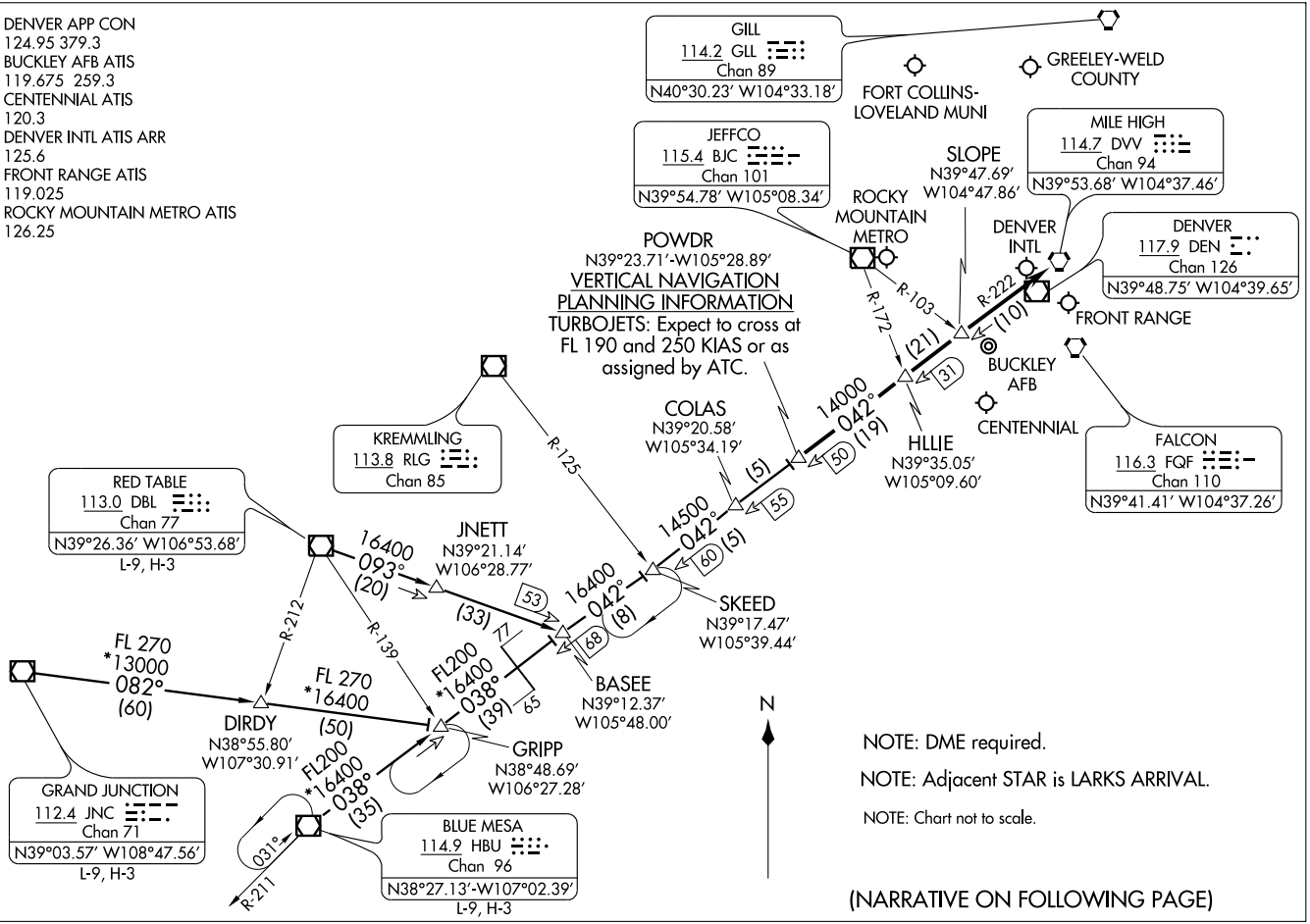
MCCOOK TRANSITION (PLAIN4.MCK): From over DEN VOR/DME via DEN R-073 and MCK R-253 to MCK VOR/DME.

THURMAN TRANSITION (PLAIN4.TXC): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC.

WEEDS TRANSITION (PLAIN4.WEEDS): From over DEN VOR/DME via DEN R-097 to WEEDS INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER APP CON
124.95 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25



POWDR SEVEN ARRIVAL

ARRIVAL DESCRIPTION

BLUE MESA TRANSITION (HBU.POWDR7): From over HBU VOR/DME via HBU R-038 and DVV R-222 to POWDR INT. Thence....

GRAND JUNCTION TRANSITION (JNC.POWDR7): From over JNC VORTAC via JNC R-082 to GRIPP INT; then via HBU R-038 and DVV R-222 to POWDR INT. Thence....

RED TABLE TRANSITION (DBL.POWDR7): From over DBL VOR/DME via DBL R-093 and DVV R-222 to POWDR INT. Thence....

....from over POWDR INT via DVV VORTAC R-222 to HLLIE, then via DVV VORTAC R-222 to SLOPE, then via DVV VORTAC R-222 to DVV. Expect radar vectors to the final approach course at or before DVV VORTAC.

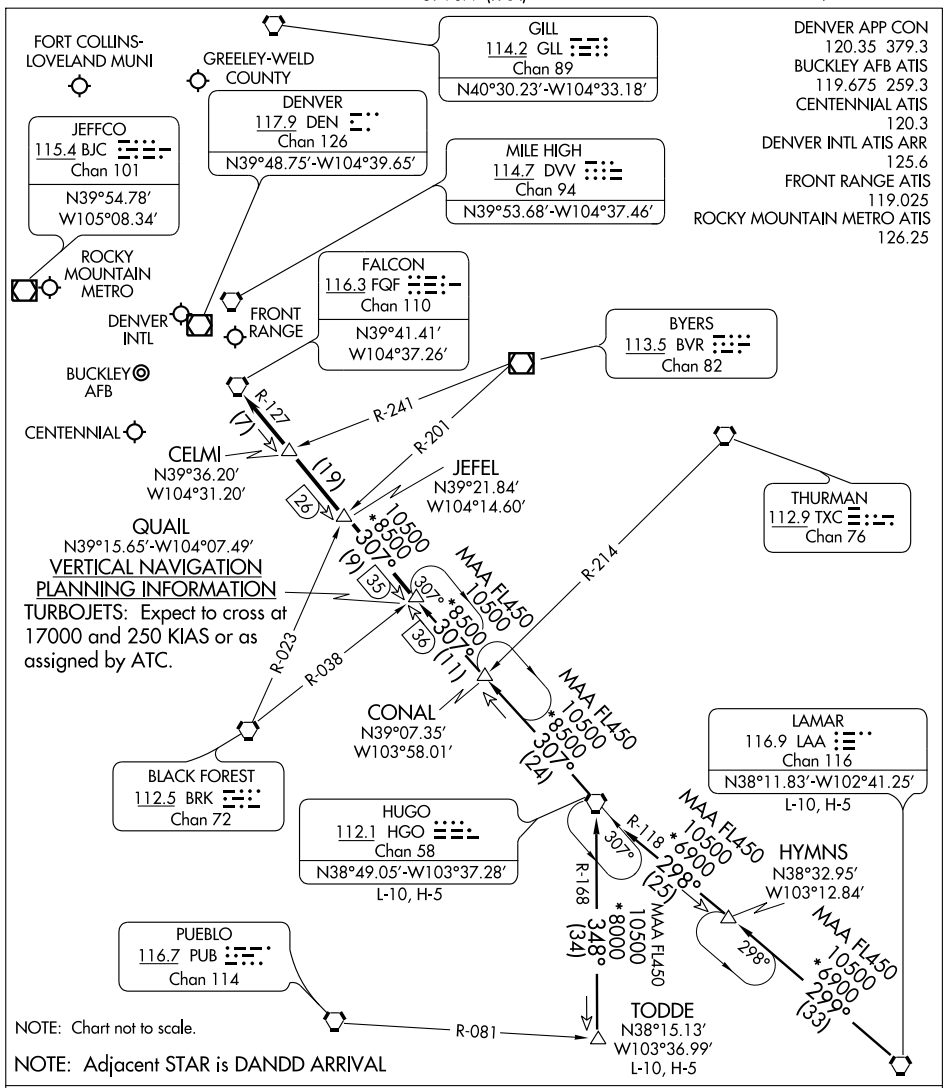
SW-1, 22 OCT 2009 to 19 NOV 2009

(QUAIL.QUAIL6) 09127

QUAIL SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is DANDD ARRIVAL

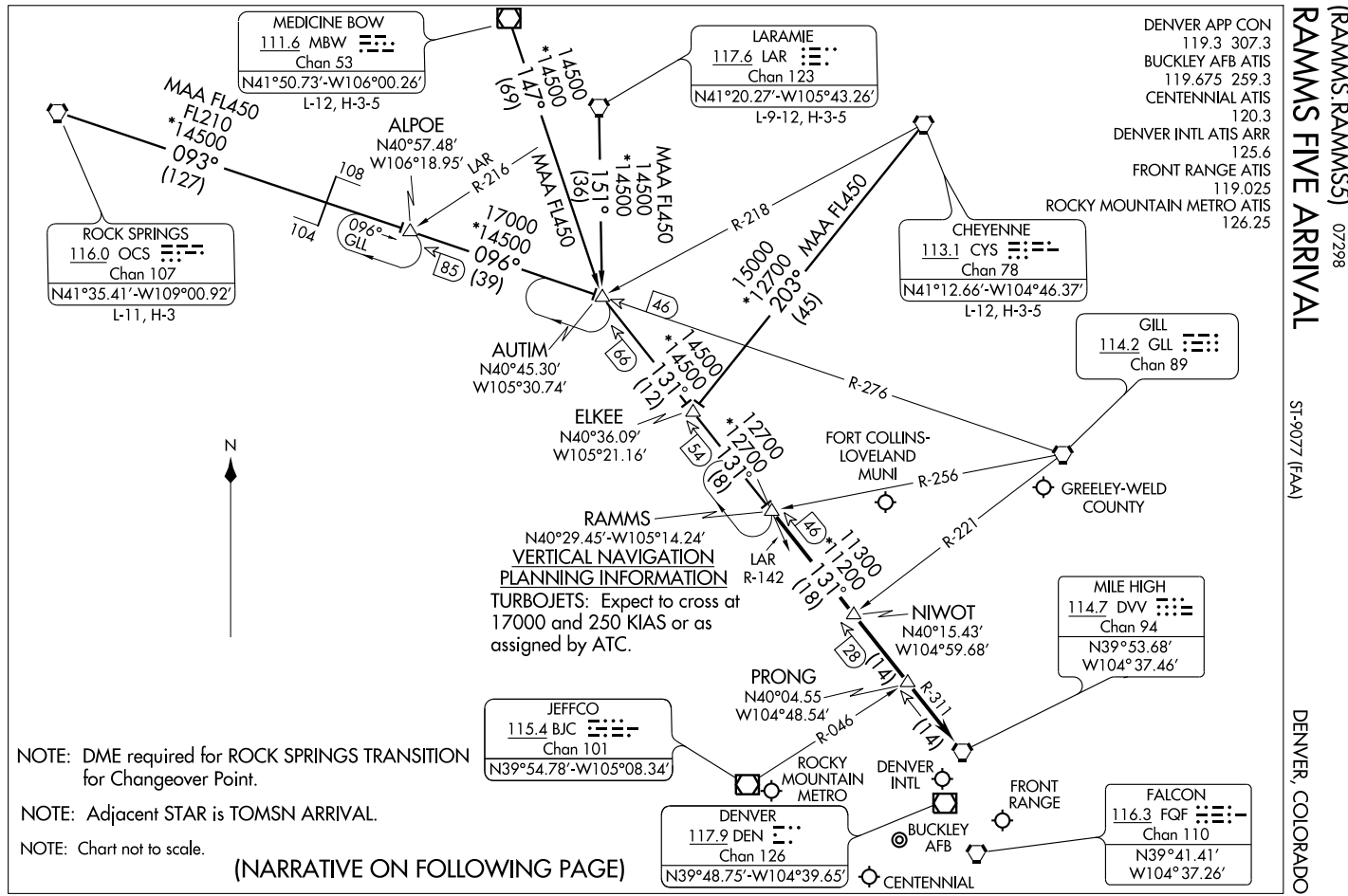
HUGO TRANSITION (HGO.QUAIL6): From over HGO VORTAC via HGO R-307 to CONAL INT; then via 306° course to QUAIL INT. Thence....

LAMAR TRANSITION (LAA.QUAIL6): From over LAA VORTAC via LAA R-299 to HYMNS INT; then via 298° course to HGO VORTAC; then via HGO R-307 to CONAL INT then via 306° course to to QUAIL INT. Thence....

TODDE TRANSITION (TODDE.QUAIL6): From over TODDE INT via HGO R-168 to HGO VORTAC; then via HGO R-307 to QUAIL INT. Thence....

....From over QUAIL INT via HGO R-307 and FQF R-127 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


RAMMS FIVE ARRIVAL (RAMMS.RAMMS5) 07298
DENVER, COLORADO
ST-9077 (FAA)
DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
MEDICINE BOW
111.6 MBW
Chan 53
N41°50.73'-W106°00.26'
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27'-W105°43.26'
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41'-W109°00.92'
L-11, H-3
CHEYENNE
113.1 CYS
Chan 78
N41°12.66'-W104°46.37'
L-12, H-3-5
GILL
114.2 GLL
Chan 89
JEFFCO
115.4 BJC
Chan 101
N39°54.78'-W105°08.34'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'
W104°37.46'
FALCON
116.3 FQF
Chan 110
N39°41.41'
W104°37.26'
ALPOE
N40°57.48'
W106°18.95'
AUTIM
N40°45.30'
W105°30.74'
ELKEE
N40°36.09'
W105°21.16'
RAMMS
N40°29.45'-W105°14.24'
NIWOT
N40°15.43'
W104°59.68'
PRONG
N40°04.55
W104°48.54'
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
ROCKY MOUNTAIN METRO
DENVER INTL
FRONT RANGE
BUCKLEY AFB
CENTENNIAL
MAA FL450
FL210
*14500
093°
(127)
147°
(69)
*14500
14500
151°
(36)
14500
*14500
MAA FL450
R-218
MAA FL450
15000
*12700
203°
(45)
108
104
LAR
R-216
096°
GLL
17000
*14500
096°
(39)
85
46
66
14500
*14500
131°
(12)
R-276
54
12700
*12700
131°
(8)
R-256
R-221
46
11300
*11200
131°
(18)
LAR
R-142
28
(14)
R-311
(14)
R-046
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at 17000 and 250 KIAS or as assigned by ATC.
NOTE: DME required for ROCK SPRINGS TRANSITION for Changeover Point.
NOTE: Adjacent STAR is TOMSN ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
N

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.RAMMS5): From over CYS VORTAC via CYS R-203 and DVV R-311 to RAMMS INT. Thence....

LARAMIE TRANSITION (LAR.RAMMS5): From over LAR VORTAC via LAR R-151 and DVV R-311 to RAMMS INT. Thence....

MEDICINE BOW TRANSITION (MBW.RAMMS5): From over MBW VOR/DME via MBW R-147 and DVV R-311 to RAMMS INT. Thence....

ROCK SPRINGS TRANSITION (OCS.RAMMS5): From over OCS VORTAC via OCS R-093 and GLL R-276 to AUTIM INT, then via DVV R-311 to RAMMS INT. Thence....

....From over RAMMS INT via DVV R-311 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

ROCKIES SEVEN DEPARTURE

ATIS 126.25
DENVER DEP CON
126.1 360.75

TAKE-OFF OBSTACLE NOTES

RWY 29L: Terrain beginning 45′ from DER, 292′ left of centerline, up to 5839′ MSL.
Fence 1015′ from DER, 392′ left of centerline, 15′ AGL/5725′ MSL.
Fence 982′ from DER, 303′ left of centerline, 14′ AGL/5714′ MSL.
Multiple trees beginning 687′ from DER, 615′ right of centerline, up to 70′ AGL/5839′ MSL.
Tree 3196′ from DER, 1337′ left of centerline, 70′ AGL/5839′ MSL.
RWY 2: Pole 432′ from DER, 370′ right of centerline, 49′ AGL/5619′ MSL.

KREMMLING
113.8 RLG
Chan 85
N40°00.16′-W106°26.55′
L-9-11, H-3-5

MEEKER
115.2 EKR
Chan 99
N40°04.05′-W107°55.49′
L-9-11, H-3

RIFLE
110.6 RIL
Chan 43
N39°31.69′ - W107°42.98′

RED TABLE
113.0 DBL
Chan 77
N39°26.36′-W106°53.68′
L-9, H-3

DOVE CREEK
114.6 DVC
Chan 93
N37°48.52′-W108°55.88′
L-9, H-3

MONTROSE
117.1 MTJ
Chan 118
N38°30.39′-W107°53.96′
L-9, H-3

BLUE MESA
114.9 HBU
Chan 96
N38°27.13′-W107°02.39′
L-9, H-3

DENVER
117.9 DEN
Chan 126
N39°48.75′-W104°39.65′

ZIMMR
N40°01.78′
W105°39.93′

CONNR
N39°41.94′
W105°39.95′

BAYLR
N39°33.20′
W105°37.10′

TEHRU
N39°14.56′
W106°43.25′

BOBBA
N39°23.70′
W106°11.17′

N

R-078
16000
260°
(68)

R-073
16000
253°
(36)

16000
275°
(48)

R-344

R-148

16300
251°
(47)

16500
242°
(59)

FL 200
240°
(47)

R-062

R-134

FL 280
240°
(27)

102

FL 200
240°
(28)

75

FL 280
219°
(71)

FL 200
201°
(69)

R-039

R-021

FL 280
218°
(64)

R-035

TAKE-OFF MINIMUMS

Rwys 2, 11R, 11L, 20, 29R: Standard.
Rwy 29L: 200-1 or standard with minimum climb of 402′ per NM to 5900.

NOTE: DME required for RED TABLE, KREMMLING, and MEEKER TRANSITIONS.

NOTE: RADAR required.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

ROCKIES SEVEN DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

BLUE MESA (HI) TRANSITION (ROCKI7.HBU): From over DEN VOR/DME via DEN R-240 and HBU R-021 to HBU VOR/DME.

DOVE CREEK (HI) TRANSITION (ROCKI7.DVC): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME, then via MTJ R-218 and DVC R-035 to DVC VORTAC.

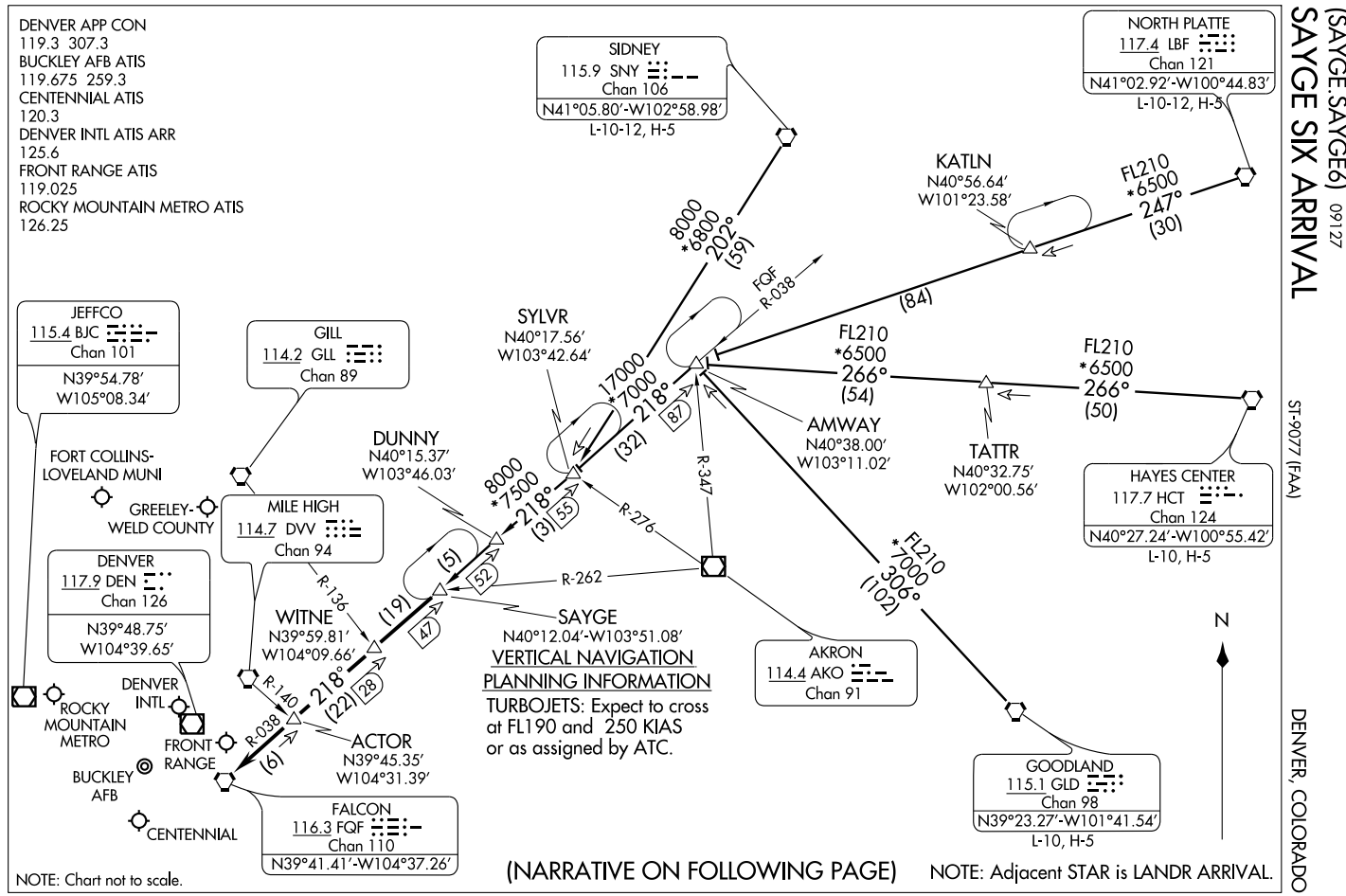
KREMMLING TRANSITION (ROCKI7.RLG): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME.

MEEKER TRANSITION (ROCKI7.EKR): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME, then via RLG R-260 and EKR R-078 to EKR VOR/DME.

MONTROSE TRANSITION (ROCKI7.MTJ): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME.

RED TABLE TRANSITION (ROCKI7.DBL): From over DEN VOR/DME via DEN R-251 and DBL R-062 to DBL VOR/DME.

SW-1, 22 OCT 2009 to 19 NOV 2009


DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
SIDNEY
115.9 SNY
Chan 106
N41°05.80'-W102°58.98'
L-10-12, H-5
NORTH PLATTE
117.4 LBF
Chan 121
N41°02.92'-W100°44.83'
L-10-12, H-5
KATLN
N40°56.64'
W101°23.58'
8000
*6800
202°
(59)
FQF
R-038
(84)
FL210
*6500
247°
(30)
SYLVR
N40°17.56'
W103°42.64'
17000
*7000
218°
(32)
87
FL210
*6500
266°
(54)
FL210
*6500
266°
(50)
AMWAY
N40°38.00'
W103°11.02'
TATTR
N40°32.75'
W102°00.56'
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
GILL
114.2 GLL
Chan 89
FORT COLLINS-
LOVELAND MUNI
GREELEY-
WELD COUNTY
MILE HIGH
114.7 DVV
Chan 94
DUNNY
N40°15.37'
W103°46.03'
8000
*7500
218°
(3)
55
R-347
R-276
R-262
(5)
52
DENVER
117.9 DEN
Chan 126
N39°48.75'
W104°39.65'
R-136
WITNE
N39°59.81'
W104°09.66'
(19)
47
SAYGE
N40°12.04'-W103°51.08'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS: Expect to cross
at FL190 and 250 KIAS
or as assigned by ATC.
FL210
*7000
306°
(102)
AKRON
114.4 AKO
Chan 91
N
DENVER
INTL
ROCKY
MOUNTAIN
METRO
FRONT
RANGE
R-140
218°
(22)
28
R-038
(6)
ACTOR
N39°45.35'
W104°31.39'
BUCKLEY
AFB
CENTENNIAL
FALCON
116.3 FQF
Chan 110
N39°41.41'-W104°37.26'
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Adjacent STAR is LANDR ARRIVAL.
(SAYGE.SAYGE6) 09127
SAYGE SIX ARRIVAL
ST-9077 (FAA)
DENVER, COLORADO

SAYGE SIX ARRIVAL

ARRIVAL DESCRIPTION

GOODLAND TRANSITION (GLD.SAYGE6): From over GLD VORTAC via GLD R-306 and FQF R-038 to SAYGE INT. Thence....

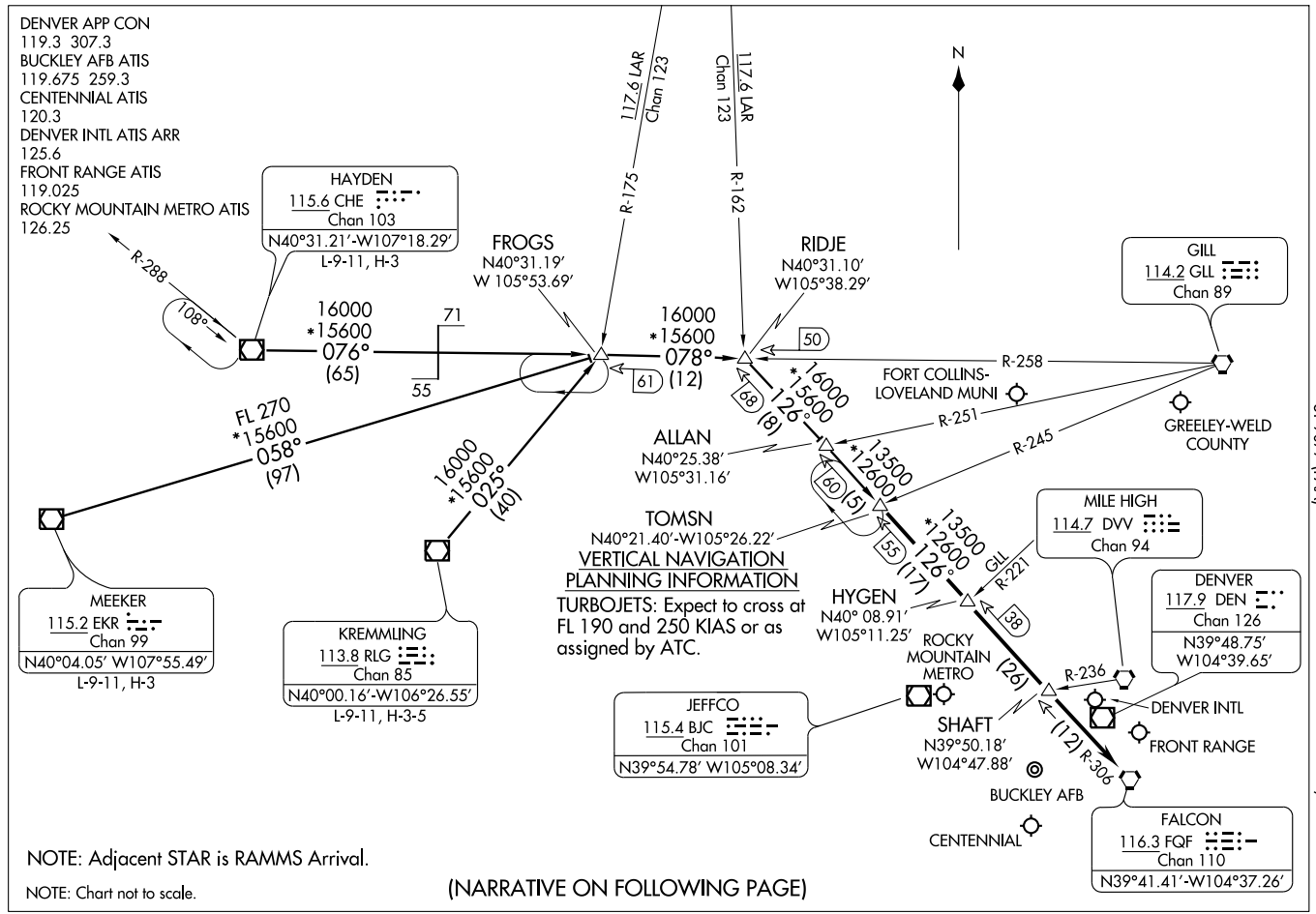
HAYES CENTER TRANSITION (HCT.SAYGE6): From over HCT VORTAC via HCT R-266 and FQF R-038 to SAYGE INT. Thence....

NORTH PLATTE TRANSITION (LBF.SAYGE6): From over LBF VORTAC via LBF R-247 and FQF R-038 to SAYGE INT. Thence....

SIDNEY TRANSITION (SNY.SAYGE6): From over SNY VORTAC via SNY R-202 and FQF R-038 to SAYGE INT. Thence....

....From over SAYGE INT via FQF R-038 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



(TOMSN.TOMSN4) 07298

TOMSN FOUR ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO

TOMSN FOUR ARRIVAL

ARRIVAL DESCRIPTION

HAYDEN TRANSITION (CHE.TOMSN4): From over CHE VOR/DME via CHE R-076 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

KREMMLING TRANSITION (RLG.TOMSN4): From over RLG VOR/DME via RLG R-025 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

MEEKER TRANSITION (EKR.TOMSN4): From over EKR VOR/DME via EKR R-058 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

....From over TOMSN INT via FQF R-306 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO AL-5612 (FAA)

VOR/DME RWY 29L/R

DENVER/
ROCKY MOUNTAIN METROPOLITAN (BJC)

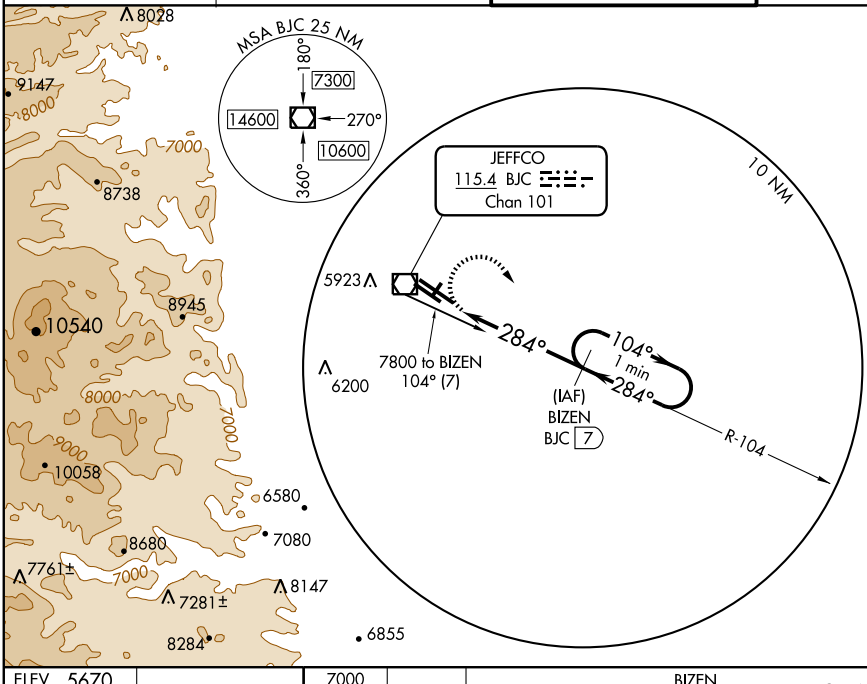
VOR/DME BJC	APP CRS	Rwy 29L Idg	7002	Rwy 29R Idg	9000
115.4	284°	TDZE	5625	TDZE	5595
Chan 101		Apt Elev	5670	Apt Elev	5670

When control tower closed, use Denver Intl altimeter setting. For inoperative MALSR, increase Denver Intl altimeter setting S-29R Cat. D visibility to 1¼ mile. Inoperative table does not apply to local altimeter setting S-29R Cat. D.

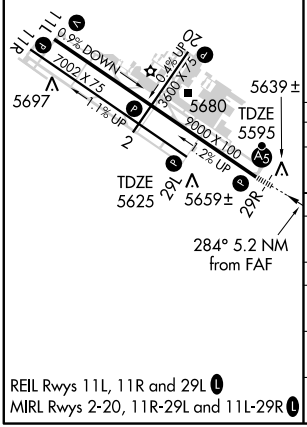
MALSR 29R

MISSED APPROACH: Climbing right turn to 7000 via BJC R-104 to BIZEN/7 DME and hold.

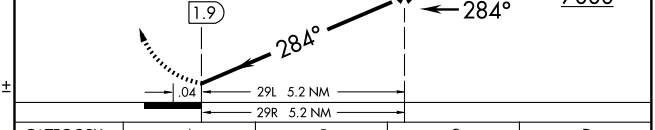
ATIS	DENVER APP CON	METRO TOWER ★	GND CON
126.25	126.1 360.75	118.6 (CTAF) L 233.7	121.7



ELEV 5670

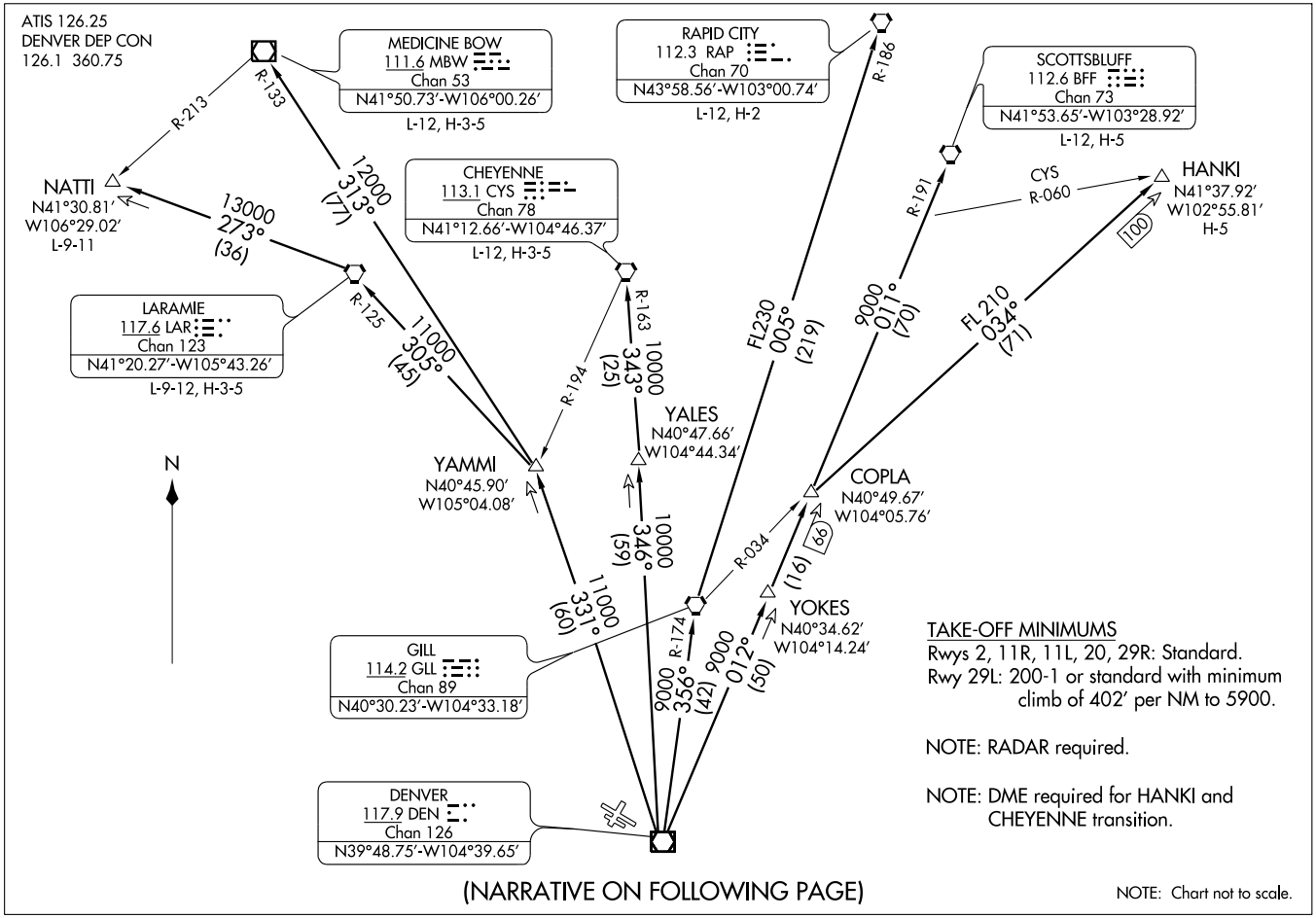


REIL Rwys 11L, 11R and 29L L
MIRL Rwys 2-20, 11R-29L and 11L-29R L



CATEGORY	A	B	C	D
S-29R	5900-½ 305 (300-½)			5900-1 305 (300-1)
S-29L	5920-1 295 (300-1)			
CIRCLING	6180-1 510 (600-1)		6240-1½ 570 (600-1½)	6240-2 570 (600-2)
DENVER INTL ALTIMETER SETTING MINIMUMS				
S-29R	5980-½ 385 (400-½)			5980-1 385 (400-1)
S-29L	6000-1 375 (400-1)			6000-1¼ 375 (400-1¼)
CIRCLING	6260-1 590 (600-1)		6320-1¾ 650 (700-1¾)	6320-2 650 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009



YELLOWSTONE SIX DEPARTURE

DENVER/ ROCKY MOUNTAIN METROPOLITAN (BJC)

SL-5612 (FAA)

DENVER, COLORADO

YELLOW.DEN 09127

YELLOWSTONE SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition.
Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

CHEYENNE TRANSITION (YELLO6.CYS): From over DEN VOR/DME via DEN R-346 and CYS R-163 to CYS VORTAC.

HANKI TRANSITION (YELLO6.HANKI): From over DEN VOR/DME via DEN R-012 and GLL R-034 to HANKI INT.

LARAMIE TRANSITION (YELLO6.LAR): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC.

MEDICINE BOW TRANSITION (YELLO6.MBW): From over DEN VOR/DME via DEN R-331 and MBW R-133 to MBW VOR/DME.

NATTI TRANSITION (YELLO6.NATTI): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC, then via LAR R-273 to NATTI INT.

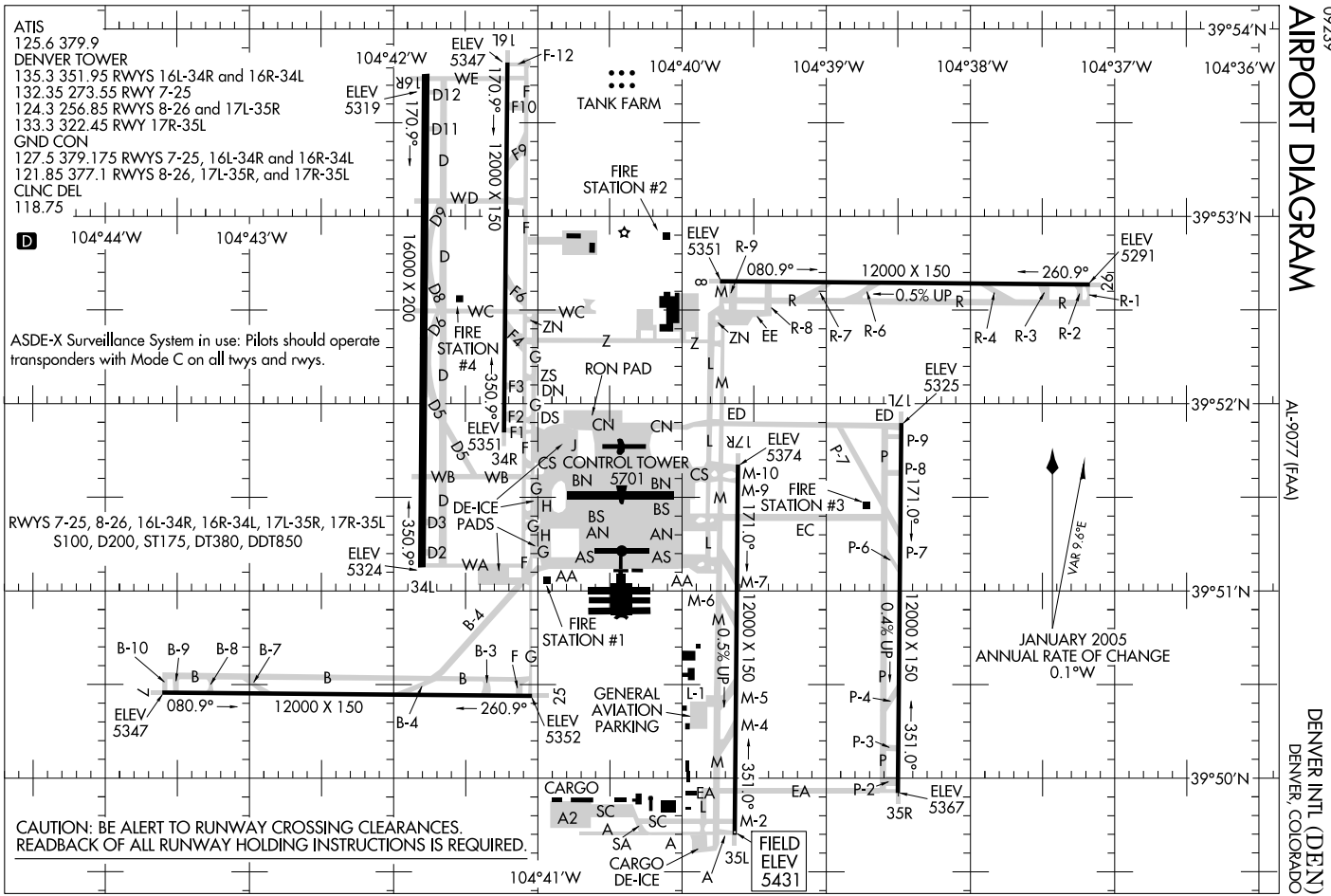
RAPID CITY TRANSITION (YELLO6.RAP): From over DEN VOR/DME via DEN R-356 and GLL R-174 to GLL VORTAC, then via GLL R-005 and RAP R-186 to RAP VORTAC.

SCOTTSBLUFF TRANSITION (YELLO6.BFF): From over DEN VOR/DME via DEN R-012 and BFF R-191 to BFF VORTAC.

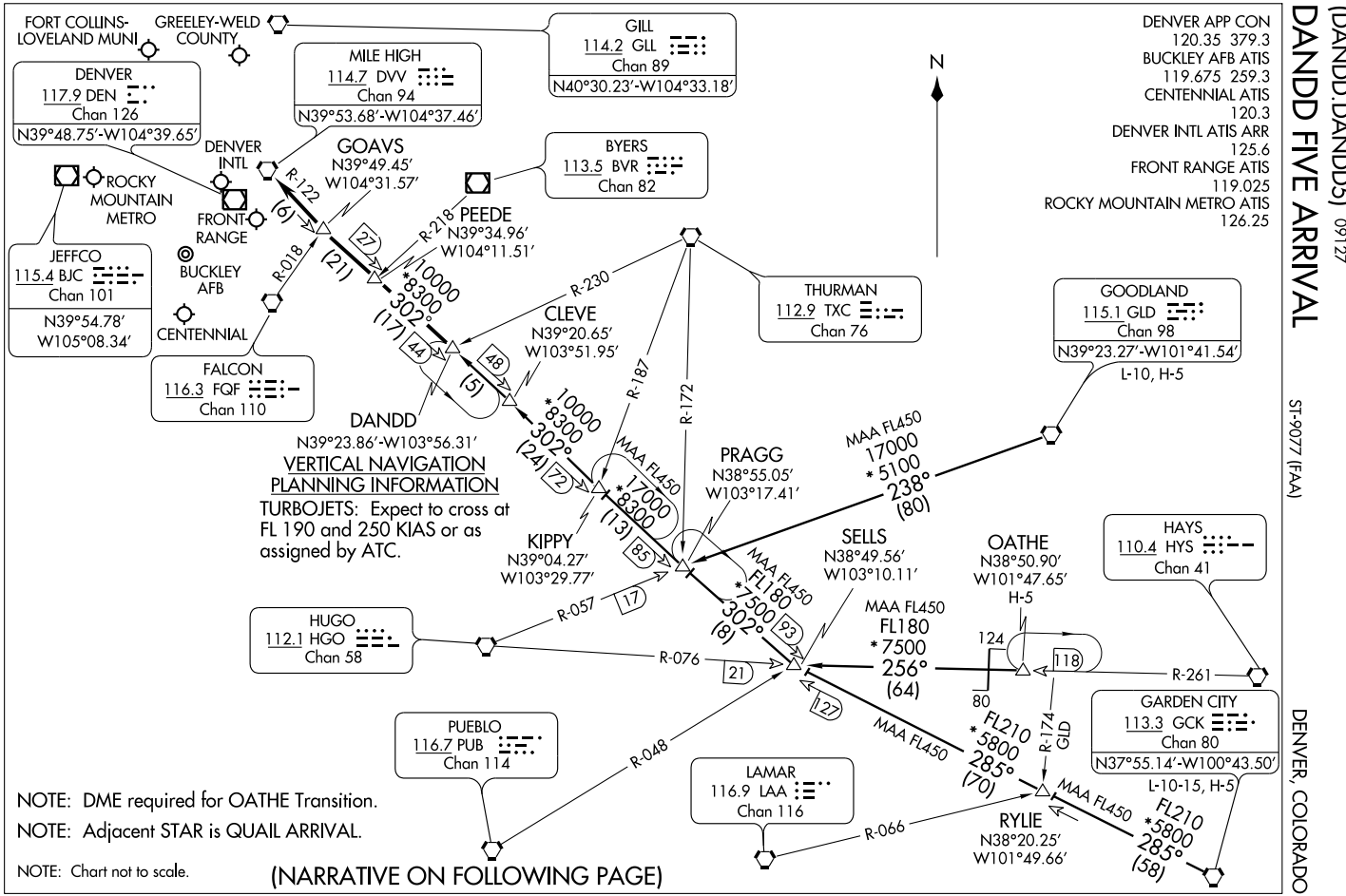
TAKE-OFF OBSTACLE NOTES

RWY 29L: Terrain beginning 45′ from DER, 292′ left of centerline, up to 5839′ MSL.
Fence 1015′ from DER, 392′ left of centerline, 15′ AGL/5725′ MSL.
Fence 982′ from DER, 303′ left of centerline, 14′ AGL/5714′ MSL.
Multiple trees beginning 687′ from DER, 615′ right of centerline, up to 70′ AGL/5839′ MSL.
Tree 3196′ from DER, 1337′ left of centerline, 70′ AGL/5839′ MSL.
RWY 2: Pole 432′ from DER, 370′ right of centerline, 49′ AGL/5619′ MSL.

SW-1, 22 OCT 2009 to 19 NOV 2009



SW-1. 22 OCT 2009 to 19 NOV 2009


DANDD FIVE ARRIVAL
(DANDD.DANDD5) 09127
ST-9077 (FAA)
DENVER, COLORADO
DENVER APP CON
120.35 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
N
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
GILL
114.2 GLL
Chan 89
N40°30.23'-W104°33.18'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'-W104°37.46'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
DENVER INTL
GOAVS
N39°49.45'
W104°31.57'
BYERS
113.5 BVR
Chan 82
ROCKY MOUNTAIN METRO
FRONT RANGE
PEEDE
N39°34.96'
W104°11.51'
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
BUCKLEY AFB
CENTENNIAL
THURMAN
112.9 TXC
Chan 76
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
FALCON
116.3 FQF
Chan 110
CLEVE
N39°20.65'
W103°51.95'
DANDD
N39°23.86'-W103°56.31'
PRAGG
N38°55.05'
W103°17.41'
KIPPY
N39°04.27'
W103°29.77'
SELLS
N38°49.56'
W103°10.11'
OATHE
N38°50.90'
W101°47.65'
H-5
HAYS
110.4 HYS
Chan 41
HUGO
112.1 HGO
Chan 58
PUEBLO
116.7 PUB
Chan 114
LAMAR
116.9 LAA
Chan 116
RYLIE
N38°20.25'
W101°49.66'
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
R-122
(6)
R-218
(27)
(21)
R-018
10000
*8300
302°
(17)
44
48
(5)
R-230
R-187
R-172
10000
*8300
302°
(24)
72
MAA FL450
17000
*8300
(13)
85
MAA FL450
17000
*5100
238°
(80)
MAA FL450
FL180
*7500
302°
(8)
93
MAA FL450
FL180
*7500
256°
(64)
124
118
80
R-261
R-057
17
R-076
21
127
MAA FL450
FL210
*5800
285°
(70)
R-174
GLD
MAA FL450
FL210
*5800
285°
(58)
R-048
R-066
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at FL 190 and 250 KIAS or as assigned by ATC.
NOTE: DME required for OATHE Transition.
NOTE: Adjacent STAR is QUAIL ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

GARDEN CITY TRANSITION (GCK.DANDD5): From over GCK VORTAC via GCK R-285 and DVV R-122 to DANDD INT. Thence....

GOODLAND TRANSITION (GLD.DANDD5): From over GLD VORTAC via GLD R-238 and HGO R-057 to PRAGG INT; then via DVV R-122 to DANDD INT. Thence....

OATHE TRANSITION (OATHE.DANDD5): From over OATHE INT via HYS R-261 and HGO R-076 to SELLS INT; then via DVV R-122 to DANDD INT. Thence....

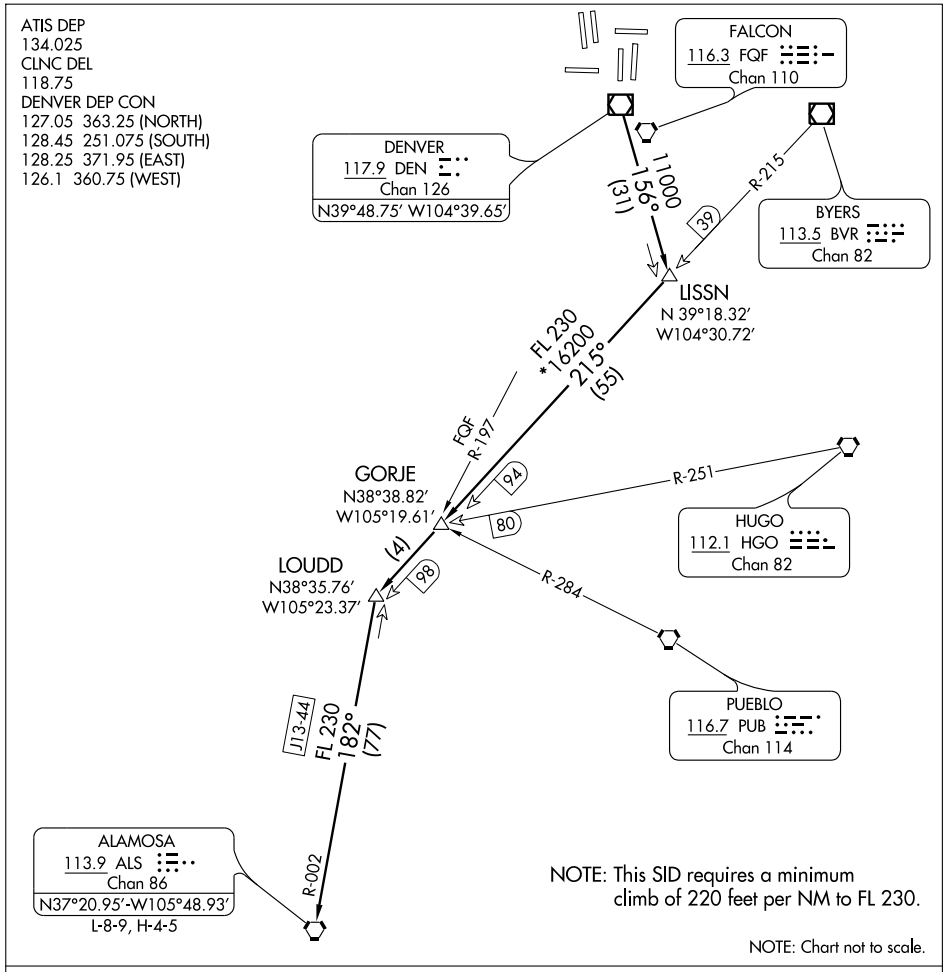
....From over DANDD INT via DVV R-122 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

DECI-BELLE TWO DEPARTURE

SL-9077 (FAA)

DENVER INTL (DEN)
DENVER, COLORADO



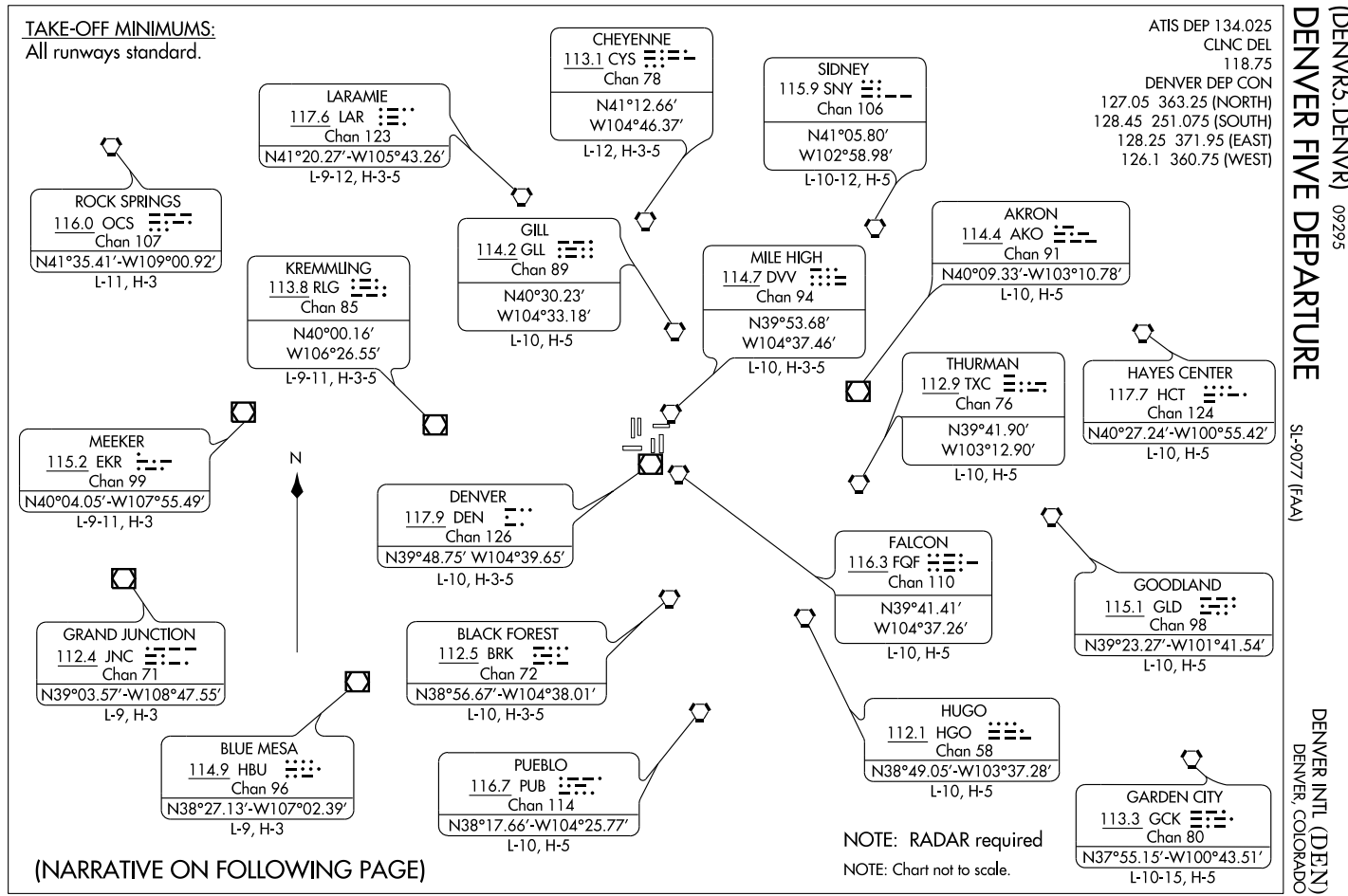
DEPARTURE ROUTE DESCRIPTION

Fly assigned heading for radar vectors to assigned route. Maintain 10000 feet or **ATC assigned lower altitude**. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within 1 minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned route. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

ALAMOSA TRANSITION (DCBEL2.ALS): From over DEN VOR/DME via DEN R-156 to LISSN INT, then via BVR R-215 and ALS R-002 to ALS VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


TAKE-OFF MINIMUMS:
All runways standard.
ATIS DEP 134.025
CLNC DEL
118.75
DENVER DEP CON
127.05 363.25 (NORTH)
128.45 251.075 (SOUTH)
128.25 371.95 (EAST)
126.1 360.75 (WEST)
DENVER FIVE DEPARTURE
(DENVR5.DENVR) 09295
SL-9077 (FAA)
CHEYENNE
113.1 CYS
Chan 78
N41°12.66′
W104°46.37′
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27′-W105°43.26′
L-9-12, H-3-5
SIDNEY
115.9 SNY
Chan 106
N41°05.80′
W102°58.98′
L-10-12, H-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41′-W109°00.92′
L-11, H-3
GILL
114.2 GLL
Chan 89
N40°30.23′
W104°33.18′
L-10, H-5
AKRON
114.4 AKO
Chan 91
N40°09.33′-W103°10.78′
L-10, H-5
KREMMLING
113.8 RLG
Chan 85
N40°00.16′
W106°26.55′
L-9-11, H-3-5
MILE HIGH
114.7 DVV
Chan 94
N39°53.68′
W104°37.46′
L-10, H-3-5
THURMAN
112.9 TXC
Chan 76
N39°41.90′
W103°12.90′
L-10, H-5
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24′-W100°55.42′
L-10, H-5
MEEKER
115.2 EKR
Chan 99
N40°04.05′-W107°55.49′
L-9-11, H-3
N
DENVER
117.9 DEN
Chan 126
N39°48.75′ W104°39.65′
L-10, H-3-5
FALCON
116.3 FQF
Chan 110
N39°41.41′
W104°37.26′
L-10, H-5
GOODLAND
115.1 GLD
Chan 98
N39°23.27′-W101°41.54′
L-10, H-5
GRAND JUNCTION
112.4 JNC
Chan 71
N39°03.57′-W108°47.55′
L-9, H-3
BLACK FOREST
112.5 BRK
Chan 72
N38°56.67′-W104°38.01′
L-10, H-3-5
HUGO
112.1 HGO
Chan 58
N38°49.05′-W103°37.28′
L-10, H-5
BLUE MESA
114.9 HBU
Chan 96
N38°27.13′-W107°02.39′
L-9, H-3
PUEBLO
116.7 PUB
Chan 114
N38°17.66′-W104°25.77′
L-10, H-5
GARDEN CITY
113.3 GCK
Chan 80
N37°55.15′-W100°43.51′
L-10-15, H-5
NOTE: RADAR required
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
DENVER INTL (DEN)
DENVER, COLORADO

DENVER FIVE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading for radar vectors to assigned transition. Maintain 10000 feet or **ATC assigned lower altitude.** Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-DZG	APP CRS	Rwy Idg	12000
111.55	079°	TDZE	5348
Chan 52 (Y)		Apt Elev	5431

ILS or LOC RWY 7

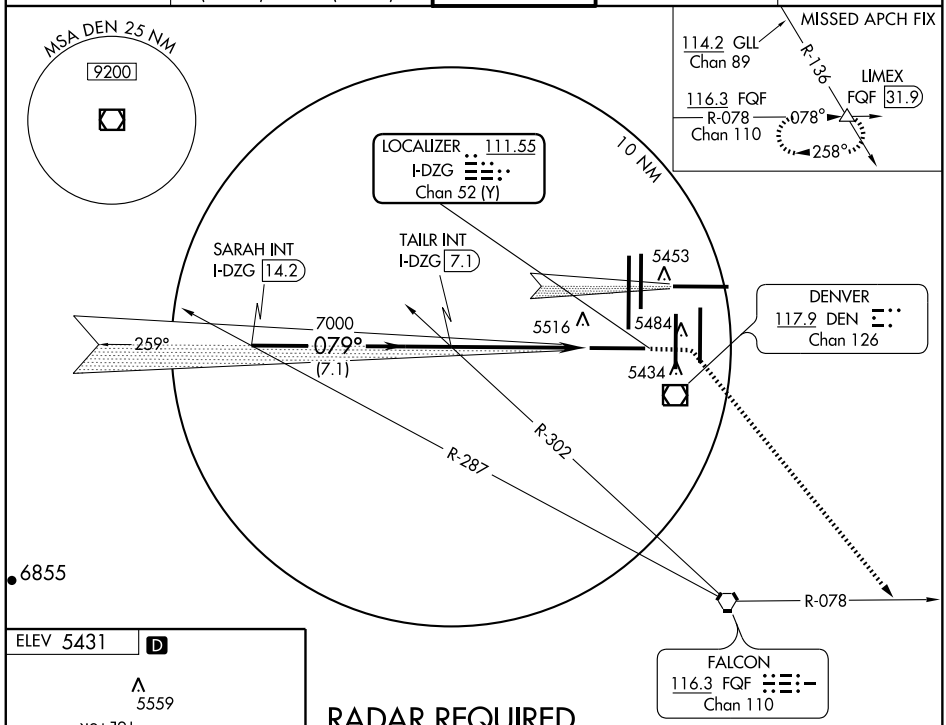
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 8.
S-LOC minima not authorized during simultaneous operations.
For inoperative MALSR, increase S-LOC Cat D visibility to RVR 5000.

MALSR

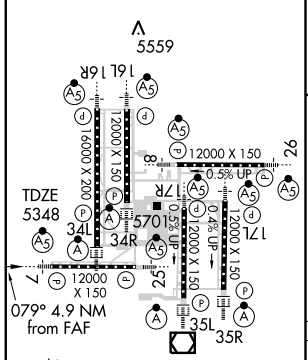
MISSED APPROACH: Climb to 5900, then climbing right turn to 10000 via 130° heading FQF VORTAC R-078 to LIMEX INT/FQF 31.9 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	132.35 273.55	127.5 379.175	118.75



SW-1, 22 OCT 2009 to 19 NOV 2009

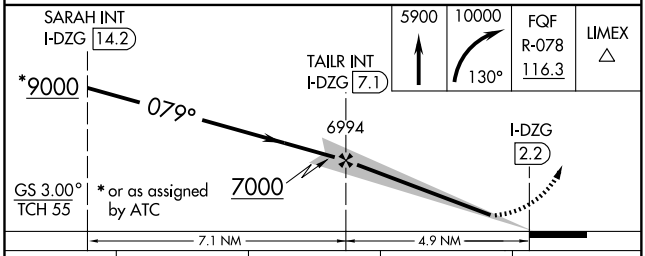
ELEV 5431 D



TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R
HIRL all Rwys

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 7	5548/18 200 (200-½)			
S-LOC 7	5640/24 292 (300-½)			5640/40 292 (300-¾)
CIRCLING	NA			

LOC/DME I-FUI	APP CRS	Rwy Idg	12000
108.9	080°	TDZE	5351
Chan 26		Apt Elev	5431

ILS or LOC RWY 8

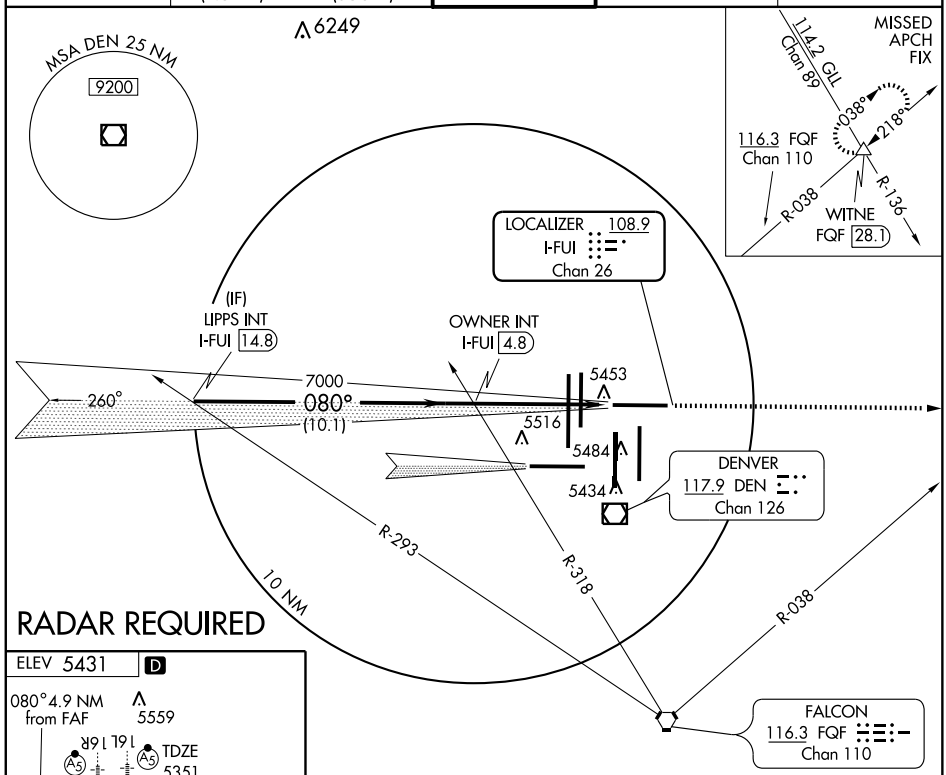
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 7.
S-LOC minima not authorized during simultaneous operations.
** RVR 1800 authorized with the use of FD or AP or HUD to DA.

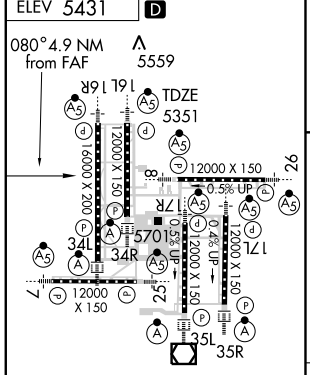
MALSR

MISSED APPROACH: Climb to 10000 via 080° heading and FQF VORTAC R-038 to WITNE INT/ FQF 28.1 DME and hold.

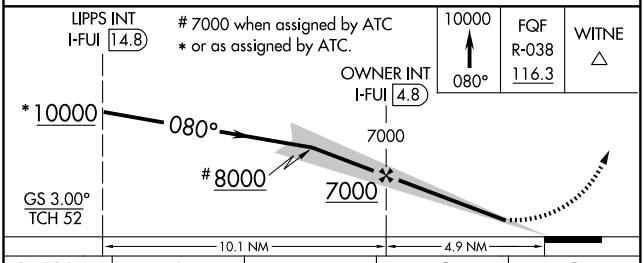
ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75



RADAR REQUIRED



TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R
HIRL all Rwys



FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

CATEGORY	A	B	C	D
S-ILS 8	** 5551/24 200 (200-½)			
S-LOC 8	5700/24 349 (300-½)			5700/40 349 (300-¾)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-DQQ	APP CRS	Rwy Idg	16000
111.9	170°	TDZE	5323
Chan 56		Apt Elev	5431

ILS or LOC RWY 16R

DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 17L and 17R.
S-LOC minima not authorized during simultaneous operations.

MALSR

MISSED APPROACH: Climb to 5900, then climbing right turn to 13000 via 220° heading and FQF VORTAC R-254 to BREWS INT/FQF 26 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 120.35 379.3 (NORTH) (SOUTH)	135.3 351.95	127.5 379.175	118.75

RADAR REQUIRED

MSA DEN 25 NM
9200

SAKIC INT
I-DQQ 15.8
RADAR

350°
170°
7000
(10.9)
10 NM
6249
R-043
115.4 BJC
Chan 101

JETSN INT
I-DQQ 4.9
RADAR

R-068
115.4 BJC
Chan 101

LOCALIZER 111.9
I-DQQ
Chan 56

5453
5516
5484
5434

DENVER
117.9 DEN
Chan 126

MISSED APCH FIX
115.4 BJC
R-176
Chan 101
074°
116.3 FQF
254°
R-254
Chan 110
BREWS
FQF 26

SAKIC INT
I-DQQ 15.8
RADAR
*or as assigned by ATC

JETSN INT
I-DQQ 4.9
RADAR

*10000
170°
7000
%LOC only
#8000
%7000
GS 3.00°
TCH 55
#7000 when assigned by ATC

5900	13000	FQF	BREWS
↑	220°	R-254 116.3	△

10.9 NM 5 NM

ELEV 5431 D

170° 5 NM from FAF
5559

TDZE 5323

16L 16R 34L 34R 17L 17R 35L 35R 7 25 26

12000 X 150
14000 X 200
12000 X 150
12000 X 150
12000 X 150
12000 X 150
0.5% UP
0.4% UP
0.5% UP

HIRL All Rwys
TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R

CATEGORY	A	B	C	D
S-ILS 16R	5523/18 200 (100-½)			
S-LOC 16R	5680/24 357 (300-½)			5680/40 357 (300-¾)
CIRCLING	NA			

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-BXP	APP CRS	Rwy Idg	12000
110.15	170°	TDZE	5335
Chan 38 (Y)		Apt Elev	5431

ILS or LOC RWY 17L

DENVER INTL (DEN)

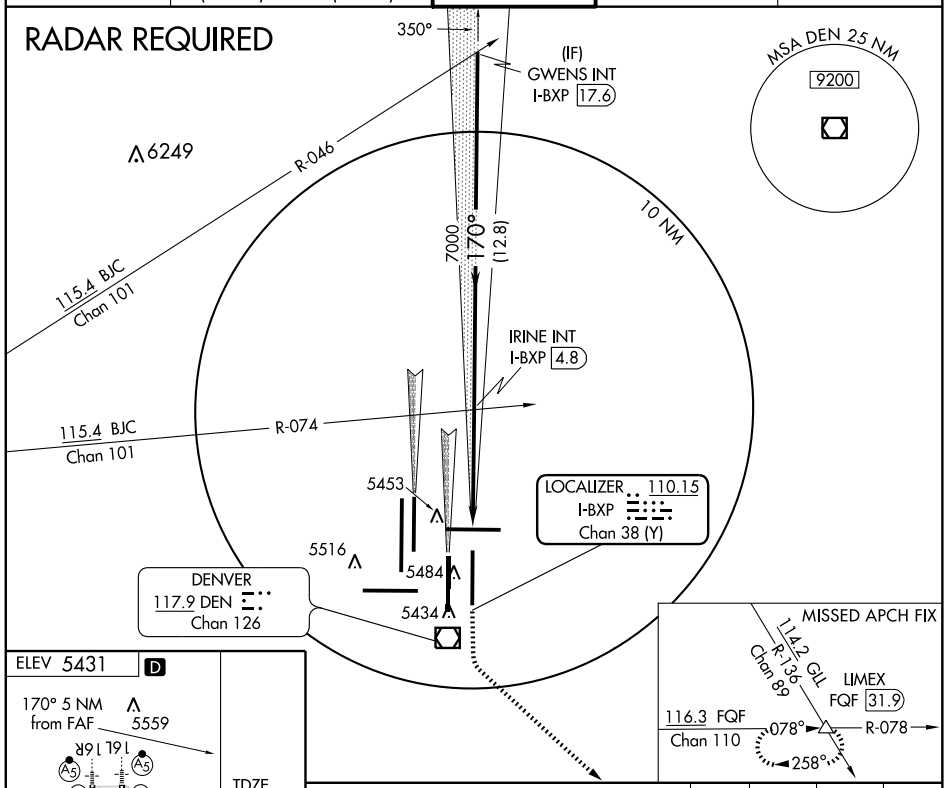
Simultaneous approaches authorized with Rwy 16L and 17R. S-LOC minima not authorized during simultaneous operations.
** RVR 1800 authorized with the use of FD or AP or HUD to DA.

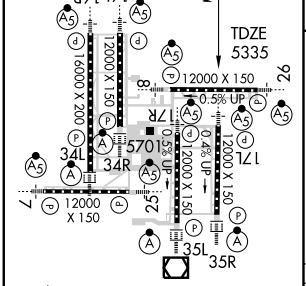
MALSR

MISSED APPROACH: Climb to 5900, then climbing left turn to 10000 via 120° heading and FQF VORTAC R-078 to LIMEX INT/FQF 31.9 DME and hold.

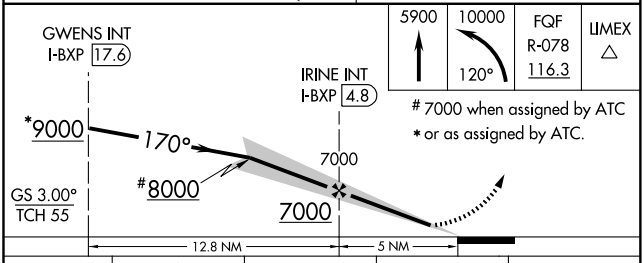
ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75

RADAR REQUIRED





TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R
HIRL all Rwys



FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
S-ILS 17L	** 5535/24 200 (200-½)			
S-LOC 17L	5700/24 365 (300-½)			5700/40 365 (300-¾)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-ERP	APP CRS	Rwy Idg	12000
111.55	260°	TDZE	5352
Chan 52 (Y)		Apt Elev	5431

ILS or LOC RWY 25

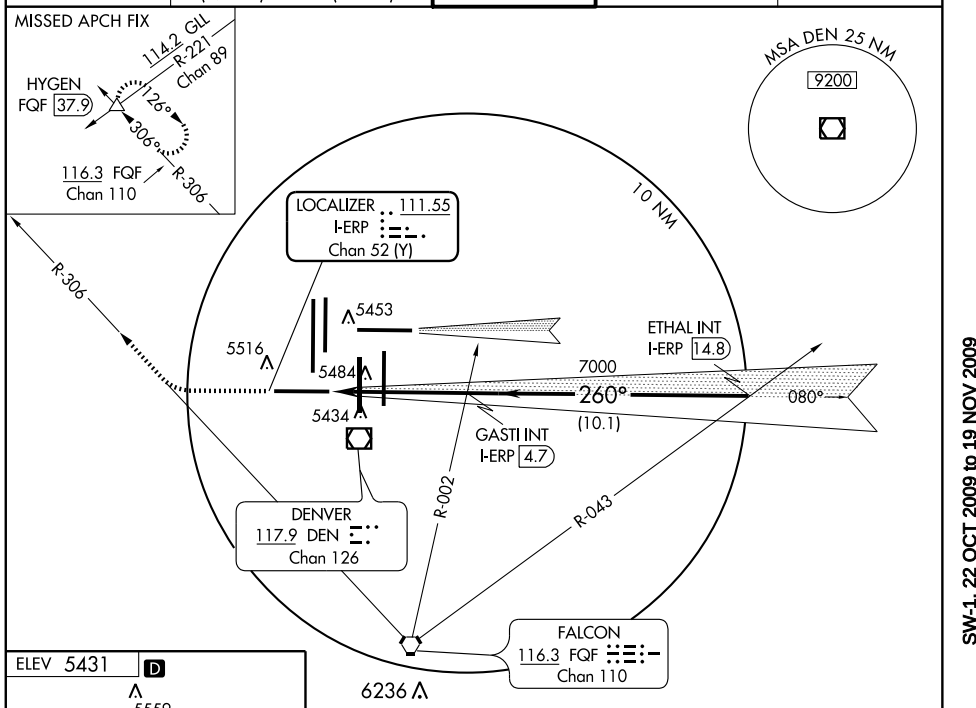
DENVER INTL (DEN)

Simultaneous approach authorized with Rwy 26.
S-LOC minimums not authorized during simultaneous operations.
RVR 1800 authorized with the use of FD or AP or HUD to DA.

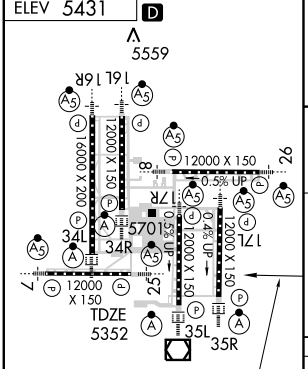
MALSR (A5)

MISSED APPROACH: Climb to 12000 via 260° heading and FQF VORTAC R-306 to HYGEN INT/FQF 37.9 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	132.35 273.55	127.5 379.175	118.75



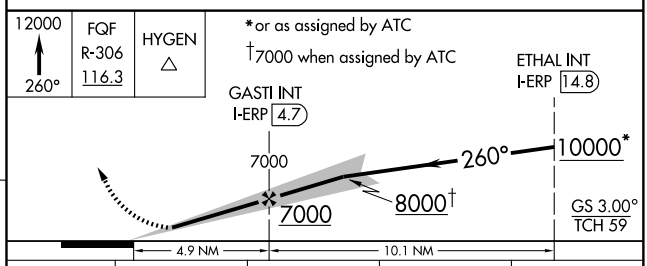
RADAR REQUIRED



TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R
HIRL all Rwys

260° 4.9 NM from FAF

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-ILS 25	# 5552/24 200 (200-½)			
S-LOC 25	5720/24 368 (300-½)			5720/40 368 (300-¾)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-DXU	APP CRS	Rwy Idg	16000
111.9	350°	TDZE	5324
Chan 56		Apt Elev	5431

ILS or LOC RWY 34L

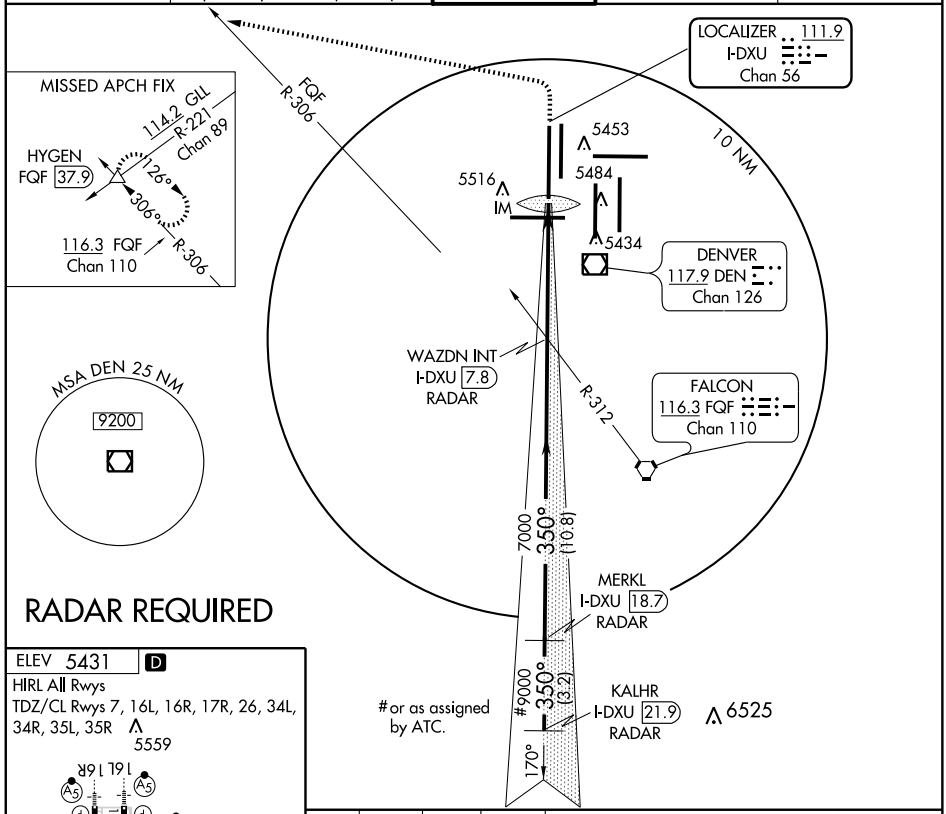
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 35L and 35R.
S-LOC minima not authorized during simultaneous operations.
* DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 5800, then climbing left turn to 12000 via 270° heading and FQF VORTAC R-306 to HYGEN INT/FQF 37.9 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

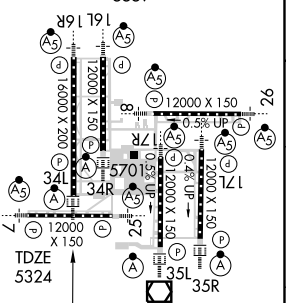


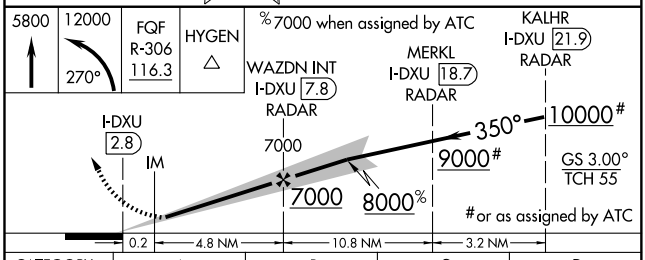
ELEV 5431 D

HIRL All Rwys

TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R

5559





CATEGORY	A	B	C	D
S-ILS 34L	5524/18 200 (100-½)			
S-LOC 34L*	5940/24 616 (600-½)		5940/60 616 (600-1¼)	5940-1½ 616 (600-1½)
CIRCLING	NA			

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-LTT	APP CRS	Rwy Idg	12000
111.1	170°	TDZE	5354
Chan 48		Apt Elev	5431

ILS RWY 16L
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 17L and 17R.
S-LOC minima not authorized during simultaneous operations.

MALSR

MISSED APPROACH: Climb to 5900, then climbing right turn to 12000 via 220° heading and BJC VOR/DME R-147 to SIGNE INT/BJC 26.7 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

RADAR REQUIRED

MSA DEN 25 NM
9200
6249
R-043
115.4 BJC
Chan 101
350°
JOBOB INT
I-LTT 15.7
7000
170°
(10.9)
10 NM
LEETS INT
I-LTT 4.8
R-068
115.4 BJC
Chan 101
LOCALIZER 111.1
I-LTT
Chan 48
5453
5516
5484
5434
DENVER
117.9 DEN
Chan 126

MISSED APCH FIX
115.4 BJC
Chan 101
R-147
147°
327°
116.3 FQF
Chan 110
R-220
SIGNE
BJC 26.7

ELEV 5431 D
5559
170° 4.9 NM from FAF
TDZE 5354
16L 16R
12000 X 150
16000 X 200
8
26
0.5% UP
17R
34L 34R
5701
0.4% UP
0.5% UP
12000 X 150
17L
7
25
12000 X 150
35L 35R

5900	12000	BJC R-147 115.4	SIGNE
	220°		

JOBOB INT
I-LTT 15.7
LEETS INT
I-LTT 4.8
*10000
170°
7000
7000
*or as assigned by ATC
GS 3.00°
TCH 60
10.9 NM
4.9 NM

TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R
HIRL all Rwys

CATEGORY	A	B	C	D
S-ILS 16L	5554/18 200 (200-½)			
S-LOC 16L	5820/24 466 (400-½)		5820/40 466 (400-¾)	5820/50 466 (400-1)
CIRCLING	NA			

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-ACX	APP CRS	Rwy Idg	12000
108.5	170°	TDZE	5388
Chan 22		Apt Elev	5431

ILS RWY 17R
DENVER INTL (DEN)

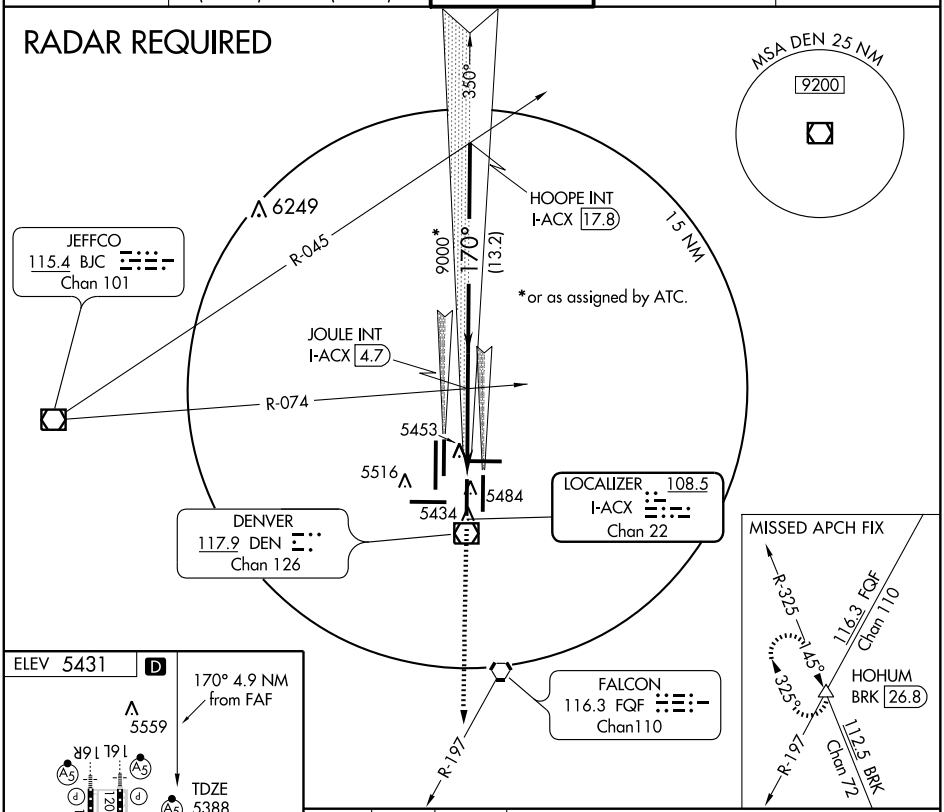
Simultaneous approaches authorized with Rwy 16L and 17L.
S-LOC minima not authorized during simultaneous operations.
For inoperative MALSR, increase S-LOC Cat D visibility to RVR 5000.

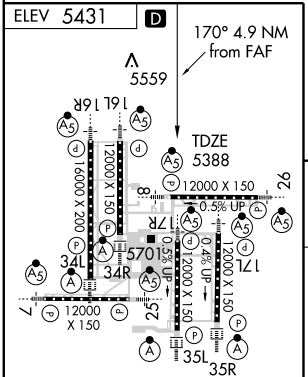
MALSR

MISSED APPROACH: Climb to 10000 via 170° heading and FQF VORTAC R-197 to HOHUM INT/BRK 26.8 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	133.3 322.45	121.85 377.1	118.75

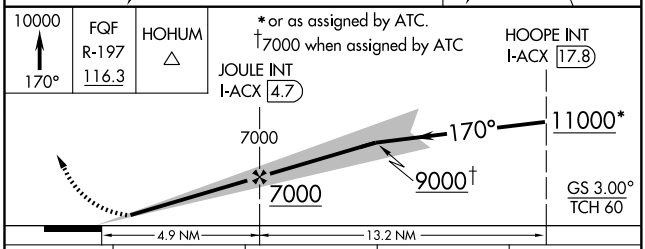
RADAR REQUIRED





TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R
HIRL all Rwys

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-ILS 17R	5588/18 200 (200-½)			
S-LOC 17R	5680/24 292 (300-½)			5680/40 292 (300-¾)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-JOY	APP CRS	Rwy Idg	12000
108.9	260°	TDZE	5306
Chan 26		Apt Elev	5431

ILS RWY 26
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 25. S-LOC minima not authorized during simultaneous operations.

MALSR

MISSED APPROACH: Climb to 5900 then climbing right turn to 11000 via 340° heading and DVV VORTAC R-311 to NIWOT INT/DVV 27.6 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75

RADAR REQUIRED

6249±

MISSED APCH FIX
NIWOT DVV 27.6
R-221
131°
114.2 GLL Chan 89
317°
R-311
114.7 DVV Chan 94
R-311
10 NM

MILE HIGH
114.7 DVV
Chan 94

LOCALIZER 108.9
I-JOY
Chan 26

5453
5516
5484
5434
7000
260°
(6.9)
080°

GRASP INT
I-JOY 7.3

FUZZZ INT
I-JOY 14.2

DENVER
117.9 DEN
Chan 126

R-014
R-037

MSA DEN 25 NM
9200

FALCON
116.3 FQF
Chan 110

ELEV 5431 D

260° 5.1 NM from FAF

5559

TDZE 5306

16L 16R 26 34L 34R 7L 7R 25R 35L 35R

12000 X 150
16000 X 200
12000 X 150
12000 X 150
12000 X 150
0.5% UP
0.4% UP
12000 X 150

TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R
HIRL all Rwys

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

5900	11000	DVV	NIWOT
	340°	R-311	△
		114.7	

*or as assigned by ATC

GRASP INT I-JOY 7.3
FUZZZ INT I-JOY 14.2
I-JOY 2.2
7000
260°
9000*
GS 3.00°
TCH 55
7000
5.1 NM
6.9 NM

CATEGORY	A	B	C	D
S-ILS 26	5506/18 200 (100-½)			
S-LOC 26	5700/24 394 (300-½)			5700/40 394 (300-¾)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-DXU	APP CRS	Rwy Idg 16000
111.9	350°	TDZE 5324
Chan 56		Apt Elev 5431

ILS RWY 34L (CAT II)

DENVER INTL (DENV)

Simultaneous approaches authorized with Rwy 35L and 35R.

ALSF-2

MISSED APPROACH: Climb to 5800, then climbing left turn to 12000 via 270° heading and FQF VORTAC R-306 to HYGEN INT/FQF 37.9 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

MISSED APCH FIX

HYGEN
FQF 37.9
114.2 GLL
R-221
Chan 89
126°
306°
116.3 FQF
Chan 110
R-306

LOCALIZER 111.9
I-DXU
Chan 56

FQF R-306

10 NM

5453
5516
IM
5484
5434

DENVER
117.9 DEN
Chan 126

WAZDN INT
I-DXU 7.8
RADAR

R-312

FALCON
116.3 FQF
Chan 110

MSA DEN 25 NM
9200

7000
350°
(10.8)

MERKL
I-DXU 18.7
RADAR

RADAR REQUIRED

#9000
350°
(3.2)

KALHR
I-DXU 21.9
RADAR
6525

170°

#or as assigned by ATC.

ELEV 5431 D
HIRL All Rwys
TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R

5559

16L 16R
12000 X 150
16000 X 200
8
0.5% UP
17R
12000 X 150
26
0.5% UP
0.4% UP
12000 X 150
12000 X 150
17L
34L
34R
5701
7
12000 X 150
25
TDZE 5324
35L
35R

5800	12000	FQF R-306 116.3	HYGEN
	270°		

or as assigned by ATC
% 7000 when assigned by ATC

WAZDN INT
I-DXU 7.8
RADAR

MERKL
I-DXU 18.7
RADAR

KALHR
I-DXU 21.9
RADAR

DH
RA 107
IM
7000
350°
10000#
9000#
5324
MSL
8000%
GS 3.00°
TCH 55

1090' 939' 4.9 NM 10.8 NM 3.2 NM

CATEGORY	A	B	C	D
S-ILS 34L	5424/12 100 RA 107			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-DXU	APP CRS	Rwy Idg 16000
111.9	350°	TDZE 5324
Chan 56		Apt Elev 5431

ILS RWY 34L (CAT III)

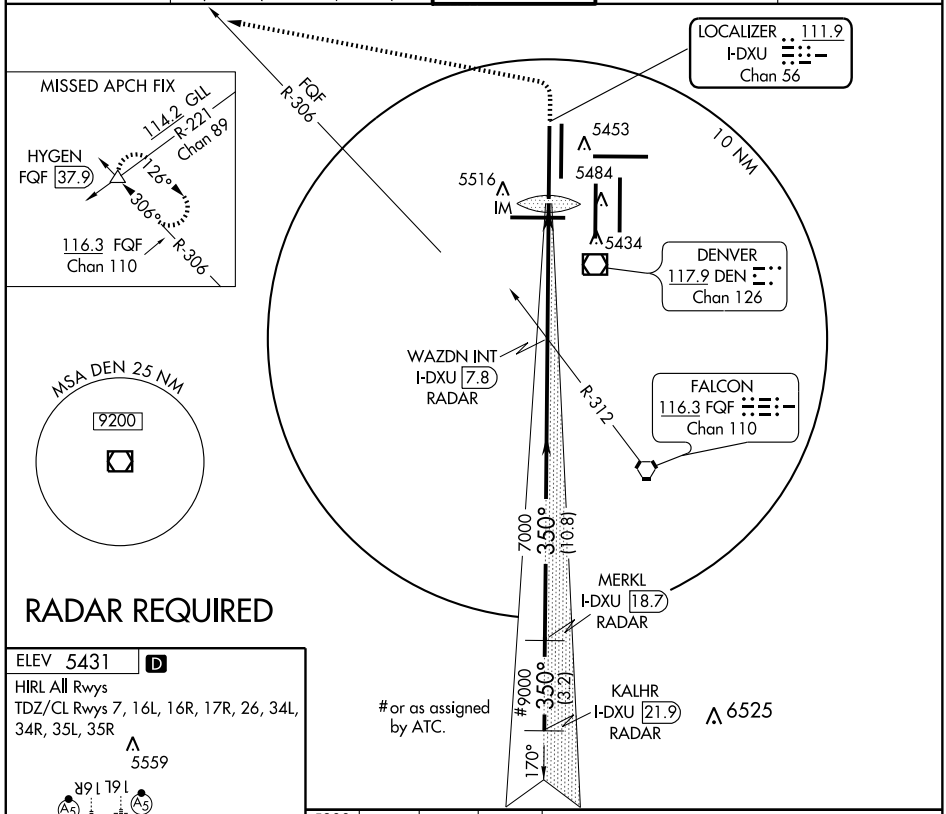
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 35L and 35R.

ALSF-2

MISSED APPROACH: Climb to 5800, then climbing left turn to 12000 via 270° heading and FQF VORTAC R-306 to HYGEN INT/FQF 37.9 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 120.35 379.3 (NORTH) (SOUTH)	135.3 351.95	127.5 379.175	118.75

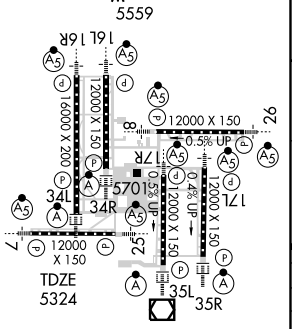


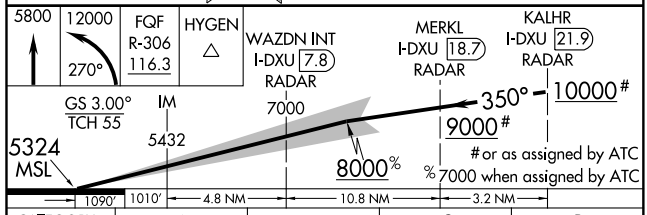
RADAR REQUIRED

ELEV 5431 D

HIRL All Rwys

TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R





CATEGORY	A	B	C	D
S-ILS 34L	CAT IIIA RVR 07			
S-ILS 34L	CAT IIIB RVR 03			
S-ILS 34L	CAT IIIC NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-OUF	APP CRS	Rwy Idg	12000
111.1	350°	TDZE	5351
Chan 48		Apt Elev	5431

ILS RWY 34R

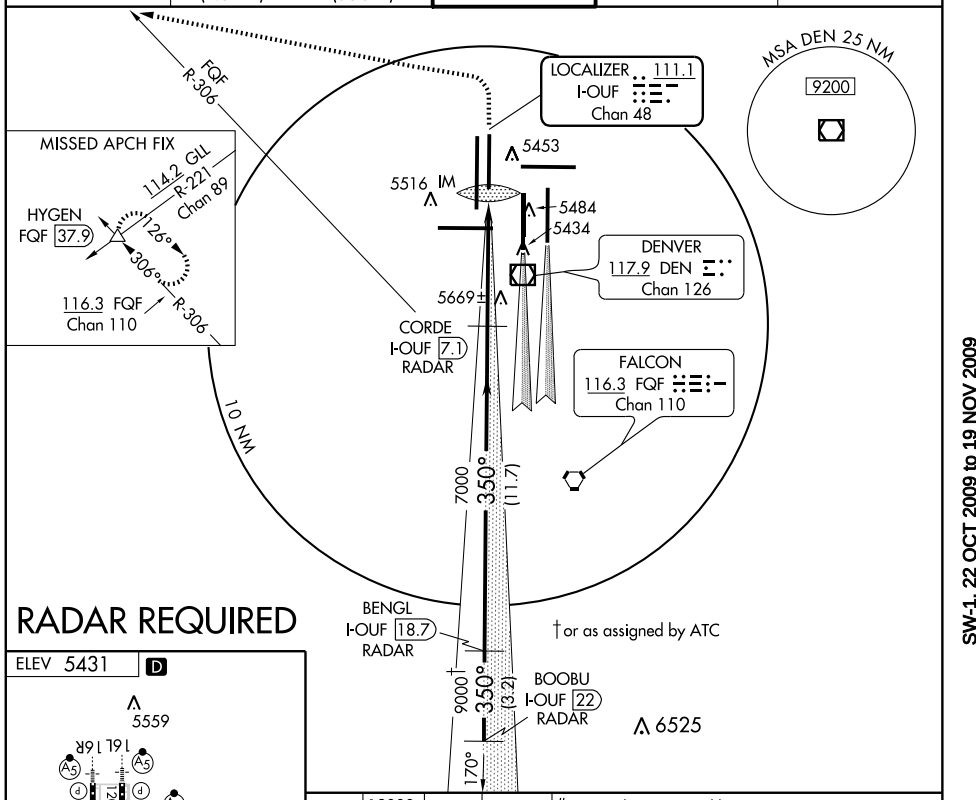
DENVER INTL (DEN)

* DME or RADAR required.
Simultaneous approaches authorized with Rwy 35L and 35R.
S-LOC minima not authorized during simultaneous operations.

ALSF-2

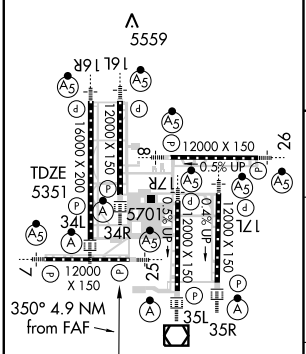
MISSED APPROACH: Climb to 5800, then climbing left turn to 12000 via 270° heading and FQF VORTAC R-306 to HYGEN INT/FQF 37.9 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

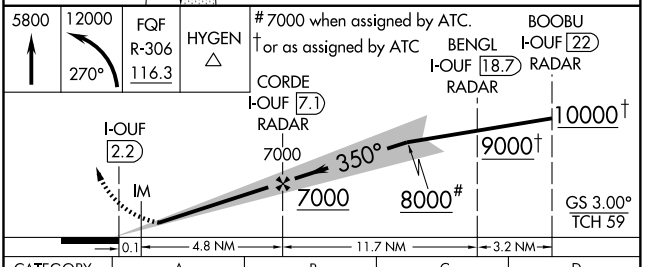


RADAR REQUIRED

ELEV 5431 D



FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-ILS 34R	5551/18 200 (200-½)			
S-LOC 34R*	5920/24 569 (500-½)		5920/50 569 (500-1)	5920/60 569 (500-1¼)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-OUF	APP CRS	Rwy Idg 12000
111.1	350°	TDZE 5351
Chan 48		Apt Elev 5431

ILS RWY 34R (CAT II)

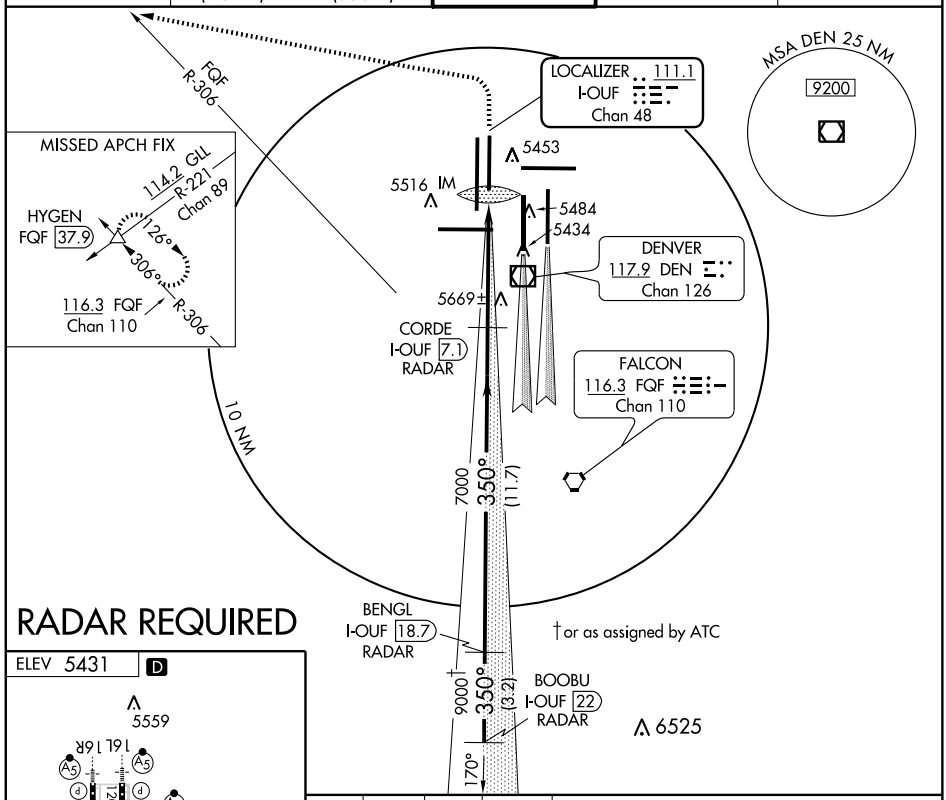
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 35L and 35R.

ALSF-2

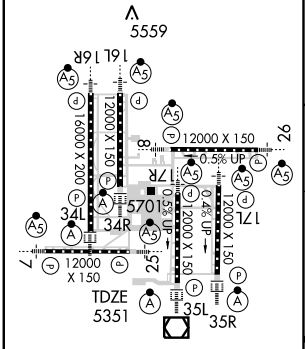
MISSED APPROACH: Climb to 5800, then climbing left turn to 12000 via 270° heading and FQF VORTAC R-306 to HYGEN INT/FQF 37.9 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

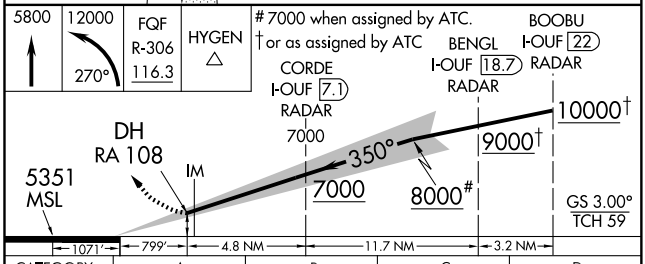


RADAR REQUIRED

ELEV 5431 D



HIRL all Rwys
TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L and 35R



CATEGORY	A	B	C	D
S-ILS-34R	5451/12 100 RA 108			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-OUF	APP CRS	Rwy Idg 12000
111.1	350°	TDZE 5351
Chan 48		Apt Elev 5431

ILS RWY 34R (CAT III)

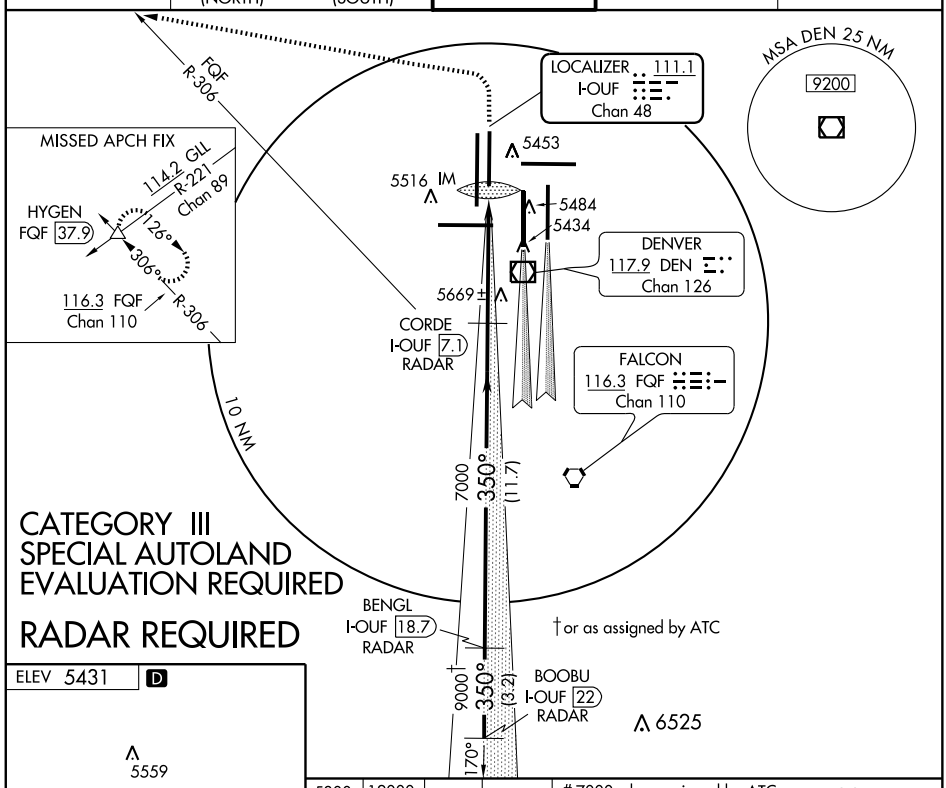
DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 35L and 35R.

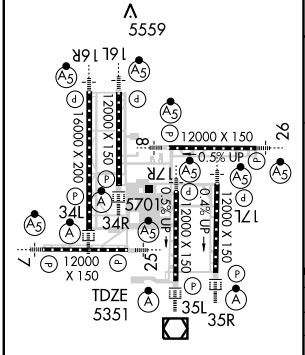
ALSF-2

MISSED APPROACH: Climb to 5800, then climbing left turn to 12000 via 270° heading and FQF VORTAC R-306 to HYGEN INT/FQF 37.9 DME and hold.

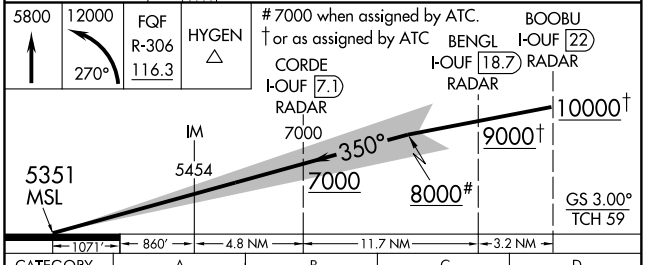
ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75



ELEV 5431 D



HIRL all Rwys
TDZ/CL Rwys 7, 16L, 16R, 17R, 26, 34L, 34R, 35L and 35R



CATEGORY	A	B	C	D
S-ILS-34R	CAT IIIA RVR 07			
S-ILS-34R	CAT IIIB RVR 03			
S-ILS-34R	CAT IIIC NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-AQD	APP CRS	Rwy Idg 12000
108.5	350°	TDZE 5431
Chan 22		Apt Elev 5431

ILS RWY 35L

DENVER INTL (DEN)

** DME or RADAR required.
Simultaneous approaches authorized with Rwy 34R and 35R.
S-LOC minima not authorized during simultaneous operations.

ALSF-2

MISSED APPROACH: Climb to 10000, then right turn direct GLL VORTAC and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	133.3 322.45	121.85 377.1	118.75

MISSED APCH FIX

025° 205° R-025

GILL

GLL

114.2

Chan 89

LOCALIZER 108.5
I-AQD
Chan 22

DENVER
117.9 DEN
Chan 126

5453

5516

5484

5434

IM

5519±

5579±

5719±

DAPGE
I-AQD 4.2
RADAR

DYMON
I-AQD 6.8
RADAR

7000

350° (9.8)

10 NM

CHOLA
I-AQD 16.6
RADAR

CRUUP
I-AQD 19.8
RADAR

10000†

350° (3.2)

170°

†or as assigned by ATC

6566

MSA DEN 25 NM
9200

RADAR REQUIRED

ELEV 5431 D

HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

5559

16L 16R

12000 X 150

16000 X 200

12000 X 150

26

0.5% UP

17R

12000 X 150

0.5% UP

17L

34L

34R

5701

12000 X 150

7

25

TDZE 5431

35L 35R

350° 4.7 NM from FAF

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

10000

GLL

114.2

†or as assigned by ATC
#7000 when assigned by ATC.

CRUUP
I-AQD 19.8
RADAR

CHOLA
I-AQD 16.6
RADAR

DYMON
I-AQD 6.8
RADAR

11000†

10000†

I-AQD 2.2

DAPGE
I-AQD 4.2
RADAR

7000

350°

IM

6100*

7000

9000#

*LOC only

GS 3.00°
TCH 57

0.1 2 NM 2.6 NM 9.8 NM 3.2 NM

CATEGORY	A	B	C	D
S-ILS 35L	5631/18 200 (200-½)			
S-LOC 35L**	5780/24 349 (400-½)			5780/40 349 (400-¾)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-AQD	APP CRS	Rwy Idg 12000
108.5	350°	TDZE 5431
Chan 22		Apt Elev 5431

ILS RWY 35L (CAT II)
DENVER INTL (DEN)

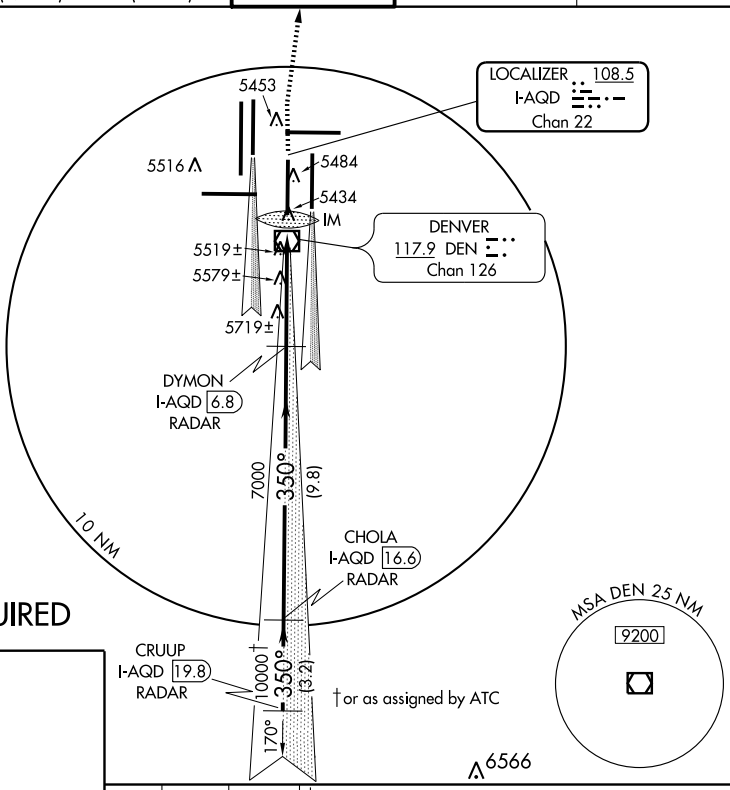
Simultaneous approaches authorized with Rwy 34R and 35R.

ALSF-2

MISSED APPROACH: Climb to 10000, then right turn direct GLL VORTAC and hold.

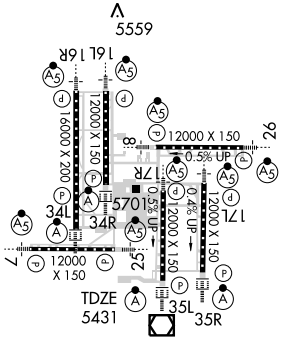
ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	133.3 322.45	121.85 377.1	118.75

MISSED APCH FIX

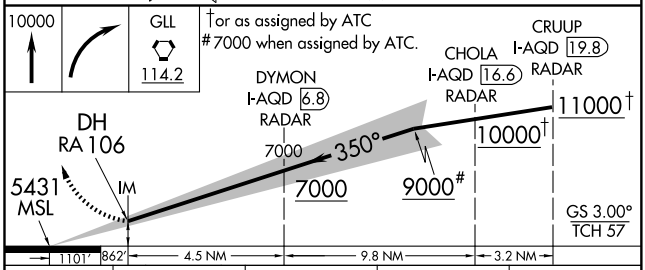


RADAR REQUIRED

ELEV 5431 D



HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R



CATEGORY	A	B	C	D
S-ILS 35L	5531/12 100 RA 106			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

LOC/DME I-AQD	APP CRS	Rwy Idg	12000
108.5	350°	TDZE	5431
Chan 22		Apt Elev	5431

ILS RWY 35L (CAT III)

DENVER INTL (DEN)

Simultaneous approaches authorized with Rwy 34R and 35R.

ALSF-2

MISSED APPROACH: Climb to 10000, then right turn direct GLL VORTAC and hold.

ATIS	DENVER APP CON		DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH)	120.35 379.3 (SOUTH)	133.3 322.45	121.85 377.1	118.75

MISSED APCH FIX

025° 205° R-025

GILL

GLL 114.2 Chan 89

LOCALIZER 108.5 I-AQD Chan 22

DENVER 117.9 DEN Chan 126

5453 5516 5484 5434 IM 5519± 5579± 5719±

DYMON I-AQD 6.8 RADAR

7000 350° (9.8)

CHOLA I-AQD 16.6 RADAR

CRUUP I-AQD 19.8 RADAR

10000† 350° (3.2)

170°

10 NM

MSA DEN 25 NM 9200

†or as assigned by ATC

6566

RADAR REQUIRED

ELEV 5431 D

5559

16L 16R 12000 X 150 16000 X 200 8 26 12000 X 150 0.5% UP 17R 34L 5701 34R 0.5% UP 12000 X 150 0.4% UP 17L 7 25 12000 X 150 TDZE 5431 35L 35R

HIRL all Rwys

TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

10000 GLL 114.2

†or as assigned by ATC

7000 when assigned by ATC.

CRUUP I-AQD 19.8 RADAR

CHOLA I-AQD 16.6 RADAR

DYMON I-AQD 6.8 RADAR

11000† 10000† 7000 350° 9000# IM 5533 5431 MSL

GS 3.00° TCH 57

1101' 860' 4.5 NM 9.8 NM 3.2 NM

CATEGORY	A	B	C	D
S-ILS 35L	CAT IIIA RVR 07			
S-ILS 35L	CAT IIIB RVR 03			
S-ILS 35L	CAT IIIC NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-DPP	APP CRS	Rwy Idg	12000
110.15	350°	TDZE	5367
Chan 38(Y)		Apt Elev	5431

ILS RWY 35R
DENVER INTL (DEN)

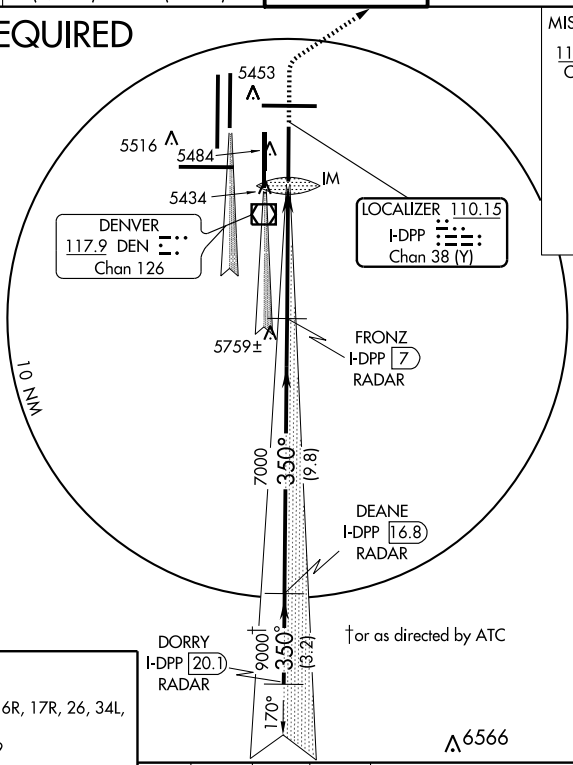
*DME or RADAR required.
Simultaneous approaches authorized with Rwy 34R and Rwy 35L.
S-LOC minima not authorized during simultaneous operations.

ALSF-2

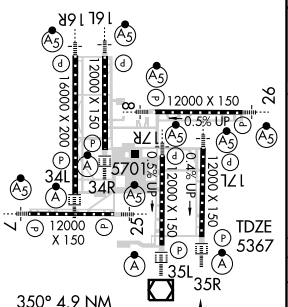
MISSED APPROACH: Climb to 5800, then climbing right turn to 10000 via 045° heading and GLL VORTAC R-136 to CEDUK INT/ GLL 16 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 120.35 379.3 (NORTH) (SOUTH)	124.3 256.85	121.85 377.1	118.75

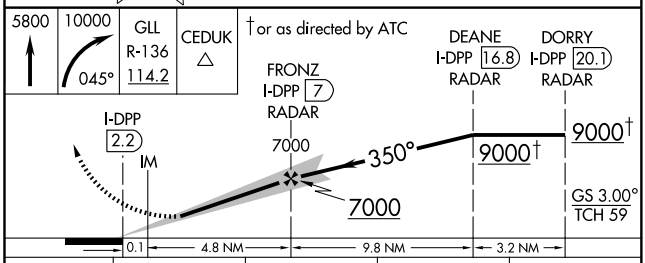
RADAR REQUIRED



ELEV 5431 D
HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R



FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-ILS 35R	5567/18 200 (200-½)			
S-LOC 35R*	5940/24 573 (600-½)		5940/50 573 (600-1)	5940/60 573 (600-1¼)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-DPP	APP CRS	Rwy Idg	12000
110.15	350°	TDZE	5367
Chan 38 (Y)		Apt Elev	5431

ILS RWY 35R (CAT II)

DENVER INTL (DEN)

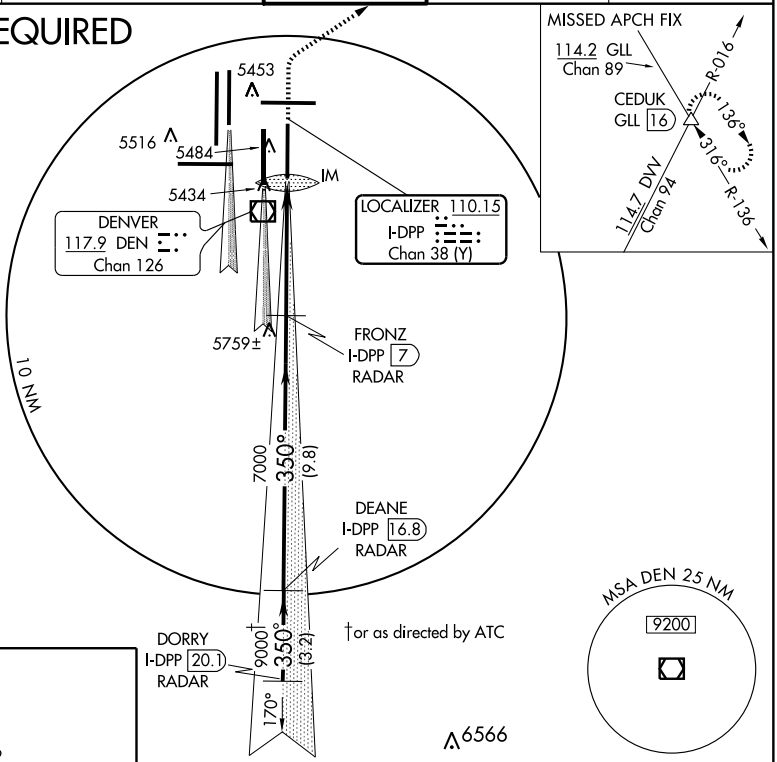
Simultaneous approaches authorized with Rwy 34R and Rwy 35L.

ALSF-2

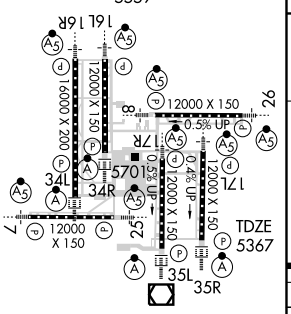
MISSED APPROACH: Climb to 5800, then climbing right turn to 10000 via 045° heading and GLL VORTAC R-136 to CEDUK INT/ GLL 16 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75

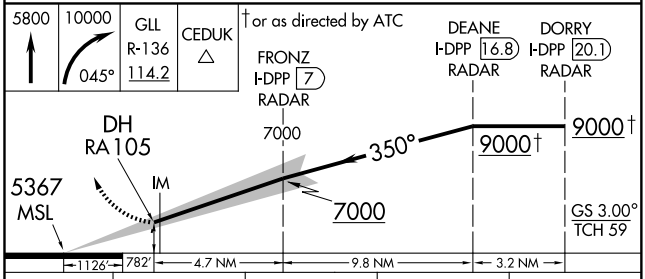
RADAR REQUIRED



ELEV 5431 D



HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R



CATEGORY	A	B	C	D
S-ILS 35R	5467/12 100 RA 105			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-DPP	APP CRS	Rwy Idg 12000
110.15	350°	TDZE 5367
Chan 38 (Y)		Apt Elev 5431

ILS RWY 35R (CAT III)

DENVER INTL (DEN)

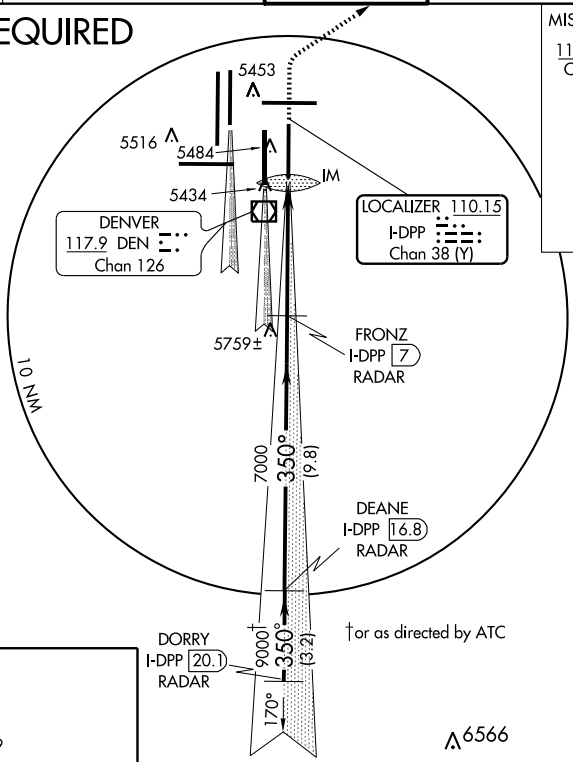
Simultaneous approaches authorized with Rwy 34R and Rwy 35L.

ALSF-2

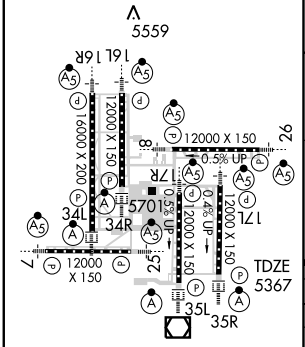
MISSED APPROACH: Climb to 5800, then climbing right turn to 10000 via 045° heading and GLL VORTAC R-136 to CEDUK INT/ GLL 16 DME and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75

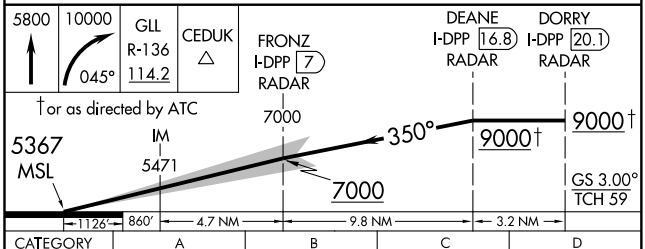
RADAR REQUIRED



ELEV 5431 D



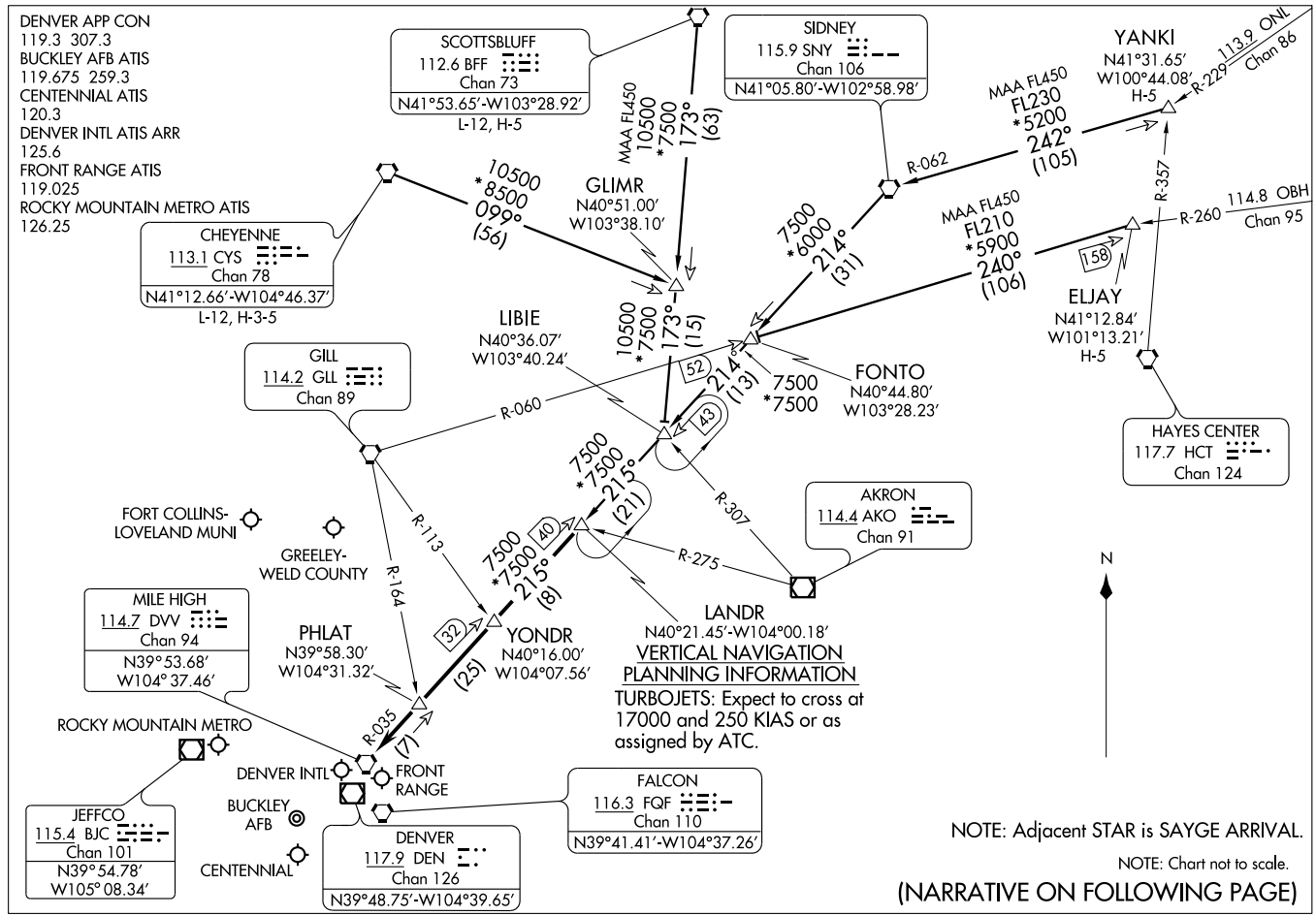
HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R



CATEGORY	A	B	C	D
S-ILS 35R	CAT IIIA RVR 07			
S-ILS 35R	CAT IIIB RVR 03			
S-ILS 35R	CAT IIIC NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009



LANDR FIVE ARRIVAL

(LANDR.LANDR5) 07298

ST-9077 (FAA)

DENVER, COLORADO

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.LANDR5): From over CYS VORTAC via CYS R-099 and BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

ELJAY TRANSITION (ELJAY.LANDR5): From over ELJAY INT via GLL R-060 to FONTO INT, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

SCOTTSBLUFF TRANSITION (BFF.LANDR5): From over BFF VORTAC via BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

YANKI TRANSITION (YANKI.LANDR5): From over YANKI INT via SNY R-062 to SNY VORTAC, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

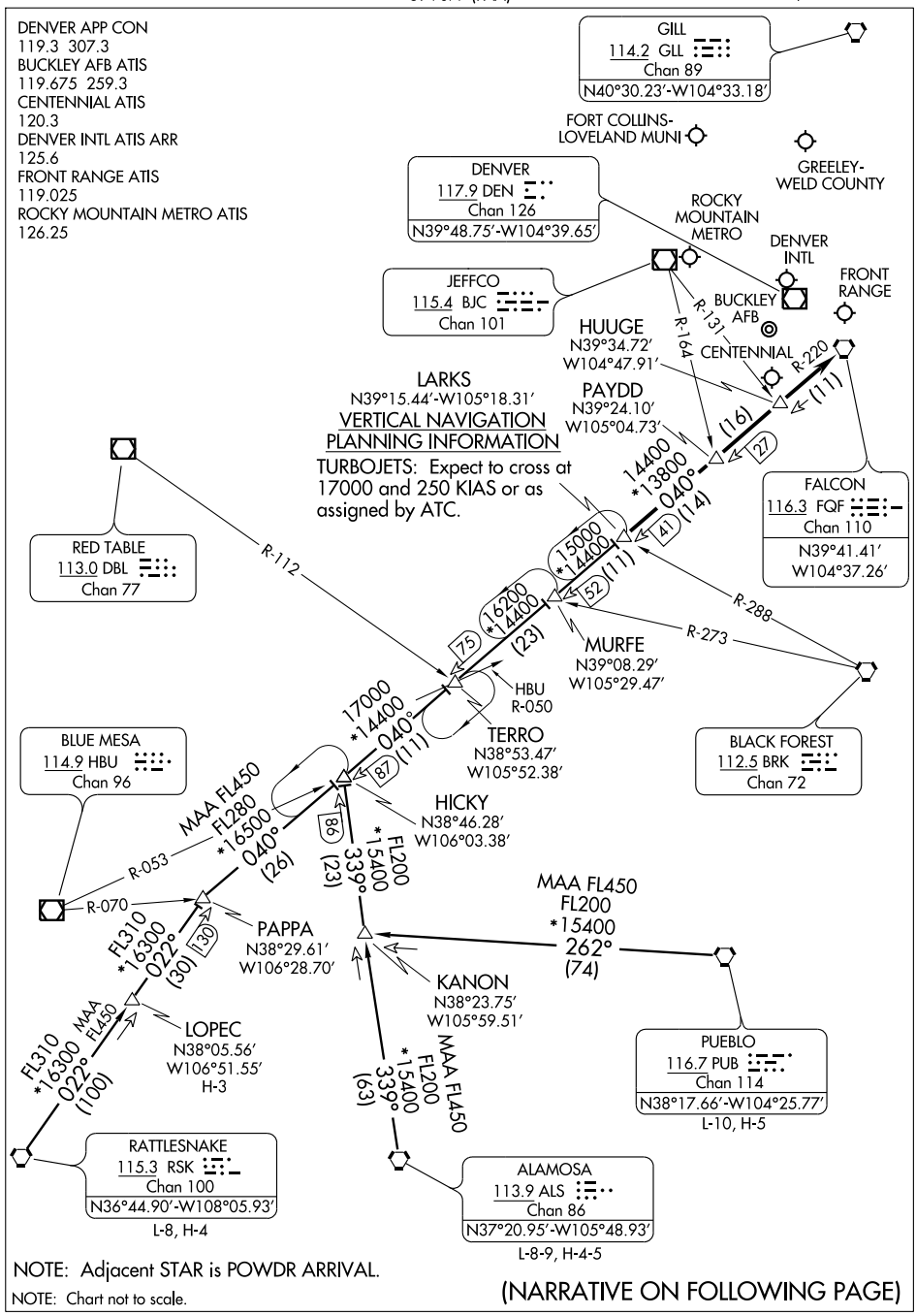
....From over LANDR INT via DVV R-035 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is POWDR ARRIVAL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ARRIVAL DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS6): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS6): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS6): From over PUB VORTAC via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS6): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

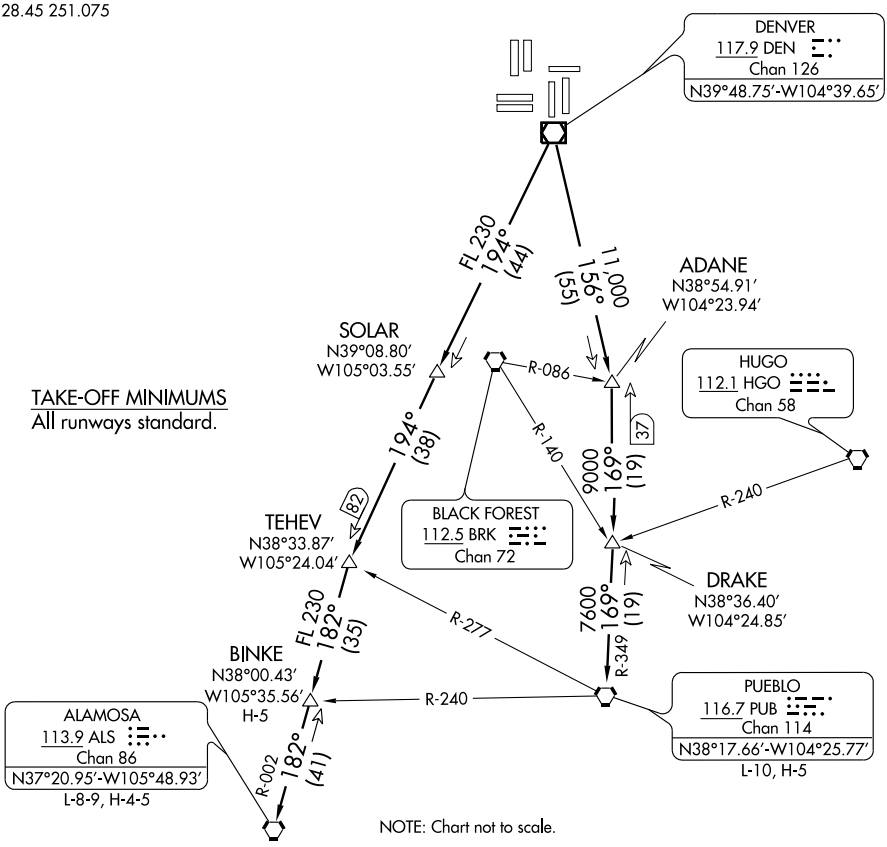
SW-1, 22 OCT 2009 to 19 NOV 2009

PIKES FOUR DEPARTURE

SL-9077 (FAA)

DENVER INTL (DEN)
DENVER, COLORADO

ATIS DEP 134.025
CLNC DEL
118.75
DENVER DEP CON
128.45 251.075



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading for radar vectors to assigned transition. Maintain 10,000 feet or **ATC assigned lower altitude**. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

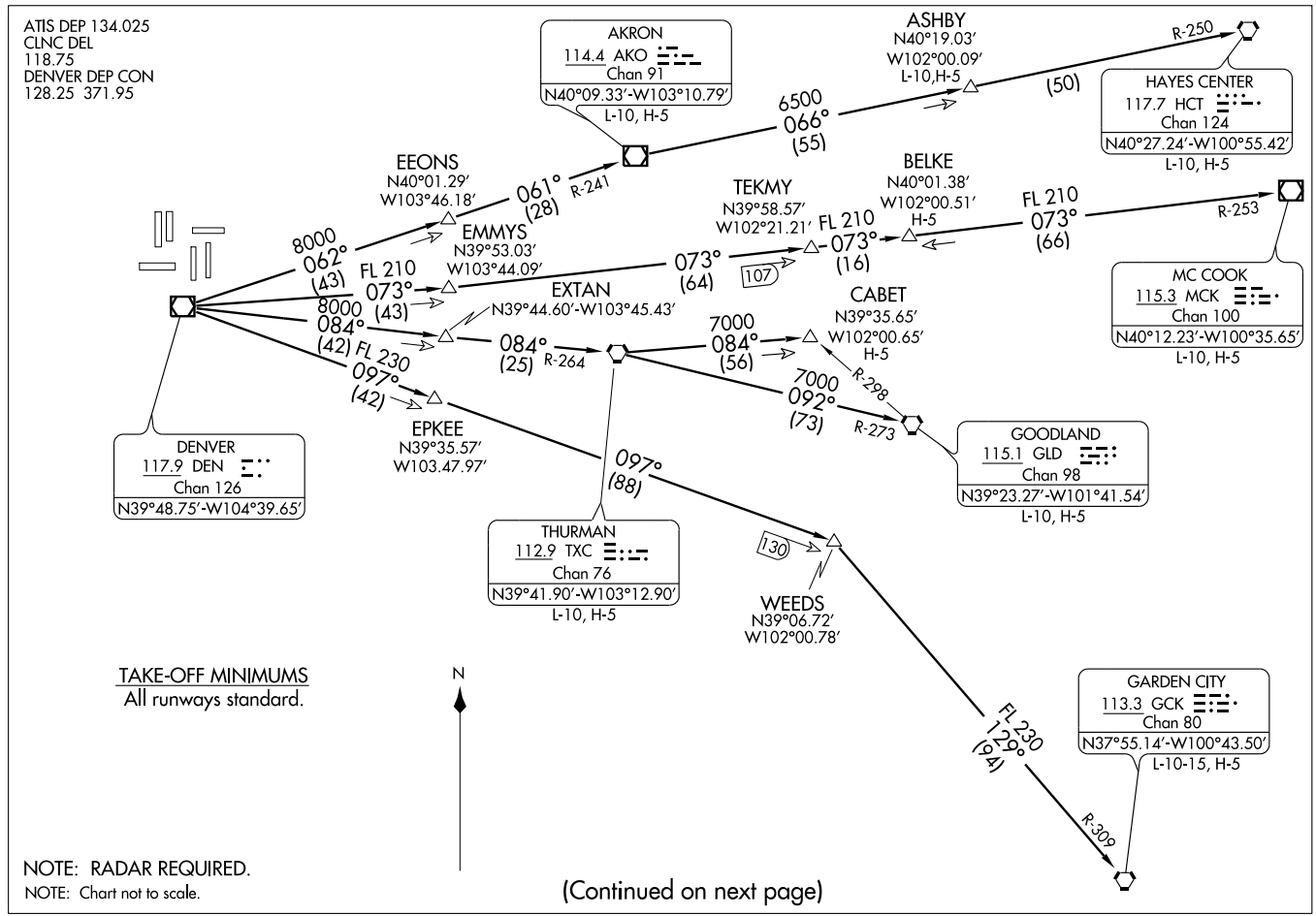
ALAMOSA TRANSITION (PIKES4.ALS): From over DEN VOR/DME via DEN R-194 and ALS R-002 to ALS VORTAC.

BINKE TRANSITION (PIKES4.BINKE): From over DEN VOR/DME via DEN R-194 and ALS R-002 to BINKE INT.

PUEBLO TRANSITION (PIKES4.PUB): From over DEN VOR/DME via DEN R-156 and PUB R-349 to PUB VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

PLAINS FOUR DEPARTURE



(Continued on next page)

SL-9077 (FAA)

DENVER INTL (DEN)
DENVER, COLORADO

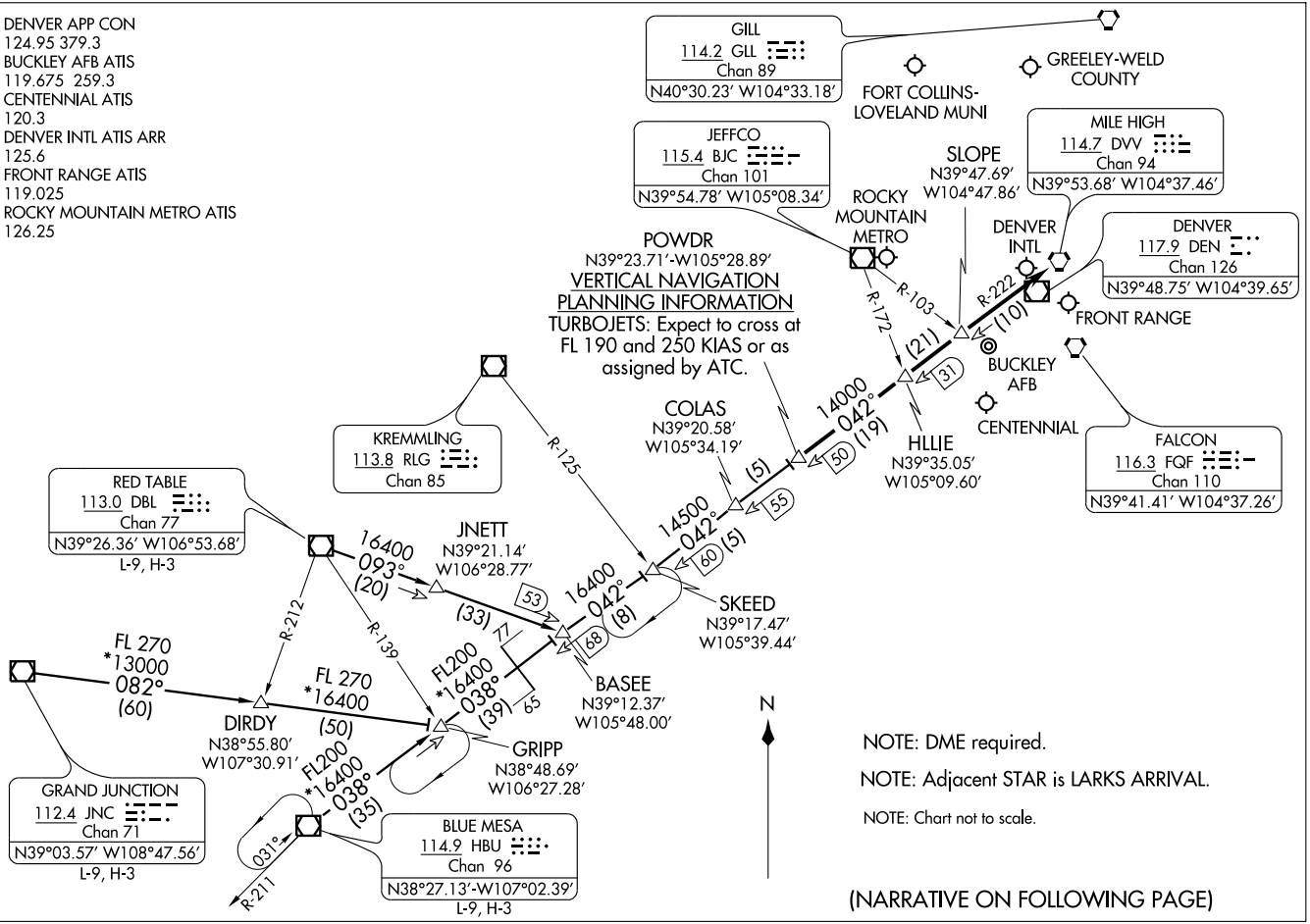
PLAINS FOUR DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading for radar vectors to assigned transition. Maintain 10,000 feet or **ATC assigned lower altitude**. Expect filed altitude 10 minutes after departure.
LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.
AKRON TRANSITION (PLAIN4.AKO): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME.
ASHBY TRANSITION (PLAIN4.ASHBY): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to ASHBY INT.
BELKE TRANSITION (PLAIN4.BELKE): From over DEN VOR/DME via DEN R-073 and MCK R-253 to BELKE INT.
CABET TRANSITION (PLAIN4.CABET): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-084 to CABET INT.
GARDEN CITY TRANSITION (PLAIN4.GCK): From over DEN VOR/DME via DEN R-097 and GCK R-309 to GCK VORTAC.
GOODLAND TRANSITION (PLAIN4.GLD): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-092 and GLD R-273 to GLD VORTAC.
HAYES CENTER TRANSITION (PLAIN4.HCT): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to HCT VORTAC.
MCCOOK TRANSITION (PLAIN4.MCK): From over DEN VOR/DME via DEN R-073 and MCK R-253 to MCK VOR/DME.
THURMAN TRANSITION (PLAIN4.TXC): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC.
WEEDS TRANSITION (PLAIN4.WEEDS): From over DEN VOR/DME via DEN R-097 to WEEDS INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER APP CON
124.95 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25



POWDR SEVEN ARRIVAL

ARRIVAL DESCRIPTION

BLUE MESA TRANSITION (HBU.POWDR7): From over HBU VOR/DME via HBU R-038 and DVV R-222 to POWDR INT. Thence....

GRAND JUNCTION TRANSITION (JNC.POWDR7): From over JNC VORTAC via JNC R-082 to GRIPP INT; then via HBU R-038 and DVV R-222 to POWDR INT. Thence....

RED TABLE TRANSITION (DBL.POWDR7): From over DBL VOR/DME via DBL R-093 and DVV R-222 to POWDR INT. Thence....

....from over POWDR INT via DVV VORTAC R-222 to HLLIE, then via DVV VORTAC R-222 to SLOPE, then via DVV VORTAC R-222 to DVV. Expect radar vectors to the final approach course at or before DVV VORTAC.

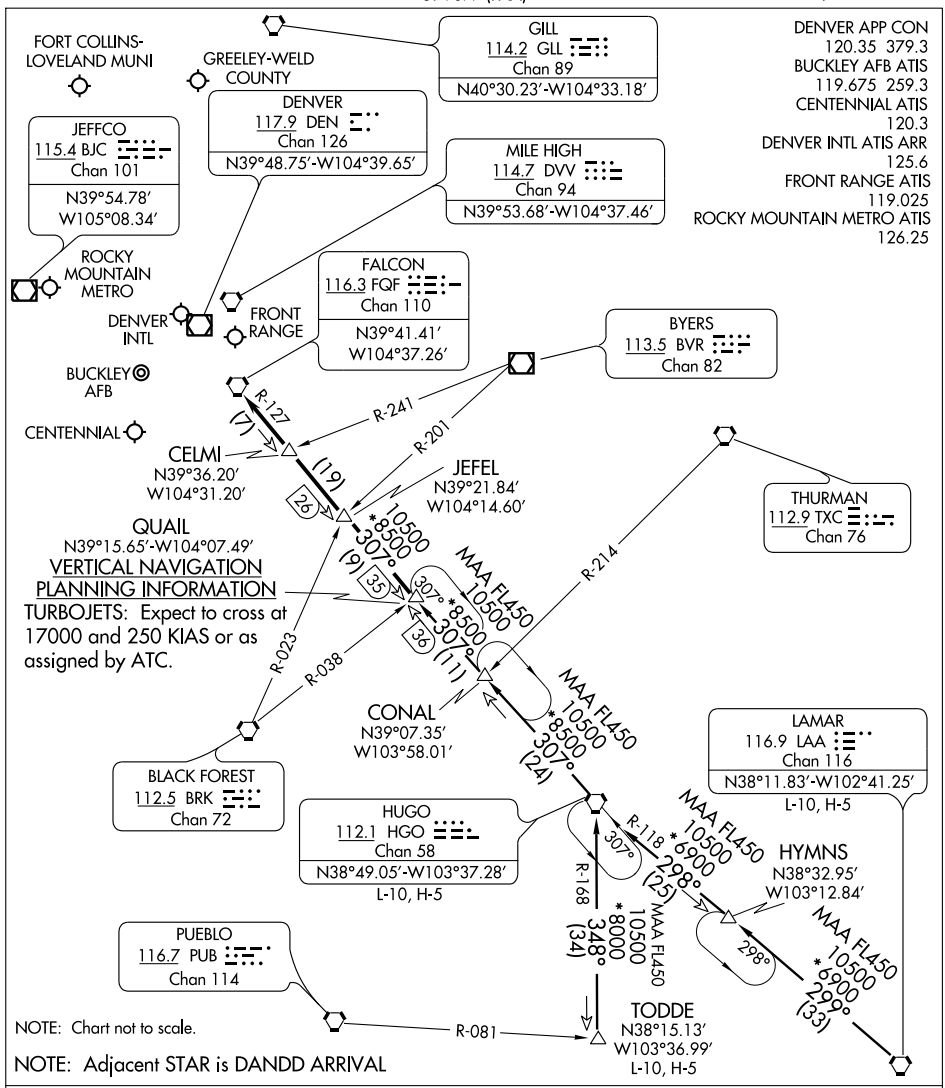
SW-1, 22 OCT 2009 to 19 NOV 2009

(QUAIL.QUAIL6) 09127

QUAIL SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is DANDD ARRIVAL

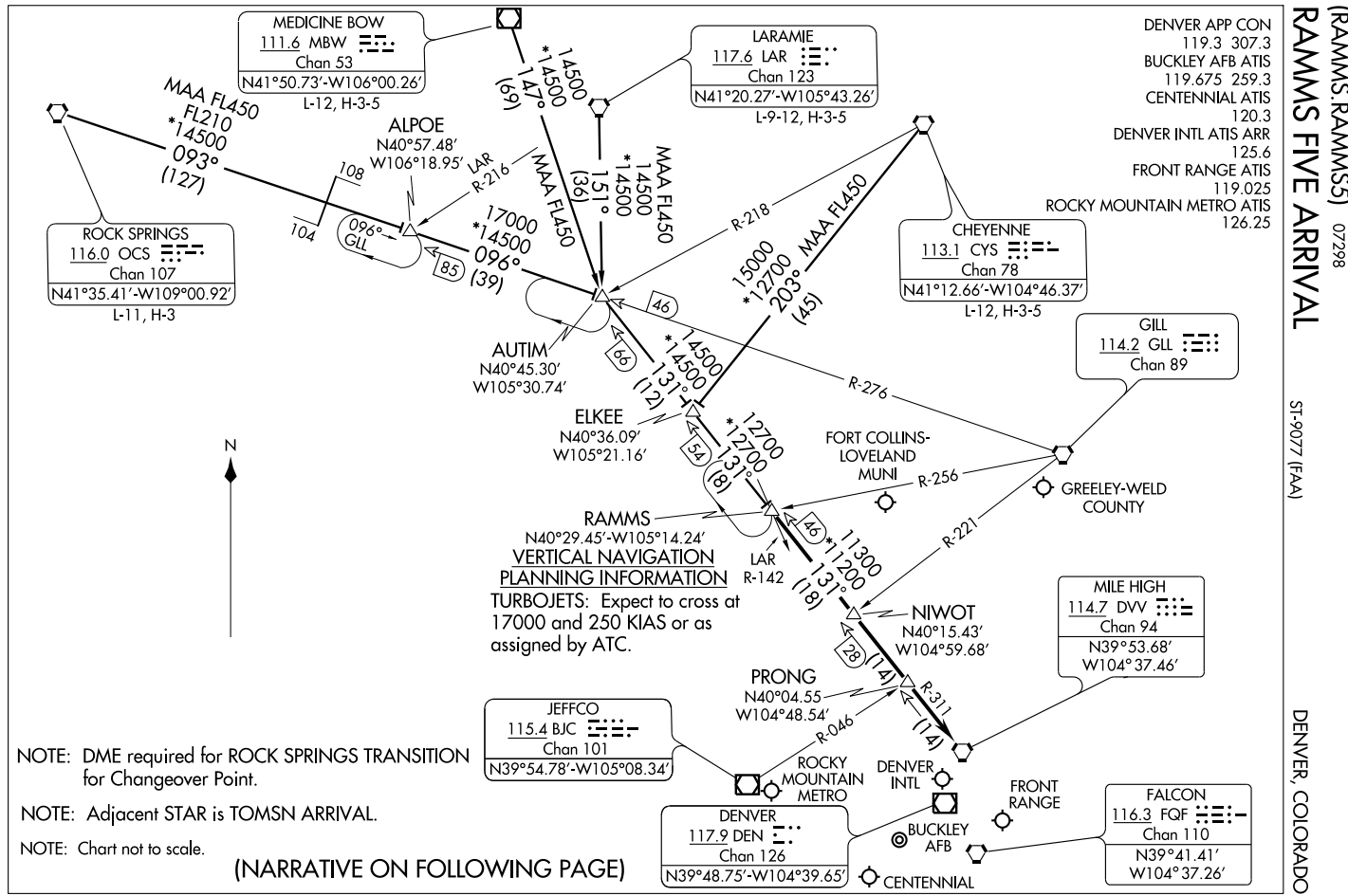
HUGO TRANSITION (HGO.QUAIL6): From over HGO VORTAC via HGO R-307 to CONAL INT; then via 306° course to QUAIL INT. Thence....

LAMAR TRANSITION (LAA.QUAIL6): From over LAA VORTAC via LAA R-299 to HYMNS INT; then via 298° course to HGO VORTAC; then via HGO R-307 to CONAL INT then via 306° course to to QUAIL INT. Thence....

TODDE TRANSITION (TODDE.QUAIL6): From over TODDE INT via HGO R-168 to HGO VORTAC; then via HGO R-307 to QUAIL INT. Thence....

....From over QUAIL INT via HGO R-307 and FQF R-127 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


RAMMS FIVE ARRIVAL (RAMMS.RAMMS5) 07298
DENVER, COLORADO
ST-9077 (FAA)
DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
MEDICINE BOW
111.6 MBW
Chan 53
N41°50.73'-W106°00.26'
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27'-W105°43.26'
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41'-W109°00.92'
L-11, H-3
CHEYENNE
113.1 CYS
Chan 78
N41°12.66'-W104°46.37'
L-12, H-3-5
GILL
114.2 GLL
Chan 89
JEFFCO
115.4 BJC
Chan 101
N39°54.78'-W105°08.34'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'
W104°37.46'
FALCON
116.3 FQF
Chan 110
N39°41.41'
W104°37.26'
ALPOE
N40°57.48'
W106°18.95'
AUTIM
N40°45.30'
W105°30.74'
ELKEE
N40°36.09'
W105°21.16'
RAMMS
N40°29.45'-W105°14.24'
NIWOT
N40°15.43'
W104°59.68'
PRONG
N40°04.55
W104°48.54'
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
ROCKY MOUNTAIN METRO
DENVER INTL
FRONT RANGE
BUCKLEY AFB
CENTENNIAL
MAA FL450
FL210
*14500
093°
(127)
147°
(69)
*14500
14500
151°
(36)
14500
*14500
MAA FL450
R-218
MAA FL450
15000
*12700
203°
(45)
108
104
LAR
R-216
096°
GLL
17000
*14500
096°
(39)
85
46
66
14500
*14500
131°
(12)
R-276
54
12700
*12700
131°
(8)
R-256
R-221
46
11300
*11200
131°
(18)
LAR
R-142
28
(14)
R-311
(14)
R-046
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at 17000 and 250 KIAS or as assigned by ATC.
NOTE: DME required for ROCK SPRINGS TRANSITION for Changeover Point.
NOTE: Adjacent STAR is TOMSN ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
N

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.RAMMS5): From over CYS VORTAC via CYS R-203 and DVV R-311 to RAMMS INT. Thence....

LARAMIE TRANSITION (LAR.RAMMS5): From over LAR VORTAC via LAR R-151 and DVV R-311 to RAMMS INT. Thence....

MEDICINE BOW TRANSITION (MBW.RAMMS5): From over MBW VOR/DME via MBW R-147 and DVV R-311 to RAMMS INT. Thence....

ROCK SPRINGS TRANSITION (OCS.RAMMS5): From over OCS VORTAC via OCS R-093 and GLL R-276 to AUTIM INT, then via DVV R-311 to RAMMS INT. Thence....

....From over RAMMS INT via DVV R-311 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 7

DENVER INTL (DEN)

APP CRS	Rwy Idg	12000
079°	TDZE	5348
	Apt Elev	5431

NA — GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Baro/VNAV NA below -25°C (-13°F). For inoperative MALSR increase LNAV Cat D visibility to RVR 6000.

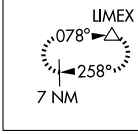
MALSR (A5)

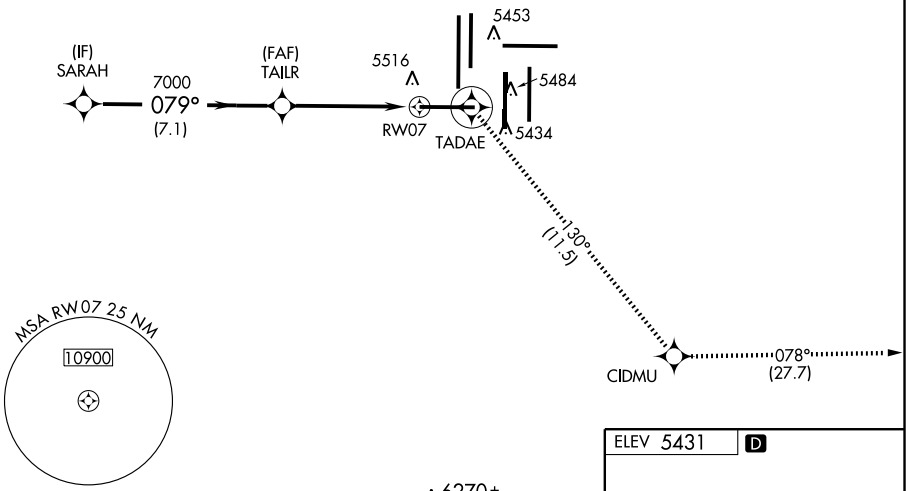
MISSED APPROACH: Climb to 10000 via 079° course to TADAE WP then 130° track to CIDMU WP then 078° track to LIMEX WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	132.35 273.55	127.5 379.175	118.75

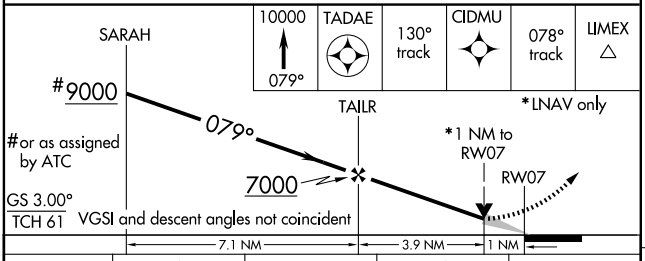
RADAR REQUIRED

MISSED APCH FIX

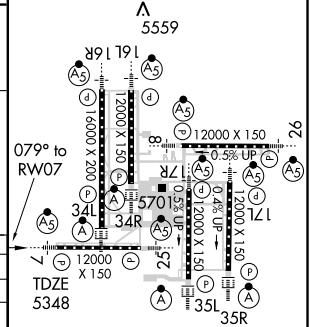




6270±



CATEGORY	A	B	C	D
GLS/PA DA	NA			
LNAV/VNAV DA	5740/40 392 (400-¾)			
LNAV MDA	5740/24 392 (400-½)			5740/50 392 (400-1)
CIRCLING	NA			



HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12000
079°	TDZE	5351
	Apt Elev	5431

RNAV (GPS) RWY 8

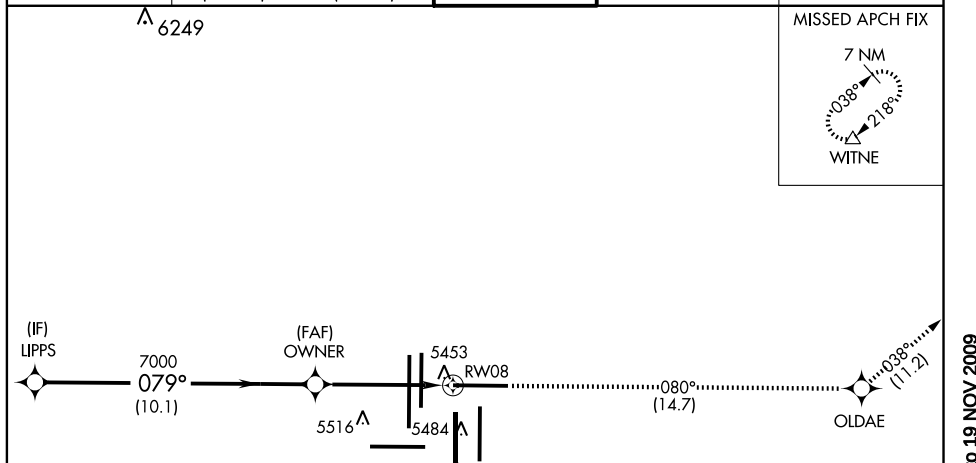
DENVER INTL (DEN)

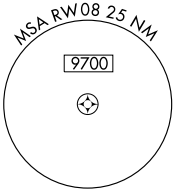
T NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MALSR

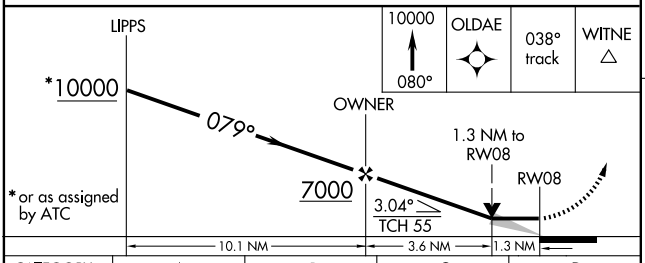
MISSED APPROACH: Climb to 10000 via 080° course to OLDAE WP then 038° track to WITNE WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75

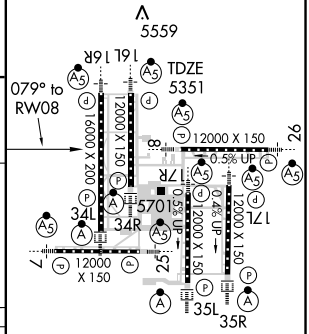




RADAR REQUIRED



CATEGORY	A	B	C	D
LNAV MDA	5820/24	469 (400-½)	5820/40	469 (400-¾)	5820/50	469 (400-1)
CIRCLING	NA			



HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

RNAV (GPS) RWY 16L

DENVER INTL (DEN)

APP CRS	Rwy Idg	12000
170°	TDZE	5354
	Apt Elev	5431

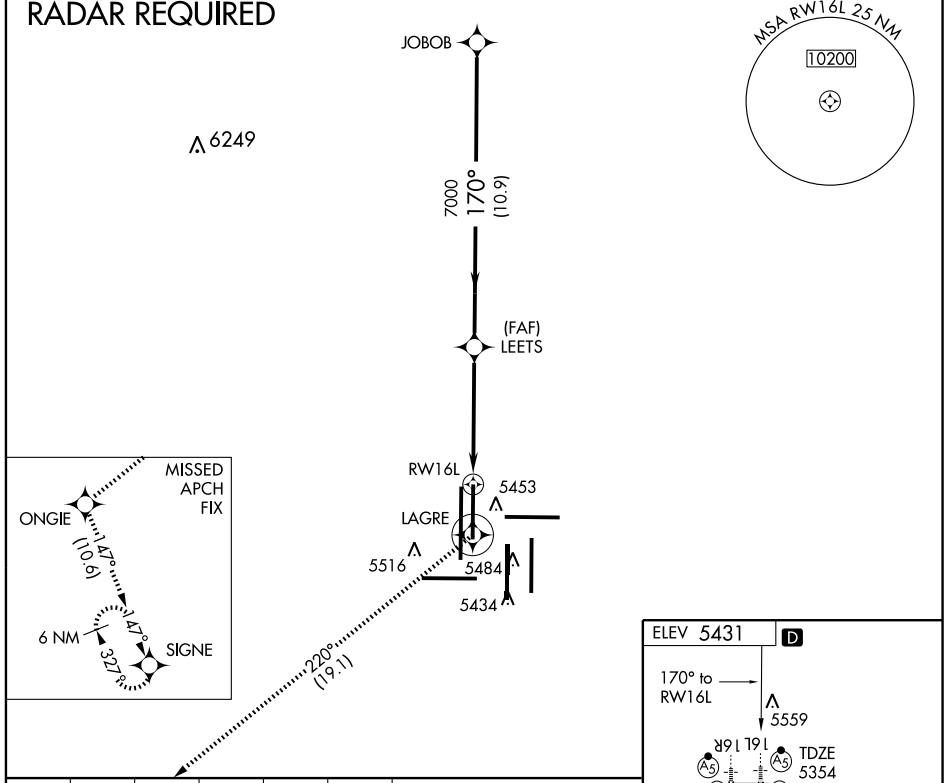
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MALSR

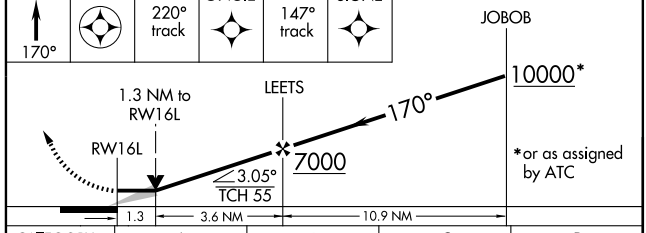
MISSED APPROACH: Climb to 12000 via 170° course to LAGRE WP, then 220° track to ONGIE WP, then 147° track to SIGNE WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

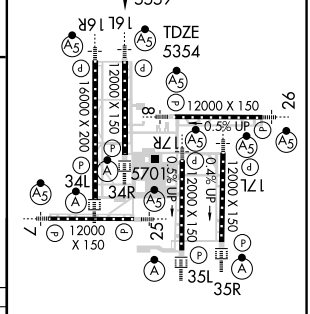
RADAR REQUIRED



12000 / 170°	LAGRE	220° track	ONGIE	147° track	SIGNE



CATEGORY	A	B	C	D
LNAV MDA	5820/24	466 (400-½)	5820/40	466 (400-¾)	5820/50	466 (400-1)
CIRCLING	NA			



HIRL all Rwys

TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	16000
170°	TDZE	5323
	Apt Elev	5431

RNAV (GPS) RWY 16R

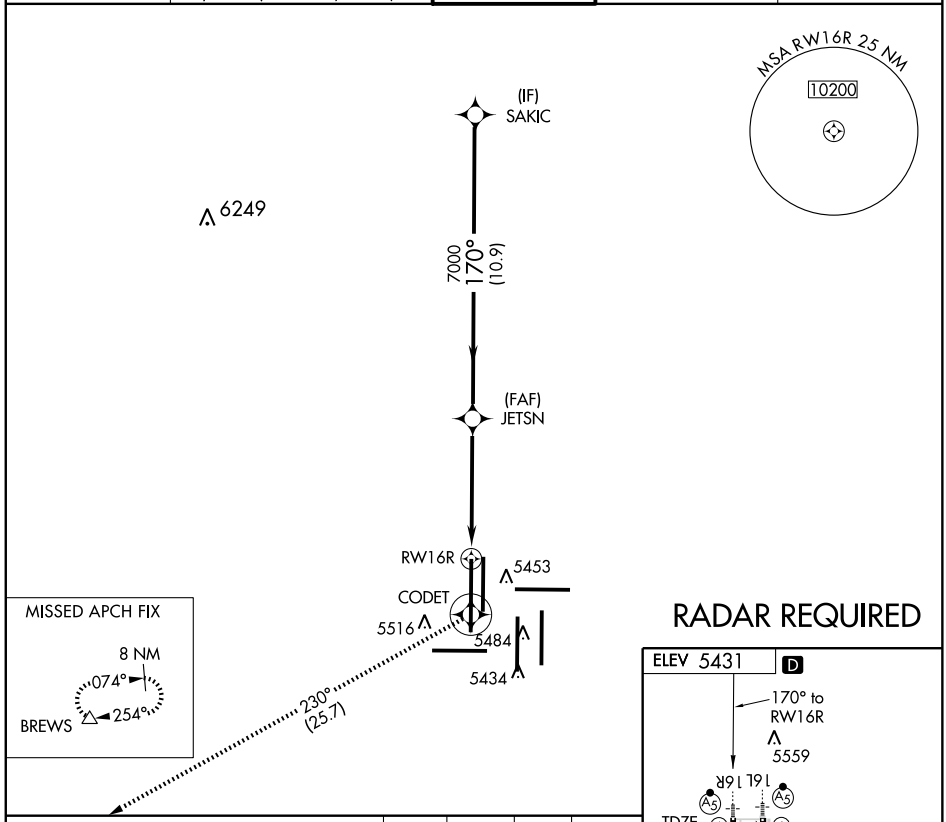
DENVER INTL (DEN)

T NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MALSR

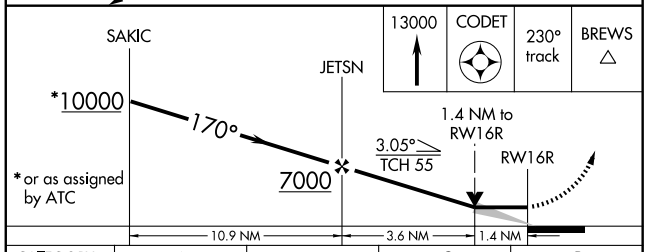
MISSED APPROACH: Climb to 13000 direct CODET WP and via 230° track to BREWS WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75



RADAR REQUIRED

HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R



CATEGORY	A	B	C	D
LNAV MDA	5820/24	497 (400-½)	5820/40 497 (400-¾)	5820/50 497 (400-1)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER, COLORADO

AL-9077 (FAA)

APP CRS	Rwy Idg	12000
170°	TDZE	5335
	Apt Elev	5431

RNAV (GPS) RWY 17L

DENVER INTL (DEN)

T
NA

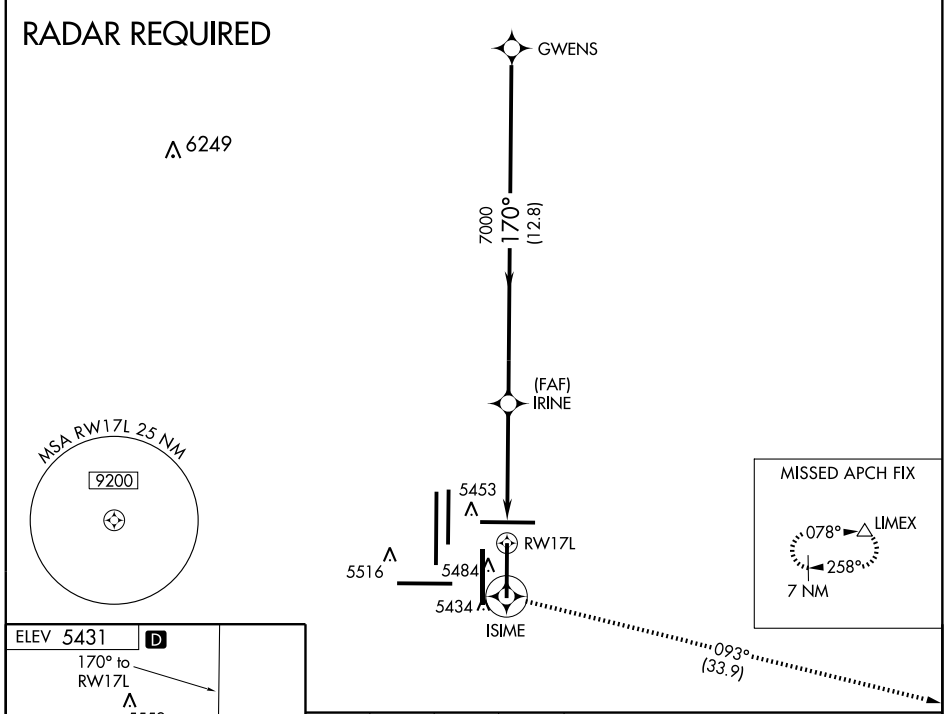
GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA.
Baro-VNAV NA below -25°C (-13°F).
For inoperative MALSR increase LNAV CAT D visibility to RVR 6000.

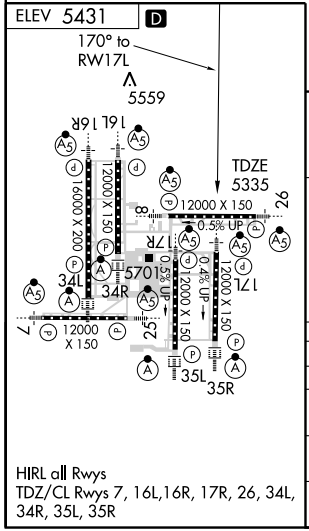
MALSR

MISSED APPROACH: Climb to 10000 via 170° course to ISIME WP, then via 093° track to LIMEX WP and hold.

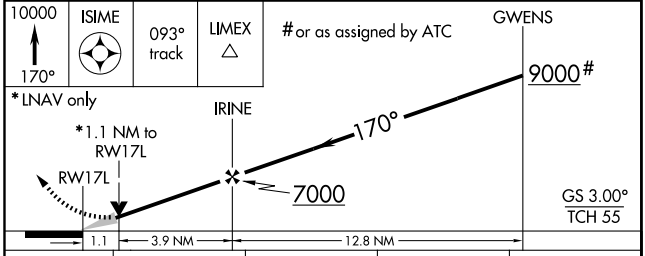
ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75

RADAR REQUIRED





HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	5700/40 365 (300-¾)			
LNAV MDA	5720/24 385 (300-½)			5720/50 385 (300-1)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12000
170°	TDZE	5388
	Apt Elev	5431

RNAV (GPS) RWY 17R

DENVER INTL (DEN)

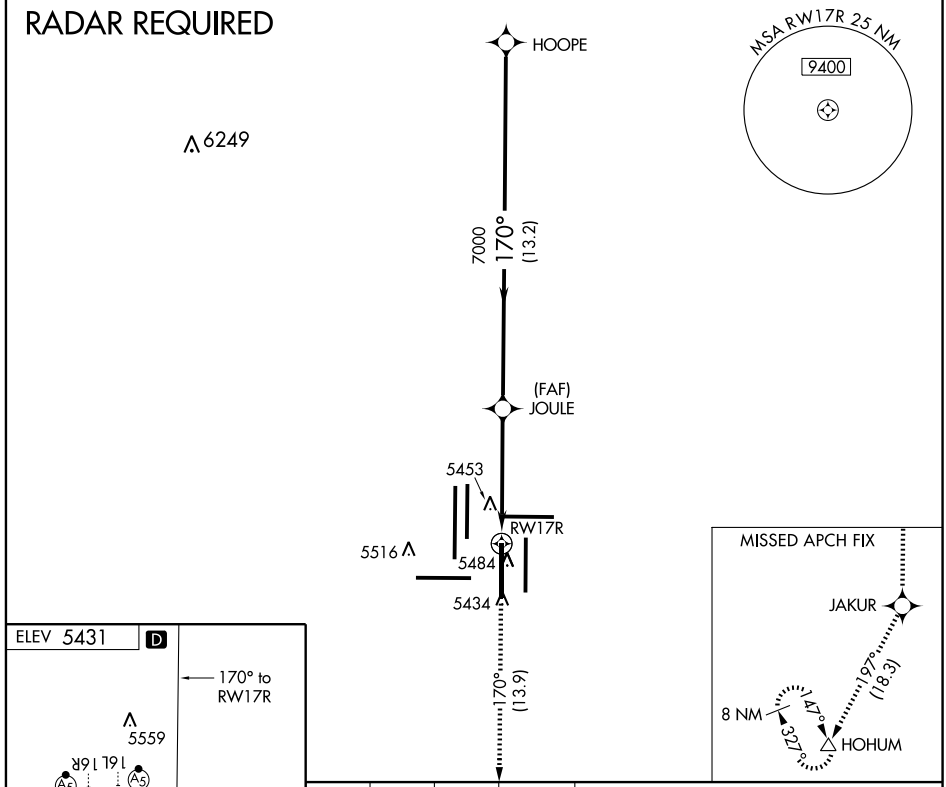
NA GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA.

MALSR

MISSED APPROACH: Climb to 10000 via 170° course to JAKUR WP, then via 197° track to HOHUM WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	133.3 322.45	121.85 377.1	118.75

RADAR REQUIRED



CATEGORY	A	B	C	D
LNAV MDA	5920/24	532 (500-½)	5920/50 532 (500-1)	5920/60 532 (500-1¼)
CIRCLING	NA			

HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12000
260°	TDZE	5352
	Apt Elev	5431

RNAV (GPS) RWY 25

DENVER INTL (DEN)

DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 12000 via 260° course to GIVTE WP, then via 305° track to HYGEN WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	132.35 273.55	127.5 379.175	118.75

MISSED APCH FIX

HYGEN 126° 306° 7 NM

RADAR REQUIRED

305° (25.4)

GIVTE 260° (5.7) RW25

5516 5453 5484 5434 5529±

(FAF) GASTI 7000 260° (10.1) ETHAL

MSA RW25 25 NM 9800

6236

ELEV 5431 D

5559

16L 16R 12000 X 150 16000 X 200 8 26 17R 0.5% UP 0.4% UP 12000 X 150 34L 34R 5701 17L 7 25 12000 X 150 TDZE 5352 35L 35R

260° to RW25

HIRL all Rwys

TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

12000 260° GIVTE 305° track HYGEN

VGSI and descent angles not coincident.

ETHAL 10000* GASTI 260° 1.2 NM to RW25 RW25 7000 3.04° TCH 59

*or as assigned by ATC.

1.2 3.7 NM 10.1 NM

CATEGORY	A	B	C	D
LNAV MDA	5780/24	428 (400-½)	5780/40 428 (400-¾)	5780/50 428 (400-1)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12000
260°	TDZE	5306
	Apt Elev	5431

RNAV (GPS) RWY 26

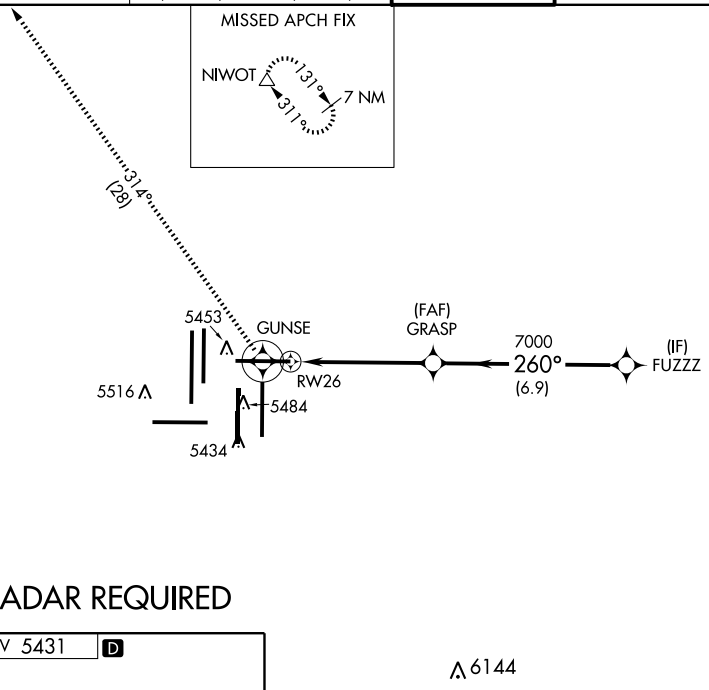
DENVER INTL (DEN)

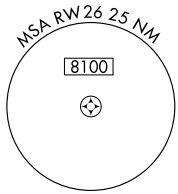
T NA — GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA. Baro/VNAV NA below -25°C (-13°F). For inoperative MALSR increase LNAV/VNAV Cat D visibility to RVR 5000.

MALSR (A5)

MISSED APPROACH: Climb to 11000 via 260° course to GUNSE WP, then via 314° track to NIWOT WP and hold.

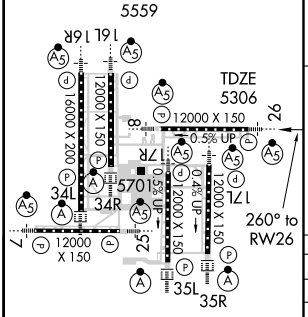
ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75





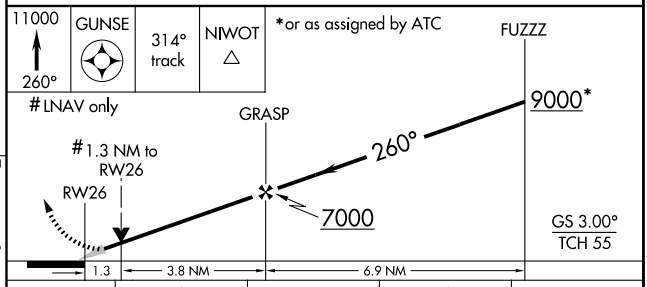
RADAR REQUIRED

ELEV 5431 D



HIRL all Rwys
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R

6144



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	5580/24 274 (200-½)			5580/40 274 (200-¾)
LNAV MDA	5760/24 454 (400-½)		5760/40 454 (400-¾)	5760/50 454 (400-1)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	16000
350°	TDZE	5324
	Apt Elev	5431

RNAV (GPS) RWY 34L

DENVER INTL (DEN)

Baro-VNAV NA below -25°C (-13°F)
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

ALSF-2

MISSED APPROACH: Climb to 12000 direct KIMMM WP and via 292° track to HYGEN WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

MISSED APCH FIX

HYGEN 126° 306° 7 NM

292° (27)

KIMMM

5453

RW34L

5516

5484

5434

MSA RW34L 25 NM

10200

(FAF) WAZDN 5689 ±

7000 350° (10.8)

MERKL 10.8 NM to WAZDN

*9000 350° (3.2)

* or as directed by ATC

KALHR

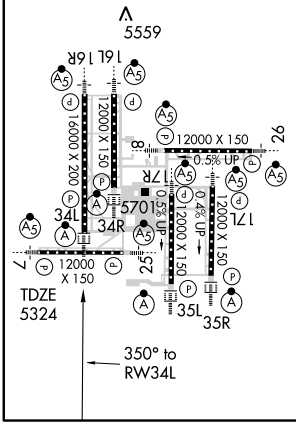
6525

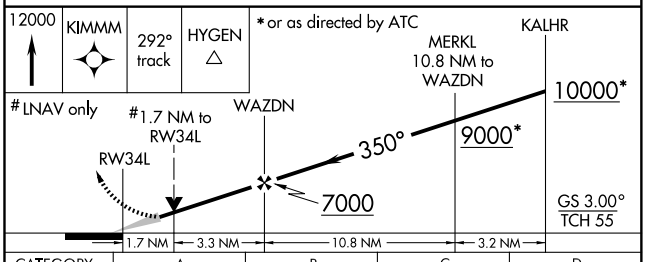
RADAR REQUIRED

ELEV 5431 D

HIRL all Rwys

TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	5780/50 456 (400-1)			
LNAV MDA	5940/24 616 (600-½)		5940/60 616 (600-1¼)	5940-1½ 616 (600-1½)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12000
350°	TDZE	5351
	Apt Elev	5431

RNAV (GPS) RWY 34R

DENVER INTL (DEN)

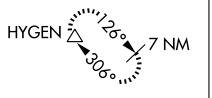
T NA — GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA. Baro-VNAV NA below -25°C (-13°F).

ALSF-2

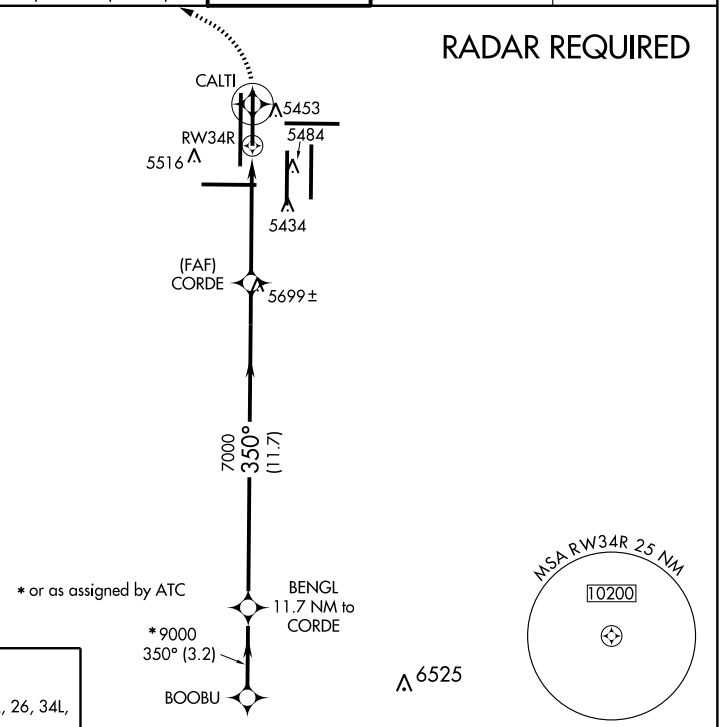
MISSED APPROACH: Climb to 12000 via 350° course to CALTI WP, then climbing left turn direct HYGEN WP and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	135.3 351.95	127.5 379.175	118.75

MISSED APCH FIX



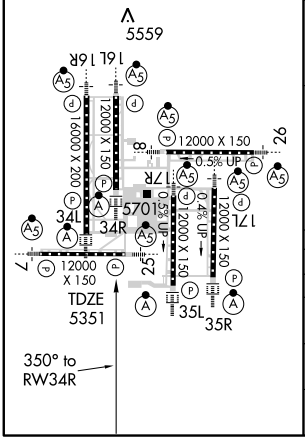
RADAR REQUIRED

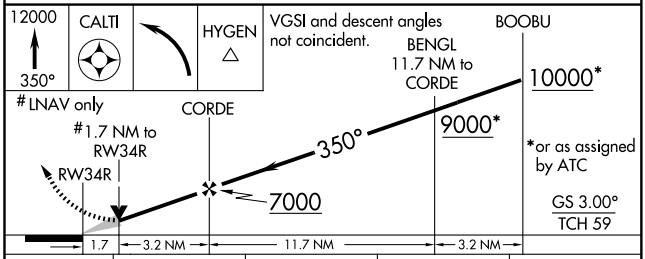


ELEV 5431 D

HIRL all Rwys

TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	5920-1½ 569 (500-1½)			
LNAV MDA	5940/24 589 (600-½)		5940/50 589 (600-1)	5940/60 589 (600-1¼)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12000
350°	TDZE	5431
	Apt Elev	5431

RNAV (GPS) RWY 35L

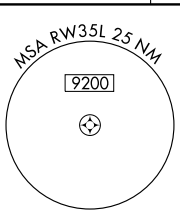
DENVER INTL (DEN)

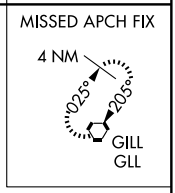
T NA GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA.

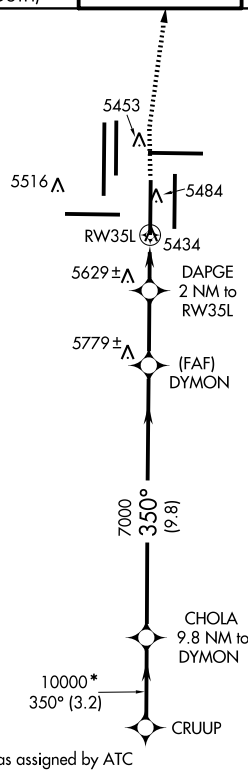
ALSF-2

MISSED APPROACH: Climb to 10000 then right turn direct GLL VORTAC and hold.

ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	133.3 322.45	121.85 377.1	118.75





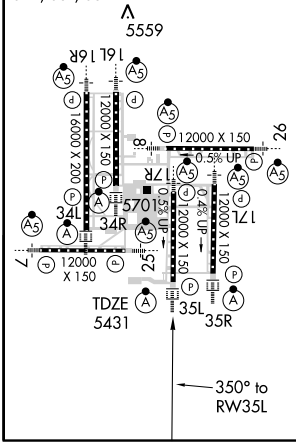


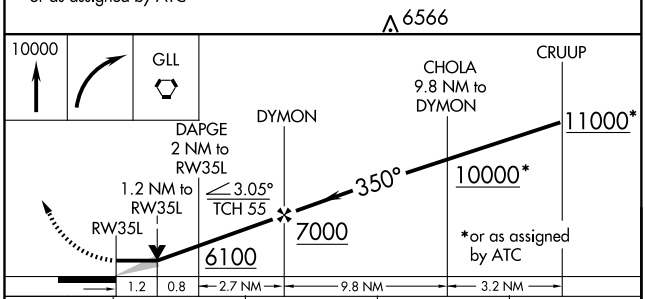
RADAR REQUIRED

ELEV 5431 D

HIRL all Rwys

TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R





CATEGORY	A	B	C	D
LNAV MDA	5860/24 429 (500-½)		5860/40 429 (500-¾)	5860/50 429 (500-1)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12000
350°	TDZE	5367
	Apt Elev	5431

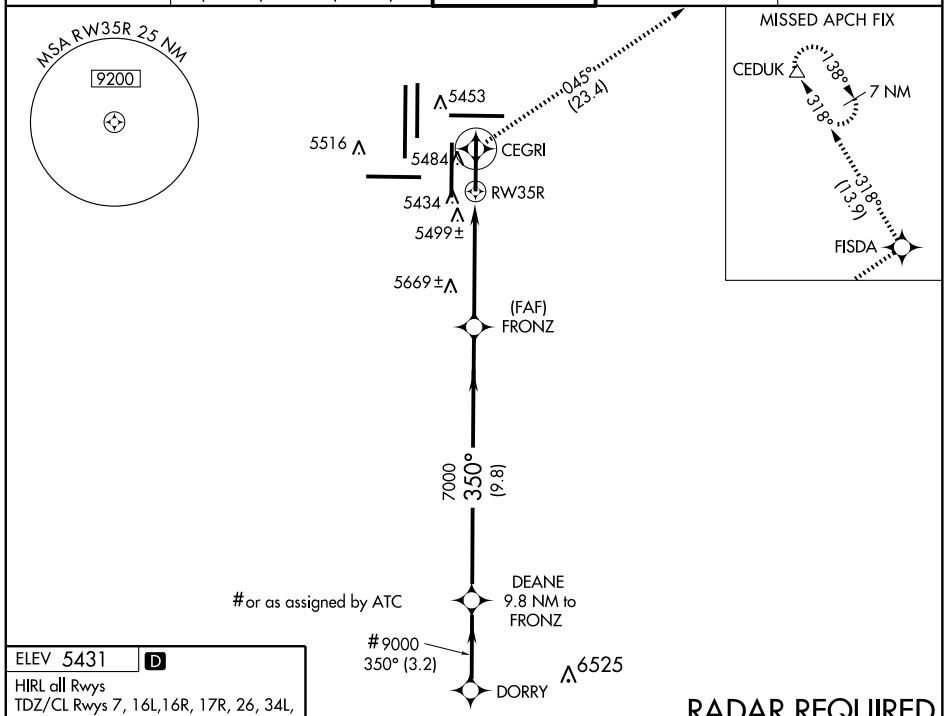
RNAV (GPS) RWY 35R
DENVER INTL (DEN)

T NA — GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA. Baro-VNAV NA below -25°C (-13°F).

ALSF-2

MISSED APPROACH: Climb to 10000 via 350° course to CEGRI WP, then via 045° track to FISDA WP, then via 318° track to CEDUK WP and hold.

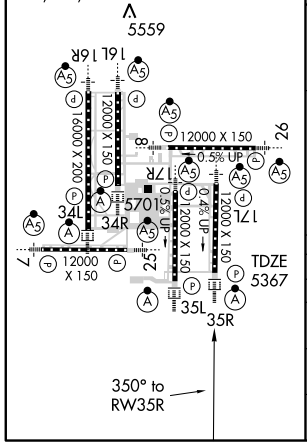
ATIS	DENVER APP CON	DENVER TOWER	GND CON	CLNC DEL
125.6 379.9	119.3 307.3 (NORTH) 120.35 379.3 (SOUTH)	124.3 256.85	121.85 377.1	118.75



ELEV 5431 D

HIRL all Rwys

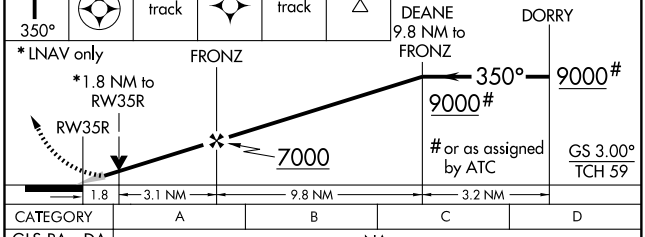
TDZ/CL Rwys 7, 16L,16R, 17R, 26, 34L, 34R, 35L, 35R



RADAR REQUIRED

10000 350°	CEGRI	045° track	FISDA	318° track	CEDUK

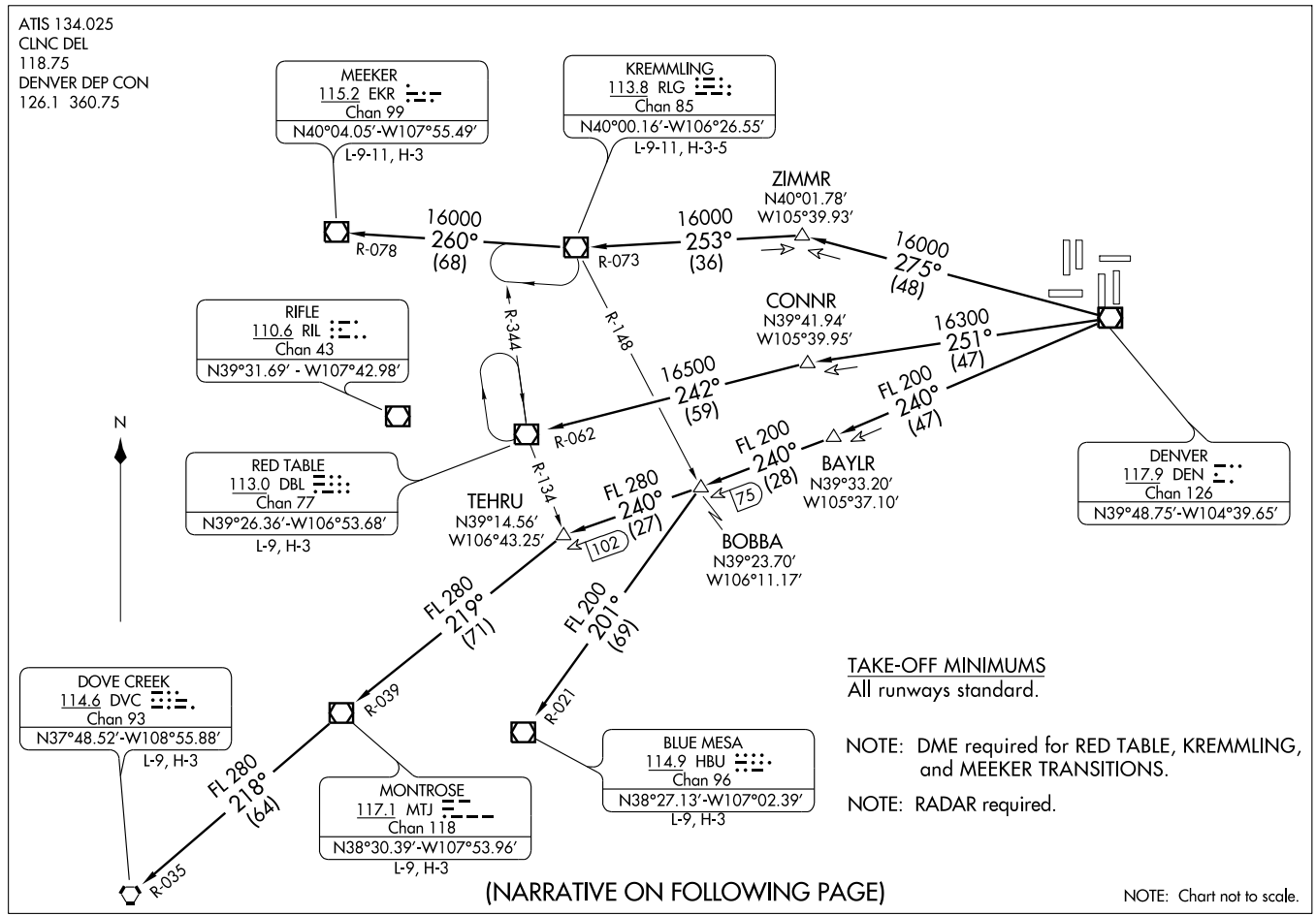
VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	5760/40 393 (400-¾)			
LNAV MDA	5920/24 553 (500-½)		5920/50 553 (500-1)	5920/60 553 (500-1¼)
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

ROCKIES SEVEN DEPARTURE



ROCKIES SEVEN DEPARTURE

SL-9077 (FAA)

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading for radar vectors to assigned transition. Maintain 10000 feet or **ATC assigned lower altitude**. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

BLUE MESA (HI) TRANSITION (ROCKI7.HBU): From over DEN VOR/DME via DEN R-240 and HBU R-021 to HBU VOR/DME.

DOVE CREEK (HI) TRANSITION (ROCKI7.DVC): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME, then via MTJ R-218 and DVC R-035 to DVC VORTAC.

KREMMLING TRANSITION (ROCKI7.RLG): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME.

MEEKER TRANSITION (ROCKI7.EKR): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME, then via RLG R-260 and EKR R-078 to EKR VOR/DME.

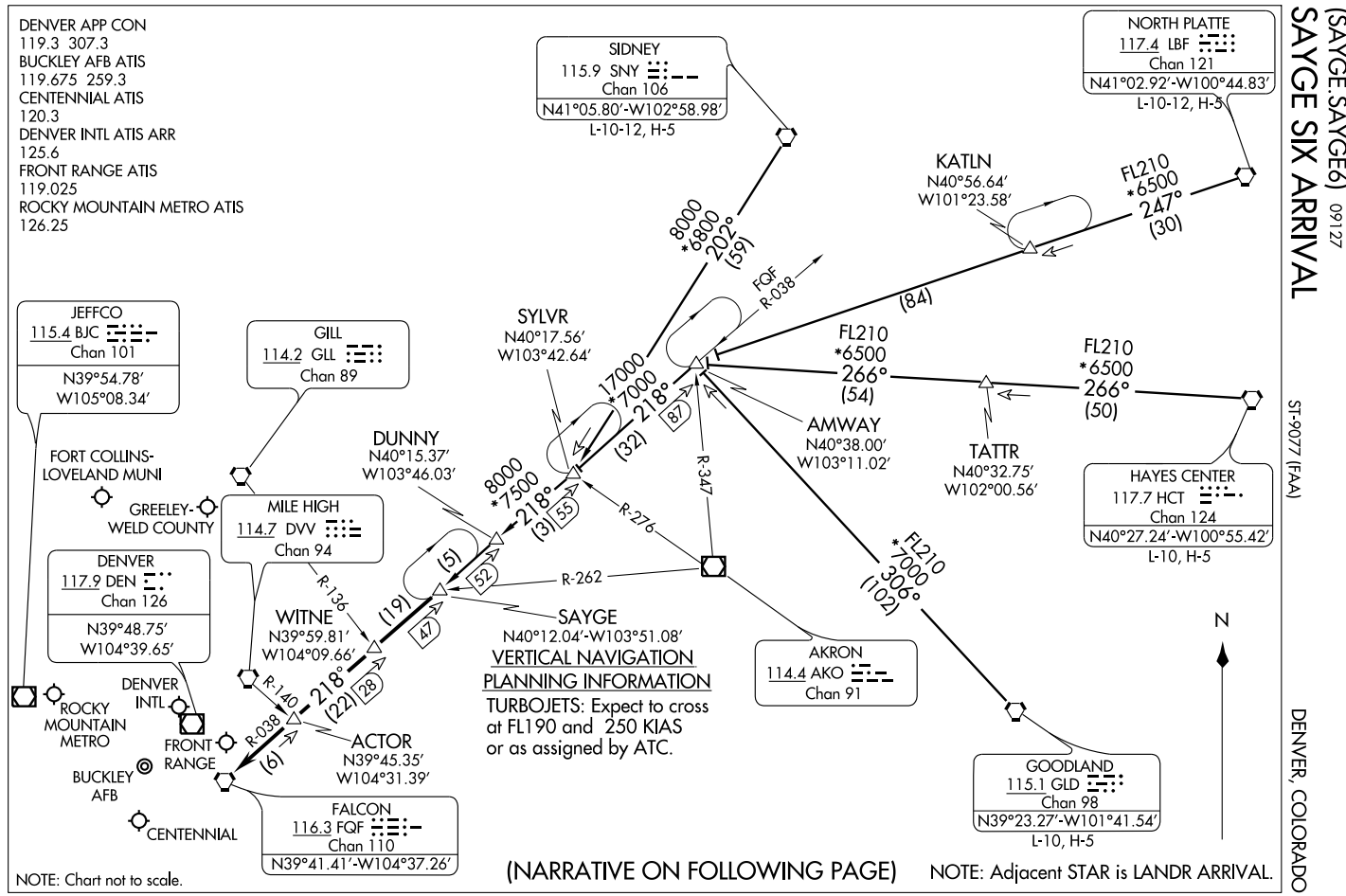
MONTROSE TRANSITION (ROCKI7.MTJ): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME.

RED TABLE TRANSITION (ROCKI7.DBL): From over DEN VOR/DME via DEN R-251 and DBL R-062 to DBL VOR/DME.

TAKE-OFF OBSTACLE NOTES

RWY 8: Multiple trees beginning 115′ from DER, 444′ right of centerline, up to 100′ AGL/5389′ MSL.
RWY 16L: Tower 4722′ from DER, 1359′ left of centerline, 153′ AGL/5473′ MSL.
Antenna on OL tower 4746′ from DER, 1358′ left of centerline, 153′ AGL/5473′ MSL.
RWY 17L: Multiple trees beginning 247′ from DER, 543′ right of centerline, up to 100′ AGL/5489′ MSL.
RWY 17R: Multiple trees beginning 1457′ from DER, 759′ right of centerline, up to 100′ AGL/5529′ MSL.
RWY 25: Multiple trees beginning 303′ from DER, 557′ right of centerline, up to 100′ AGL/5439′ MSL.
RWY 34L: Multiple trees beginning 273′ from DER, 537′ right of centerline, up to 100′ AGL/5399′ MSL.
RWY 34R: Multiple trees beginning 471′ from DER, 580′ right of centerline, up to 100′ AGL/5449′ MSL.
RWY 35L: Terrain beginning 149′ from DER, 34′ right of centerline, up to 5414′ MSL.

SW-1, 22 OCT 2009 to 19 NOV 2009


DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
SIDNEY
115.9 SNY
Chan 106
N41°05.80'-W102°58.98'
L-10-12, H-5
NORTH PLATTE
117.4 LBF
Chan 121
N41°02.92'-W100°44.83'
L-10-12, H-5
KATLN
N40°56.64'
W101°23.58'
8000
*6800
202°
(59)
FQF
R-038
(84)
FL210
*6500
247°
(30)
SYLVR
N40°17.56'
W103°42.64'
17000
*7000
218°
(32)
87
FL210
*6500
266°
(54)
FL210
*6500
266°
(50)
AMWAY
N40°38.00'
W103°11.02'
TATTR
N40°32.75'
W102°00.56'
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
GILL
114.2 GLL
Chan 89
FORT COLLINS-
LOVELAND MUNI
GREELEY-
WELD COUNTY
MILE HIGH
114.7 DVV
Chan 94
DUNNY
N40°15.37'
W103°46.03'
8000
*7500
218°
(3)
55
R-347
R-276
R-262
(5)
52
DENVER
117.9 DEN
Chan 126
N39°48.75'
W104°39.65'
R-136
WITNE
N39°59.81'
W104°09.66'
(19)
47
SAYGE
N40°12.04'-W103°51.08'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS: Expect to cross
at FL190 and 250 KIAS
or as assigned by ATC.
FL210
*7000
306°
(102)
AKRON
114.4 AKO
Chan 91
N
DENVER
INTL
ROCKY
MOUNTAIN
METRO
FRONT
RANGE
R-140
218°
(22)
28
R-038
(6)
ACTOR
N39°45.35'
W104°31.39'
BUCKLEY
AFB
CENTENNIAL
FALCON
116.3 FQF
Chan 110
N39°41.41'-W104°37.26'
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Adjacent STAR is LANDR ARRIVAL.
(SAYGE.SAYGE6) 09127
SAYGE SIX ARRIVAL
ST-9077 (FAA)
DENVER, COLORADO

SAYGE SIX ARRIVAL

ARRIVAL DESCRIPTION

GOODLAND TRANSITION (GLD.SAYGE6): From over GLD VORTAC via GLD R-306 and FQF R-038 to SAYGE INT. Thence....

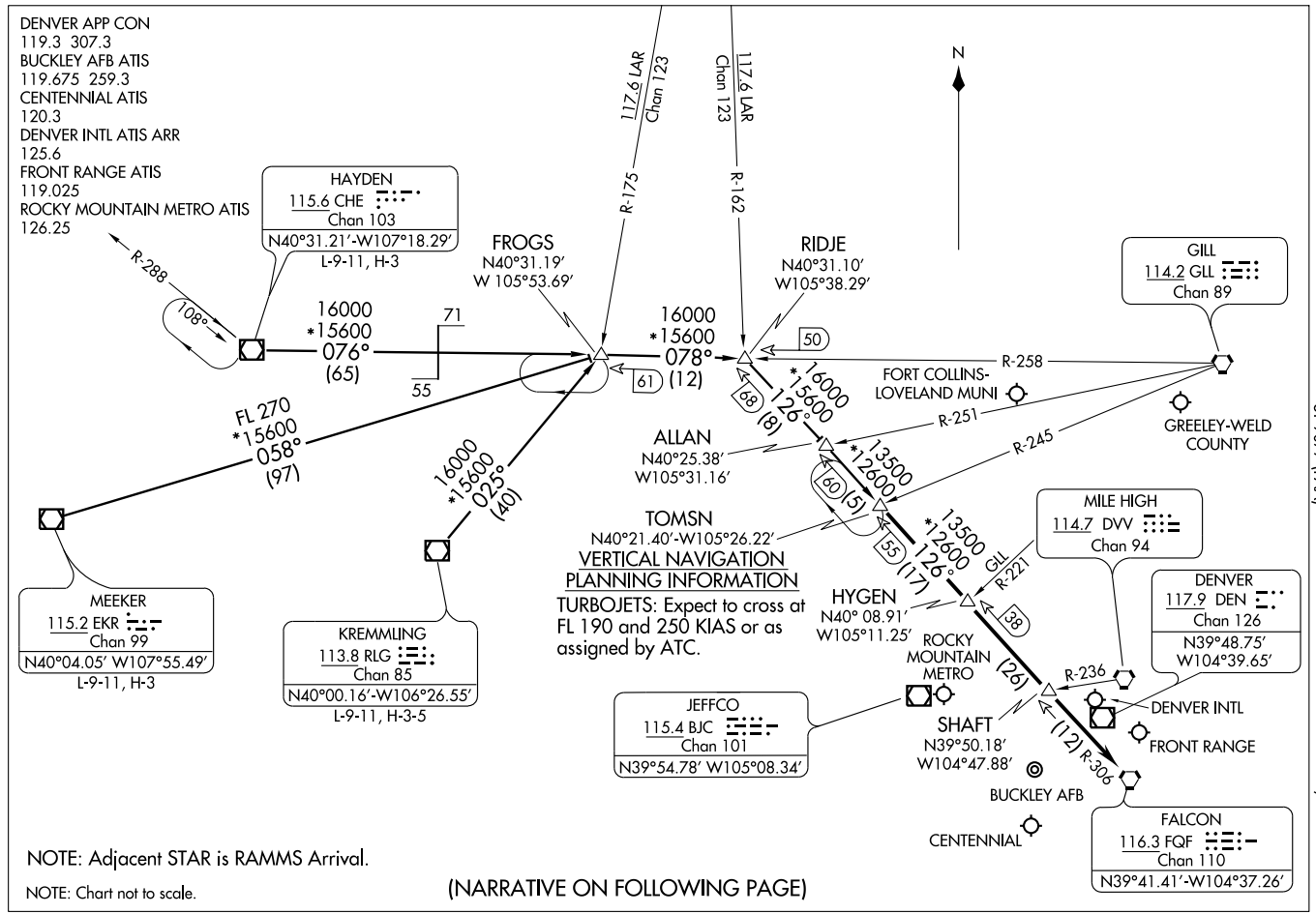
HAYES CENTER TRANSITION (HCT.SAYGE6): From over HCT VORTAC via HCT R-266 and FQF R-038 to SAYGE INT. Thence....

NORTH PLATTE TRANSITION (LBF.SAYGE6): From over LBF VORTAC via LBF R-247 and FQF R-038 to SAYGE INT. Thence....

SIDNEY TRANSITION (SNY.SAYGE6): From over SNY VORTAC via SNY R-202 and FQF R-038 to SAYGE INT. Thence....

....From over SAYGE INT via FQF R-038 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



(TOMSN.TOMSN4) 07298

TOMSN FOUR ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO

TOMSN FOUR ARRIVAL

ARRIVAL DESCRIPTION

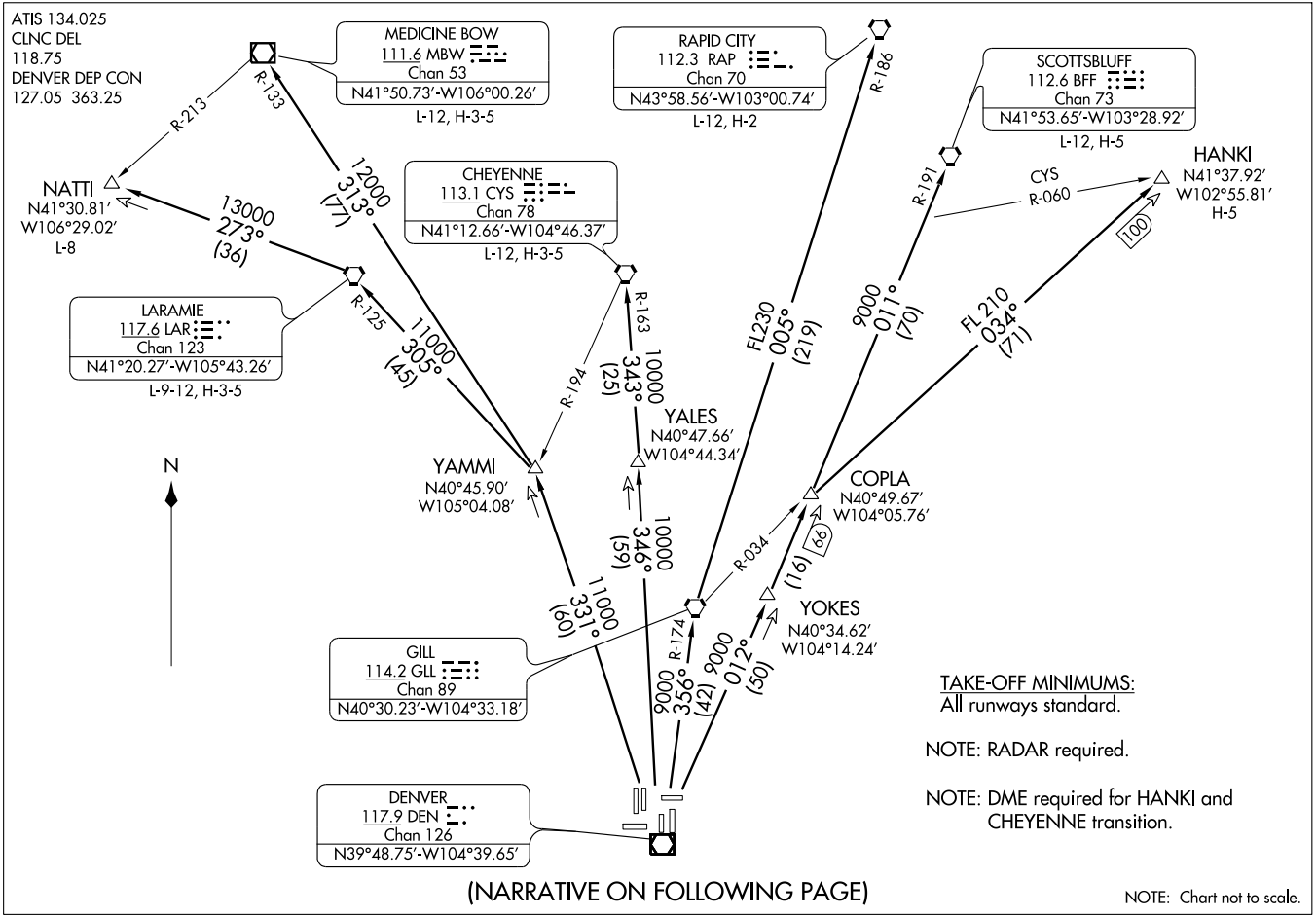
HAYDEN TRANSITION (CHE.TOMSN4): From over CHE VOR/DME via CHE R-076 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

KREMMLING TRANSITION (RLG.TOMSN4): From over RLG VOR/DME via RLG R-025 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

MEEKER TRANSITION (EKR.TOMSN4): From over EKR VOR/DME via EKR R-058 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

....From over TOMSN INT via FQF R-306 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



YELLOWSTONE SIX DEPARTURE

(YELLOW.DEN) 09127

SL-9077 (FAA)

DENVER INTL (DEN)
DENVER, COLORADO

YELLOWSTONE SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading for radar vectors to assigned transition. Maintain 10000 feet or **ATC assigned lower altitude.** Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

CHEYENNE TRANSITION (YELLO6.CYS): From over DEN VOR/DME via DEN R-346 and CYS R-163 to CYS VORTAC.

HANKI TRANSITION (YELLO6.HANKI): From over DEN VOR/DME via DEN R-012 and GLL R-034 to HANKI INT.

LARAMIE TRANSITION (YELLO6.LAR): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC.

MEDICINE BOW TRANSITION (YELLO6.MBW): From over DEN VOR/DME via DEN R-331 and MBW R-133 to MBW VOR/DME.

NATTI TRANSITION (YELLO6.NATTI): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC, then via LAR R-273 to NATTI INT.

RAPID CITY TRANSITION (YELLO6.RAP): From over DEN VOR/DME via DEN R-356 and GLL R-174 to GLL VORTAC, then via GLL R-005 and RAP R-186 to RAP VORTAC.

SCOTTSBLUFF TRANSITION (YELLO6.BFF): From over DEN VOR/DME via DEN R-012 and BFF R-191 to BFF VORTAC.

TAKE-OFF OBSTACLE NOTES

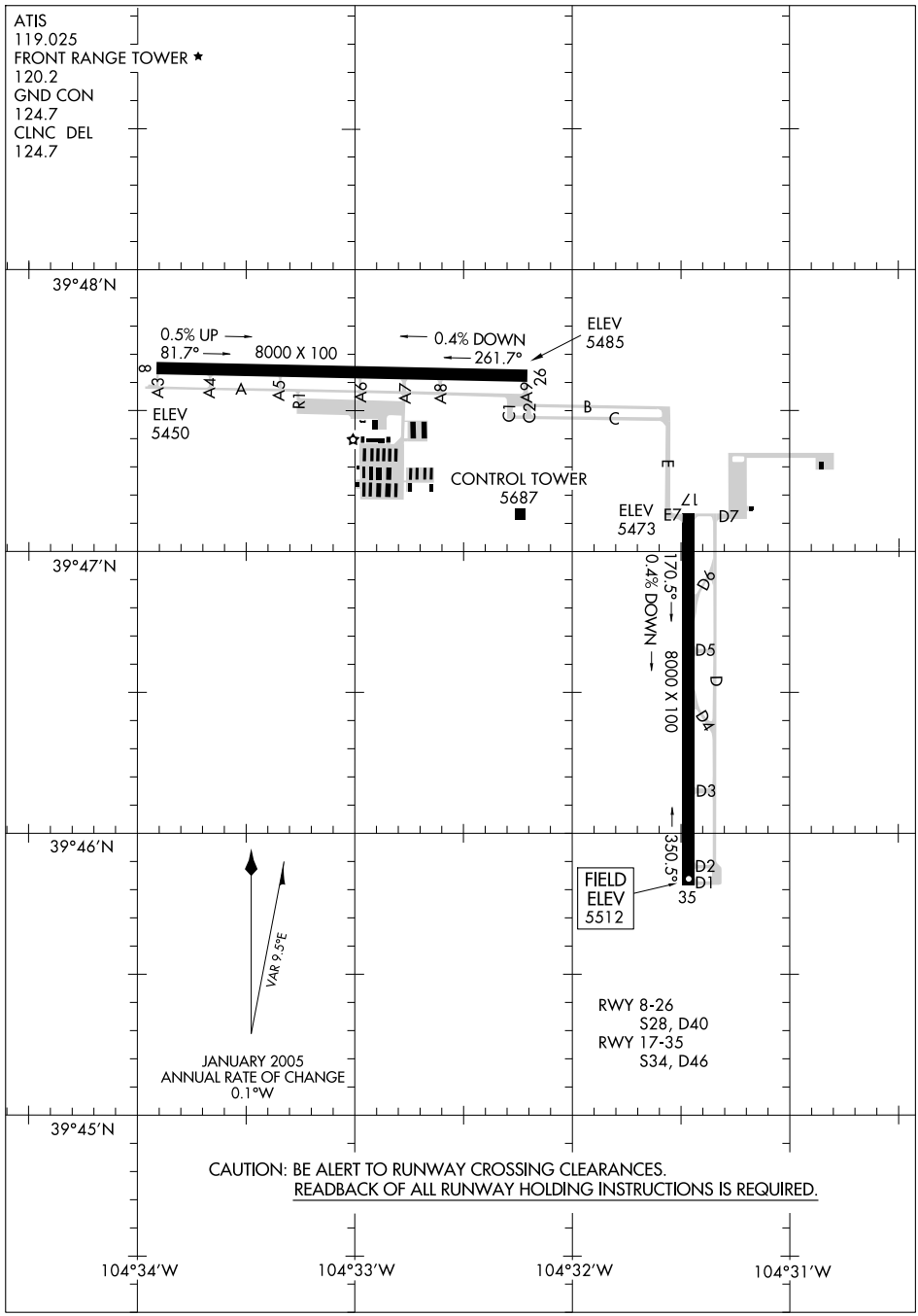
RWY 8: Multiple trees beginning 115′ from DER, 444′ right of centerline, up to 100′ AGL/5389′ MSL.
RWY 16L: Tower 4722′ from DER, 1359′ left of centerline, 153′ AGL/5473′ MSL.
Antenna on OL tower 4746′ from DER, 1358′ left of centerline, 153′ AGL/5473′ MSL.
RWY 17L: Multiple trees beginning 247′ from DER, 543′ right of centerline, up to 100′ AGL/5489′ MSL.
RWY 17R: Multiple trees beginning 1457′ from DER, 759′ right of centerline, up to 100′ AGL/5529′ MSL.
RWY 25: Multiple trees beginning 303′ from DER, 557′ right of centerline, up to 100′ AGL/5439′ MSL.
RWY 34L: Multiple trees beginning 273′ from DER, 537′ right of centerline, up to 100′ AGL/5399′ MSL.
RWY 34R: Multiple trees beginning 471′ from DER, 580′ right of centerline, up to 100′ AGL/5449′ MSL.
RWY 35L: Terrain beginning 149′ from DER, 34′ right of centerline, up to 5414′ MSL.

SW-1, 22 OCT 2009 to 19 NOV 2009

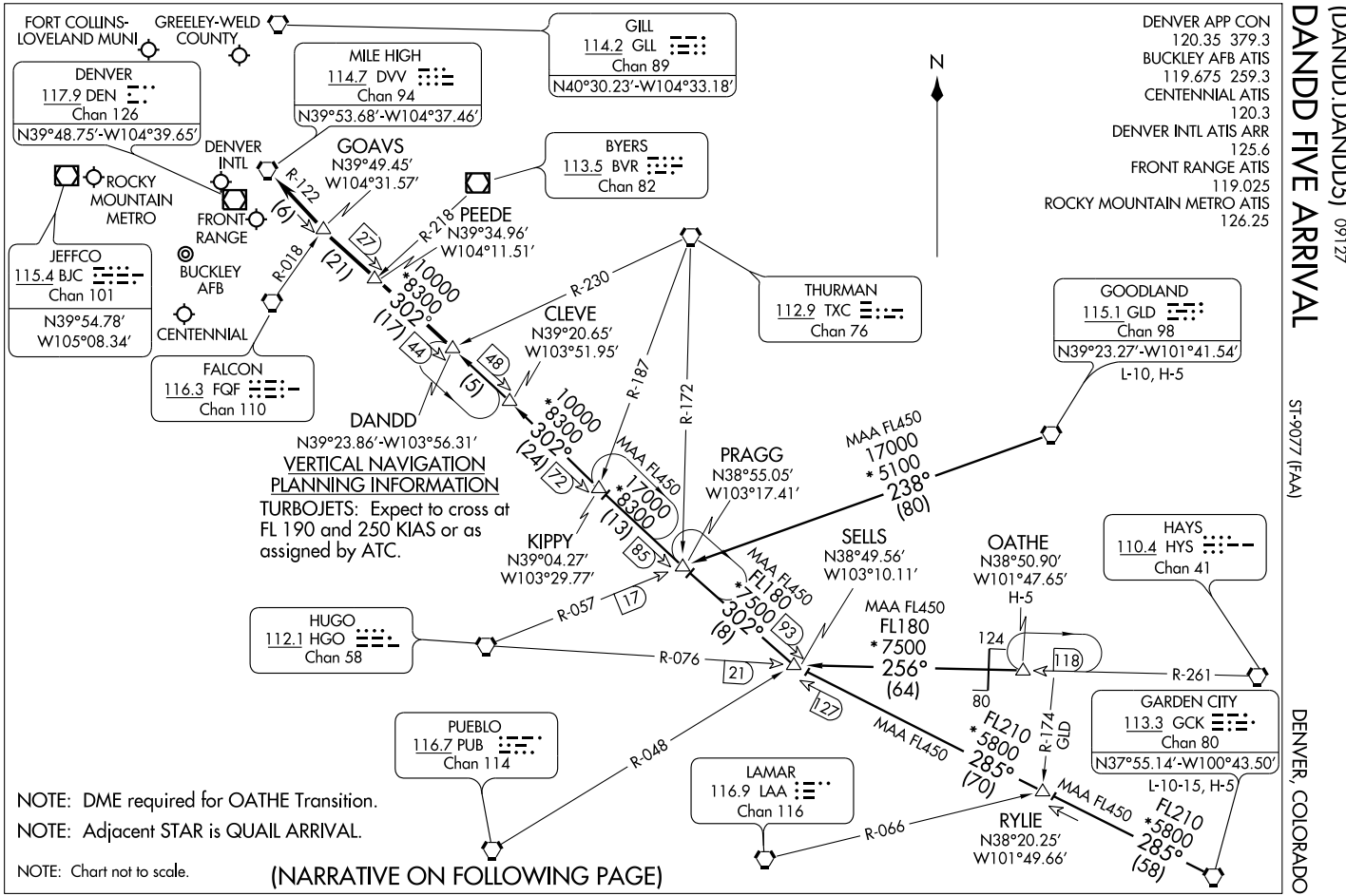
AIRPORT DIAGRAM

AL-6851 (FAA)

DENVER/FRONT RANGE (FTG)
DENVER, COLORADO



SW-1, 22 OCT 2009 to 19 NOV 2009


DANDD FIVE ARRIVAL
(DANDD.DANDD5) 09127
ST-9077 (FAA)
DENVER, COLORADO
DENVER APP CON
120.35 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
N
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
GILL
114.2 GLL
Chan 89
N40°30.23'-W104°33.18'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'-W104°37.46'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
DENVER INTL
GOAVS
N39°49.45'
W104°31.57'
BYERS
113.5 BVR
Chan 82
ROCKY MOUNTAIN METRO
FRONT RANGE
PEEDE
N39°34.96'
W104°11.51'
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
BUCKLEY AFB
CENTENNIAL
THURMAN
112.9 TXC
Chan 76
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
FALCON
116.3 FQF
Chan 110
CLEVE
N39°20.65'
W103°51.95'
DANDD
N39°23.86'-W103°56.31'
PRAGG
N38°55.05'
W103°17.41'
KIPPY
N39°04.27'
W103°29.77'
SELLS
N38°49.56'
W103°10.11'
OATHE
N38°50.90'
W101°47.65'
H-5
HAYS
110.4 HYS
Chan 41
HUGO
112.1 HGO
Chan 58
PUEBLO
116.7 PUB
Chan 114
LAMAR
116.9 LAA
Chan 116
RYLIE
N38°20.25'
W101°49.66'
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
R-122
(6)
R-218
(27)
(21)
R-018
10000
*8300
302°
(17)
44
48
(5)
R-230
R-187
R-172
10000
*8300
302°
(24)
72
MAA FL450
17000
*8300
(13)
85
MAA FL450
17000
*5100
238°
(80)
MAA FL450
FL180
*7500
302°
(8)
93
MAA FL450
FL180
*7500
256°
(64)
124
118
80
R-261
R-057
17
R-076
21
127
MAA FL450
FL210
*5800
285°
(70)
R-174
GLD
MAA FL450
FL210
*5800
285°
(58)
R-048
R-066
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at FL 190 and 250 KIAS or as assigned by ATC.
NOTE: DME required for OATHE Transition.
NOTE: Adjacent STAR is QUAIL ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

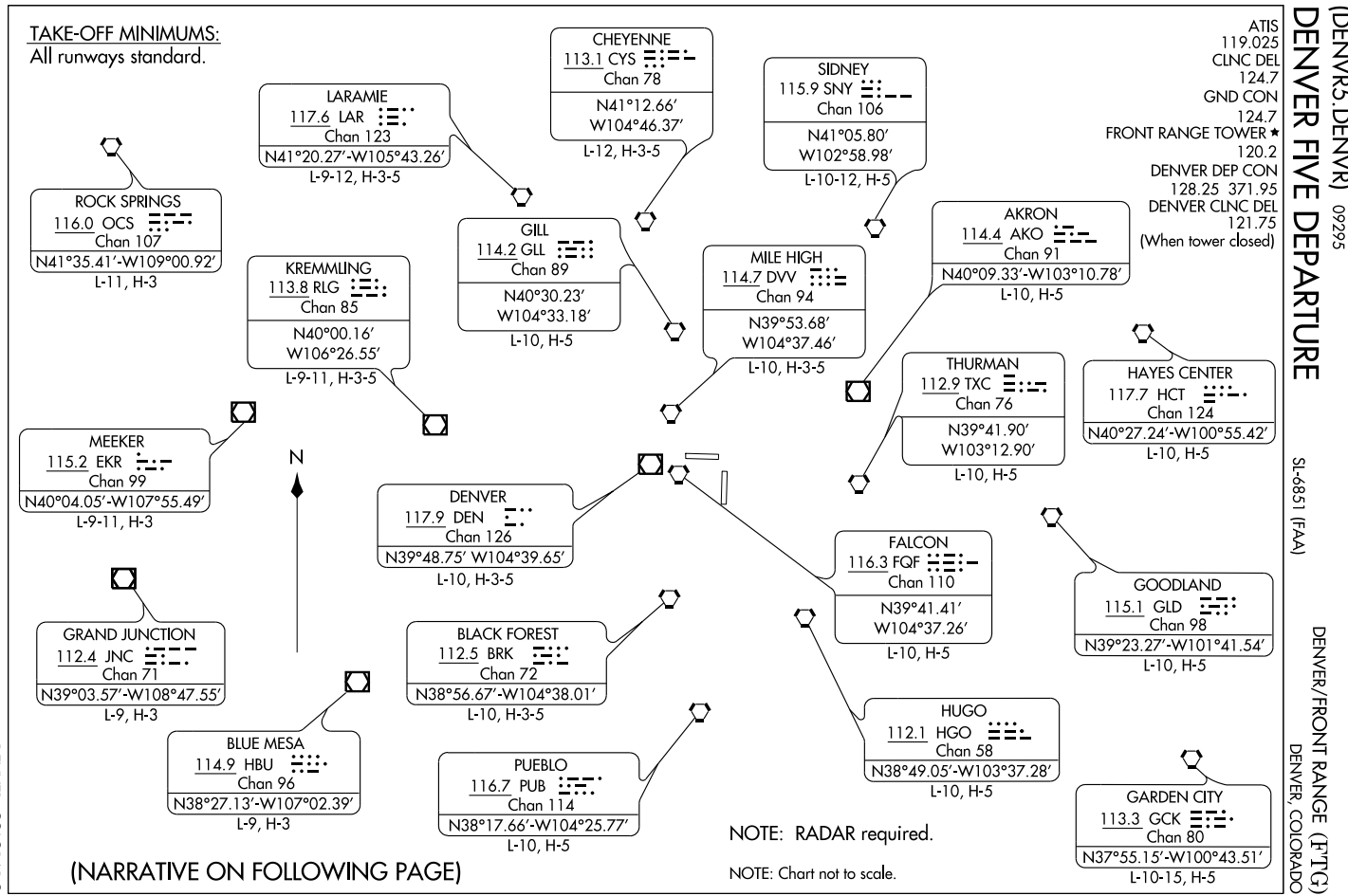
GARDEN CITY TRANSITION (GCK.DANDD5): From over GCK VORTAC via GCK R-285 and DVV R-122 to DANDD INT. Thence....

GOODLAND TRANSITION (GLD.DANDD5): From over GLD VORTAC via GLD R-238 and HGO R-057 to PRAGG INT; then via DVV R-122 to DANDD INT. Thence....

OATHE TRANSITION (OATHE.DANDD5): From over OATHE INT via HYS R-261 and HGO R-076 to SELLS INT; then via DVV R-122 to DANDD INT. Thence....

....From over DANDD INT via DVV R-122 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


TAKE-OFF MINIMUMS:
All runways standard.
CHEYENNE
113.1 CYS
Chan 78
N41°12.66′
W104°46.37′
L-12, H-3-5
SIDNEY
115.9 SNY
Chan 106
N41°05.80′
W102°58.98′
L-10-12, H-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27′-W105°43.26′
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41′-W109°00.92′
L-11, H-3
GILL
114.2 GLL
Chan 89
N40°30.23′
W104°33.18′
L-10, H-5
AKRON
114.4 AKO
Chan 91
N40°09.33′-W103°10.78′
L-10, H-5
KREMMLING
113.8 RLG
Chan 85
N40°00.16′
W106°26.55′
L-9-11, H-3-5
MILE HIGH
114.7 DVV
Chan 94
N39°53.68′
W104°37.46′
L-10, H-3-5
THURMAN
112.9 TXC
Chan 76
N39°41.90′
W103°12.90′
L-10, H-5
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24′-W100°55.42′
L-10, H-5
MEEKER
115.2 EKR
Chan 99
N40°04.05′-W107°55.49′
L-9-11, H-3
N
DENVER
117.9 DEN
Chan 126
N39°48.75′ W104°39.65′
L-10, H-3-5
FALCON
116.3 FQF
Chan 110
N39°41.41′
W104°37.26′
L-10, H-5
GOODLAND
115.1 GLD
Chan 98
N39°23.27′-W101°41.54′
L-10, H-5
GRAND JUNCTION
112.4 JNC
Chan 71
N39°03.57′-W108°47.55′
L-9, H-3
BLACK FOREST
112.5 BRK
Chan 72
N38°56.67′-W104°38.01′
L-10, H-3-5
HUGO
112.1 HGO
Chan 58
N38°49.05′-W103°37.28′
L-10, H-5
BLUE MESA
114.9 HBU
Chan 96
N38°27.13′-W107°02.39′
L-9, H-3
PUEBLO
116.7 PUB
Chan 114
N38°17.66′-W104°25.77′
L-10, H-5
GARDEN CITY
113.3 GCK
Chan 80
N37°55.15′-W100°43.51′
L-10-15, H-5
NOTE: RADAR required.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
ATIS
119.025
CLNC DEL
124.7
GND CON
124.7
FRONT RANGE TOWER ★
120.2
DENVER DEP CON
128.25 371.95
DENVER CLNC DEL
121.75
(When tower closed)
DENVER FIVE DEPARTURE
(DENVR5.DENVR) 09295
SL-6851 (FAA)
DENVER/FRONT RANGE (FTG)
DENVER, COLORADO

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-FZR	APP CRS	Rwy Idg	8000
110.9	169°	TDZE	5488
Chan 46		Apt Elev	5512

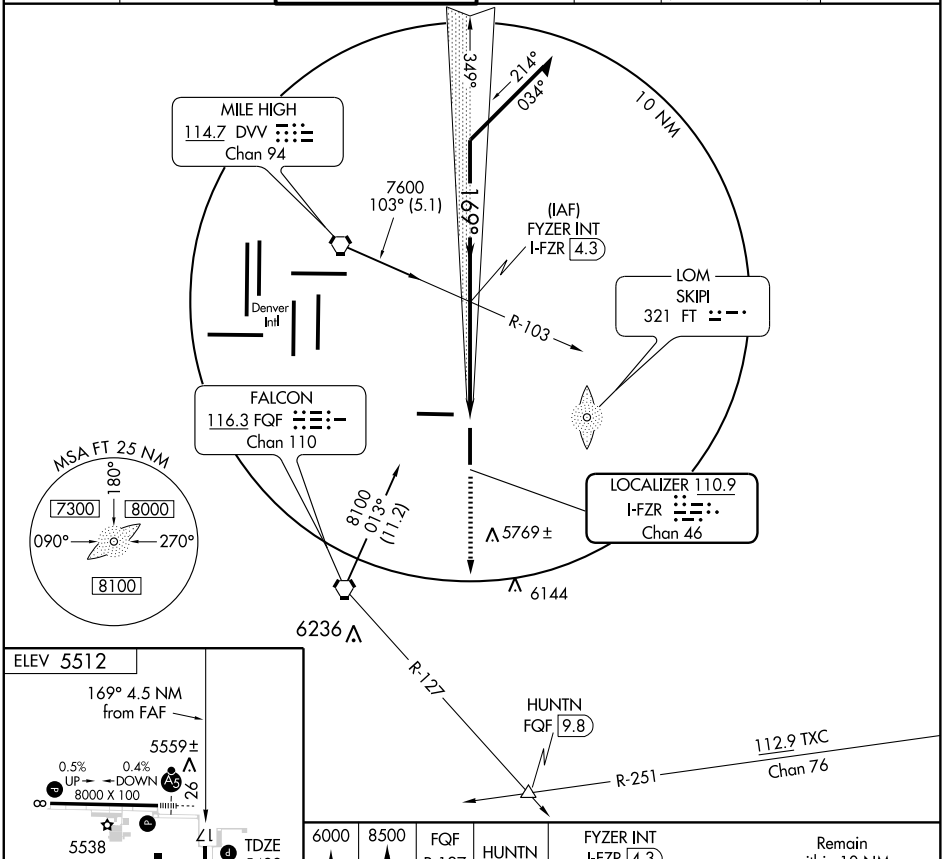
ILS or LOC RWY 17

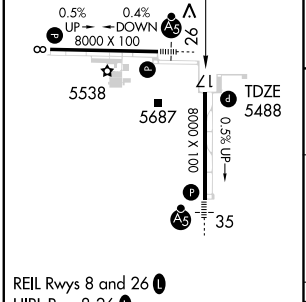
DENVER/ FRONT RANGE (FTG)

When local altimeter not received use Denver Intl altimeter setting and increase all DH/MDAs 40 feet.

MISSED APPROACH: Climb to 6000, continue climbing to 8500 via heading 169° and FQF VORTAC R-127 to HUNTN Int.

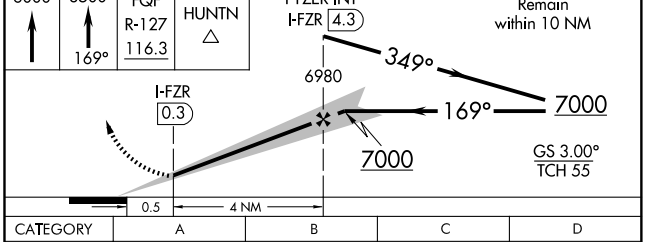
ATIS	DENVER APP CON	FRONT RANGE TOWER★	GND CON	CLNC DEL	DENVER CLNC DEL	UNICOM
119.025	128.25 371.95	120.2 (CTAF) L	124.7	124.7	121.75 (When tower closed)	122.95





REIL Rwys 8 and 26 L
HIRL Rwy 8-26 L
MIRL Rwy 17-35 L

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20



CATEGORY	A	B	C	D
S-ILS 17	5688-¾ 200 (200-¾)			
S-LOC 17	5820-1 332 (400-1)			
CIRCLING	5960-1 448 (500-1)	5980-1 468 (500-1)	5980-1½ 468 (500-1½)	6080-2 568 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-FTG	APP CRS	Rwy Idg	8000
109.3	260°	TDZE	5485
Chan 30		Apt Elev	5512

ILS or LOC RWY 26

DENVER/ FRONT RANGE (FTG)

T ANA When local altimeter setting not received use Denver Intl altimeter setting and increase all DA 29 feet and all MDA 40 feet, increase S-LOC visibility Cat C to ¾ mile. VDP NA when using Denver Intl altimeter setting. ADF required

MALSR

MISSED APPROACH: Climb to 6000 then climbing left turn to 7200 direct SKIPI LOM/ I-FTG 6.5 DME and hold.

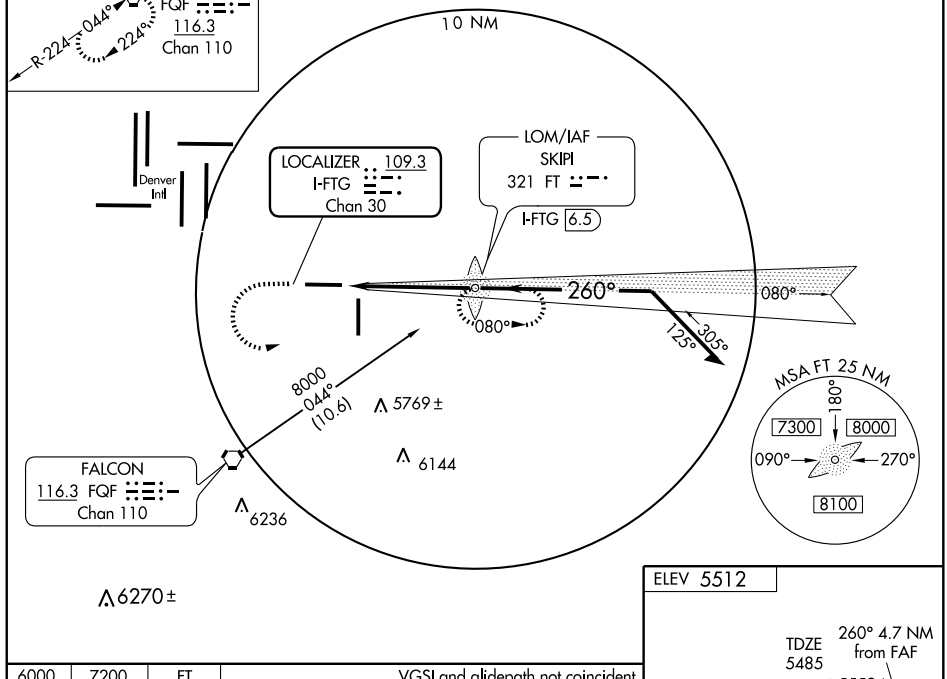
ATIS	DENVER APP CON	FRONT RANGE TOWER★	GND CON	CLNC DEL	DENVER CLNC DEL	UNICOM
119.025	128.25 371.95	120.2 (CTAF) L	124.7	124.7	121.75 (When tower closed)	122.95

ALTERNATE MISSED APCH FIX

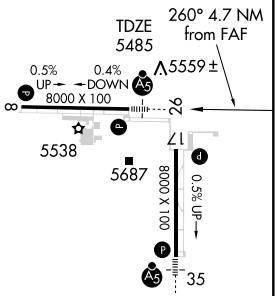
FALCON FQF 116.3 Chan 110

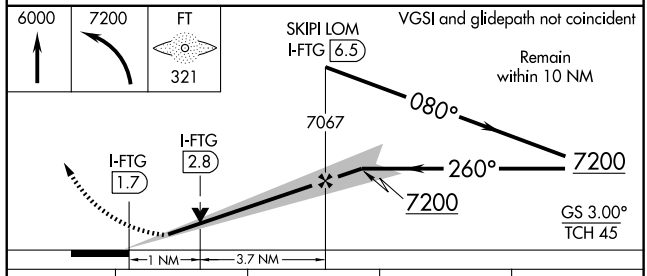
R-224° 044° 224°

ADF or DME REQUIRED



ELEV 5512





REIL Rwys 8 and 26 L
HIRL Rwy 8-26 L
MIRL Rwy 17-35 L

CATEGORY	A	B	C	D
S-ILS 26	5685-½ 200 (200-½)			
S-LOC 26	5860-½ 375 (400-½)			5860-¾ 375 (400-¾)
CIRCLING	5960-1 448 (500-1)	5980-1 468 (500-1)	5980-1½ 468 (500-1½)	6080-2 568 (600-2)

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-VWT	APP CRS	Rwy Idg	8000
110.9	349°	TDZE	5512
Chan 46		Apt Elev	5512

ILS or LOC RWY 35

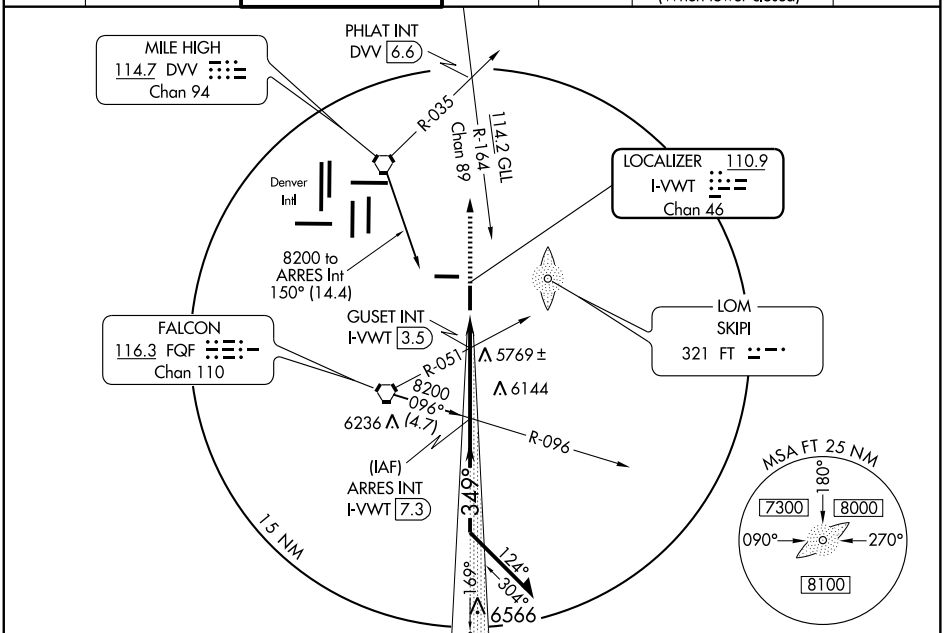
DENVER/ FRONT RANGE (FTG)

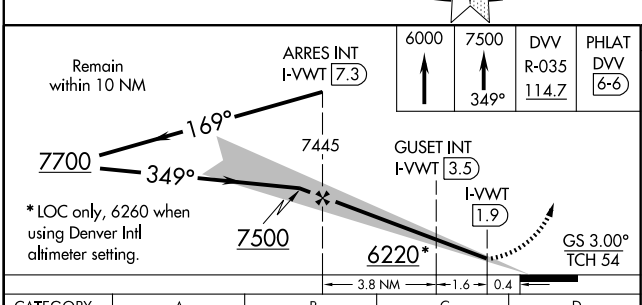
T ANA If local altimeter not received, use Denver Intl altimeter setting and increase all DH/MDA 40 feet.

MALSR

MISSED APPROACH: Climb to 6000; continue climb to 7500 via heading 349° and DVV VORTAC R-035 to PHLAT Int.

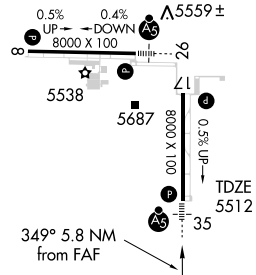
ATIS	DENVER APP CON	FRONT RANGE TOWER*	GND CON	CLNC DEL	DENVER CLNC DEL	UNICOM
119.025	128.25 371.95	120.2 (CTAF)	124.7	124.7	121.75 (When tower closed)	122.95





6000	7500	DVV R-035	PHLAT DVV
↑	↑ 349°	114.7	6-6

ELEV 5512



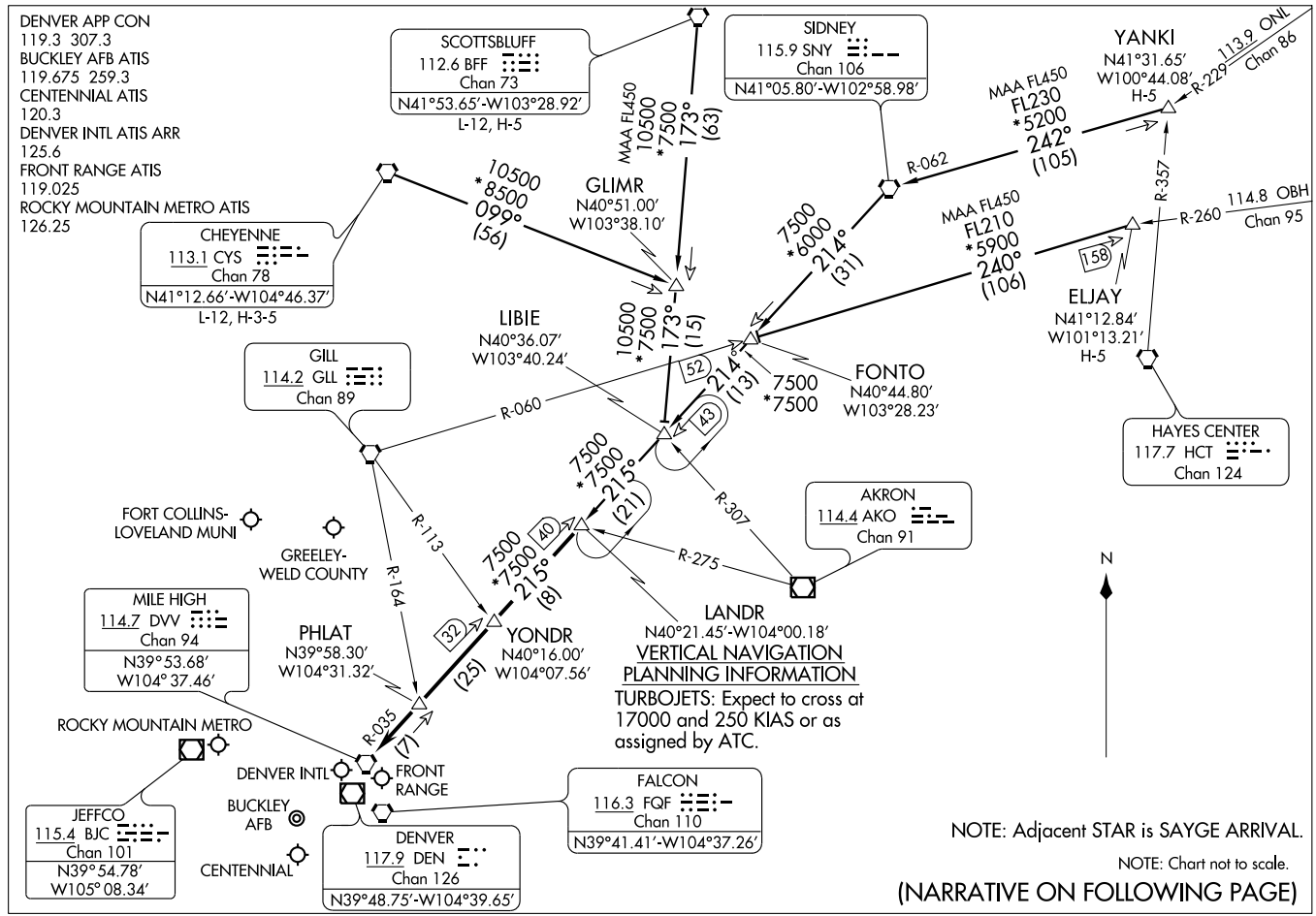
CATEGORY	A	B	C	D
S-ILS 35	5712-¾ 200 (200-¾)			
S-LOC 35	6220-1 708 (800-1)		6220-2 708 (800-2)	6220-2¼ 708 (800-2¼)
CIRCLING	6220-1 708 (800-1)		6220-2 708 (800-2)	6220-2¼ 708 (800-2¼)
GUSET INT/DME MINIMA				
S-LOC 35	6000-1 488 (500-1)		6000-1¼ 488 (500-1¼)	6000-1½ 488 (500-1½)
CIRCLING	6000-1 488 (500-1)		6000-1½ 488 (500-1½)	6080-2 568 (600-2)

REIL Rwys 8 and 26 L
HIRL Rwy 8-26 L
MIRL Rwy 17-35 L

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

SW-1, 22 OCT 2009 to 19 NOV 2009



LANDR FIVE ARRIVAL

(LANDR.LANDR5) 07298

ST-9077 (FAA)

DENVER, COLORADO

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.LANDR5): From over CYS VORTAC via CYS R-099 and BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

ELJAY TRANSITION (ELJAY.LANDR5): From over ELJAY INT via GLL R-060 to FONTO INT, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

SCOTTSBLUFF TRANSITION (BFF.LANDR5): From over BFF VORTAC via BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

YANKI TRANSITION (YANKI.LANDR5): From over YANKI INT via SNY R-062 to SNY VORTAC, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

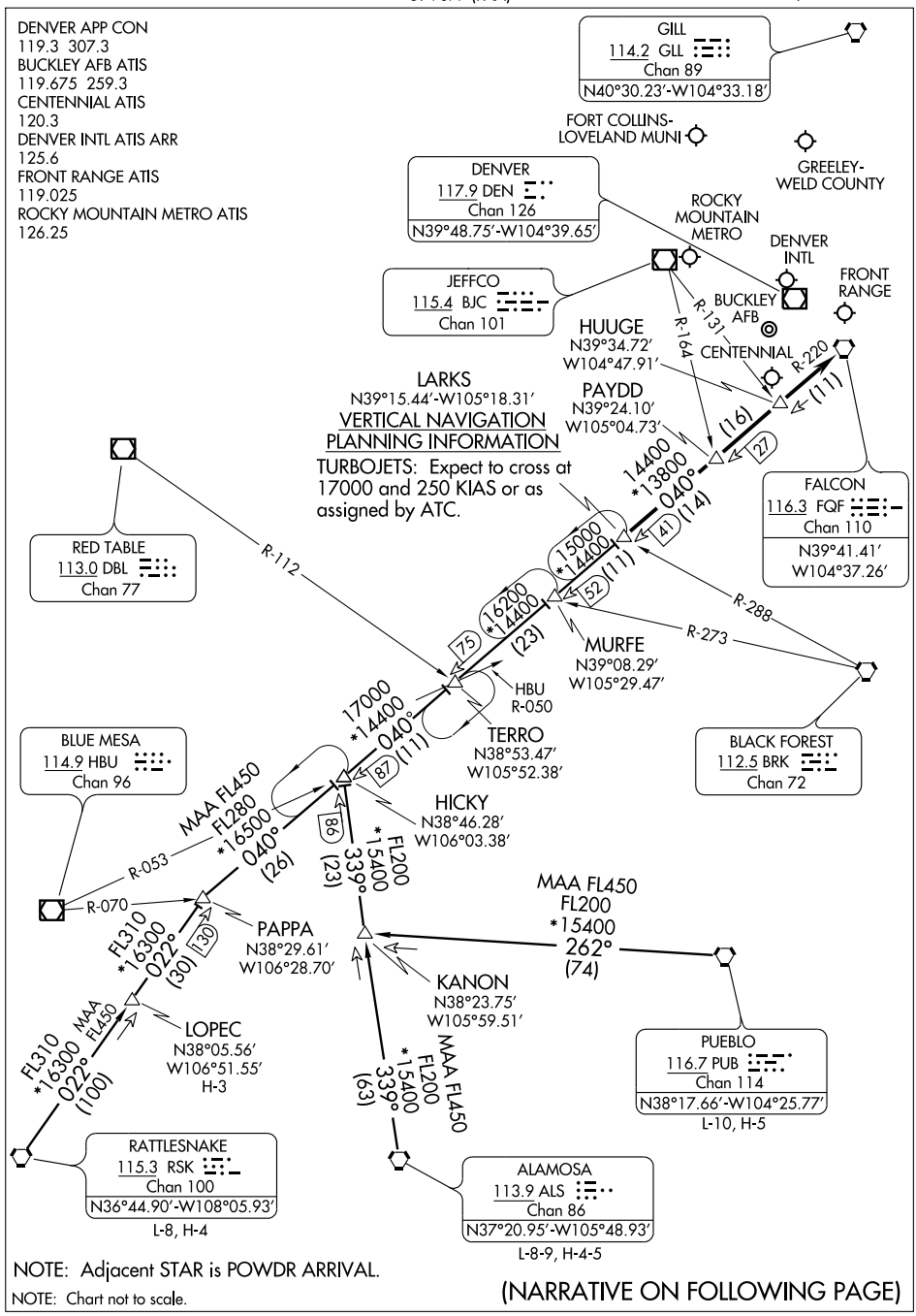
....From over LANDR INT via DVV R-035 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is POWDR ARRIVAL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ARRIVAL DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS6): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS6): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS6): From over PUB VORTAC via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS6): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOM FT	APP CRS	Rwy Idg	8000
321	260°	TDZE	5485
		Apt Elev	5512

NDB RWY 26

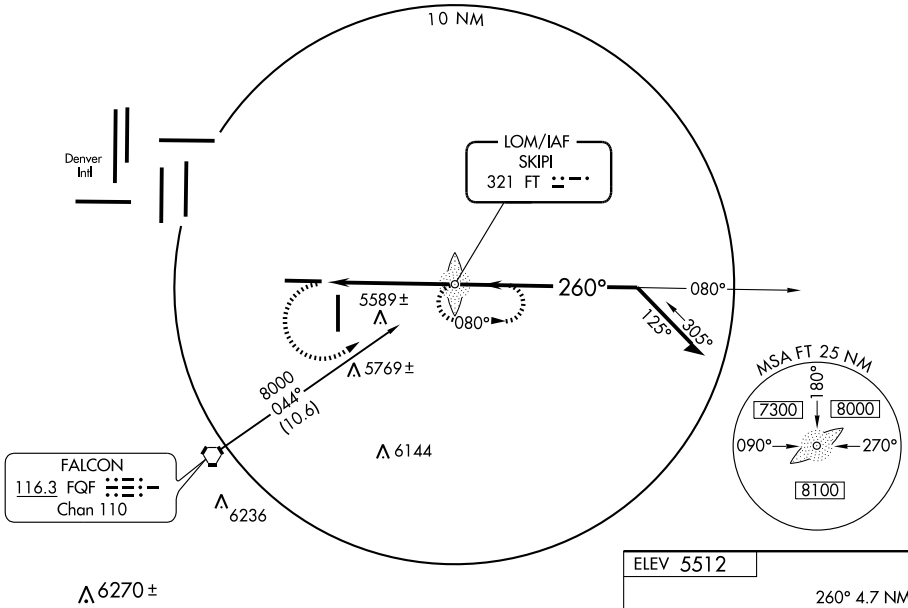
DENVER/ FRONT RANGE (FTG)

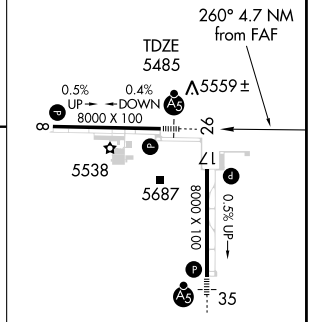
▼ When local altimeter setting not received use Denver Intl altimeter setting and increase all MDA 40 feet, increase S-26 Cat D visibility to 1¼ .

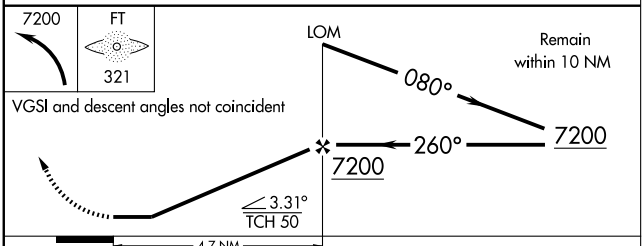
MALSR

MISSED APPROACH: Climbing left turn to 7200 direct FT LOM and hold.

ATIS	DENVER APP CON	FRONT RANGE TOWER★	GND CON	CLNC DEL	DENVER CLNC DEL	UNICOM
119.025	128.25 371.95	120.2 (CTAF)	124.7	124.7	121.75 (When tower closed)	122.95







REIL Rwys 8 and 26 (L)
HIRL Rwy 8-26 (L)
MIRL Rwy 17-35 (L)

CATEGORY	A	B	C	D
S-26	5900-¾ 415 (400-¾)			5900-1 415 (400-1)
CIRCLING	5960-1 448 (500-1)	5980-1 468 (500-1)	5980-1½ 468 (500-1½)	6080-2 568 (600-2)

FAF to MAP 4.7 NM

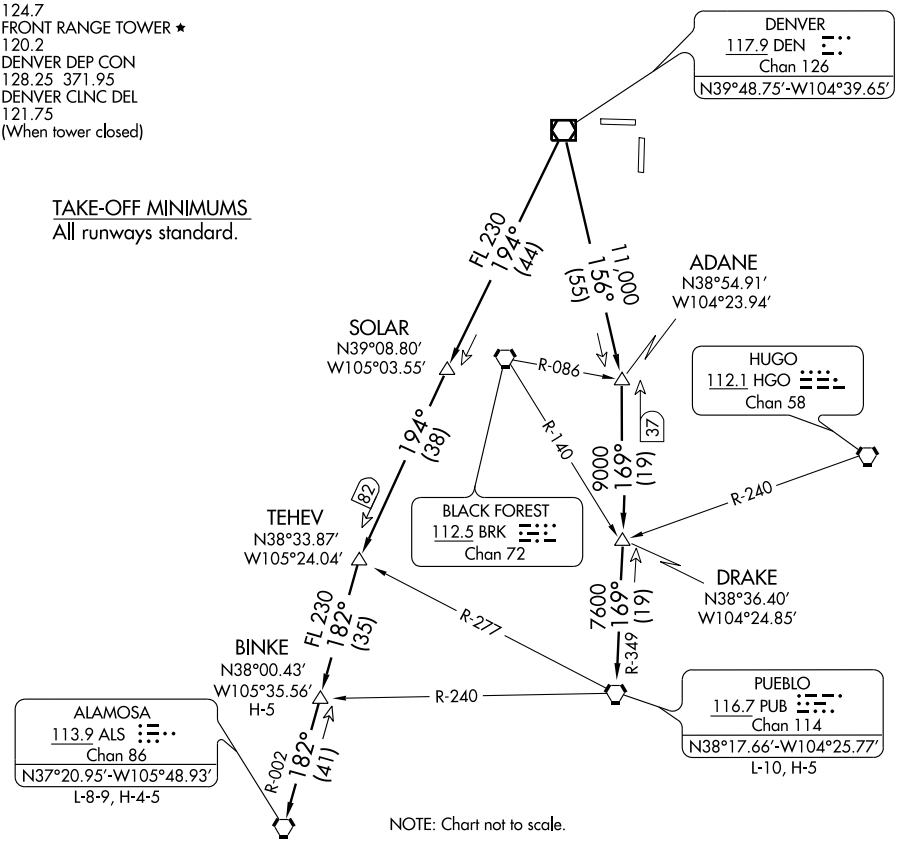
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

SW-1, 22 OCT 2009 to 19 NOV 2009

PIKES FOUR DEPARTURE

ATIS
119.025
CLNC DEL
124.7
GND CON
124.7
FRONT RANGE TOWER ★
120.2
DENVER DEP CON
128.25 371.95
DENVER CLNC DEL
121.75
(When tower closed)

TAKE-OFF MINIMUMS
All runways standard.



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

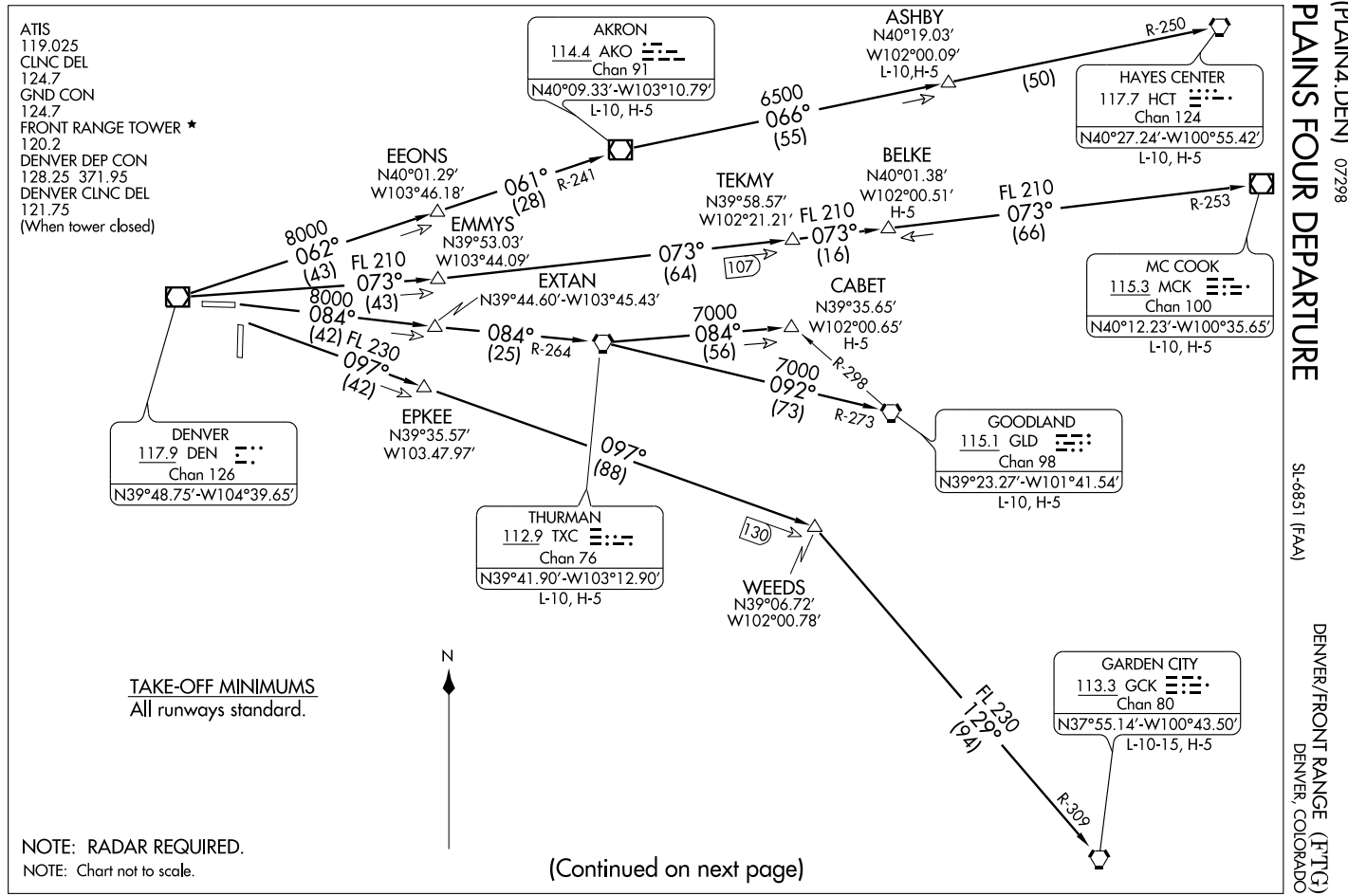
ALAMOSA TRANSITION (PIKES4.ALS): From over DEN VOR/DME via DEN R-194 and ALS R-002 to ALS VORTAC.

BINKE TRANSITION (PIKES4.BINKE): From over DEN VOR/DME via DEN R-194 and ALS R-002 to BINKE INT.

PUEBLO TRANSITION (PIKES4.PUB): From over DEN VOR/DME via DEN R-156 and PUB R-349 to PUB VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

PLAINS FOUR DEPARTURE



(Continued on next page)

PLAINS FOUR DEPARTURE SL-6851 (FAA)

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

AKRON TRANSITION (PLAIN4.AKO): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME.

ASHBY TRANSITION (PLAIN4.ASHBY): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to ASHBY INT.

BELKE TRANSITION (PLAIN4.BELKE): From over DEN VOR/DME via DEN R-073 and MCK R-253 to BELKE INT.

CABET TRANSITION (PLAIN4.CABET): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-084 to CABET INT.

GARDEN CITY TRANSITION (PLAIN4.GCK): From over DEN VOR/DME via DEN R-097 and GCK R-309 to GCK VORTAC.

GOODLAND TRANSITION (PLAIN4.GLD): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-092 and GLD R-273 to GLD VORTAC.

HAYES CENTER TRANSITION (PLAIN4.HCT): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to HCT VORTAC.

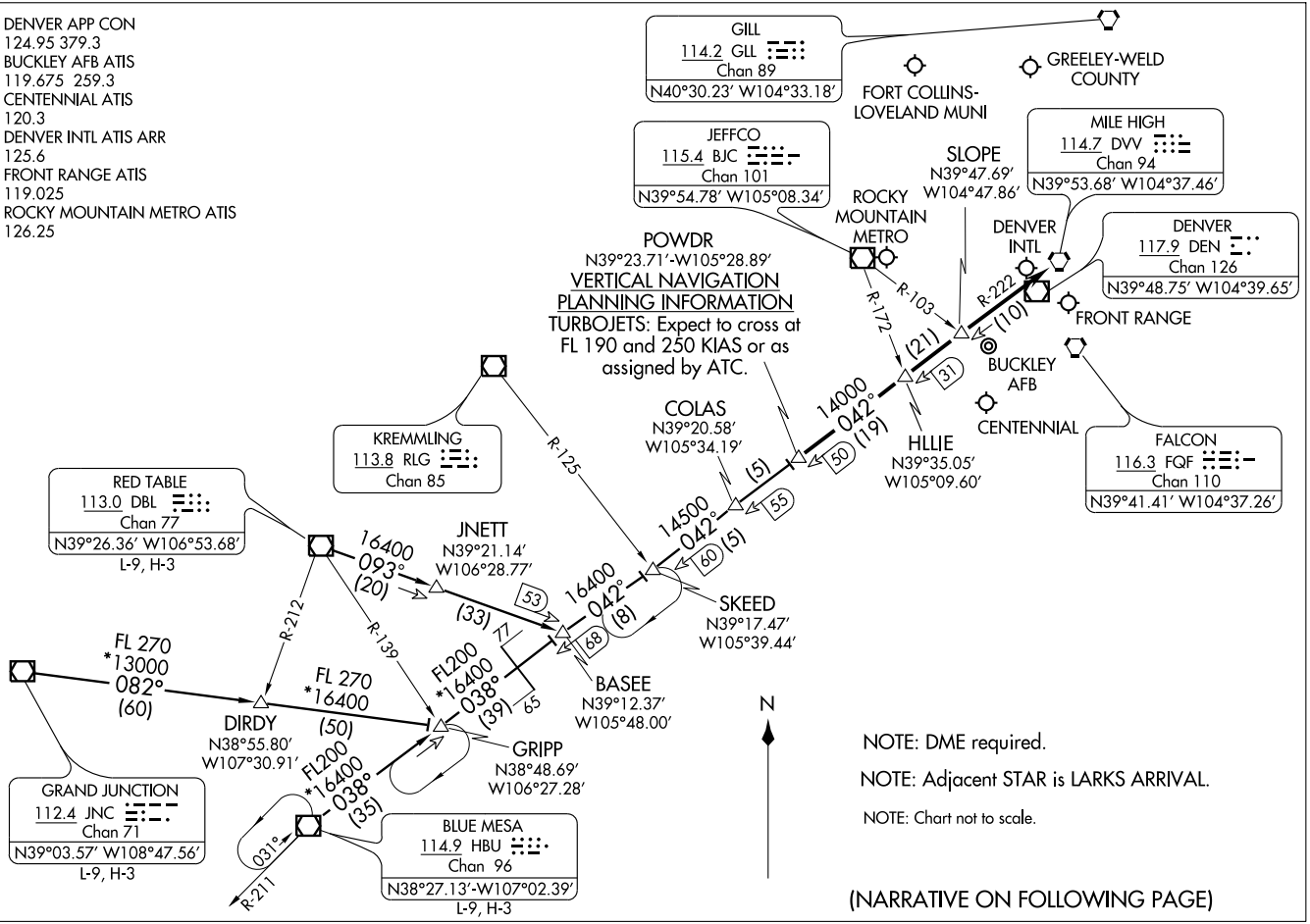
MCCOOK TRANSITION (PLAIN4.MCK): From over DEN VOR/DME via DEN R-073 and MCK R-253 to MCK VOR/DME.

THURMAN TRANSITION (PLAIN4.TXC): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC.

WEEDS TRANSITION (PLAIN4.WEEDS): From over DEN VOR/DME via DEN R-097 to WEEDS INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER APP CON
124.95 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25



POWDR SEVEN ARRIVAL

ARRIVAL DESCRIPTION

BLUE MESA TRANSITION (HBU.POWDR7): From over HBU VOR/DME via HBU R-038 and DVV R-222 to POWDR INT. Thence....

GRAND JUNCTION TRANSITION (JNC.POWDR7): From over JNC VORTAC via JNC R-082 to GRIPP INT; then via HBU R-038 and DVV R-222 to POWDR INT. Thence....

RED TABLE TRANSITION (DBL.POWDR7): From over DBL VOR/DME via DBL R-093 and DVV R-222 to POWDR INT. Thence....

....from over POWDR INT via DVV VORTAC R-222 to HLLIE, then via DVV VORTAC R-222 to SLOPE, then via DVV VORTAC R-222 to DVV. Expect radar vectors to the final approach course at or before DVV VORTAC.

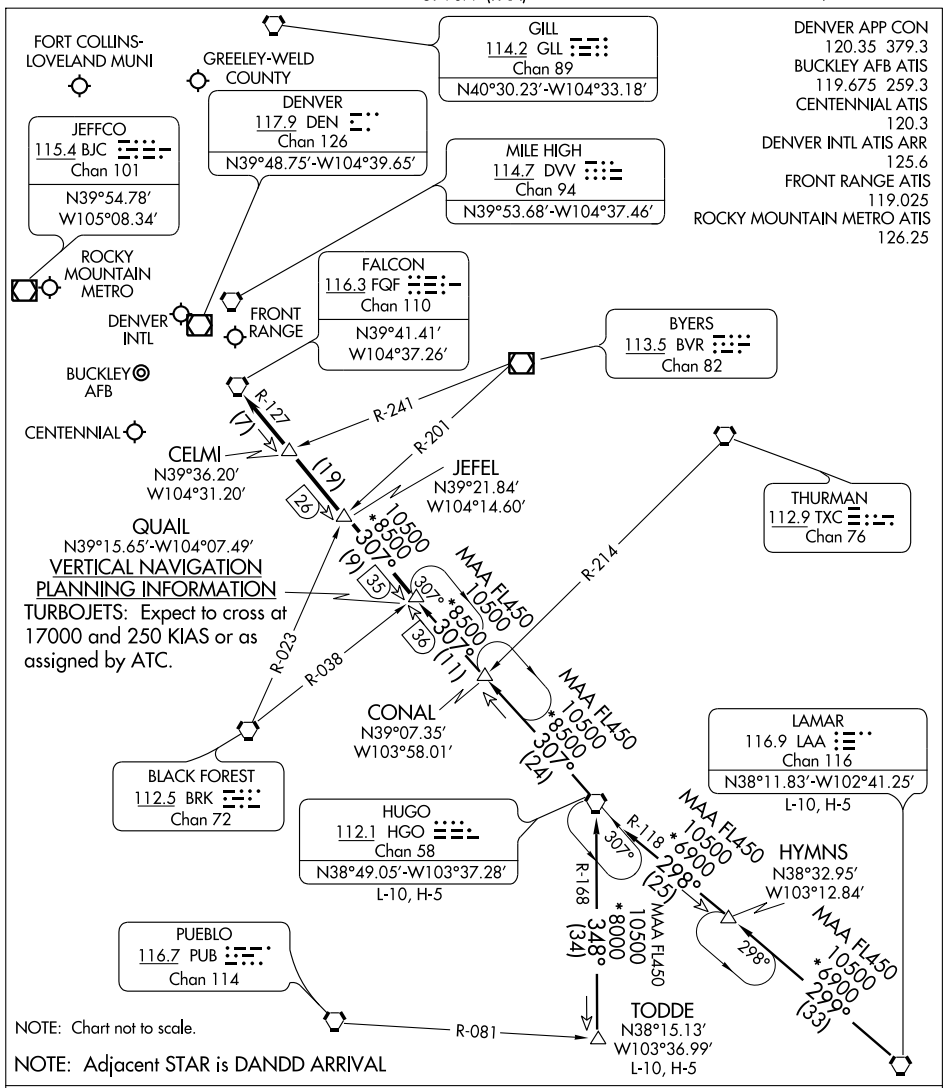
SW-1, 22 OCT 2009 to 19 NOV 2009

(QUAIL.QUAIL6) 09127

QUAIL SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is DANDD ARRIVAL

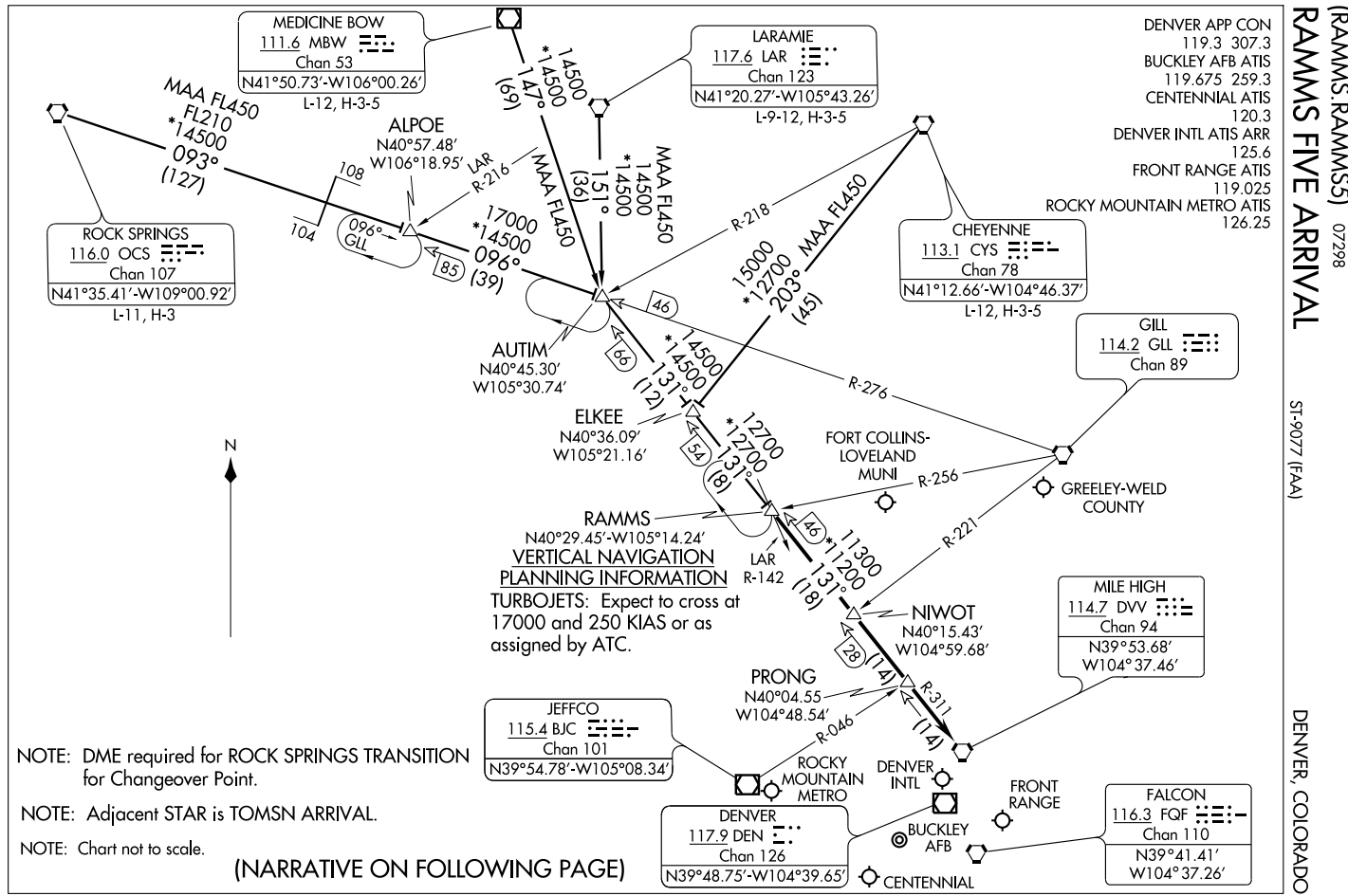
HUGO TRANSITION (HGO.QUAIL6): From over HGO VORTAC via HGO R-307 to CONAL INT; then via 306° course to QUAIL INT. Thence....

LAMAR TRANSITION (LAA.QUAIL6): From over LAA VORTAC via LAA R-299 to HYMNS INT; then via 298° course to HGO VORTAC; then via HGO R-307 to CONAL INT then via 306° course to to QUAIL INT. Thence....

TODDE TRANSITION (TODDE.QUAIL6): From over TODDE INT via HGO R-168 to HGO VORTAC; then via HGO R-307 to QUAIL INT. Thence....

....From over QUAIL INT via HGO R-307 and FQF R-127 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


RAMMS FIVE ARRIVAL (RAMMS.RAMMS5) 07298
DENVER, COLORADO
ST-9077 (FAA)
DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
MEDICINE BOW
111.6 MBW
Chan 53
N41°50.73'-W106°00.26'
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27'-W105°43.26'
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41'-W109°00.92'
L-11, H-3
CHEYENNE
113.1 CYS
Chan 78
N41°12.66'-W104°46.37'
L-12, H-3-5
GILL
114.2 GLL
Chan 89
JEFFCO
115.4 BJC
Chan 101
N39°54.78'-W105°08.34'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'
W104°37.46'
FALCON
116.3 FQF
Chan 110
N39°41.41'
W104°37.26'
ALPOE
N40°57.48'
W106°18.95'
AUTIM
N40°45.30'
W105°30.74'
ELKEE
N40°36.09'
W105°21.16'
RAMMS
N40°29.45'-W105°14.24'
NIWOT
N40°15.43'
W104°59.68'
PRONG
N40°04.55
W104°48.54'
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
ROCKY MOUNTAIN METRO
DENVER INTL
FRONT RANGE
BUCKLEY AFB
CENTENNIAL
MAA FL450
FL210
*14500
093°
(127)
147°
(69)
*14500
14500
151°
(36)
14500
*14500
MAA FL450
R-218
MAA FL450
15000
*12700
203°
(45)
108
104
LAR
R-216
096°
GLL
17000
*14500
096°
(39)
85
46
66
14500
*14500
131°
(12)
R-276
54
12700
*12700
131°
(8)
R-256
R-221
46
11300
*11200
131°
(18)
LAR
R-142
28
(14)
R-311
(14)
R-046
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at 17000 and 250 KIAS or as assigned by ATC.
NOTE: DME required for ROCK SPRINGS TRANSITION for Changeover Point.
NOTE: Adjacent STAR is TOMSN ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
N

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.RAMMS5): From over CYS VORTAC via CYS R-203 and DVV R-311 to RAMMS INT. Thence....

LARAMIE TRANSITION (LAR.RAMMS5): From over LAR VORTAC via LAR R-151 and DVV R-311 to RAMMS INT. Thence....

MEDICINE BOW TRANSITION (MBW.RAMMS5): From over MBW VOR/DME via MBW R-147 and DVV R-311 to RAMMS INT. Thence....

ROCK SPRINGS TRANSITION (OCS.RAMMS5): From over OCS VORTAC via OCS R-093 and GLL R-276 to AUTIM INT, then via DVV R-311 to RAMMS INT. Thence....

....From over RAMMS INT via DVV R-311 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8000
CH 82209	169°	TDZE	5488
W17A		Apt Elev	5512

RNAV (GPS) RWY 17

DENVER/FRONT RANGE (FTG)

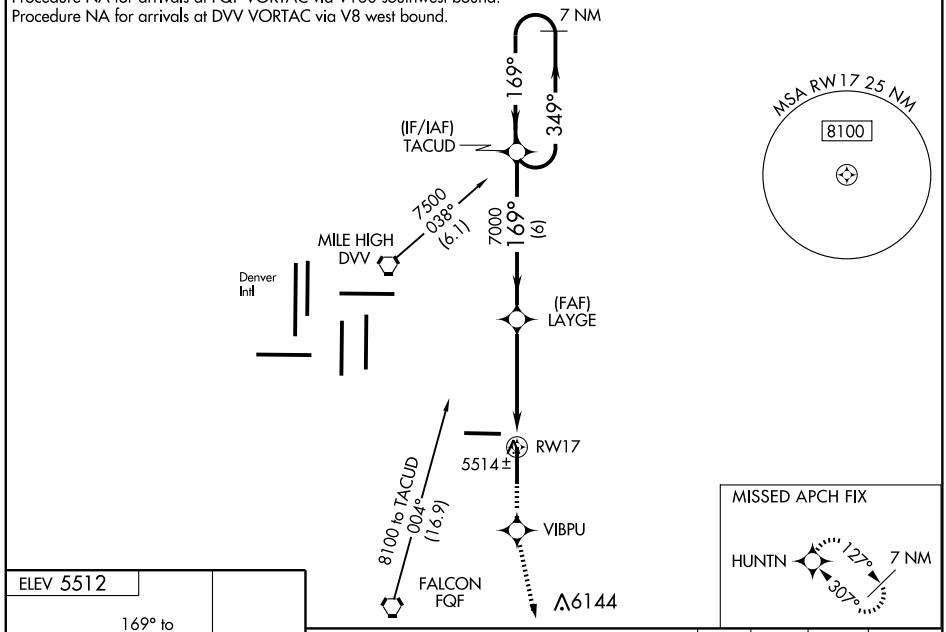
NA

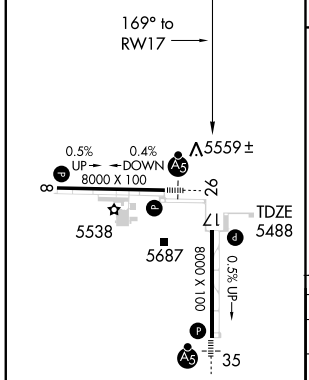
DME/DME RNP -0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 37°C (98°F). When local altimeter setting not received use Denver Intl altimeter setting and increase all DA 29 feet and all MDA 40 feet. Increase LNAV visibility Cat D to 1½ mile: Baro-VNAV and VDP NA when using Denver Intl altimeter setting.

MISSED APPROACH: Climb to 8500 direct VIBPU and via 157° track to HUNTN and hold.

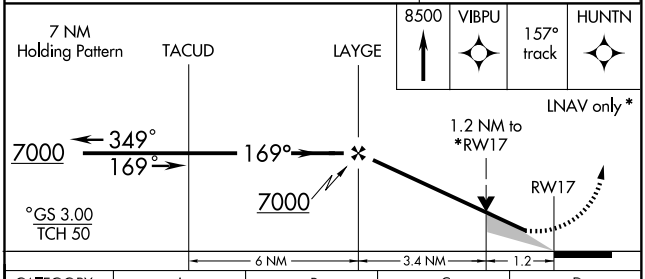
ATIS	DENVER APP CON	FRONT RANGE TOWER*	GND CON	CLNC DEL	DENVER CLNC DEL	UNICOM
119.025	128.25 371.95	120.2 (CTAF) L	124.7	124.7	121.75 (When tower closed)	122.95

Procedure NA for arrivals at FQF VORTAC via V160 southwest bound.
Procedure NA for arrivals at DVV VORTAC via V8 west bound.





REIL Rwys 8 and 26 L
HIRL Rwy 8-26 L
MIRL Rwy 17-35 L



CATEGORY	A	B	C	D
LPV DA	5738-1 250 (300-1)			
LNAV/VNAV DA	5839-1¼ 351 (400- 1¼)			
LNAV MDA	5900-1 412 (500- 1)		5900-1¼ 412 (500-1¼)	5900-1¼ 412 (500-1¼)
CIRCLING	5960-1 448 (500-1)	5980-1 468 (500-1)	5980-1½ 468 (500-1½)	6080-2 568 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8000
CH 93909	260°	TDZE	5485
W26A		Apt Elev	5512

RNAV (GPS) RWY 26

DENVER/ FRONT RANGE (FTG)

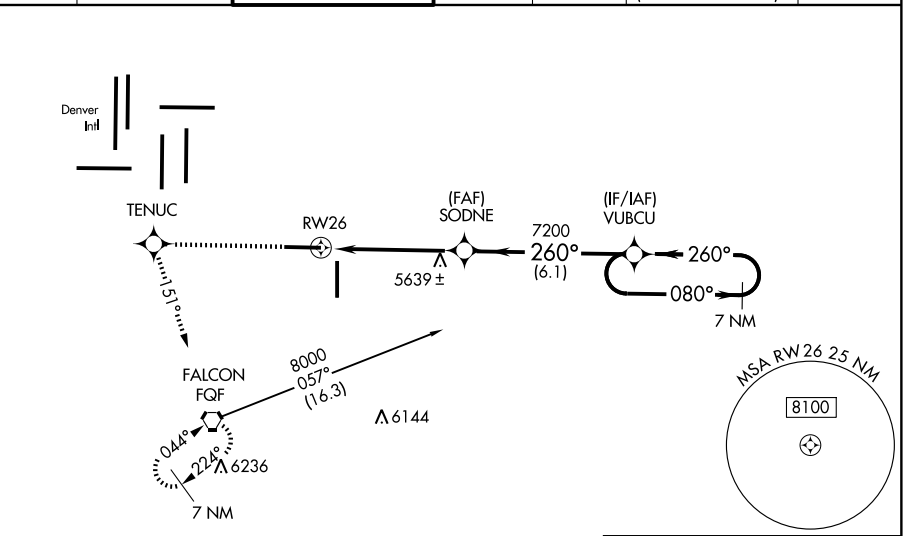
NA

DME/DME RNP -0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 38° C (100°F). When local altimeter setting not received, use Denver Intl altimeter setting and increase all DA 29 feet and all MDA 40 feet, increase LNAV/VNAV visibility Cat A, B, C to ¾ mile. For inoperative MALSR increase LNAV/VNAV visibility Cat D to 1 mile, LNAV visibility Cat D to 1¼ mile. For inoperative MALSR when using Denver Intl altimeter setting increase LPV visibility all Cats to 1 mile, LNAV/VNAV visibility all Cats to 1¼ mile. Baro-VNAV and VDP NA when using Denver Intl altimeter setting.

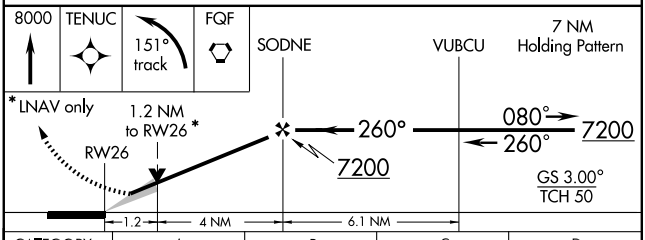
MALSR

MISSED APPROACH: Climb to 8000 direct TENUC and left turn via 151° track to FQF VORTAC and hold. Continue climb-in-hold to 8000.

ATIS	DENVER APP CON	FRONT RANGE TOWER*	GND CON	CLNC DEL	DENVER CLNC DEL	UNICOM
119.025	128.25 371.95	120.2 (CTAF)	124.7	124.7	121.75 (When tower closed)	122.95

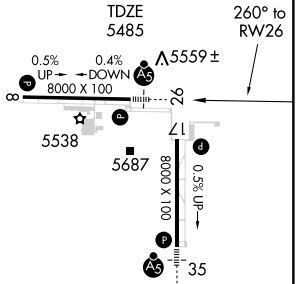


6270 ± ∧



CATEGORY	A	B	C	D
LPV DA	5735-½ 250 (300-½)			
LNAV/VNAV DA	5786-½ 301 (300-½)			5786-¾ 301 (300-¾)
LNAV MDA	5900-½ 415 (500-½)		5900-¾ 415 (500-¾)	5900-1 415 (500-1)
CIRCLING	5960-1 448 (500-1)	5980-1 468 (500-1)	5980-1½ 468 (500-1½)	6080-2 568 (600-2)

ELEV 5512



SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8000
CH 93809	349°	TDZE	5512
W35A		Apt Elev	5512

RNAV (GPS) RWY 35

DENVER/ FRONT RANGE (FTG)

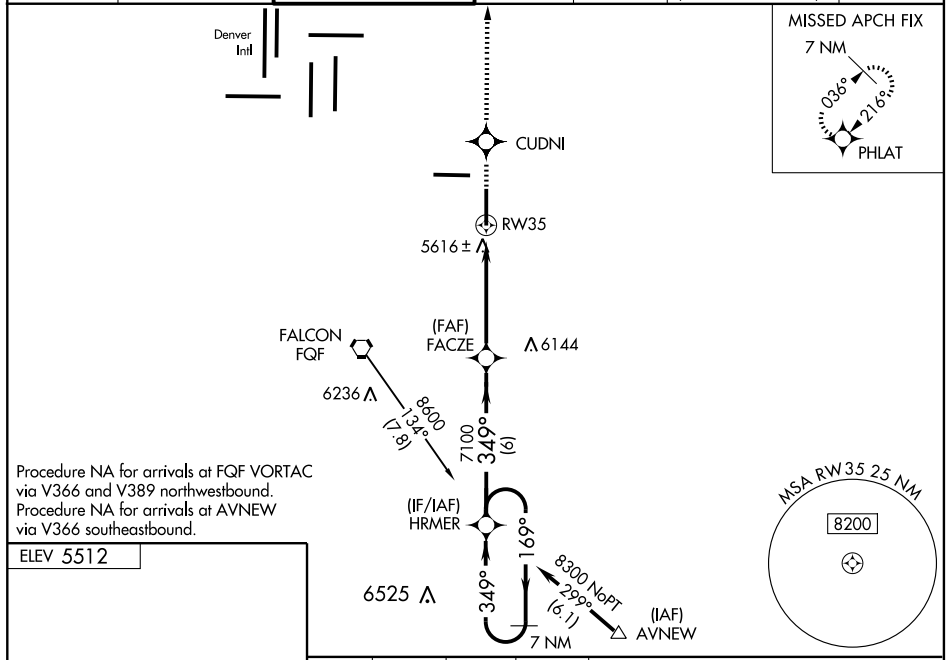
DME/DME RNP -0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 37°C (98°F). When local altimeter setting not received, use Denver Intl altimeter setting and increase all DA 29 feet and all MDA 40 feet, increase LPV all Cats visibility to ¾ mile, LNAV/VNAV all Cats visibility to 1 mile, LNAV Cat C visibility to 1½ mile, Cat D visibility to 1¾ mile. For inoperative MALSR increase LPV all Cats visibility to 1 mile. For inoperative MALSR when using Denver Intl altimeter setting increase LPV all Cats visibility to 1¼ mile. Baro-VNAV and VDP NA when using Denver Intl altimeter setting.

NA

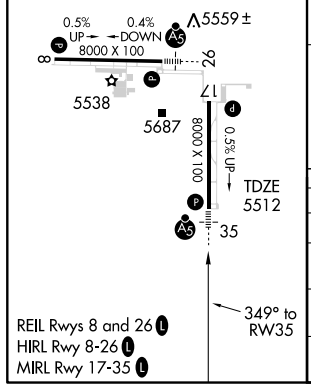
MALSR A5

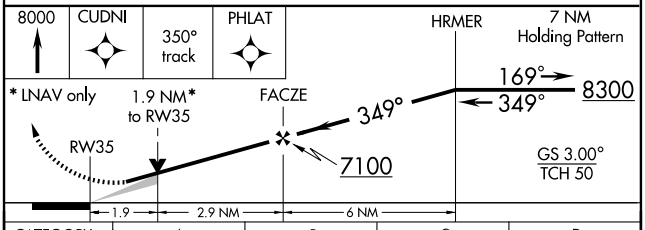
MISSED APPROACH: Climb to 8000 direct CUDNI then via 350° track to PHLAT and hold.

ATIS	DENVER APP CON	FRONT RANGE TOWER*	GND CON	CLNC DEL	DENVER CLNC DEL	UNICOM
119.025	128.25 371.95	120.2 (CTAF) L	124.7	124.7	121.75 (When tower closed)	122.95



ELEV 5512





CATEGORY	A	B	C	D
LPV DA	5828-½ 316 (400-½)			
LNAV/VNAV DA	5891-¾ 379 (400-¾)			
LNAV MDA	6180-½ 668 (700-½)		6180-1¼ 668 (700-1¼)	6180-1½ 668 (700-1½)
CIRCLING	6180-1 668 (700-1)		6180-1¾ 668 (700-1¾)	6180-2 668 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

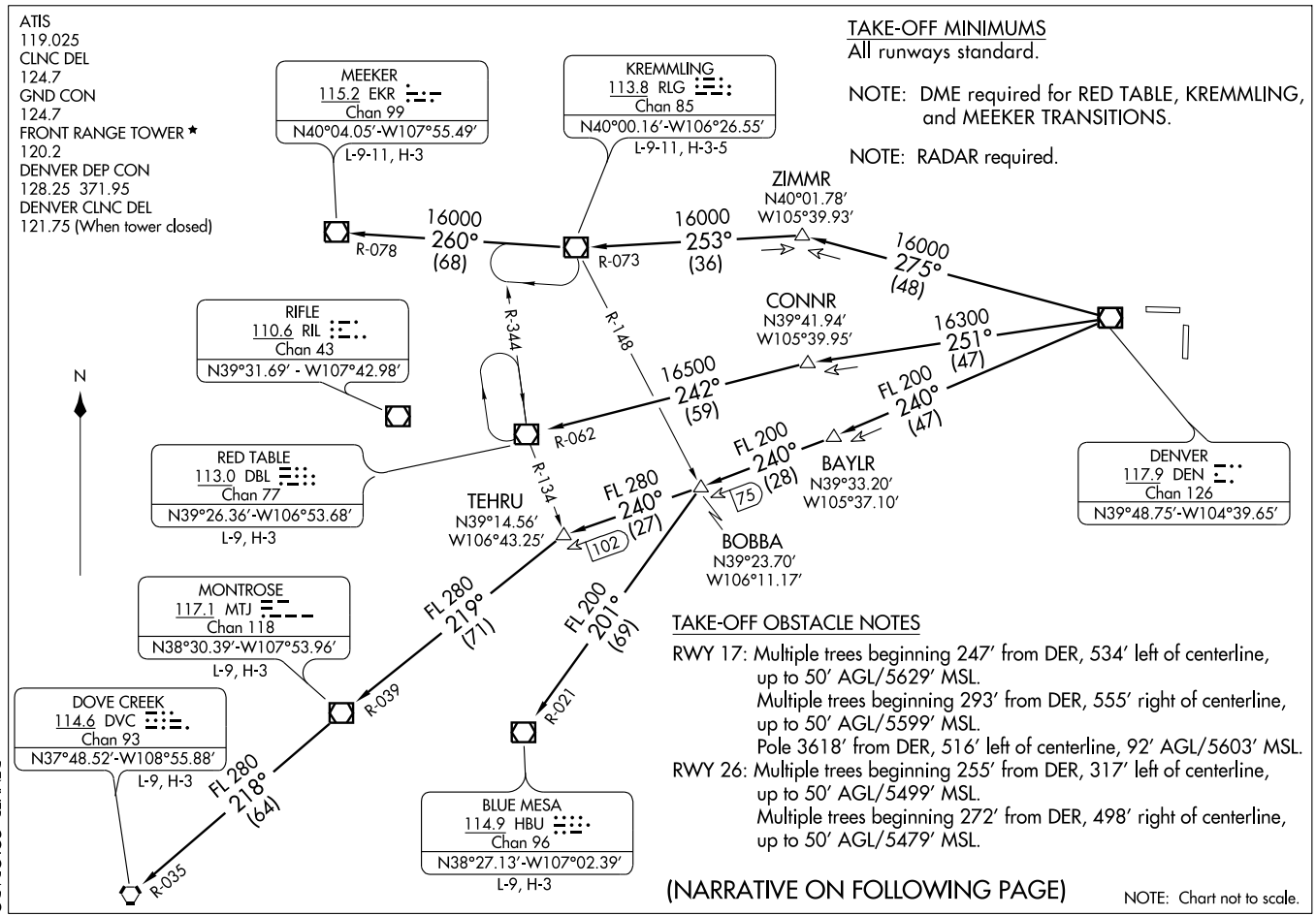
ATIS
119.025
CLNC DEL
124.7
GND CON
124.7
FRONT RANGE TOWER ★
120.2
DENVER DEP CON
128.25 371.95
DENVER CLNC DEL
121.75 (When tower closed)

TAKE-OFF MINIMUMS

All runways standard.

NOTE: DME required for RED TABLE, KREMMLING, and MEEKER TRANSITIONS.

NOTE: RADAR required.



TAKE-OFF OBSTACLE NOTES

RWY 17: Multiple trees beginning 247′ from DER, 534′ left of centerline, up to 50′ AGL/5629′ MSL.
Multiple trees beginning 293′ from DER, 555′ right of centerline, up to 50′ AGL/5599′ MSL.
Pole 3618′ from DER, 516′ left of centerline, 92′ AGL/5603′ MSL.

RWY 26: Multiple trees beginning 255′ from DER, 317′ left of centerline, up to 50′ AGL/5499′ MSL.
Multiple trees beginning 272′ from DER, 498′ right of centerline, up to 50′ AGL/5479′ MSL.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SL-6851 (FAA)

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

BLUE MESA (HI) TRANSITION (ROCKI7.HBU): From over DEN VOR/DME via DEN R-240 and HBU R-021 to HBU VOR/DME.

DOVE CREEK (HI) TRANSITION (ROCKI7.DVC): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME, then via MTJ R-218 and DVC R-035 to DVC VORTAC.

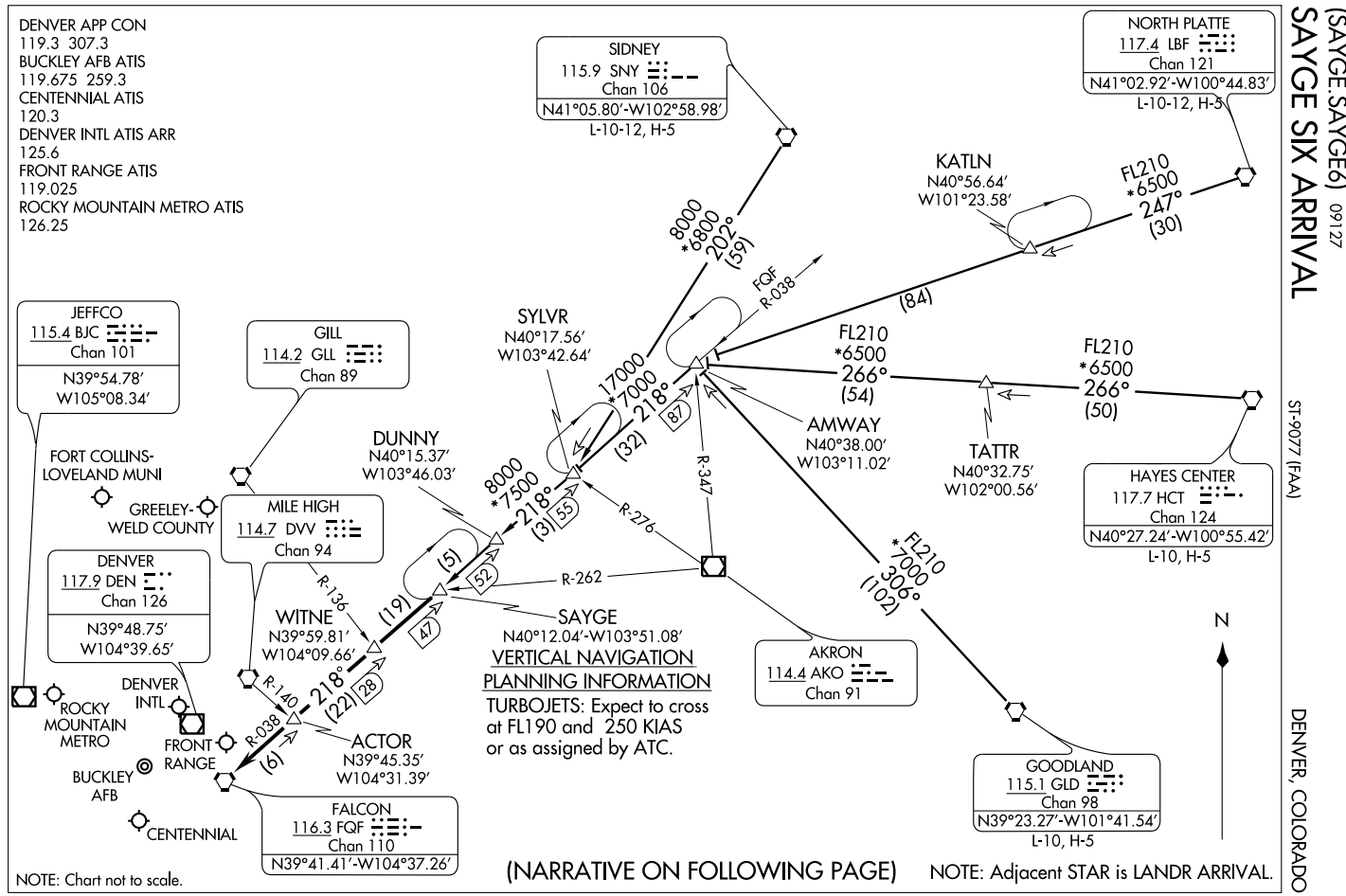
KREMMLING TRANSITION (ROCKI7.RLG): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME.

MEEKER TRANSITION (ROCKI7.EKR): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME, then via RLG R-260 and EKR R-078 to EKR VOR/DME.

MONTROSE TRANSITION (ROCKI7.MTJ): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME.

RED TABLE TRANSITION (ROCKI7.DBL): From over DEN VOR/DME via DEN R-251 and DBL R-062 to DBL VOR/DME.

SW-1, 22 OCT 2009 to 19 NOV 2009


DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
SIDNEY
115.9 SNY
Chan 106
N41°05.80'-W102°58.98'
L-10-12, H-5
NORTH PLATTE
117.4 LBF
Chan 121
N41°02.92'-W100°44.83'
L-10-12, H-5
KATLN
N40°56.64'
W101°23.58'
8000
*6800
202°
(59)
FQF
R-038
(84)
FL210
*6500
247°
(30)
SYLVR
N40°17.56'
W103°42.64'
17000
*7000
218°
(32)
87
FL210
*6500
266°
(54)
FL210
*6500
266°
(50)
AMWAY
N40°38.00'
W103°11.02'
TATTR
N40°32.75'
W102°00.56'
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
GILL
114.2 GLL
Chan 89
FORT COLLINS-
LOVELAND MUNI
GREELEY-
WELD COUNTY
MILE HIGH
114.7 DVV
Chan 94
DUNNY
N40°15.37'
W103°46.03'
8000
*7500
218°
(3)
55
R-347
R-276
R-262
(5)
52
DENVER
117.9 DEN
Chan 126
N39°48.75'
W104°39.65'
R-136
WITNE
N39°59.81'
W104°09.66'
(19)
47
SAYGE
N40°12.04'-W103°51.08'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS: Expect to cross
at FL190 and 250 KIAS
or as assigned by ATC.
FL210
*7000
306°
(102)
AKRON
114.4 AKO
Chan 91
N
DENVER
INTL
ROCKY
MOUNTAIN
METRO
FRONT
RANGE
R-140
218°
(22)
28
R-038
(6)
ACTOR
N39°45.35'
W104°31.39'
BUCKLEY
AFB
CENTENNIAL
FALCON
116.3 FQF
Chan 110
N39°41.41'-W104°37.26'
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Adjacent STAR is LANDR ARRIVAL.
(SAYGE.SAYGE6) 09127
SAYGE SIX ARRIVAL
ST-9077 (FAA)
DENVER, COLORADO

SAYGE SIX ARRIVAL

ARRIVAL DESCRIPTION

GOODLAND TRANSITION (GLD.SAYGE6): From over GLD VORTAC via GLD R-306 and FQF R-038 to SAYGE INT. Thence....

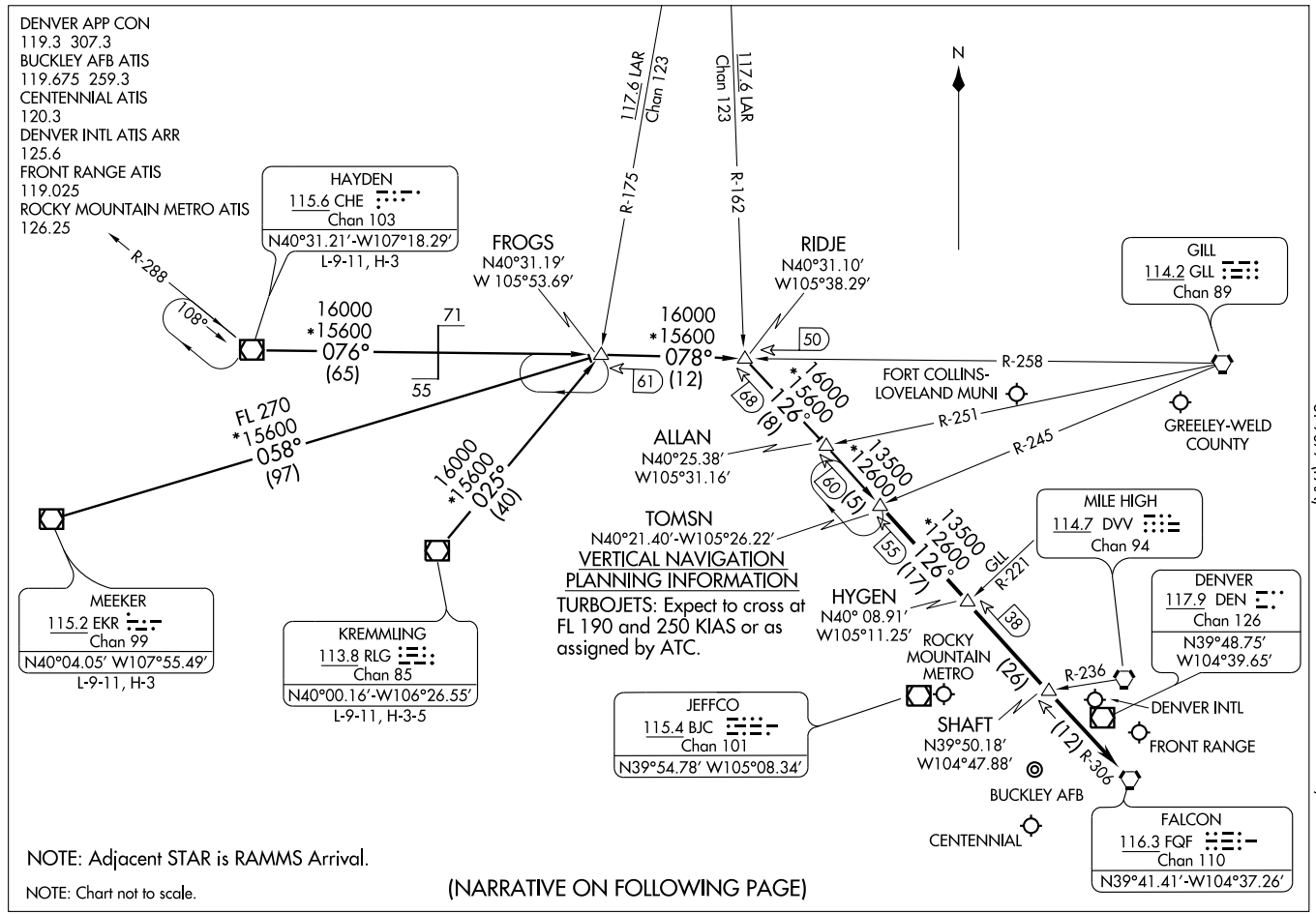
HAYES CENTER TRANSITION (HCT.SAYGE6): From over HCT VORTAC via HCT R-266 and FQF R-038 to SAYGE INT. Thence....

NORTH PLATTE TRANSITION (LBF.SAYGE6): From over LBF VORTAC via LBF R-247 and FQF R-038 to SAYGE INT. Thence....

SIDNEY TRANSITION (SNY.SAYGE6): From over SNY VORTAC via SNY R-202 and FQF R-038 to SAYGE INT. Thence....

....From over SAYGE INT via FQF R-038 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



(TOMSN.TOMSN4) 07298

TOMSN FOUR ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO

TOMSN FOUR ARRIVAL

ARRIVAL DESCRIPTION

HAYDEN TRANSITION (CHE.TOMSN4): From over CHE VOR/DME via CHE R-076 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

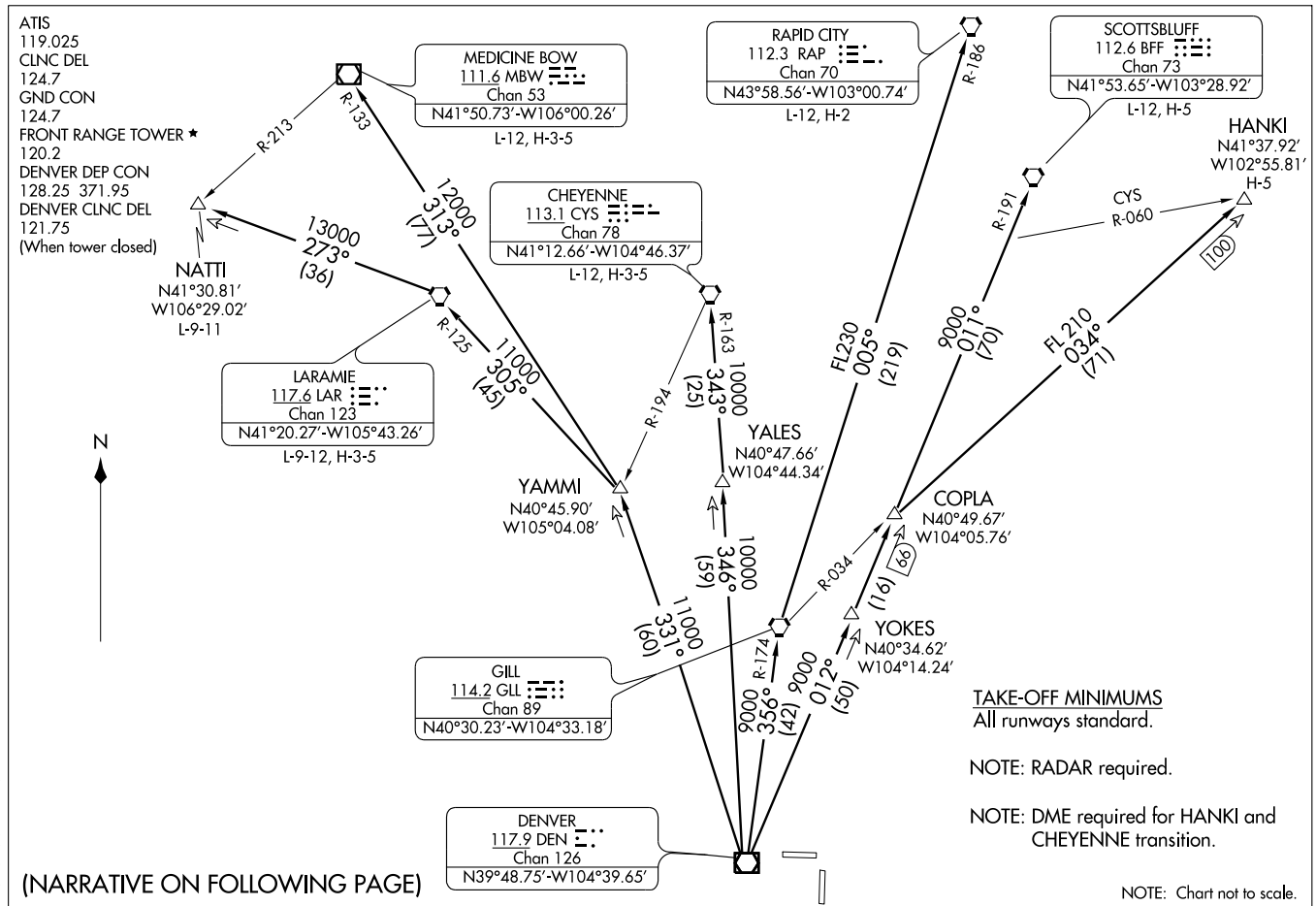
KREMMLING TRANSITION (RLG.TOMSN4): From over RLG VOR/DME via RLG R-025 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

MEEKER TRANSITION (EKR.TOMSN4): From over EKR VOR/DME via EKR R-058 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

....From over TOMSN INT via FQF R-306 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

YELLOWSTONE SIX DEPARTURE



YELLOWSTONE SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition.
Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

CHEYENNE TRANSITION (YELLO6.CYS): From over DEN VOR/DME via DEN R-346 and CYS R-163 to CYS VORTAC.

HANKI TRANSITION (YELLO6.HANKI): From over DEN VOR/DME via DEN R-012 and GLL R-034 to HANKI INT.

LARAMIE TRANSITION (YELLO6.LAR): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC.

MEDICINE BOW TRANSITION (YELLO6.MBW): From over DEN VOR/DME via DEN R-331 and MBW R-133 to MBW VOR/DME.

NATTI TRANSITION (YELLO6.NATTI): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC, then via LAR R-273 to NATTI INT.

RAPID CITY TRANSITION (YELLO6.RAP): From over DEN VOR/DME via DEN R-356 and GLL R-174 to GLL VORTAC, then via GLL R-005 and RAP R-186 to RAP VORTAC.

SCOTTSBLUFF TRANSITION (YELLO6.BFF): From over DEN VOR/DME via DEN R-012 and BFF R-191 to BFF VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 17: Multiple trees beginning 247′ from DER, 534′ left of centerline, up to 50′ AGL/5629′ MSL.
Multiple trees beginning 293′ from DER, 555′ right of centerline, up to 50′ AGL/5599′ MSL.
Pole 3618′ from DER, 516′ left of centerline, 92′ AGL/5603′ MSL.
RWY 26: Multiple trees beginning 255′ from DER, 317′ left of centerline, up to 50′ AGL/5499′ MSL.
Multiple trees beginning 272′ from DER, 498′ right of centerline, up to 50′ AGL/5479′ MSL.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-DRO	APP CRS	Rwy Idg	9201
109.1	027°	TDZE	6638
		Apt Elev	6685

ILS or LOC/DME RWY 3

DURANGO-LA PLATA COUNTY (DRO)

DME from DRO VOR/DME. Simultaneous reception of I-DRO and DRO VOR/DME required.

MALSR

MISSED APPROACH: Climb to 7500 then climbing right turn to 10000 via heading 140° and DRO VOR/DME R-120 to SOVDE/14 DME and hold. Continue climb-in-hold to 10000.

ASOS	DENVER CENTER	UNICOM
120.625	118.575 348.7	122.8 (CTAF) L

8709 ^ ^ 9151 ^ 8385 9900± ^ 7800 ^

DME REQUIRED

Procedure NA for arrivals at RSK VORTAC via airway radials 333 CW 072.

MSA DRO 25 NM
15100
070° 275°
10000

(IAF) FIMGA DRO 14

LOCALIZER 109.1 I-DRO

R-272

8366

6903 ± MM

6808 ±

DURANGO 108.2 DRO Chan 19

LIVBE DRO 2.8

6819 ±

10000 to JUBEP 204° (7.5)

(IAF) COKRI DRO 14

8551

R-096

R-120

10000 NoPT to HINDY DRO 14 Arc

10000 NoPT DRO 14 Arc

(IAF) JUBEP DRO 7.5

8800

027° (6.5)

LR-195

120°

300°

(IAF) SOVDE DRO 14

252°

072°

LR-212

207°

(IF) HINDY DRO 14

10000 NoPT

10000 NoPT to HINDY 018° (15.6)

10 NM DRO 14 Arc

IAF RATTLESNAKE 115.3 RSK Chan 100

ELEV 6685

REIL Rwy 21 L

HIRL Rwy 3-21 L

6702 ^

21

0.7% DOWN

6720 ☆

9201 X 150

TDZE 6638

0.8% UP

3

027° 6.6 NM from FAF

Remain within 10 NM

JUBEP DRO 7.5

207°

9300

027°

8800

LIVBE DRO 2.8

DRO 1

MM

8800

7260*

GS 3.00° TCH 55

4.7 NM 1.4 NM 0.5

7500	10000	DRO R-120 108.2	SOVDE DRO 14
	140°		

*LOC only

CATEGORY	A	B	C	D
S-ILS 3	6838-½ 200 (200-½)			
S-LOC 3	7080-½ 442 (400-½)		7080-¾ 442 (400-¾)	7080-1 442 (400-1)
CIRCLING	7180-1 495 (500-1)	7200-1 515 (600-1)	7220-1½ 535 (600-1½)	7260-2 575 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	9201
CH 53710	027°	TDZE	6638
W03A		Apt Elev	6685

RNAV (GPS) RWY 3

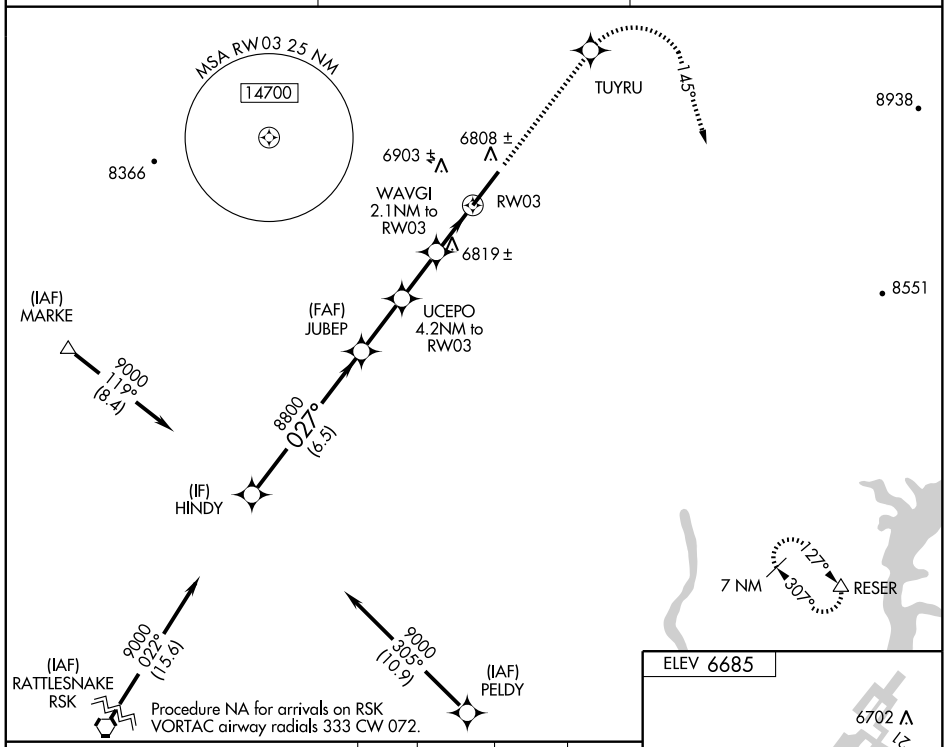
DURANGO-LA PLATA COUNTY (DRO)

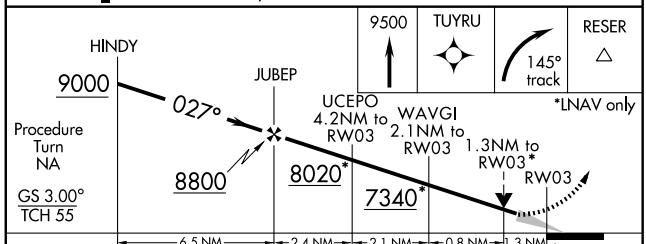
For uncompensated Baro-VNAV systems, procedure NA below -28°C (-18°F) or above 36°C (96°F). DME/DME RNP-0.3 NA.

MALSR

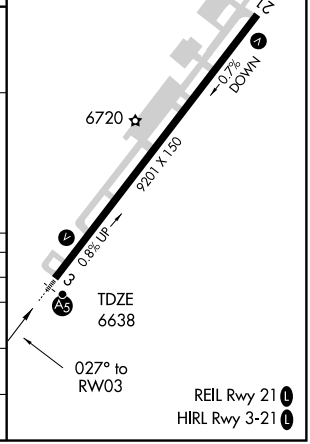
MISSED APPROACH: Climb to 9500 direct TUYRU then climbing right turn via 145° track to RESER and hold.

ASOS	DENVER CENTER	UNICOM
120.625	118.575 348.7	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	6838-½ 200 (200-½)			
LNAV/ VNAV DA	6980-¾ 342 (300-¾)			
LNAV MDA	7080-½ 442 (400-½)		7080-¾ 442 (400-¾)	7080-1 442 (400-1)
CIRCLING	7180-1 495 (500-1)	7200-1 515 (600-1)	7220-1½ 535 (600-1½)	7260-2 575 (600-2)



SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME DRO	APP CRS	Rwy Idg	9201
108.2	030°	TDZE	6639
Chan 19		Apt Elev	6685

VOR/DME RWY 3

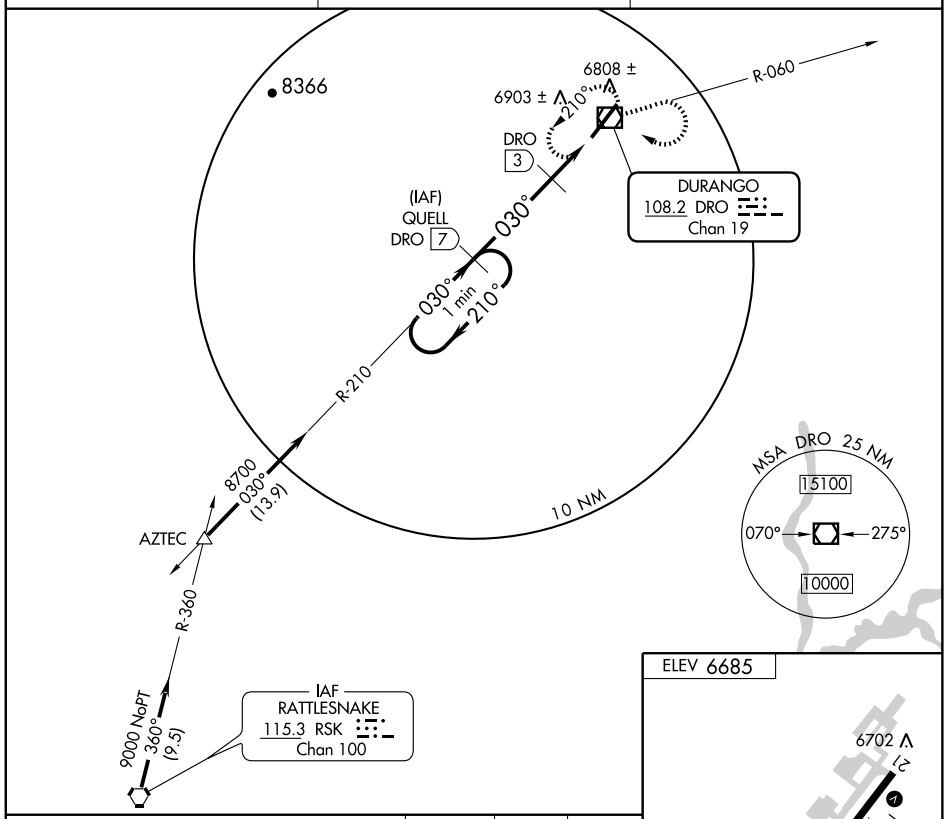
DURANGO-LA PLATA COUNTY (DRO)

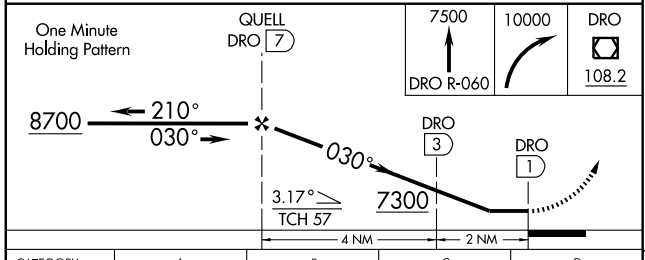
Cat. D S-3 visibility increased ¼ mile for inoperative MALSR.

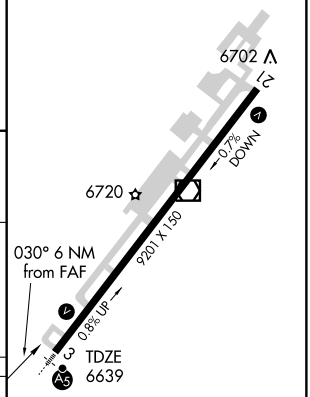
MALSR

MISSED APPROACH: Climb on R-060 to 7500, then climbing right turn to 10,000 direct DRO VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
120.625	118.575 348.7	122.8 (CTAF) L



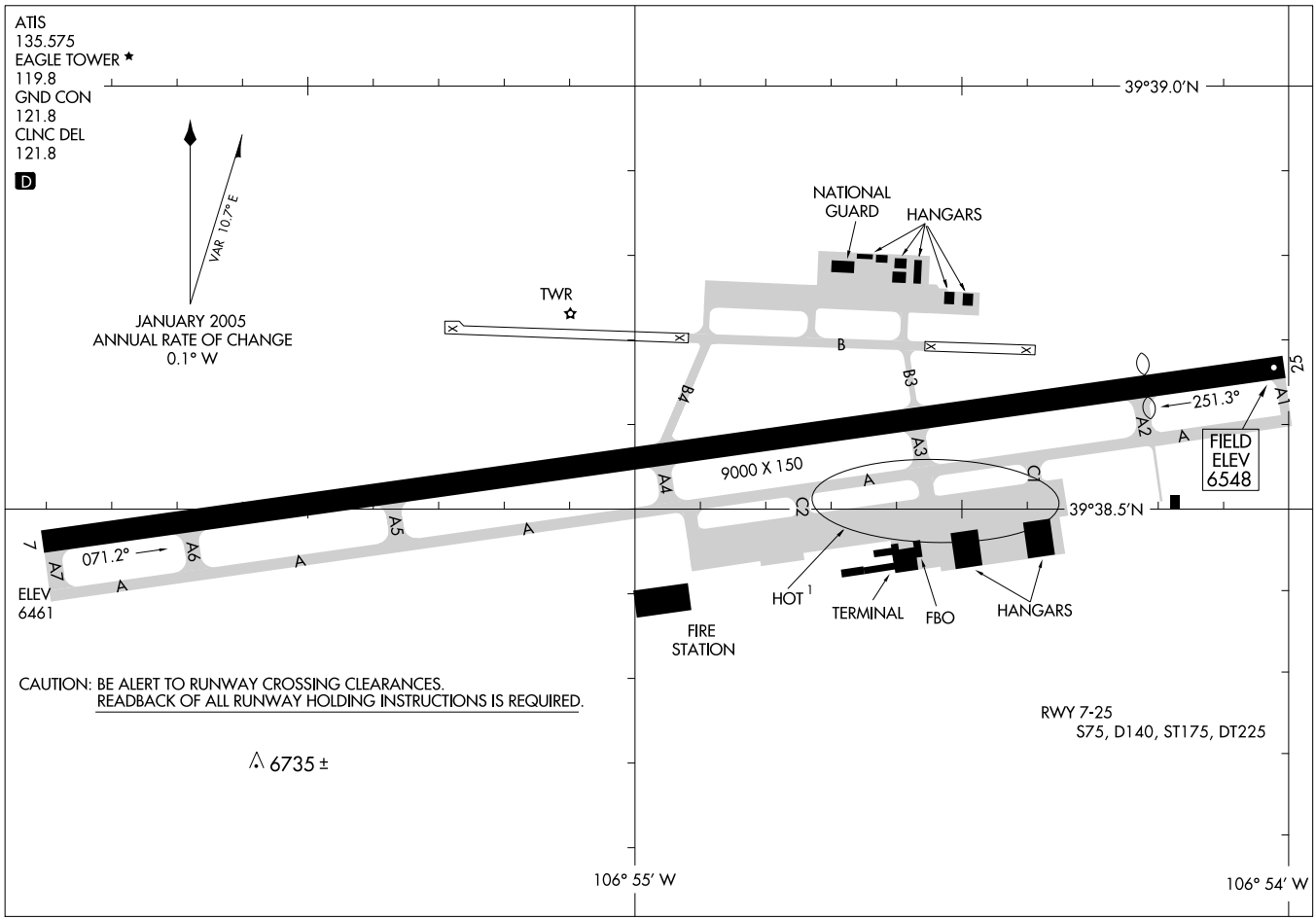




CATEGORY	A	B	C	D
S-3	7020-½ 381 (400-½)			7020-1 381 (400-1)
CIRCLING	7180-1 495 (500-1)	7200-1 515 (600-1)	7220-1½ 535 (600-1½)	7260-2 575 (600-2)

REIL Rwy 21 L
HIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

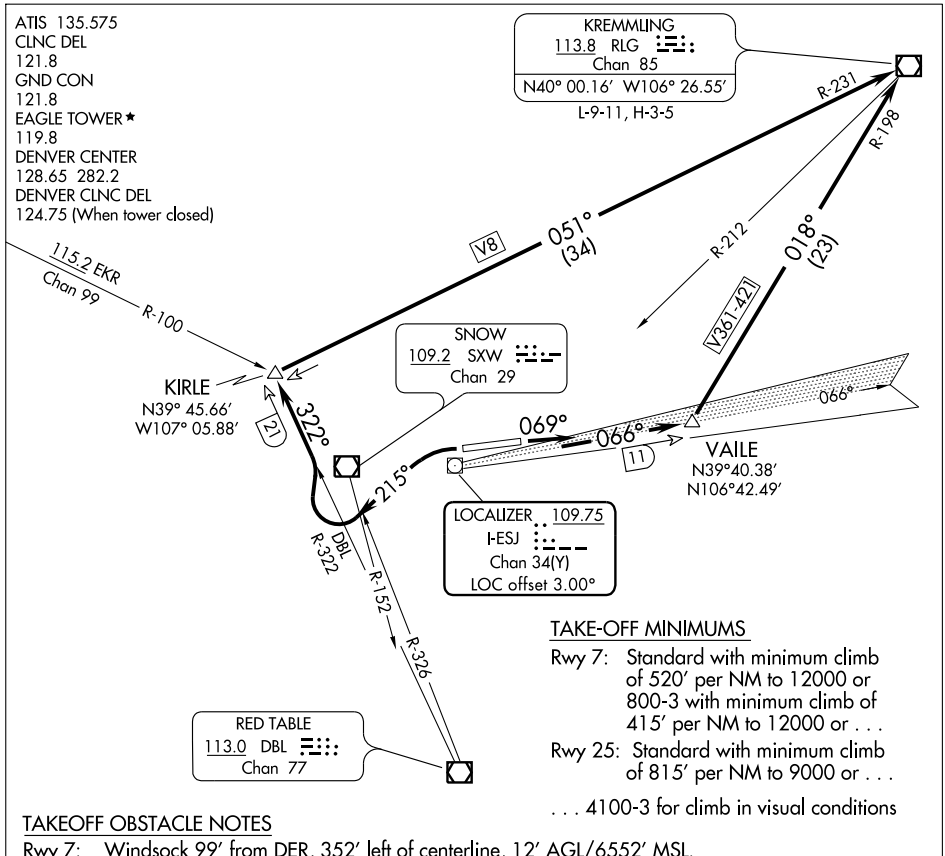
09275

AL-6403 (FAA)

EAGLE COUNTY RGNL (EGE)

EAGLE, COLORADO

GYPSUM FOUR DEPARTURE (OBSTACLE)



TAKE-OFF MINIMUMS

Rwy 7: Standard with minimum climb of 520' per NM to 12000 or 800-3 with minimum climb of 415' per NM to 12000 or . . .

Rwy 25: Standard with minimum climb of 815' per NM to 9000 or . . .

. . . 4100-3 for climb in visual conditions

TAKEOFF OBSTACLE NOTES

Rwy 7: Windsock 99' from DER, 352' left of centerline, 12' AGL/6552' MSL.
OL on tower 2.2 NM from DER, 1688' right of centerline, 57' AGL/7057' MSL.
Trees beginning 1.1 NM from DER, 1945' right of centerline, up to 18' AGL/7017' MSL.
Tree 2.2 NM from DER, 3227' right of centerline, 27' AGL/7252' MSL.

Rwy 25: Multiple trees beginning 1.6 NM from DER, 233' left of centerline, up to 15' AGL/7694' MSL.
Pole 2 NM from DER, 111' left of centerline, 14' AGL/7333' MSL.
Multiple trees beginning 1.4 NM from DER, 795' right of centerline, up to 16' AGL/7615' MSL.
Multiple poles, tank, and OL on tower beginning 1.4 NM from DER, 77' right of centerline, up to 37' AGL/7716' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Climb heading 069° and I-ESJ northeast course to VAILE INT/I-ESJ 11 DME then turn left via RLG R-198 to RLG VOR/DME or . . .

TAKE-OFF RUNWAY 25: Climbing left turn heading 215°, upon crossing SXW R-152 or DBL R-326 turn right via DBL R-322 to KIRLE INT/DBL 21 DME then turn right via RLG R-231 to RLG VOR/DME or . . .

. . . Climb in visual conditions to cross Eagle County Rgnl Airport northeast bound at or above 10500, then via RLG R-212 to RLG VOR/DME.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-ESJ	APP CRS	Rwy Idg	8000
109.75	246°	TDZE	6540
Chan 34 (Y)		Apt Elev	6540

LDA/DME RWY 25

EAGLE COUNTY RGNL (EGE)

T Inoperative table does not apply.
A At night increase LDA/GS visibility to 5 miles.
* Fly visual to airport authorized during day only.

MALSR

MISSED APPROACH: Climb to 14500 direct SXW VOR/DME and climbing right turn via SXW R-001 to JESIE INT/SXW 24.2 DME and hold.

ATIS	DENVER CENTER	EAGLE TOWER *	GND CON	CLNC DEL	DENVER CLNC DEL
135.575	128.65 282.2	119.8 (CTAF) L	121.8	121.8	124.75 (When tower closed)

MISSED APCH FIX
JESIE
SXW 24.2
181°
001°
113.8 RLG
R-260
Chan 85
109.2 SXW
R-001
Chan 29

ALTERNATE MISSED APCH FIX
KREMMLING
RLG 113.8
Chan 85
R-260
080°
260°

KREMMLING
113.8 RLG
Chan 85

MSA SXW 25 NM
180°
14600
15300
360°

10 NM

Missed approach obstructions require a minimum climb gradient of 275 FT/NM to 11700/ for S-LDA/GS 25.

LOCALIZER 109.75
I-ESJ
Chan 34(Y)
LOC offset 3.00°

(IF) WEHAL I-ESJ 15.3
AQULA INT I-ESJ 17.2
AIGLE I-ESJ 10.8
9800
246° (1.5)
CIPKU I-ESJ 3.5
8829±
246° (4.5)
8189±
WASHI I-ESJ 9.4
12200
246° (1.9)
10400
066°
11260
(IAF) VOAXA RLG 13.5
12900
184°
(6)
11320
11573
11484
11089
13800
184°
(13.5)
R-184
004°
184°
R-001
8687
11166
10005
9005 ±

* For LDA/GS fly visual to airport 246°- 4.3 NM

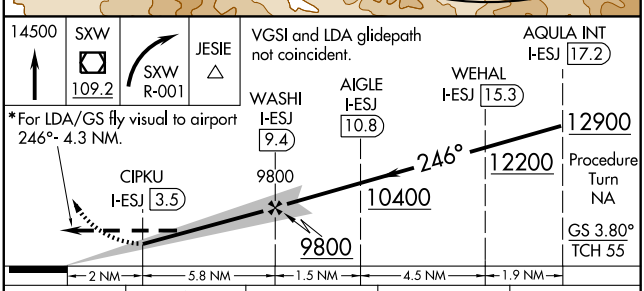
SNOW
109.2 SXW
Chan 29

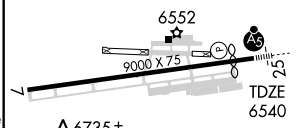
ELEV 6540 D

14500
SXW 109.2
SXW R-001
JESIE

VGSI and LDA glidepath not coincident.

*For LDA/GS fly visual to airport 246°- 4.3 NM.





CATEGORY	A	B	C	D
S-LDA/GS 25	8330-3 1790 (1800-3)			NA
S-LDA 25	8620-2½ 2080 (2100-2½)		8620-3 2080 (2100-3)	NA

HIRL Rwy 7-25 L
REIL Rwy 7 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
247°	TDZE	N/A
	Apt Elev	6535

RNAV (GPS) -D
EAGLE COUNTY RGNL (EGE)

GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA. Circling south of Rwy 7-25 not authorized for Cat. C and D at night.

MISSED APPROACH: Climb to 14500 via 247° course to ZODSY WP, then via 006° course to JESIE WP and hold.

ATIS	DENVER CENTER	EAGLE TOWER ★	GND CON	CLNC DEL	DENVER CLNC DEL
135.575	128.65 282.2	119.8 (CTAF) L	121.8	121.8	124.75 (When tower closed)

MISSED APCH FIX

JESIE 180° 360° 10 NM

MSA NEPRY 25 NM 15100

KREMMLING RLG

14000 199° (13.8)

11089 11484 11573

(IAF) KIMBL

12000 184° (7)

11313± 10462± 11320 8687

006° (25.6)

8320± POWRS 12000 299° (3) 11260

1100 237° (5)

3 NM to NEPRY

247° (FAF) AWACC

FOGUP

13300 299° (4.1)

(IAF) FIDLE 10005 9005±

ZODSY 247° (7.8) (MAP) NEPRY 7325±

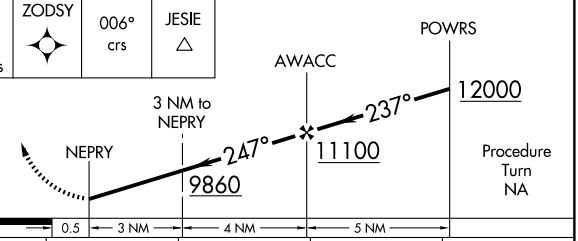
11166 13092 12840 13672 14007

ELEV 6535 D

6552 A5 9000 X 75 25

6735±

14500 247° crs	ZODSY	006° crs	JESIE



CATEGORY	A	B	C	D
CIRCLING	8900-1¼ 2365 (2400-1¼)	8900-1½ 2365 (2400-1½)	8900-3 2365 (2400-3)	

HIRL Rwy 7-25 L
REIL Rwy 7 L

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME BJC 115.4 Chan 101	APP CRS 203°	Rwy Idg N/A TDZE N/A Apt Elev 5130

VOR/DME or GPS-A

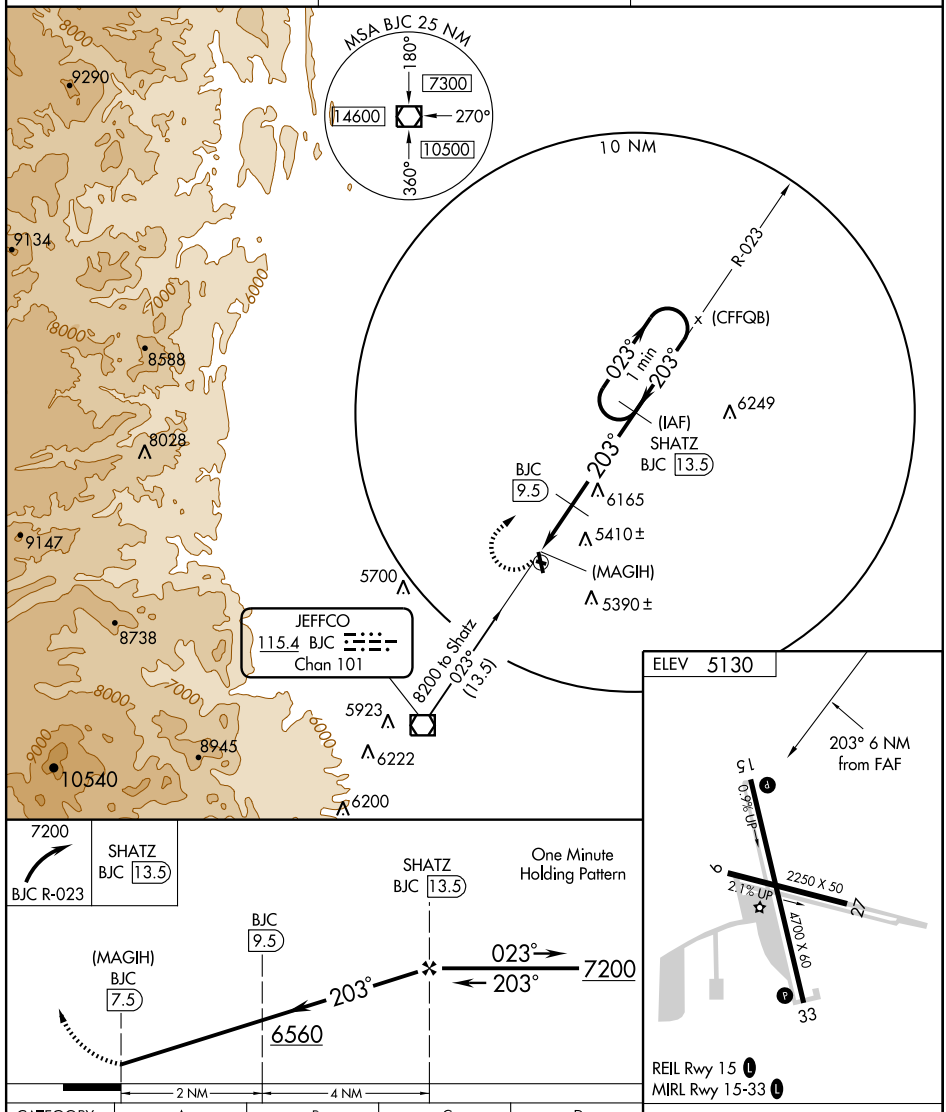
ERIE MUNI (EIK)

T
NA

Use Denver Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 7200 via BJC R-023to SHATZ/13.5 DME and hold.

AWOS-3	DENVER APP CON	UNICOM
133.825	126.1 360.75	123.0 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	5840-1 710 (800-1)	5860-1 730 (800-1)	5880-2 ¼ 750 (800-2¼)	NA

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

COPTER NDB 314°

NDB IHS	APCH CRS	Rwy ldg	4574
335	314°	TDZE	5823
		Arpt Elev	5838

AL-6594 [USA]

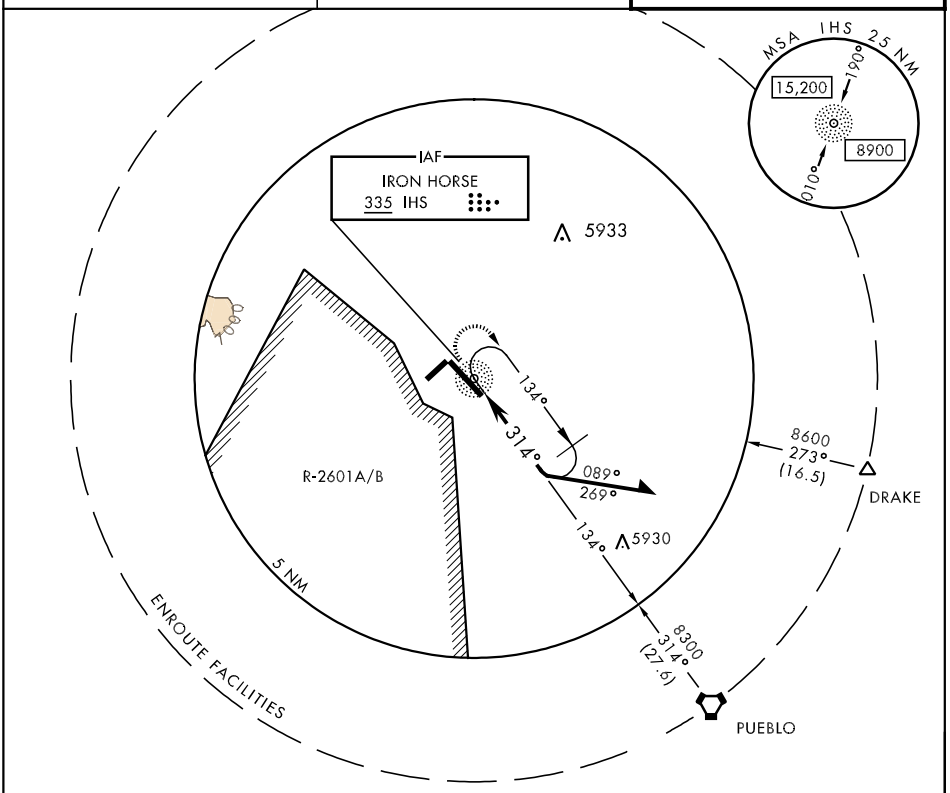
BUTTS AAF (KFCS)

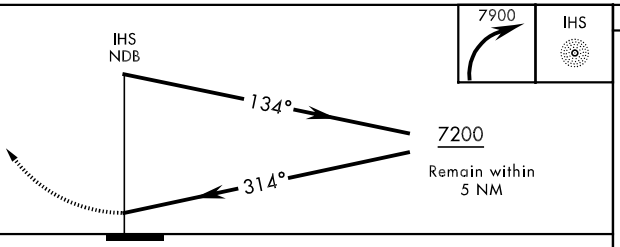
When control zone not in effect, use Colorado Springs, CO altimeter setting

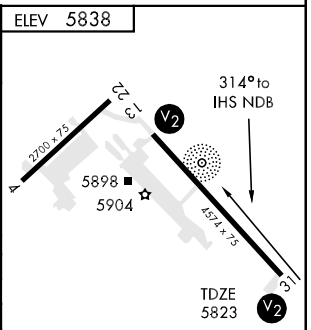
T A NA

MISSED APPROACH: Climbing right turn to 7900 in IHS holding pattern

ATIS	SPRINGS APP CON	BUTTS TOWER
108.8	124.0 257.875	125.5 Ⓒ 229.4 41.5







CATEGORY	COPTER		
H-314°	6280-½	457	(500-½)
CITY OF COLORADO SPRINGS MUNI ALTIMETER SETTING MINIMUMS			
H-314°	6360-½	537	(600-½)

VOR/DME FCS	APCH CRS	Rwy ldg	4574
108.8	310°	TDZE	5823
Chan 25		Arpt Elev	5838

AL-6594 [USA]

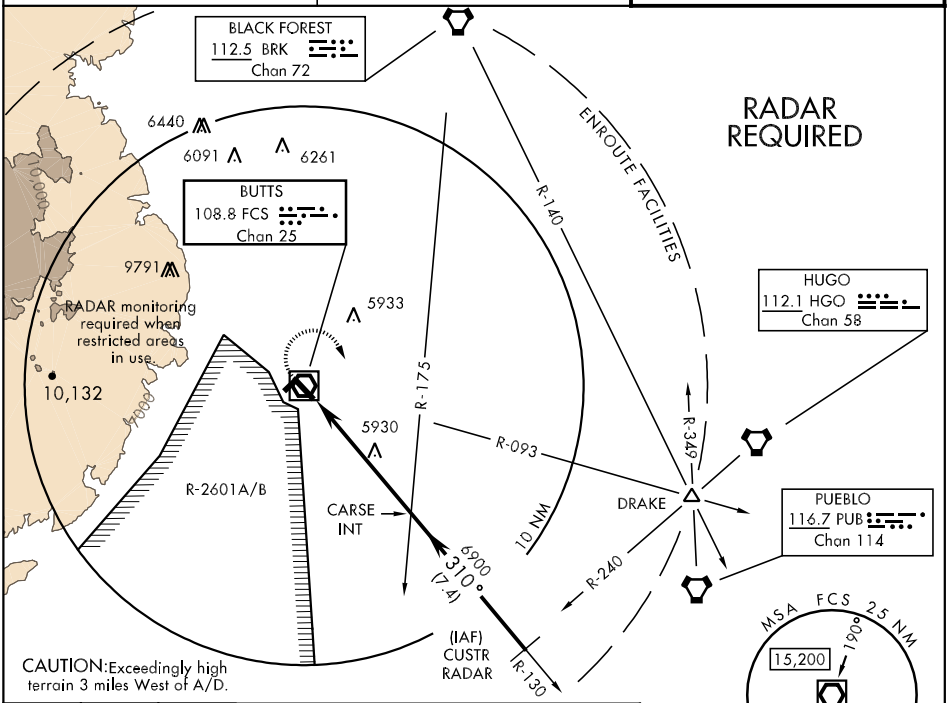
VOR or GPS RWY 31

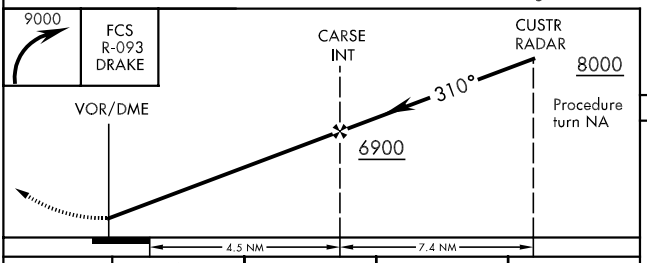
BUTTS AAF (KFCS)

When control zone not in effect use Colorado Springs, CO altimeter setting.
NA

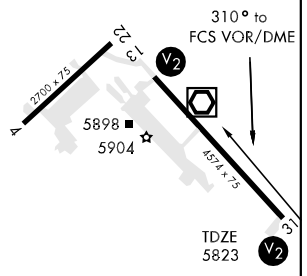
MISSED APPROACH: Climbing right turn to 9000 via FCS R-093 to DRAKE INT.

ATIS	SPRINGS APP CON	BUTTS TOWER
108.8	124.0 257.875	125.5 229.4 41.5



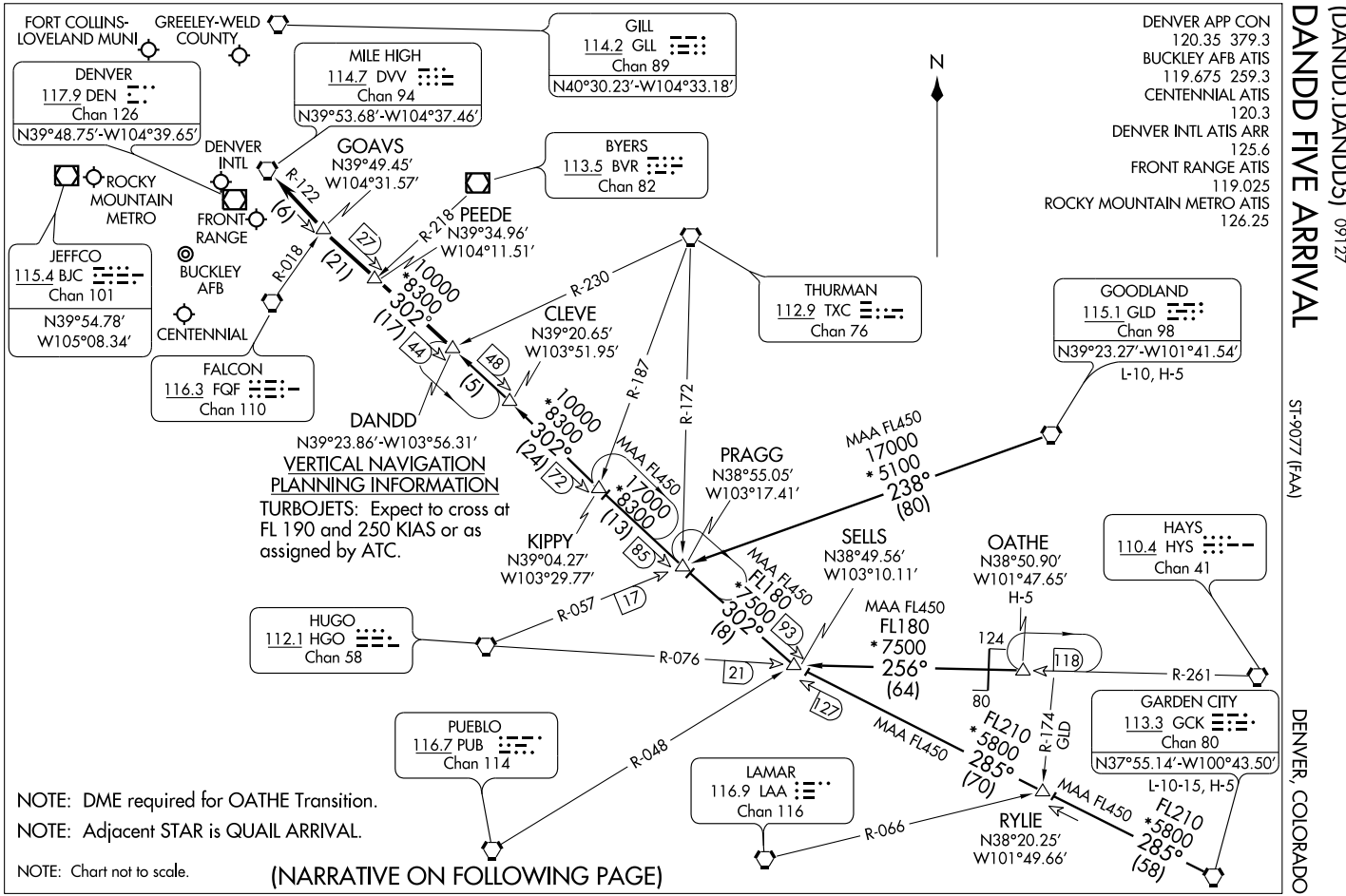


ELEV 5838



CATEGORY	A	B	C	D
S-31	6200-1 377 (400-1)			NA
CIRCLING	6340-1 502 (600-1)		6340-1½ 502 (600-1½)	NA
CITY OF COLORADO SPRINGS MUNI ALTIMETER SETTING MINIMUMS				
S-31	6260-1 437 (500-1)		6260-1¼ 437 (500-1¼)	NA
CIRCLING	6400-1 562 (600-1)		6420-1½ 582 (600-1½)	NA

MIRL Rwy 13-31


DANDD FIVE ARRIVAL
(DANDD.DANDD5) 09127
ST-9077 (FAA)
DENVER, COLORADO
DENVER APP CON
120.35 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
N
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
GILL
114.2 GLL
Chan 89
N40°30.23'-W104°33.18'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'-W104°37.46'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
DENVER INTL
GOAVS
N39°49.45'
W104°31.57'
BYERS
113.5 BVR
Chan 82
ROCKY MOUNTAIN METRO
FRONT RANGE
PEEDE
N39°34.96'
W104°11.51'
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
BUCKLEY AFB
CENTENNIAL
THURMAN
112.9 TXC
Chan 76
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
FALCON
116.3 FQF
Chan 110
CLEVE
N39°20.65'
W103°51.95'
DANDD
N39°23.86'-W103°56.31'
PRAGG
N38°55.05'
W103°17.41'
KIPPY
N39°04.27'
W103°29.77'
SELLS
N38°49.56'
W103°10.11'
OATHE
N38°50.90'
W101°47.65'
H-5
HAYS
110.4 HYS
Chan 41
HUGO
112.1 HGO
Chan 58
PUEBLO
116.7 PUB
Chan 114
LAMAR
116.9 LAA
Chan 116
RYLIE
N38°20.25'
W101°49.66'
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
R-122
(6)
R-218
(27)
(21)
R-018
10000
*8300
302°
(17)
44
48
(5)
R-230
R-187
R-172
10000
*8300
302°
(24)
72
MAA FL450
17000
*8300
(13)
85
MAA FL450
17000
*5100
238°
(80)
MAA FL450
FL180
*7500
302°
(8)
93
MAA FL450
FL180
*7500
256°
(64)
124
118
80
R-261
R-057
17
R-076
21
127
MAA FL450
FL210
*5800
285°
(70)
R-174
GLD
MAA FL450
FL210
*5800
285°
(58)
R-048
R-066
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at FL 190 and 250 KIAS or as assigned by ATC.
NOTE: DME required for OATHE Transition.
NOTE: Adjacent STAR is QUAIL ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

GARDEN CITY TRANSITION (GCK.DANDD5): From over GCK VORTAC via GCK R-285 and DVV R-122 to DANDD INT. Thence....

GOODLAND TRANSITION (GLD.DANDD5): From over GLD VORTAC via GLD R-238 and HGO R-057 to PRAGG INT; then via DVV R-122 to DANDD INT. Thence....

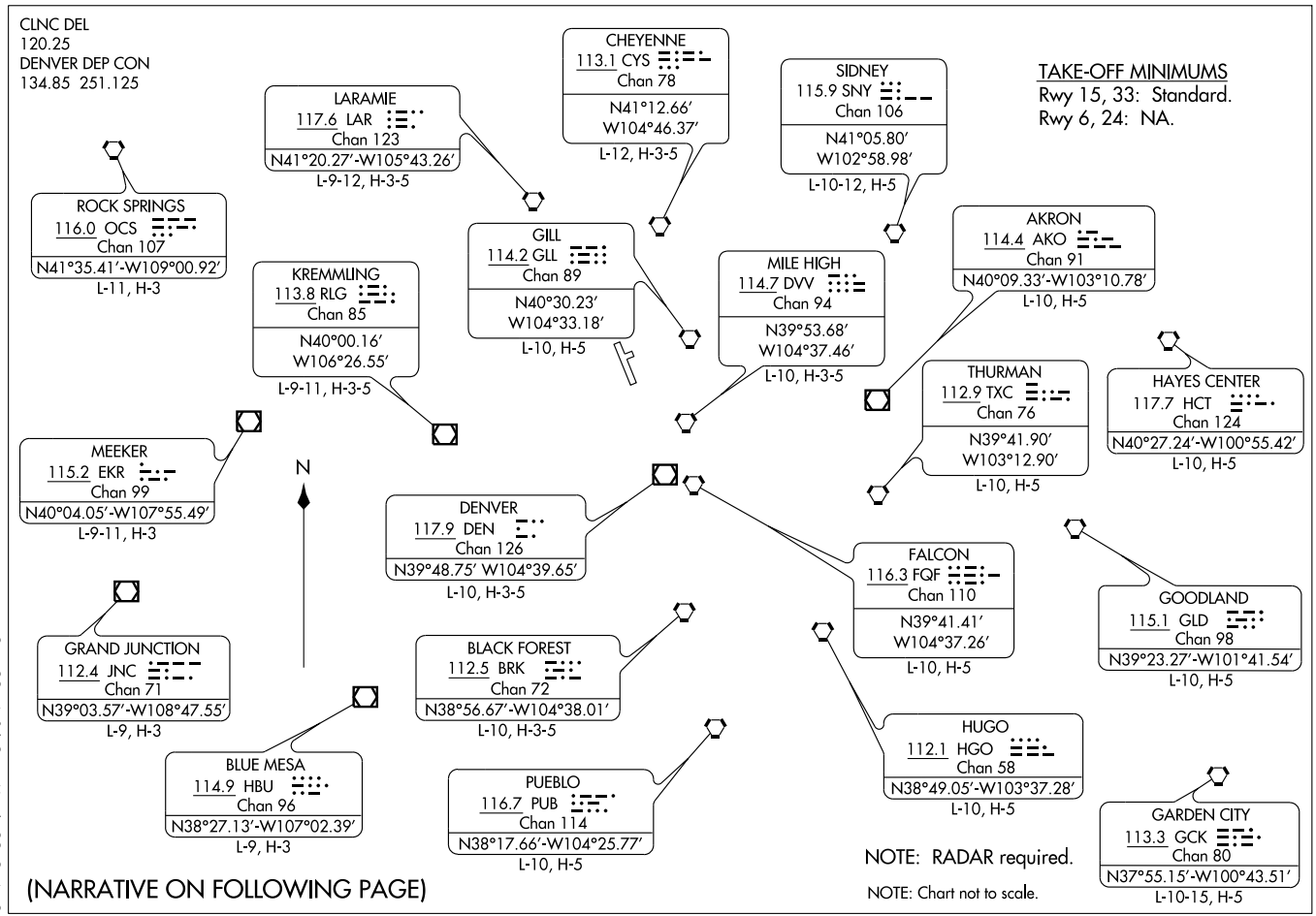
OATHE TRANSITION (OATHE.DANDD5): From over OATHE INT via HYS R-261 and HGO R-076 to SELLS INT; then via DVV R-122 to DANDD INT. Thence....

....From over DANDD INT via DVV R-122 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER FIVE DEPARTURE

SL-5677 (FAA)



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-FNL	APP CRS	Rwy Idg	8500
109.5	331°	TDZE	5016
		Apt Elev	5016

ILS or LOC RWY 33

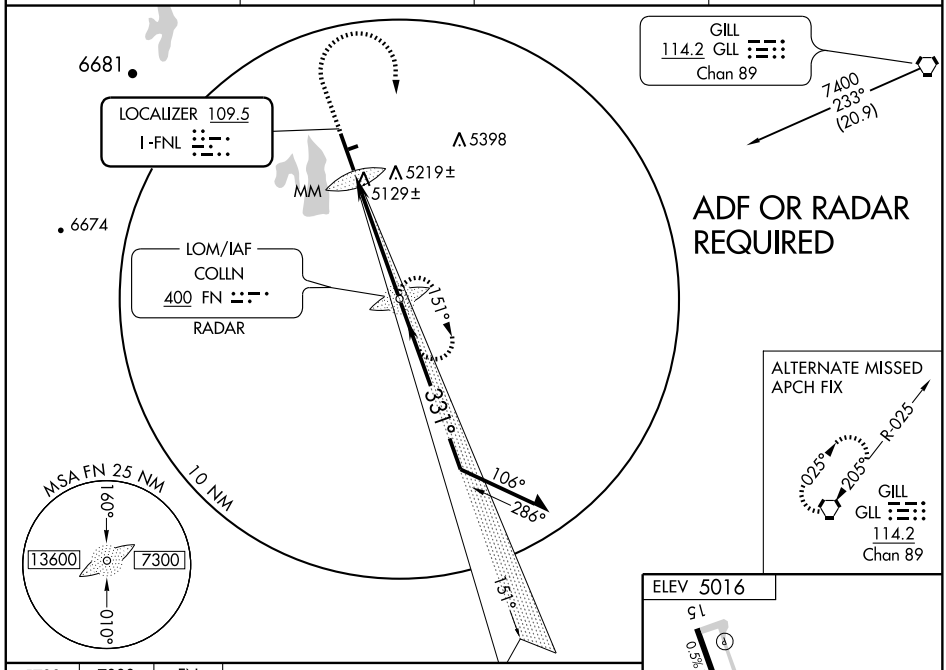
FORT COLLINS-LOVELAND MUNI (FNL)

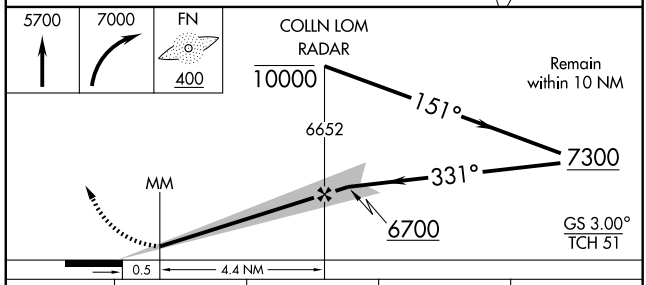
T A NA — Circling to Rwy 6/24 NA at night. ADF or RADAR required. When local altimeter setting not received, use Denver Intl altimeter setting and increase DA 147 feet and all MDA 160 feet. Increase S-ILS 33 visibility all Cats ¼ mile, S-LOC 33 Cat C/D visibility ½ mile, and Circling Cat C/D visibility ¼ mile. For inoperative MALSR, when using Denver Intl altimeter setting increase S-ILS 33 visibility all Cats to 1¼ mile.

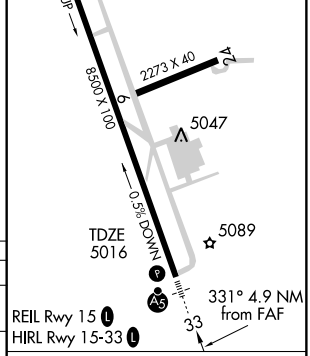
MALSR (A5)

MISSED APPROACH: Climb to 5700 then climbing right turn to 7000 direct COLLN LOM and hold.

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.075	134.85 251.125	120.25	122.7 (CTAF) L





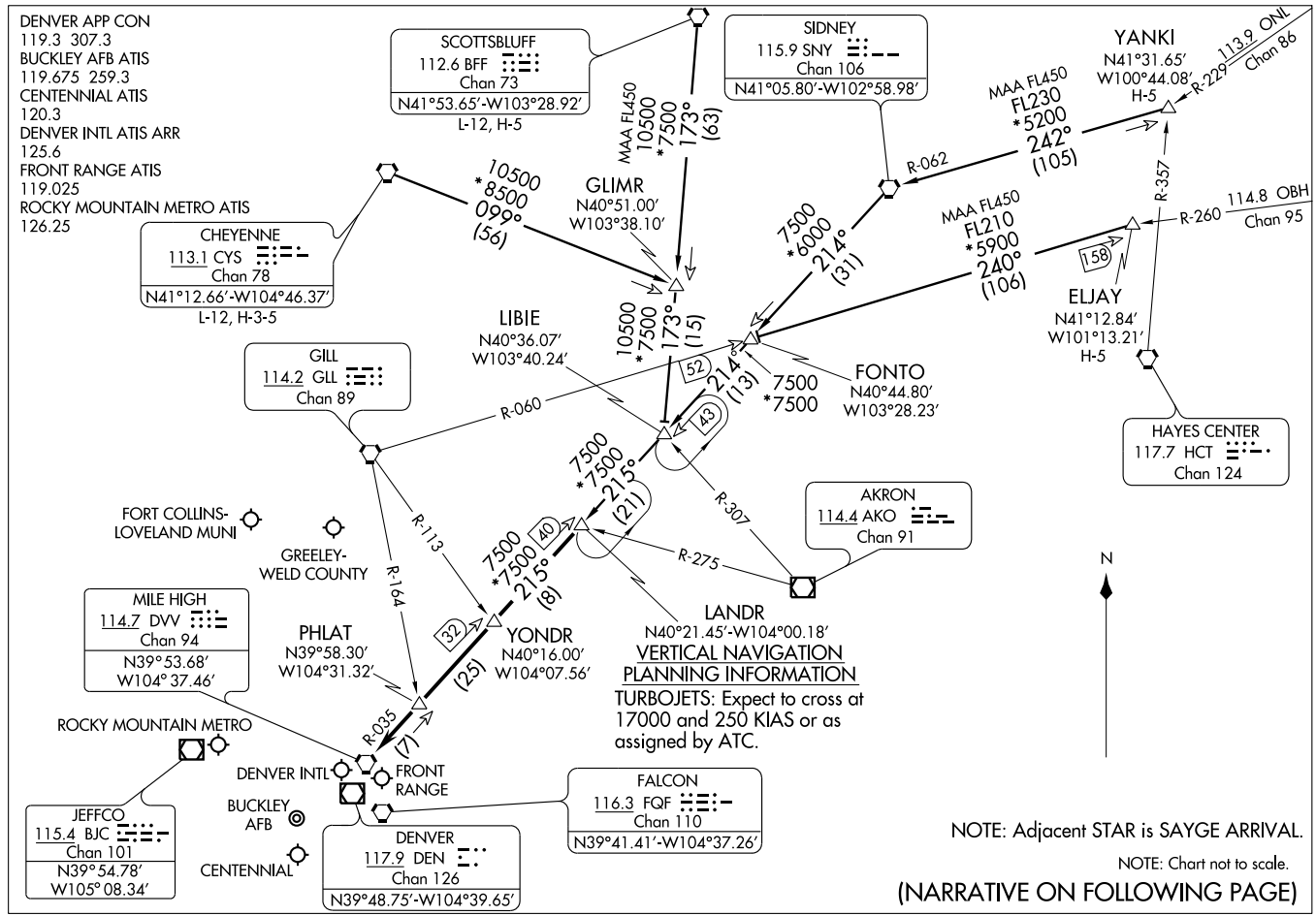


CATEGORY	A	B	C	D
S-ILS 33	5216-½ 200 (200-½)			
S-LOC 33	5380-½ 364 (400-½)			5380-¾ 364 (400-¾)
CIRCLING	5500-1 484 (500-1)		5520-1½ 504 (600-1½)	5580-2 564 (600-2)

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

SW-1, 22 OCT 2009 to 19 NOV 2009



LANDR FIVE ARRIVAL

(LANDR.LANDR5) 07298

ST-9077 (FAA)

DENVER, COLORADO

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.LANDR5): From over CYS VORTAC via CYS R-099 and BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

ELJAY TRANSITION (ELJAY.LANDR5): From over ELJAY INT via GLL R-060 to FONTO INT, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

SCOTTSBLUFF TRANSITION (BFF.LANDR5): From over BFF VORTAC via BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

YANKI TRANSITION (YANKI.LANDR5): From over YANKI INT via SNY R-062 to SNY VORTAC, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

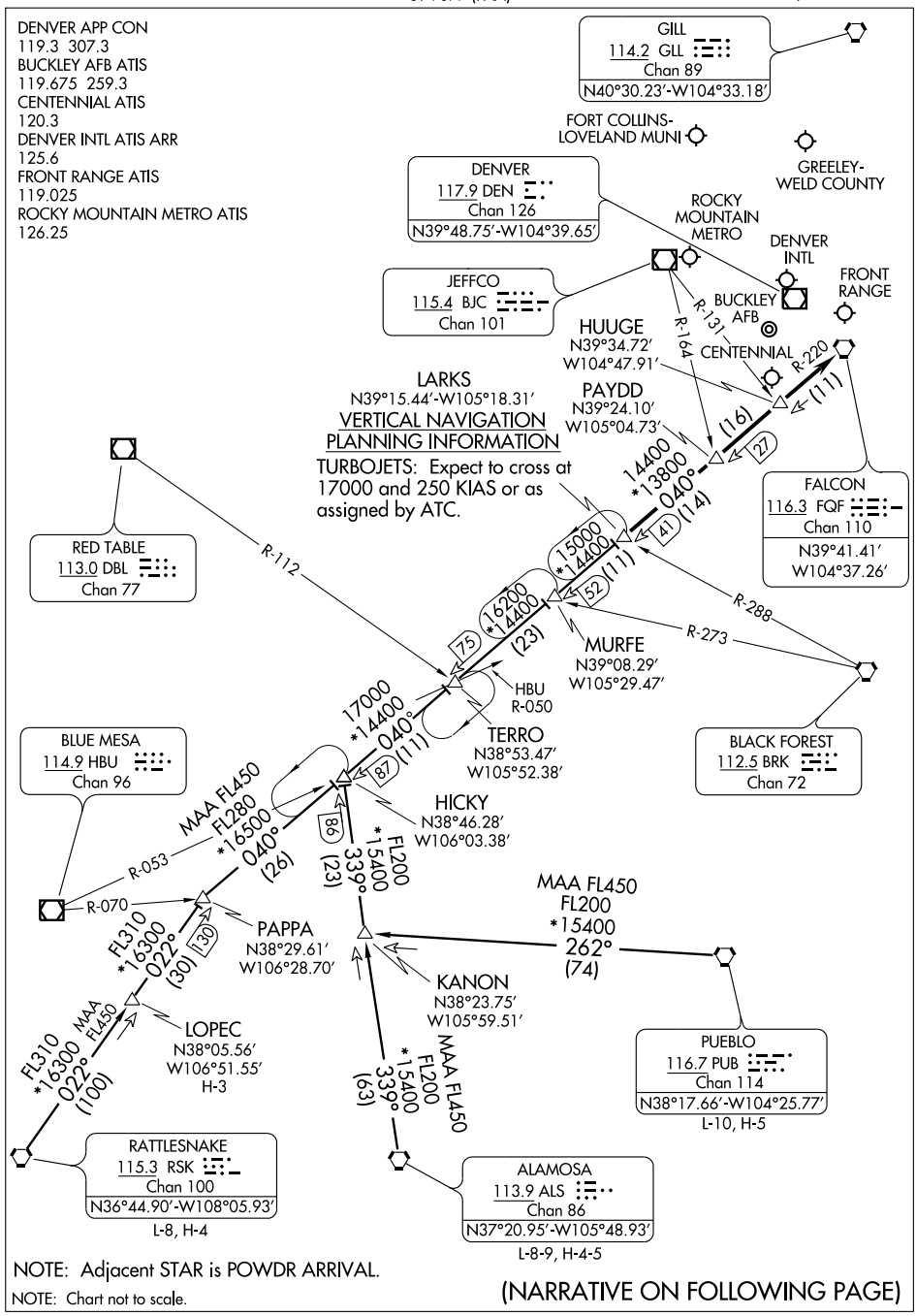
....From over LANDR INT via DVV R-035 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is POWDR ARRIVAL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ARRIVAL DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS6): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS6): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS6): From over PUB VORTAC via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS6): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

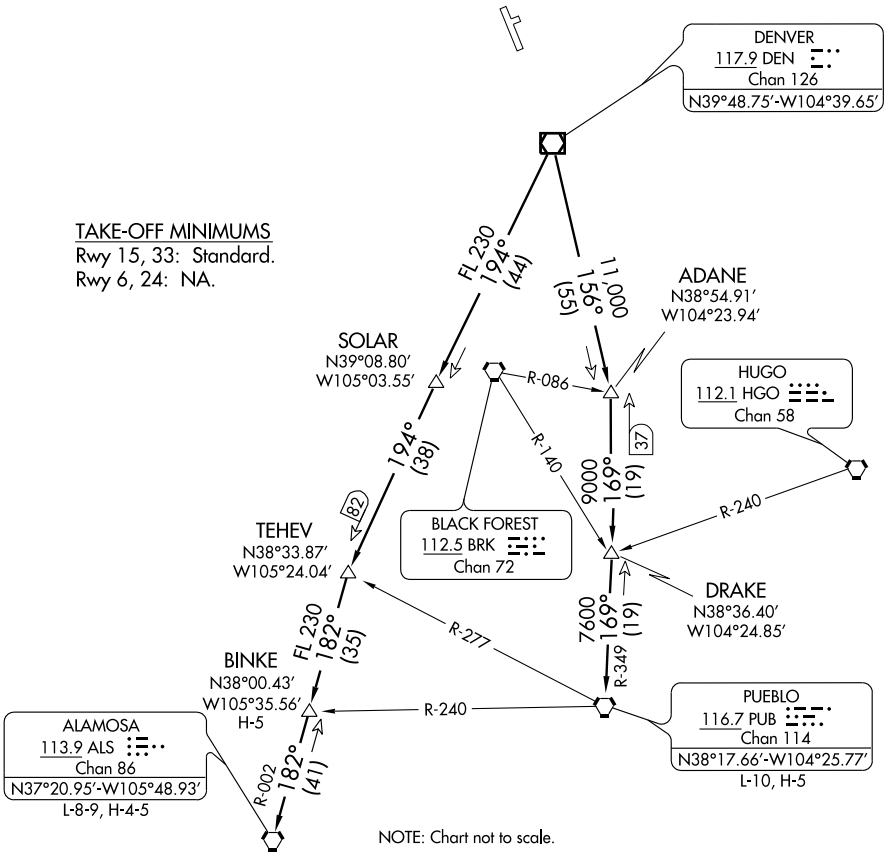
SW-1, 22 OCT 2009 to 19 NOV 2009

PIKES FOUR DEPARTURE

SL-5677 (FAA)

FORT COLLINS-LOVELAND MUNI (FNL)
FORT COLLINS (LOVELAND), COLORADO

CLNC DEL
120.25
DENVER DEP CON
134.85 251.125



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

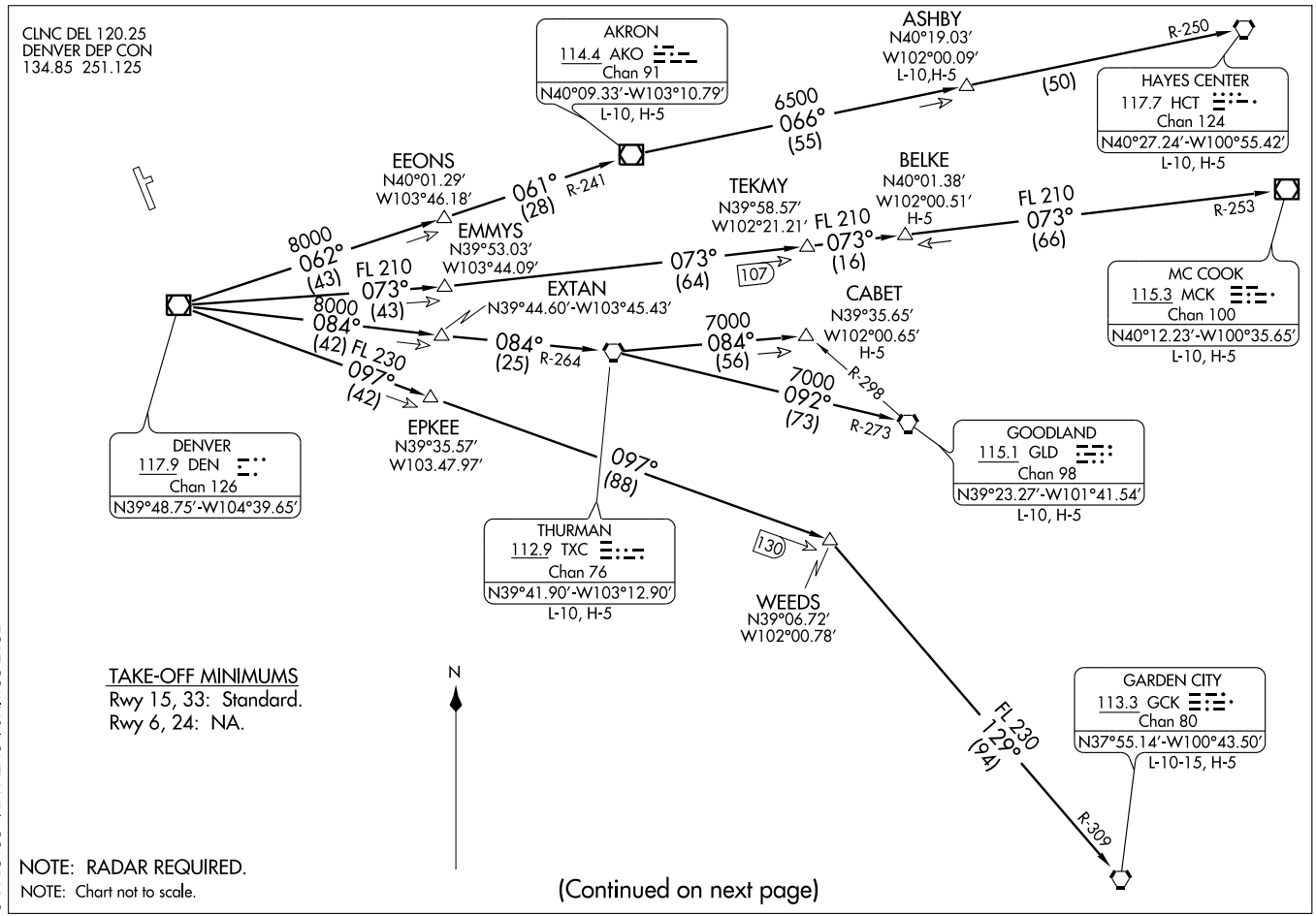
ALAMOSA TRANSITION (PIKES4.ALS): From over DEN VOR/DME via DEN R-194 and ALS R-002 to ALS VORTAC.

BINKE TRANSITION (PIKES4.BINKE): From over DEN VOR/DME via DEN R-194 and ALS R-002 to BINKE INT.

PUEBLO TRANSITION (PIKES4.PUB): From over DEN VOR/DME via DEN R-156 and PUB R-349 to PUB VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

PLAINS FOUR DEPARTURE



(Continued on next page)

PLAINS FOUR DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

AKRON TRANSITION (PLAIN4.AKO): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME.

ASHBY TRANSITION (PLAIN4.ASHBY): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to ASHBY INT.

BELKE TRANSITION (PLAIN4.BELKE): From over DEN VOR/DME via DEN R-073 and MCK R-253 to BELKE INT.

CABET TRANSITION (PLAIN4.CABET): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-084 to CABET INT.

GARDEN CITY TRANSITION (PLAIN4.GCK): From over DEN VOR/DME via DEN R-097 and GCK R-309 to GCK VORTAC.

GOODLAND TRANSITION (PLAIN4.GLD): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-092 and GLD R-273 to GLD VORTAC.

HAYES CENTER TRANSITION (PLAIN4.HCT): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to HCT VORTAC.

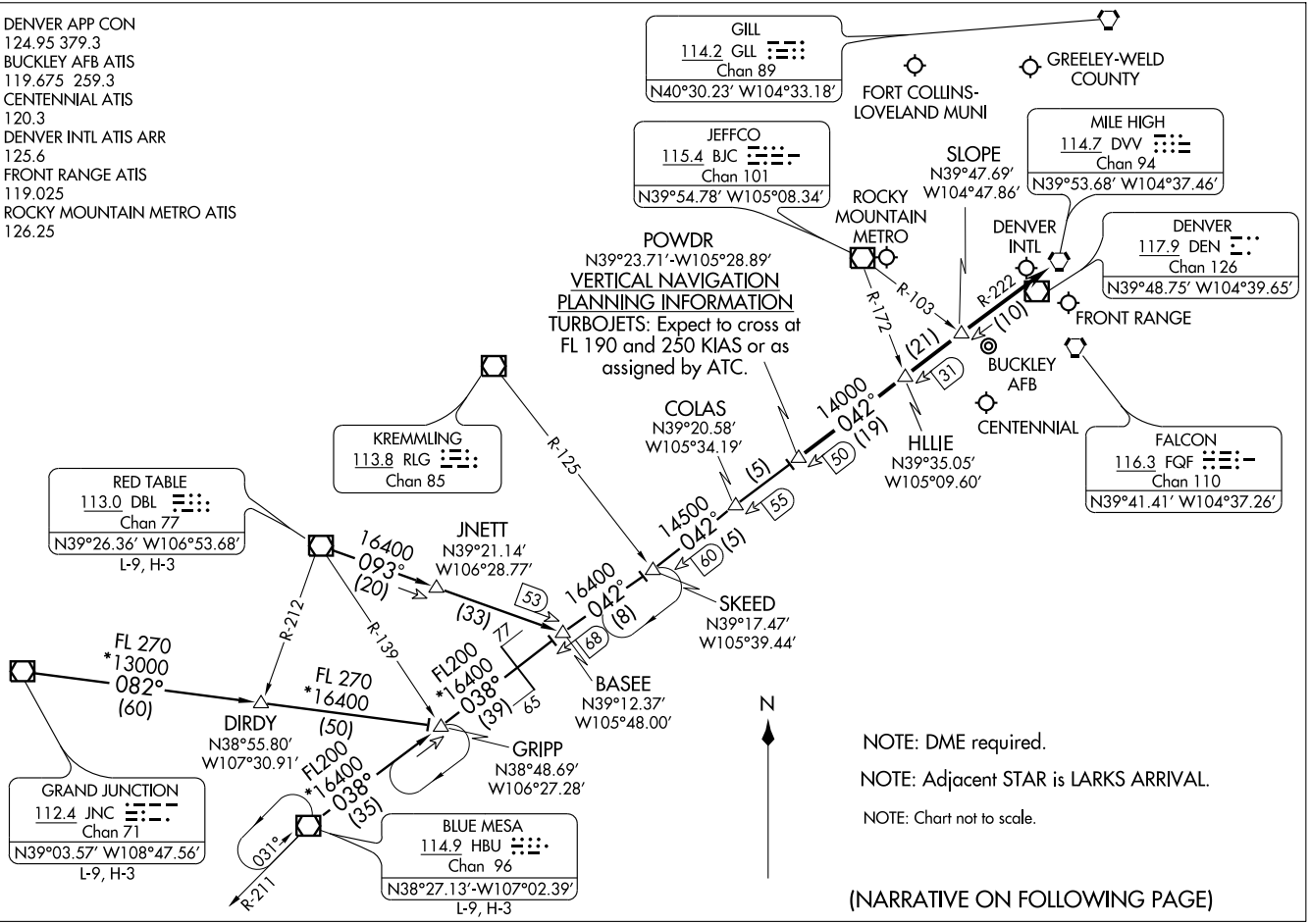
MCCOOK TRANSITION (PLAIN4.MCK): From over DEN VOR/DME via DEN R-073 and MCK R-253 to MCK VOR/DME.

THURMAN TRANSITION (PLAIN4.TXC): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC.

WEEDS TRANSITION (PLAIN4.WEEDS): From over DEN VOR/DME via DEN R-097 to WEEDS INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER APP CON
124.95 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25



POWDR SEVEN ARRIVAL

ARRIVAL DESCRIPTION

BLUE MESA TRANSITION (HBU.POWDR7): From over HBU VOR/DME via HBU R-038 and DVV R-222 to POWDR INT. Thence....

GRAND JUNCTION TRANSITION (JNC.POWDR7): From over JNC VORTAC via JNC R-082 to GRIPP INT; then via HBU R-038 and DVV R-222 to POWDR INT. Thence....

RED TABLE TRANSITION (DBL.POWDR7): From over DBL VOR/DME via DBL R-093 and DVV R-222 to POWDR INT. Thence....

....from over POWDR INT via DVV VORTAC R-222 to HLLIE, then via DVV VORTAC R-222 to SLOPE, then via DVV VORTAC R-222 to DVV. Expect radar vectors to the final approach course at or before DVV VORTAC.

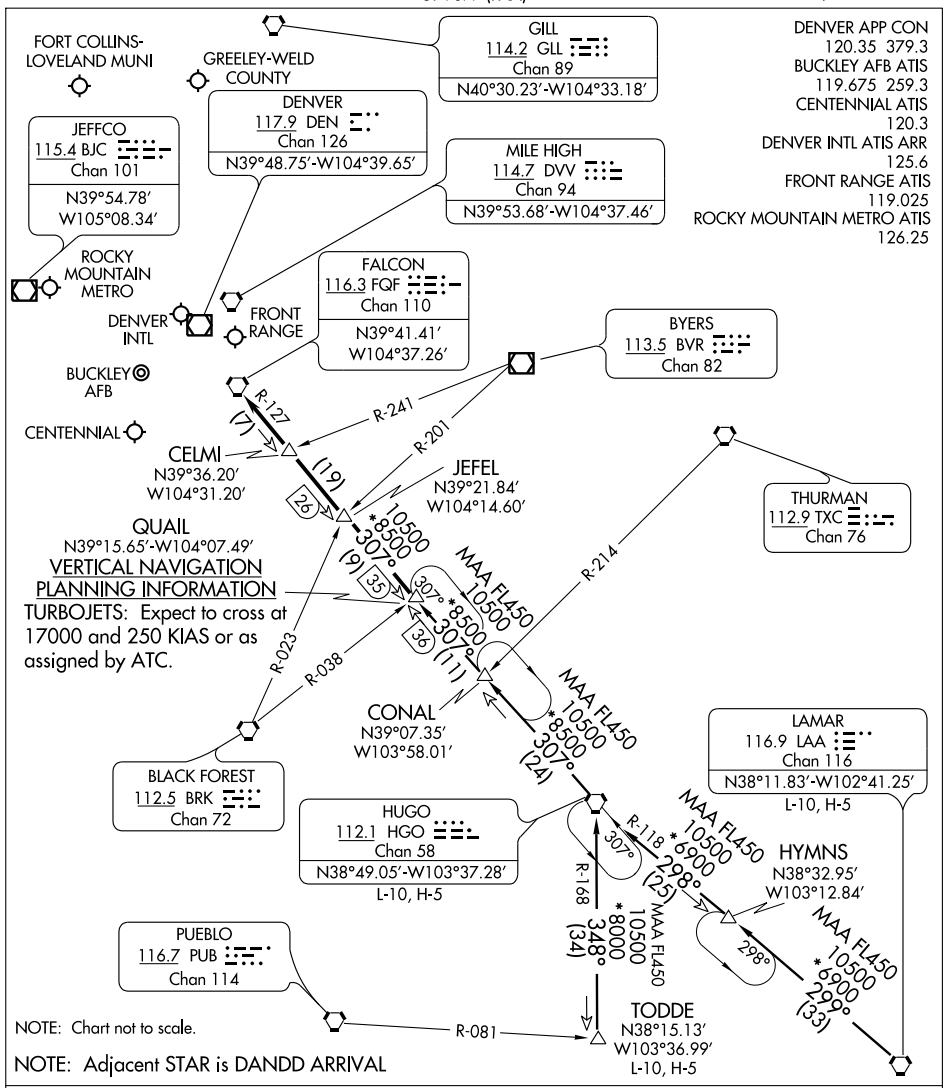
SW-1, 22 OCT 2009 to 19 NOV 2009

(QUAIL.QUAIL6) 09127

QUAIL SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is DANDD ARRIVAL

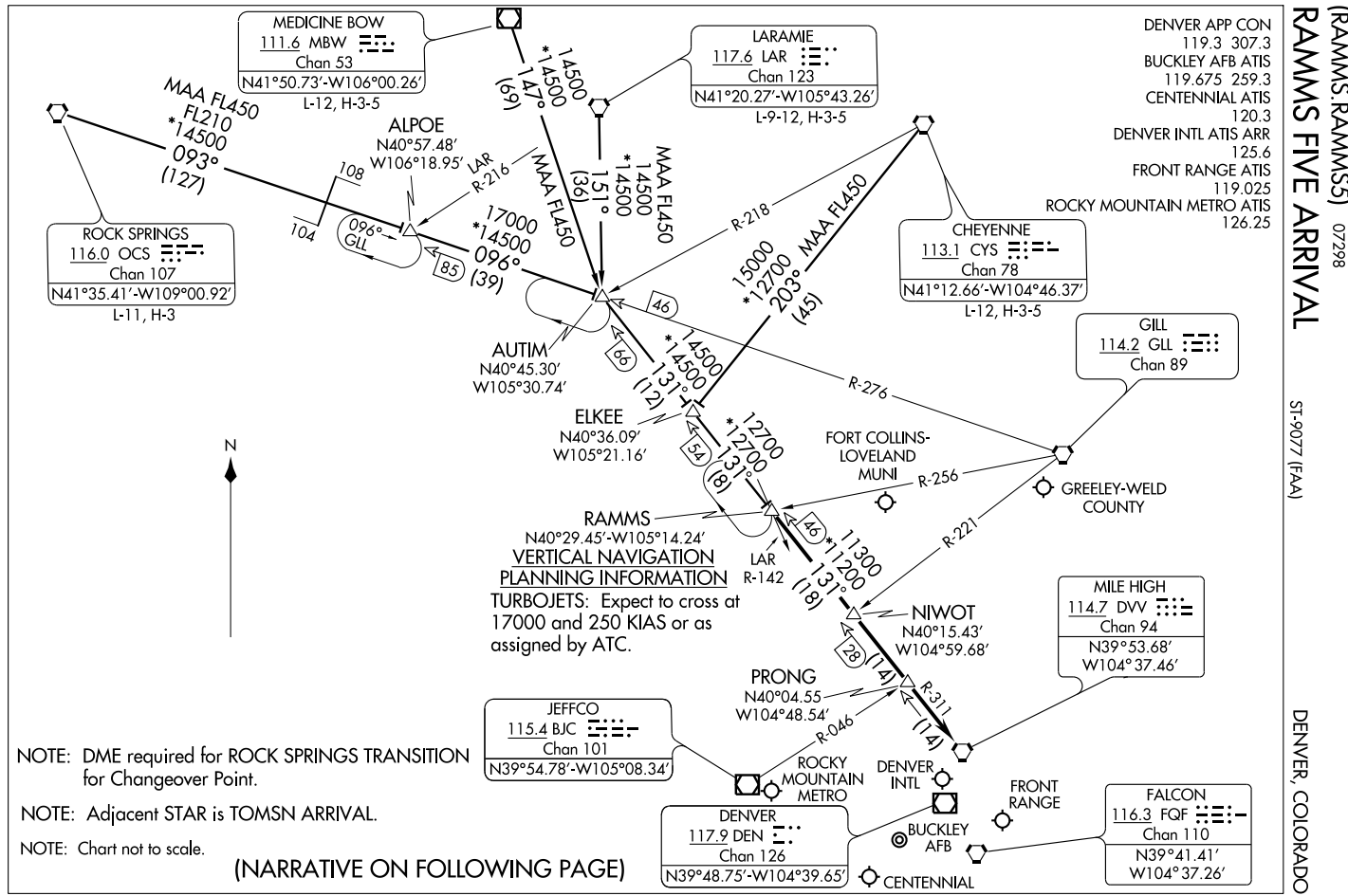
HUGO TRANSITION (HGO.QUAIL6): From over HGO VORTAC via HGO R-307 to CONAL INT; then via 306° course to QUAIL INT. Thence....

LAMAR TRANSITION (LAA.QUAIL6): From over LAA VORTAC via LAA R-299 to HYMNS INT; then via 298° course to HGO VORTAC; then via HGO R-307 to CONAL INT then via 306° course to to QUAIL INT. Thence....

TODDE TRANSITION (TODDE.QUAIL6): From over TODDE INT via HGO R-168 to HGO VORTAC; then via HGO R-307 to QUAIL INT. Thence....

....From over QUAIL INT via HGO R-307 and FQF R-127 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


RAMMS FIVE ARRIVAL (RAMMS.RAMMS5) 07298
DENVER, COLORADO
ST-9077 (FAA)
DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
MEDICINE BOW
111.6 MBW
Chan 53
N41°50.73'-W106°00.26'
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27'-W105°43.26'
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41'-W109°00.92'
L-11, H-3
CHEYENNE
113.1 CYS
Chan 78
N41°12.66'-W104°46.37'
L-12, H-3-5
GILL
114.2 GLL
Chan 89
JEFFCO
115.4 BJC
Chan 101
N39°54.78'-W105°08.34'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'
W104°37.46'
FALCON
116.3 FQF
Chan 110
N39°41.41'
W104°37.26'
ALPOE
N40°57.48'
W106°18.95'
AUTIM
N40°45.30'
W105°30.74'
ELKEE
N40°36.09'
W105°21.16'
RAMMS
N40°29.45'-W105°14.24'
NIWOT
N40°15.43'
W104°59.68'
PRONG
N40°04.55
W104°48.54'
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
ROCKY MOUNTAIN METRO
DENVER INTL
FRONT RANGE
BUCKLEY AFB
CENTENNIAL
MAA FL450
FL210
*14500
093°
(127)
147°
(69)
*14500
14500
151°
(36)
14500
*14500
MAA FL450
R-218
MAA FL450
15000
*12700
203°
(45)
108
104
LAR
R-216
096°
GLL
17000
*14500
096°
(39)
85
46
66
14500
*14500
131°
(12)
R-276
54
12700
*12700
131°
(8)
R-256
R-221
46
11300
*11200
131°
(18)
LAR
R-142
28
(14)
R-311
(14)
R-046
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at 17000 and 250 KIAS or as assigned by ATC.
NOTE: DME required for ROCK SPRINGS TRANSITION for Changeover Point.
NOTE: Adjacent STAR is TOMSN ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
N

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.RAMMS5): From over CYS VORTAC via CYS R-203 and DVV R-311 to RAMMS INT. Thence....

LARAMIE TRANSITION (LAR.RAMMS5): From over LAR VORTAC via LAR R-151 and DVV R-311 to RAMMS INT. Thence....

MEDICINE BOW TRANSITION (MBW.RAMMS5): From over MBW VOR/DME via MBW R-147 and DVV R-311 to RAMMS INT. Thence....

ROCK SPRINGS TRANSITION (OCS.RAMMS5): From over OCS VORTAC via OCS R-093 and GLL R-276 to AUTIM INT, then via DVV R-311 to RAMMS INT. Thence....

....From over RAMMS INT via DVV R-311 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

FORT COLLINS (LOVELAND), COLORADO AL-5677 (FAA)

APP CRS	Rwy Idg	8500
151°	TDZE	4985
	Apt Elev	5016

RNAV (GPS) RWY 15

FORT COLLINS-LOVELAND MUNI (FNL)

Circling to Rwy 6/24 NA at night.
DME/DME RNP- 0.3 NA.
VDP NA when using Denver Intl altimeter setting.
When local altimeter setting not received, use Denver Intl altimeter setting and increase all MDA 160 feet and increase LNAV Cat C visibility ¼ mile, Cat D ½ mile, and Circling Cat C/D visibility ¼ mile.

MISSED APPROACH: Climb to 7600 direct IMOMY and hold.

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.075	134.85 251.125	120.25	122.7 (CTAF) L

Procedure NA for arrivals at BARGR via V361 northeast bound and arrivals at WISER via V81 north bound.

(IAF) BARGR
8200
177°
(13.4)

(IAF) WISER
8200
231°
(11.1)

(IF) NAXOS
7200
151°
(6.1)

(FAF) LASXE

WIDOD
3 NM to
RW15

RW15 5025±

5398

5219±

8471

7660

6681

MSA RW15 25 NM
14800

MISSED APCH FIX
IMOMY
151°
331°
6 NM

ELEV 5016
151° to RW15
15
TDZE 4985
0.5% UP
6
2273 X 40
24
8500 X 100
5047
0.5% DOWN
5089
A5
33
REIL Rwy 15 L
HIRL Rwy 15-33 L

NAXOS
8200
151°
7200
3.06°
TCH 50
LASXE
WIDOD
3 NM to
RW15
0.8 NM to
RW15
RW15
5980
Procedure
Turn
NA
7600
IMOMY
6.1 NM
3.7 NM
2.2 NM
0.8

CATEGORY	A	B	C	D
LNAV MDA	5280-1 295 (300-1)			
CIRCLING	5500-1 484 (500-1)		5520-1½ 504 (600-1½)	5580-2 564 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8500
CH 97511	331°	TDZE	5016
W33A		Apt Elev	5016

RNAV (GPS) RWY 33

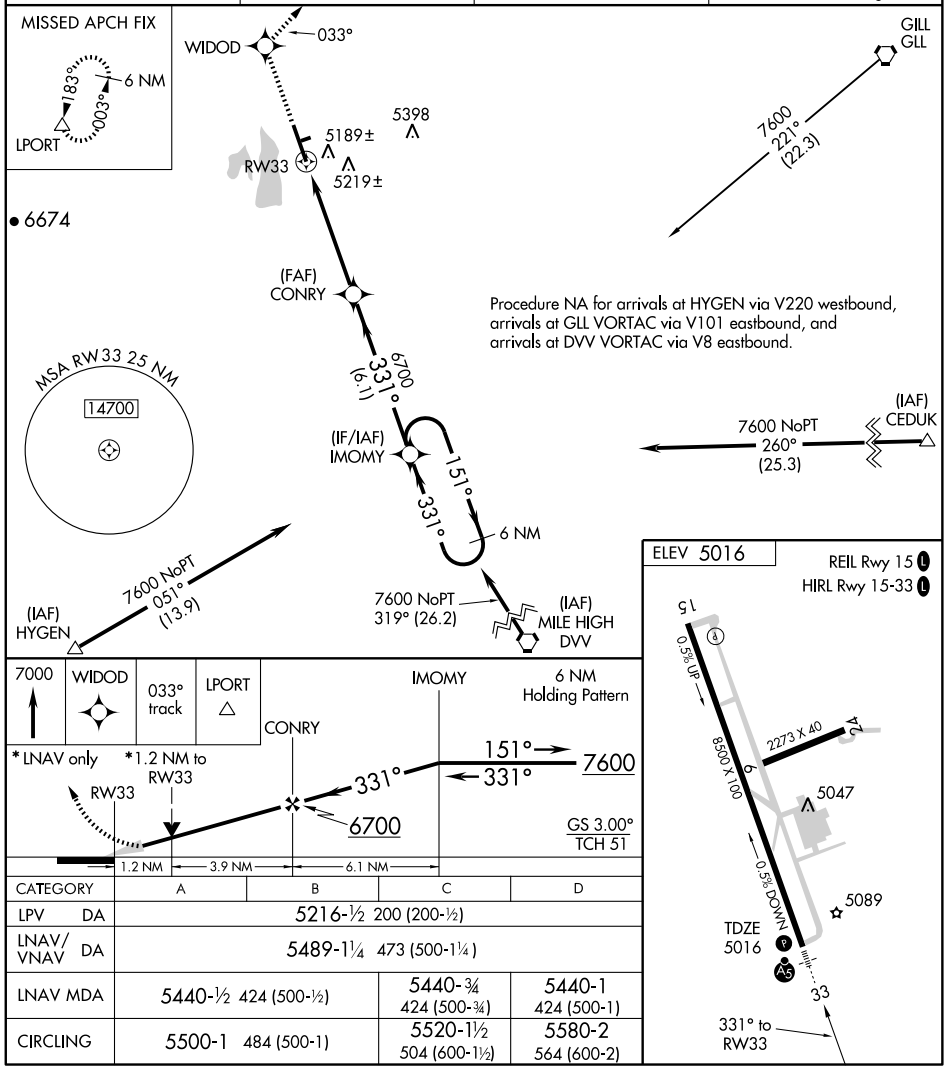
FORT COLLINS-LOVELAND MUNI (FNL)

T Circling to Rwy 6/24 NA at night.
A For inoperative MALSR, increase LNAV Cat D visibility to 1¼ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 39°C (102°F).
VDP and Baro-VNAV NA when using Denver Intl altimeter setting.
For inoperative MALSR when using Denver Intl altimeter setting, increase visibility all Cats ½ mile.
When local altimeter setting not received, use Denver Intl altimeter setting and increase DA 147 feet and MDA 160 feet. Increase LPV visibility all Cats ¼ mile, LNAV/VNAV all Cats ½ mile, LNAV and Circling Cat C/D ¼ mile.

MALSR

MISSED APPROACH: Climb to 7000 direct WIDOD and via 033° track to LPORT and hold. When authorized by ATC, climb-in-hold to 8000.

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.075	134.85 251.125	120.25	122.7 (CTAF) L



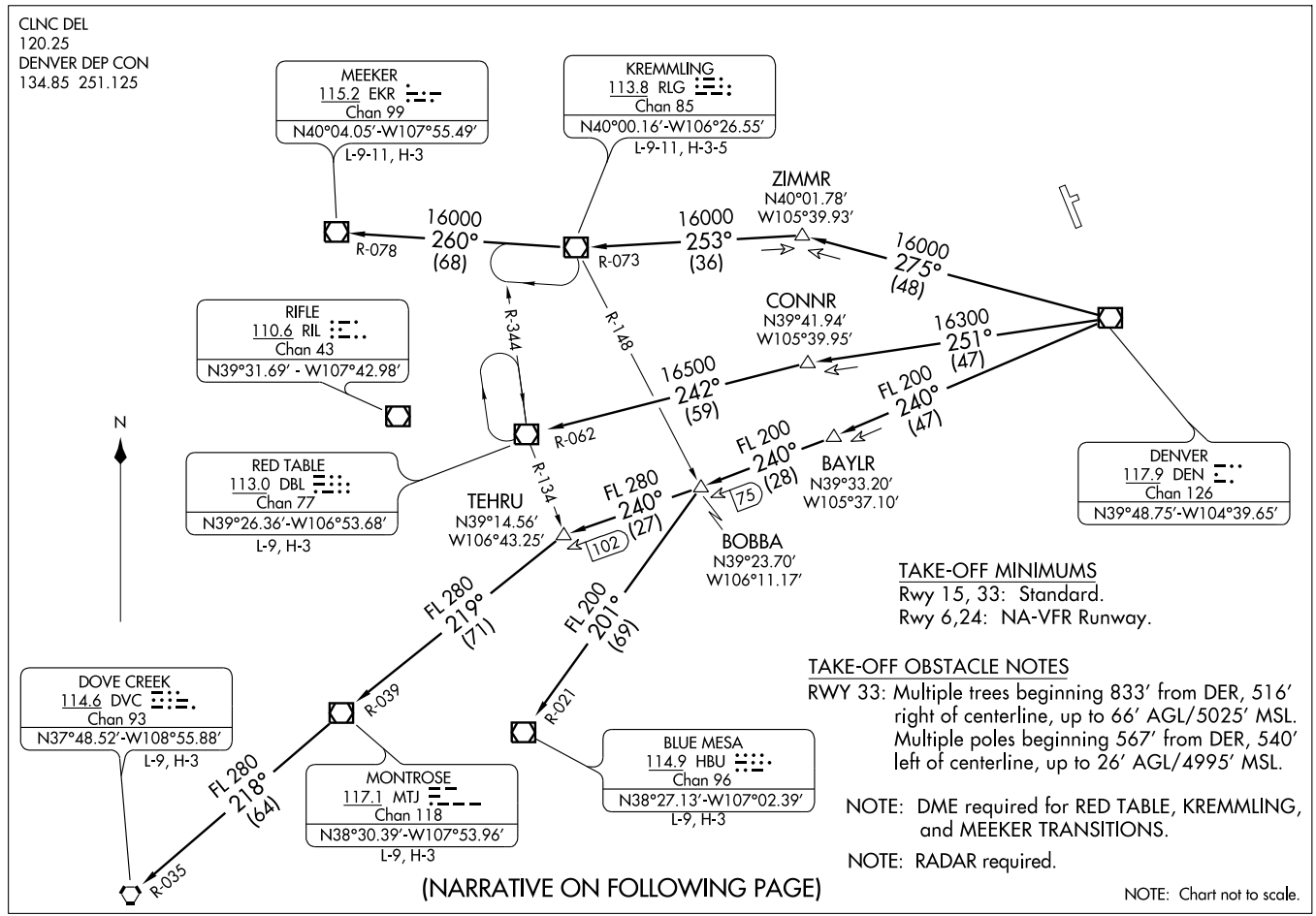
CATEGORY	A	B	C	D
LPV DA	5216-½ 200 (200-½)			
LNAV/VNAV DA	5489-1¼ 473 (500-1¼)			
LNAV MDA	5440-½ 424 (500-½)		5440-¾ 424 (500-¾)	5440-1 424 (500-1)
CIRCLING	5500-1 484 (500-1)		5520-1½ 504 (600-1½)	5580-2 564 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

ROCKIES SEVEN DEPARTURE

SL-5677 (FAA)

FORT COLLINS-LOVELAND MUNI (FNL)
FORT COLLINS (LOVELAND), COLORADO



TAKE-OFF MINIMUMS

Rwy 15, 33: Standard.
Rwy 6,24: NA-VFR Runway.

TAKE-OFF OBSTACLE NOTES

RWY 33: Multiple trees beginning 833' from DER, 516' right of centerline, up to 66' AGL/5025' MSL. Multiple poles beginning 567' from DER, 540' left of centerline, up to 26' AGL/4995' MSL.

NOTE: DME required for RED TABLE, KREMMLING, and MEEKER TRANSITIONS.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

BLUE MESA (HI) TRANSITION (ROCKI7.HBU): From over DEN VOR/DME via DEN R-240 and HBU R-021 to HBU VOR/DME.

DOVE CREEK (HI) TRANSITION (ROCKI7.DVC): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME, then via MTJ R-218 and DVC R-035 to DVC VORTAC.

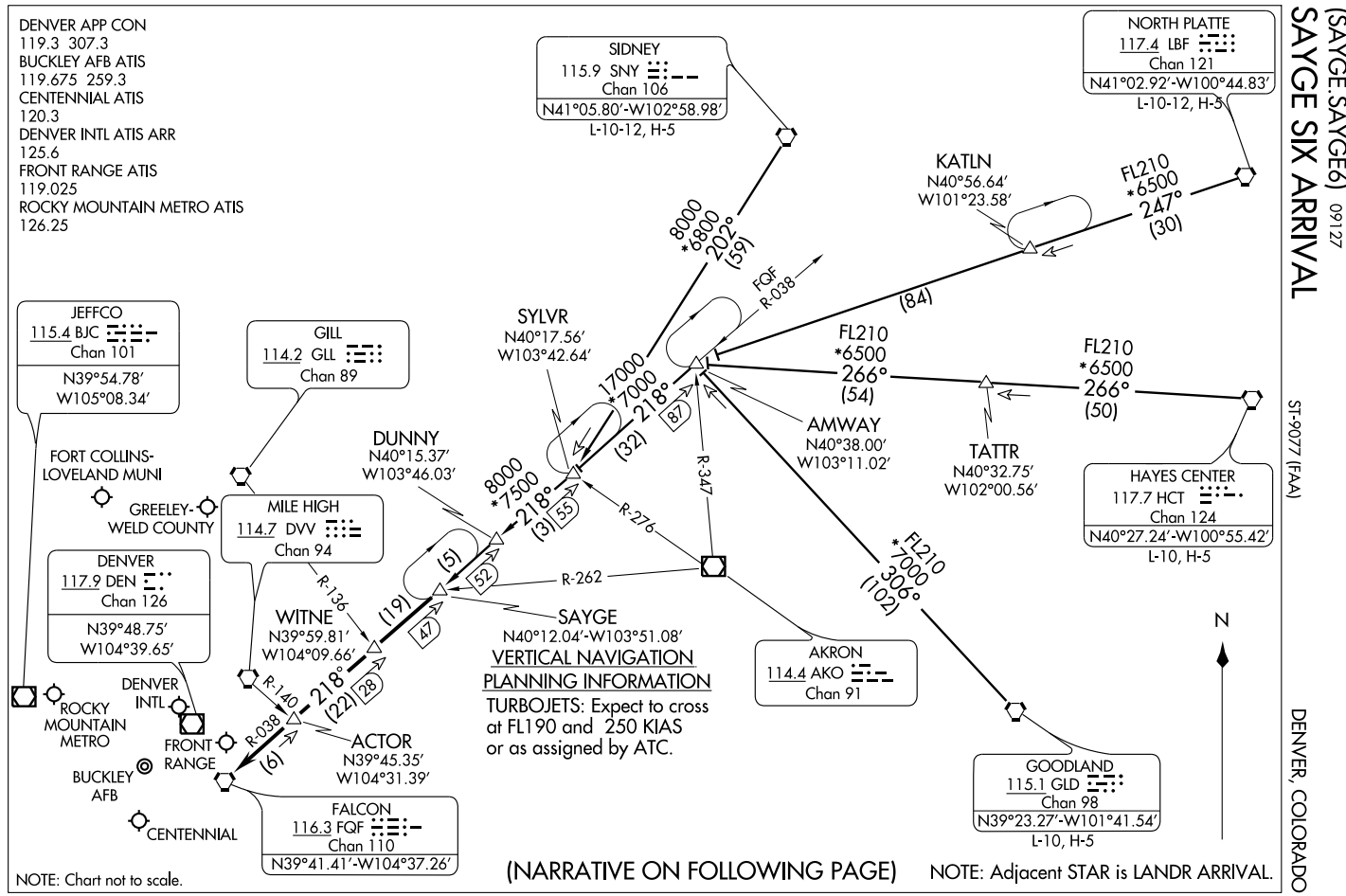
KREMMLING TRANSITION (ROCKI7.RLG): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME.

MEEKER TRANSITION (ROCKI7.EKR): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME, then via RLG R-260 and EKR R-078 to EKR VOR/DME.

MONTROSE TRANSITION (ROCKI7.MTJ): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME.

RED TABLE TRANSITION (ROCKI7.DBL): From over DEN VOR/DME via DEN R-251 and DBL R-062 to DBL VOR/DME.

SW-1, 22 OCT 2009 to 19 NOV 2009


DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
SIDNEY
115.9 SNY
Chan 106
N41°05.80'-W102°58.98'
L-10-12, H-5
NORTH PLATTE
117.4 LBF
Chan 121
N41°02.92'-W100°44.83'
L-10-12, H-5
KATLN
N40°56.64'
W101°23.58'
8000
*6800
202°
(59)
FQF
R-038
(84)
FL210
*6500
247°
(30)
SYLVR
N40°17.56'
W103°42.64'
17000
*7000
218°
(32)
87
FL210
*6500
266°
(54)
FL210
*6500
266°
(50)
AMWAY
N40°38.00'
W103°11.02'
TATTR
N40°32.75'
W102°00.56'
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
GILL
114.2 GLL
Chan 89
FORT COLLINS-
LOVELAND MUNI
GREELEY-
WELD COUNTY
MILE HIGH
114.7 DVV
Chan 94
DUNNY
N40°15.37'
W103°46.03'
8000
*7500
218°
(3)
55
R-347
R-276
R-262
(5)
52
DENVER
117.9 DEN
Chan 126
N39°48.75'
W104°39.65'
R-136
WITNE
N39°59.81'
W104°09.66'
(19)
47
SAYGE
N40°12.04'-W103°51.08'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS: Expect to cross
at FL190 and 250 KIAS
or as assigned by ATC.
FL210
*7000
306°
(102)
AKRON
114.4 AKO
Chan 91
N
DENVER
INTL
ROCKY
MOUNTAIN
METRO
FRONT
RANGE
R-140
218°
(22)
28
R-038
(6)
ACTOR
N39°45.35'
W104°31.39'
BUCKLEY
AFB
CENTENNIAL
FALCON
116.3 FQF
Chan 110
N39°41.41'-W104°37.26'
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Adjacent STAR is LANDR ARRIVAL.
(SAYGE.SAYGE6) 09127
SAYGE SIX ARRIVAL
ST-9077 (FAA)
DENVER, COLORADO

SAYGE SIX ARRIVAL

ARRIVAL DESCRIPTION

GOODLAND TRANSITION (GLD.SAYGE6): From over GLD VORTAC via GLD R-306 and FQF R-038 to SAYGE INT. Thence....

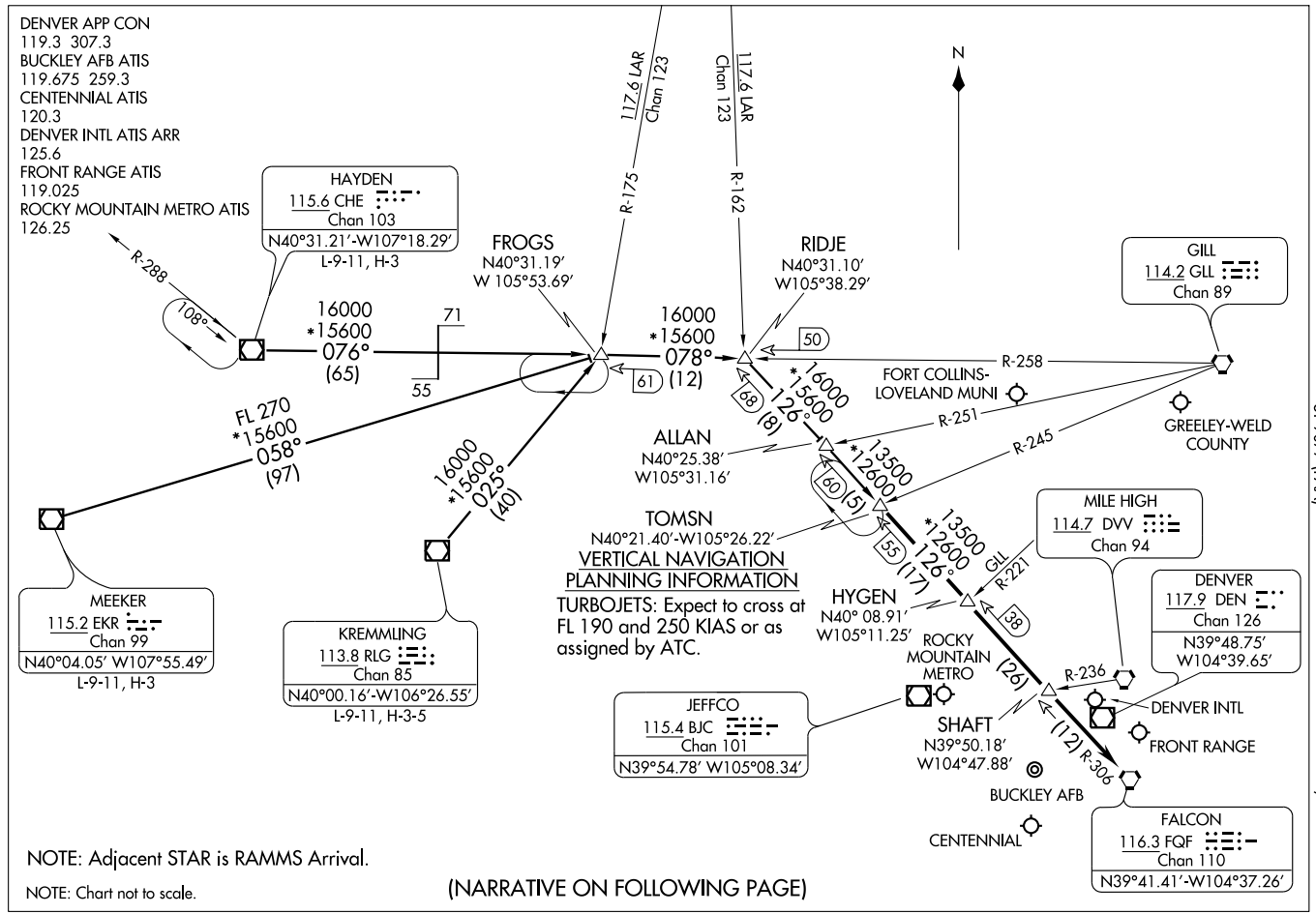
HAYES CENTER TRANSITION (HCT.SAYGE6): From over HCT VORTAC via HCT R-266 and FQF R-038 to SAYGE INT. Thence....

NORTH PLATTE TRANSITION (LBF.SAYGE6): From over LBF VORTAC via LBF R-247 and FQF R-038 to SAYGE INT. Thence....

SIDNEY TRANSITION (SNY.SAYGE6): From over SNY VORTAC via SNY R-202 and FQF R-038 to SAYGE INT. Thence....

....From over SAYGE INT via FQF R-038 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



(TOMSN.TOMSN4) 07298

TOMSN FOUR ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO

TOMSN FOUR ARRIVAL

ARRIVAL DESCRIPTION

HAYDEN TRANSITION (CHE.TOMSN4): From over CHE VOR/DME via CHE R-076 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

KREMMLING TRANSITION (RLG.TOMSN4): From over RLG VOR/DME via RLG R-025 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

MEEKER TRANSITION (EKR.TOMSN4): From over EKR VOR/DME via EKR R-058 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

....From over TOMSN INT via FQF R-306 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC GLL	APP CRS	Rwy Idg	N/A
114.2	248°	TDZE	N/A
Chan 89		Apt Elev	5016

VOR/DME-A

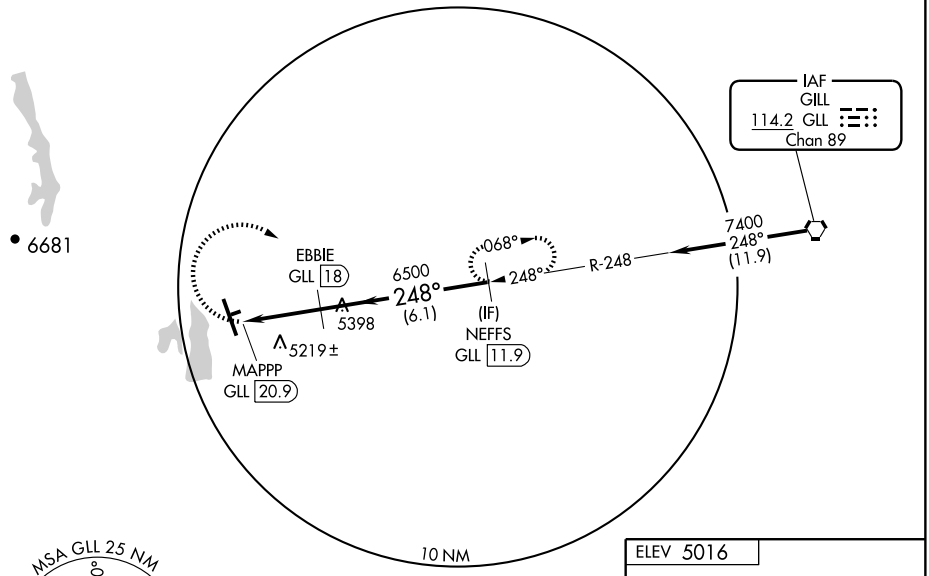
FORT COLLINS-LOVELAND MUNI (FNL)

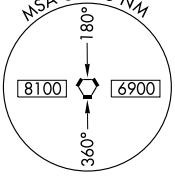
Circling to Rwy 6/24 NA at night.
When local altimeter setting not received, use Denver Intl altimeter setting and increase all MDA 160 feet and Cat C/D visibility ¼ mile.

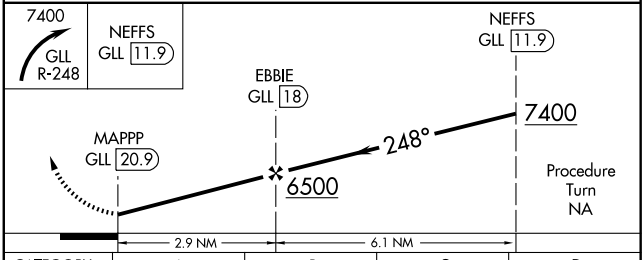
MISSED APPROACH: Climbing right turn to 7400 via GLL VORTAC R-248 to NEFFS/GLL 11.9 DME and hold.

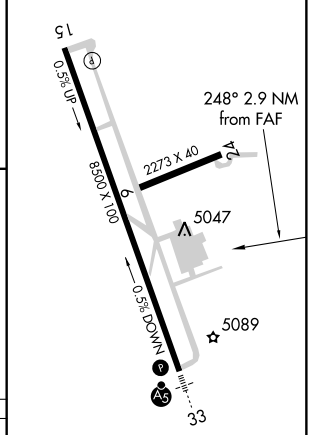
AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.075	134.85 251.125	120.25	122.7 (CTAF) L

Procedure NA for arrivals on GLL VORTAC airway radials 221 CW 301.







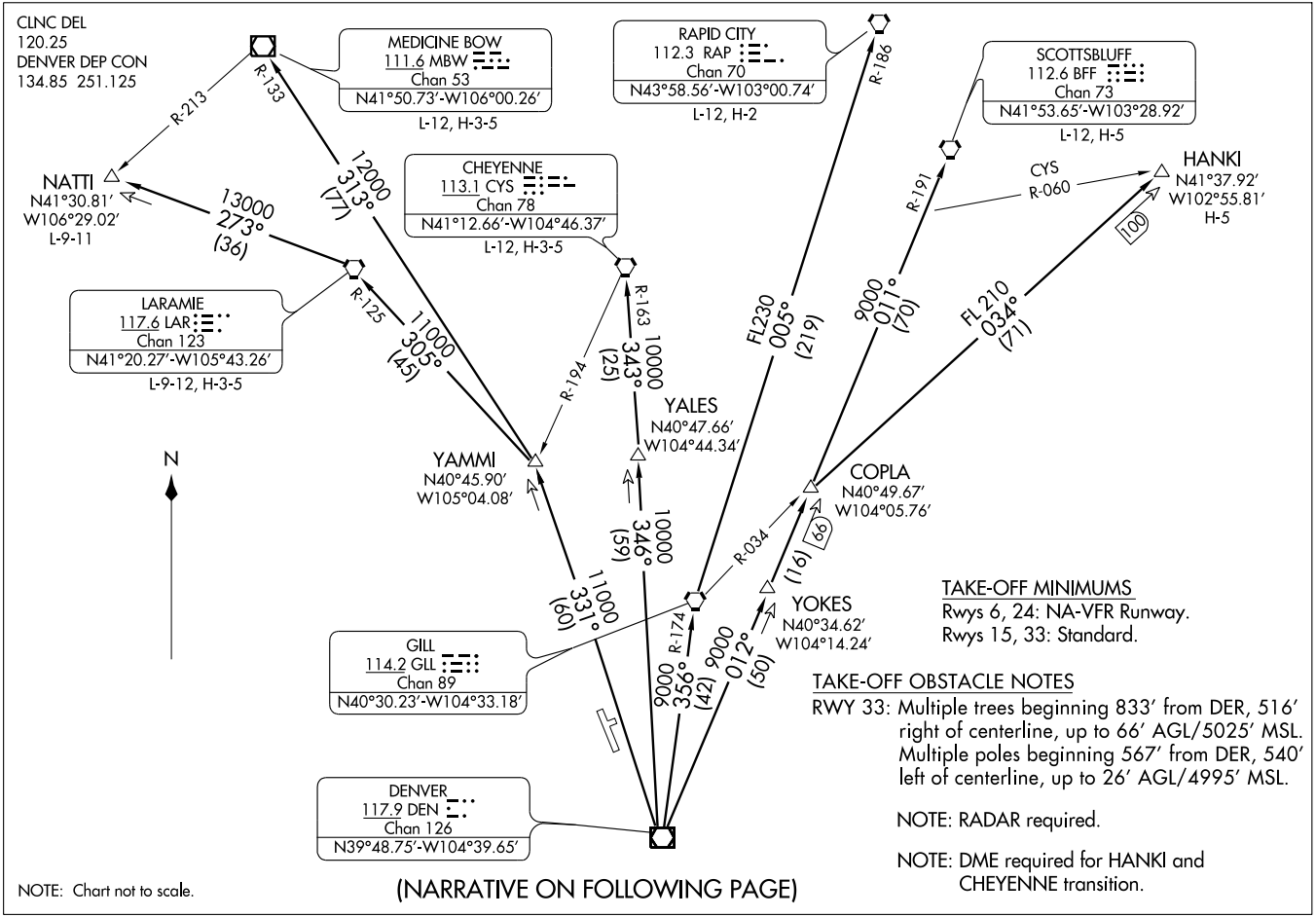


CATEGORY	A	B	C	D
CIRCLING	5500-1 484 (500-1)	5500-1¼ 484 (500-1¼)	5520-1½ 504 (600-1½)	5580-2 564 (600-2)

REIL Rwy 15 L
HIRL Rwy 15-33 L

SW-1, 22 OCT 2009 to 19 NOV 2009

YELLOWSTONE SIX DEPARTURE



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

TAKE-OFF MINIMUMS

Rwys 6, 24: NA-VFR Runway.
Rwys 15, 33: Standard.

TAKE-OFF OBSTACLE NOTES

RWY 33: Multiple trees beginning 833' from DER, 516' right of centerline, up to 66' AGL/5025' MSL. Multiple poles beginning 567' from DER, 540' left of centerline, up to 26' AGL/4995' MSL.

NOTE: RADAR required.

NOTE: DME required for HANKI and CHEYENNE transition.

SL-5677 (FAA)

FORT COLLINS-LOVELAND MUNI (FNL)
FORT COLLINS (LOVELAND), COLORADO

YELLOWSTONE SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

CHEYENNE TRANSITION (YELLO6.CYS): From over DEN VOR/DME via DEN R-346 and CYS R-163 to CYS VORTAC.

HANKI TRANSITION (YELLO6.HANKI): From over DEN VOR/DME via DEN R-012 and GLL R-034 to HANKI INT.

LARAMIE TRANSITION (YELLO6.LAR): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC.

MEDICINE BOW TRANSITION (YELLO6.MBW): From over DEN VOR/DME via DEN R-331 and MBW R-133 to MBW VOR/DME.

NATTI TRANSITION (YELLO6.NATTI): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC, then via LAR R-273 to NATTI INT.

RAPID CITY TRANSITION (YELLO6.RAP): From over DEN VOR/DME via DEN R-356 and GLL R-174 to GLL VORTAC, then via GLL R-005 and RAP R-186 to RAP VORTAC.

SCOTTSBLUFF TRANSITION (YELLO6.BFF): From over DEN VOR/DME via DEN R-012 and BFF R-191 to BFF VORTAC.

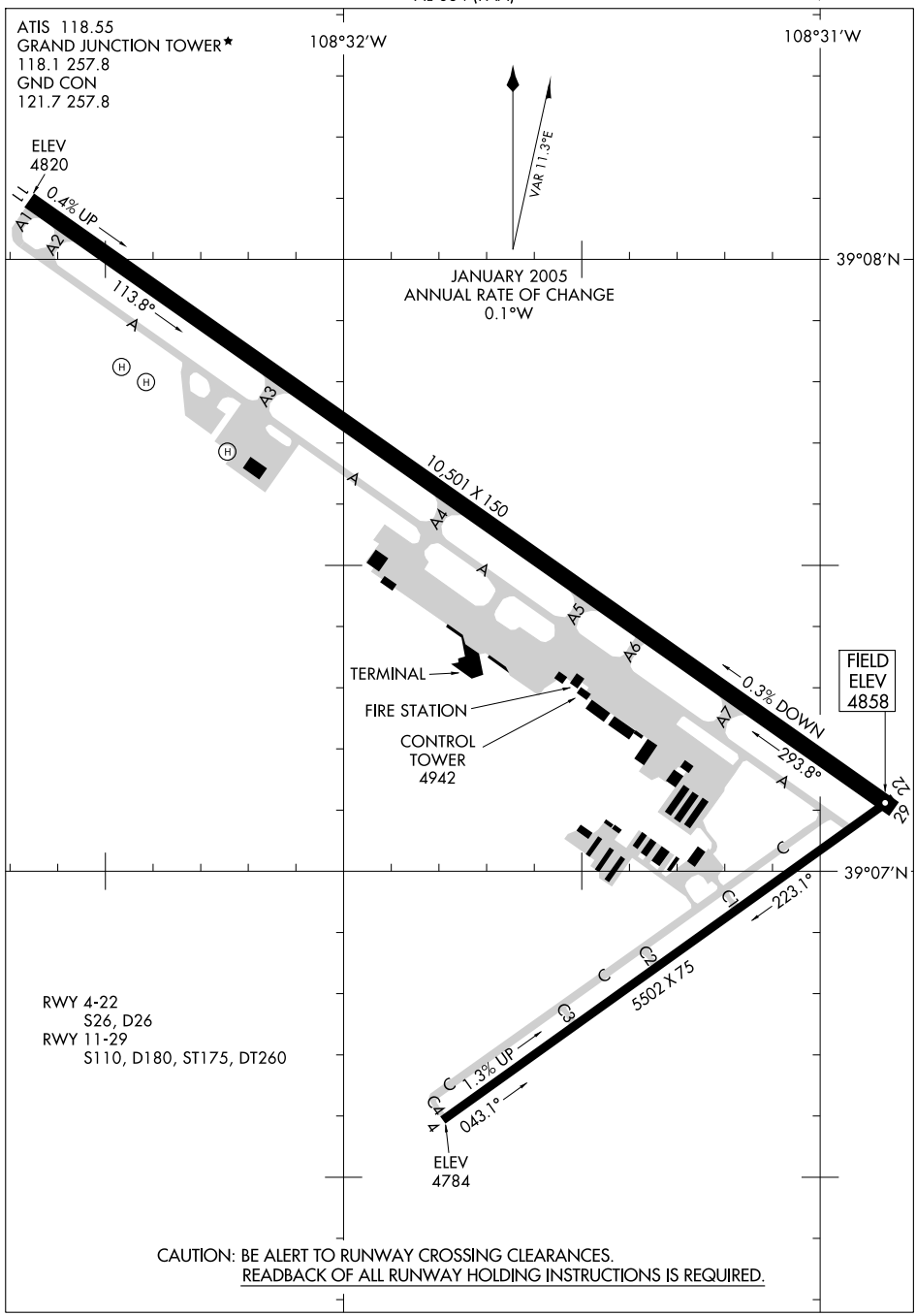
SW-1, 22 OCT 2009 to 19 NOV 2009

07242

AIRPORT DIAGRAM

AL-634 (FAA)

GRAND JUNCTION RGNL (GJT)
GRAND JUNCTION, COLORADO



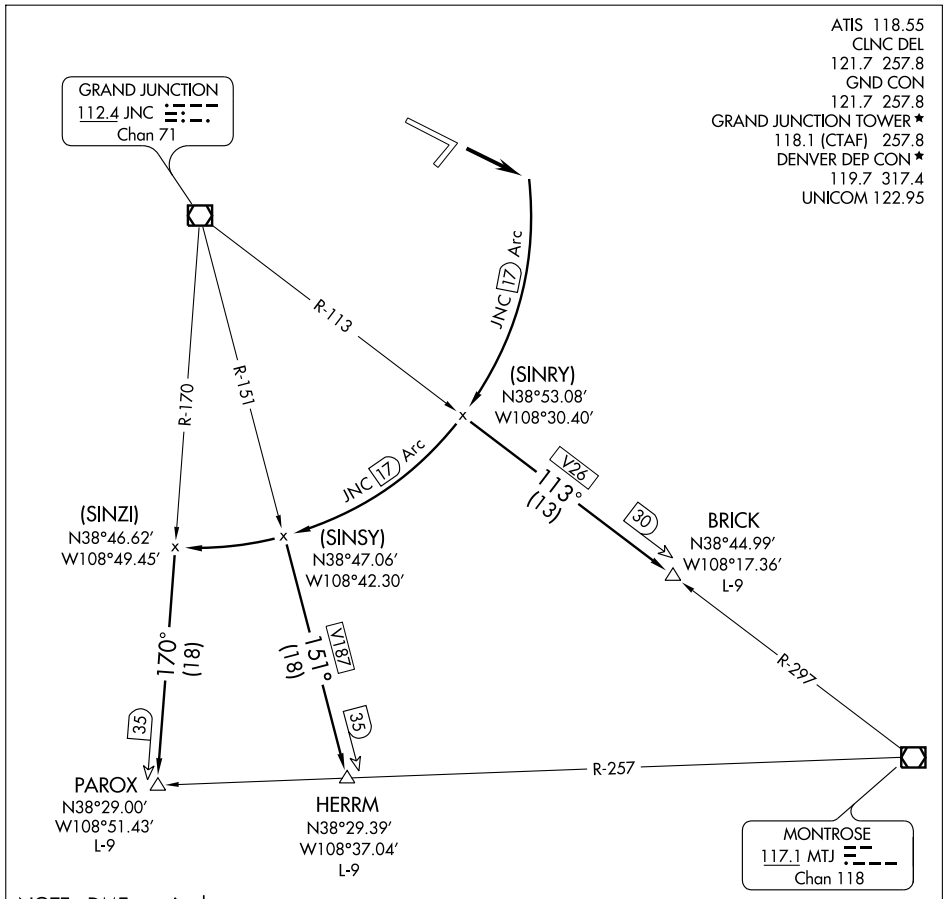
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-1, 22 OCT 2009 to 19 NOV 2009

GLADE PARK ONE DEPARTURE

SL-634 (FAA)

GRAND JUNCTION RGNL (GJT)
GRAND JUNCTION, COLORADO



NOTE: DME required.

NOTE: This SID requires a minimum climb of 220′ per NM to 9000′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Climb runway heading to intercept JNC VORTAC 17 DME Arc thence clockwise to assigned transition.

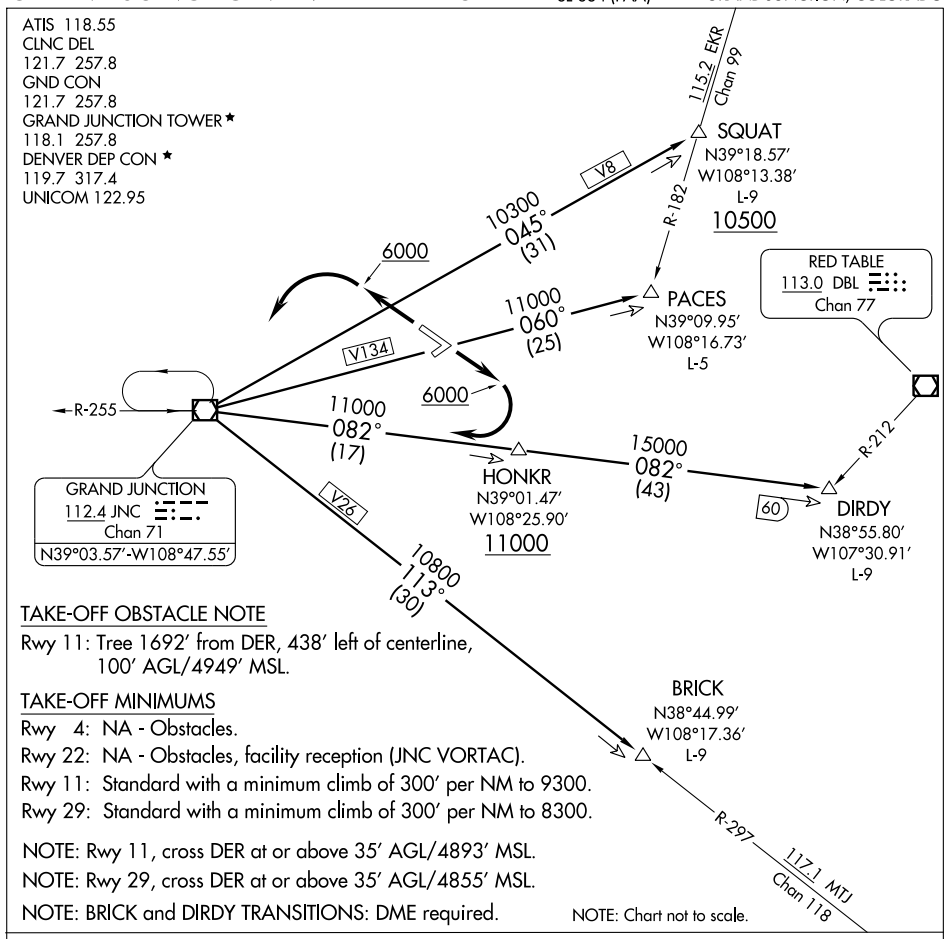
BRICK TRANSITION (GDPK1.BRICK): Via JNC VORTAC 17 DME Arc to JNC R-113 thence Southeast-bound to BRICK DME fix.

HERRM TRANSITION (GDPK1.HERRM): Via JNC VORTAC 17 DME Arc to JNC R-151 thence Southeast-bound to HERRM INT.

PAROX TRANSITION (GDPK1.PAROX): Via JNC VORTAC 17 DME Arc to JNC R-170 thence Southeast-bound to PAROX INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

GRAND JUNCTION FIVE DEPARTURE



TAKE-OFF OBSTACLE NOTE

Rwy 11: Tree 1692' from DER, 438' left of centerline, 100' AGL/4949' MSL.

TAKE-OFF MINIMUMS

Rwy 4: NA - Obstacles.
Rwy 22: NA - Obstacles, facility reception (JNC VORTAC).
Rwy 11: Standard with a minimum climb of 300' per NM to 9300.
Rwy 29: Standard with a minimum climb of 300' per NM to 8300.

NOTE: Rwy 11, cross DER at or above 35' AGL/4893' MSL.
NOTE: Rwy 29, cross DER at or above 35' AGL/4855' MSL.
NOTE: BRICK and DIRDY TRANSITIONS: DME required.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Climb runway heading to 6000, then climbing right turn direct JNC VORTAC; then via transition/route.

TAKE-OFF RUNWAY 29: Climb runway heading to 6000, then climbing left turn direct JNC VORTAC; then via transition/route.

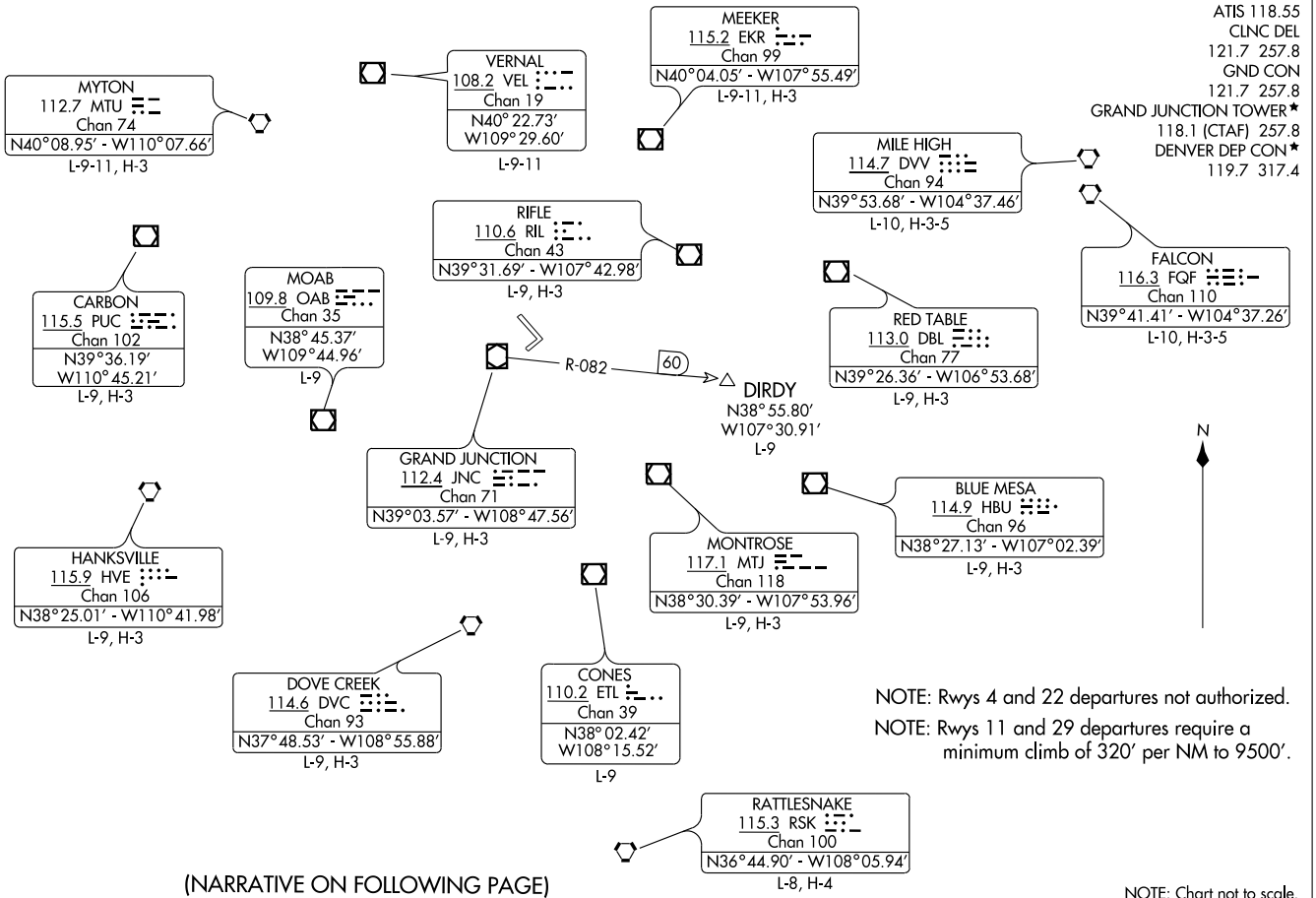
BRICK TRANSITION (JNC5.BRICK): From over JNC VORTAC via JNC R-113 to BRICK/JNC 30 DME.

DIRDY TRANSITION (JNC5.DIRDY): From over JNC VORTAC via JNC R-082 to HONKR/JNC 17 DME then via JNC R-082 to DIRDY INT/JNC 60 DME.

PACES TRANSITION (JNC5.PACES): From over JNC VORTAC via JNC R-060 to PACES INT/JNC 25 DME.

SQUAT TRANSITION (JNC5.SQUAT): From over JNC VORTAC via JNC R-045 to SQUAT INT/JNC 31 DME.

SW-1, 22 OCT 2009 to 19 NOV 2009


ATIS 118.55
CLNC DEL
121.7 257.8
GND CON
121.7 257.8
GRAND JUNCTION TOWER★
118.1 (CTAF) 257.8
DENVER DEP CON★
119.7 317.4
MYTON
112.7 MTU
Chan 74
N40°08.95′ - W110°07.66′
L-9-11, H-3
VERNAL
108.2 VEL
Chan 19
N40° 22.73′
W109° 29.60′
L-9-11
MEEKER
115.2 EKR
Chan 99
N40°04.05′ - W107°55.49′
L-9-11, H-3
MILE HIGH
114.7 DVV
Chan 94
N39°53.68′ - W104°37.46′
L-10, H-3-5
FALCON
116.3 FQF
Chan 110
N39°41.41′ - W104°37.26′
L-10, H-3-5
RIFLE
110.6 RIL
Chan 43
N39°31.69′ - W107°42.98′
L-9, H-3
CARBON
115.5 PUC
Chan 102
N39°36.19′
W110°45.21′
L-9, H-3
MOAB
109.8 OAB
Chan 35
N38°45.37′
W109°44.96′
L-9
R-082
60
DIRDY
N38°55.80′
W107°30.91′
L-9
RED TABLE
113.0 DBL
Chan 77
N39°26.36′ - W106°53.68′
L-9, H-3
N
GRAND JUNCTION
112.4 JNC
Chan 71
N39°03.57′ - W108°47.56′
L-9, H-3
BLUE MESA
114.9 HBU
Chan 96
N38°27.13′ - W107°02.39′
L-9, H-3
MONTROSE
117.1 MTJ
Chan 118
N38°30.39′ - W107°53.96′
L-9, H-3
HANKSVILLE
115.9 HVE
Chan 106
N38°25.01′ - W110°41.98′
L-9, H-3
DOVE CREEK
114.6 DVC
Chan 93
N37°48.53′ - W108°55.88′
L-9, H-3
CONES
110.2 ETL
Chan 39
N38°02.42′
W108°15.52′
L-9
NOTE: Rwys 4 and 22 departures not authorized.
NOTE: Rwys 11 and 29 departures require a minimum climb of 320′ per NM to 9500′.
RATTLESNAKE
115.3 RSK
Chan 100
N36°44.90′ - W108°05.94′
L-8, H-4
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading for vectors to assigned fix/route. Maintain 14000 or assigned lower altitude. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within 1 minute after departure, Runway 11: Climbing right turn direct to JNC VORTAC; Runway 29: Climb to 6000′ then climbing left turn direct to JNC VORTAC. Aircraft departing JNC R-221 clockwise JNC R-060, depart JNC VORTAC on course. All other aircraft climb in JNC VORTAC holding pattern (hold SW, left turns, 075° inbound) to cross JNC VORTAC at or above: R-061 clockwise R-130 9500′; R-131 clockwise R-220 10500′.

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-TACAN-A

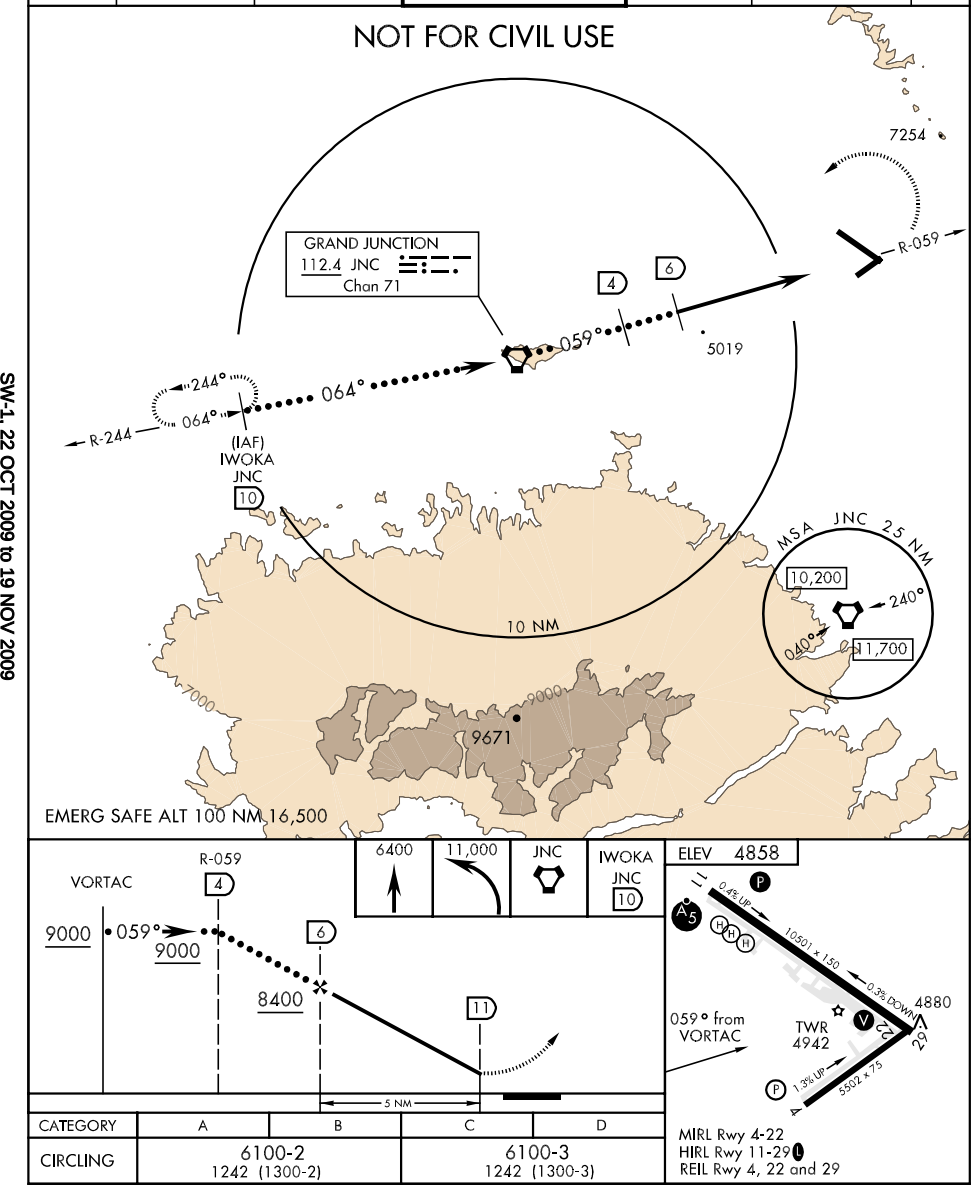
VORTAC JNC Chan 71	APCH CRS 059°	Rwy ldg NA TDZE NA Arpt Elev 4858	JAL-634 [USN]	GRAND JUNCTION RGNL (KGJT)

NA

MISSED APPROACH: Climb to 6400, then climbing left turn to 11,000 direct JNC VORTAC, then outbound JNC R-244 to IWOKA/10 DME and hold.

ATIS ★	DENVER CENTER	DENVER APP CON	GRAND JUNCTION TOWER ★	GND CON	UNICOM	ASOS
118.55	134.5 327.8	119.7 317.4	118.1 (CTAF) L 257.8	121.7 257.8	122.95	

NOT FOR CIVIL USE



CATEGORY	A	B	C	D
CIRCLING	6100-2 1242 (1300-2)		6100-3 1242 (1300-3)	

MIRL Rwy 4-22
HIRL Rwy 11-29 L
REIL Rwy 4, 22 and 29

GRAND JUNCTION, COLORADO

AL-634 (FAA)

LOC/DME I-GJT	APP CRS	Rwy Idg	10501
110.3	112°	TDZE	4833
Chan 40		Apt Elev	4858

ILS or LOC RWY 11

GRAND JUNCTION RGNL (GJT)

T DME required.
A # RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 6100 then climbing right turn to 9000 direct JNC VORTAC then via JNC VORTAC R-275 to JISIG/13.3 DME and hold.

ATIS	DENVER APP CON ★	GRAND JUNCTION TOWER ★	GND CON	UNICOM
118.55	119.7 317.4	118.1 (CTAF) L 257.8	121.7 257.8	122.95

Procedure NA for arrivals at LOMMA via V187.

WINDO I-GJT 58.1

MEEKER 115.2 EKR Chan 99

BITAR INT I-GJT 45.8

MACKS I-GJT 24.7 RADAR

(IF) LOMMA I-GJT 17 RADAR

JINNY INT I-GJT 10.7 RADAR

RHONE OM/INT I-GJT 6.2 RADAR

(IAF) JISIG JNC 13.3

(IAF) ZUKSO JNC 13.3

9000 to LOMMA JNC 13.3 Arc

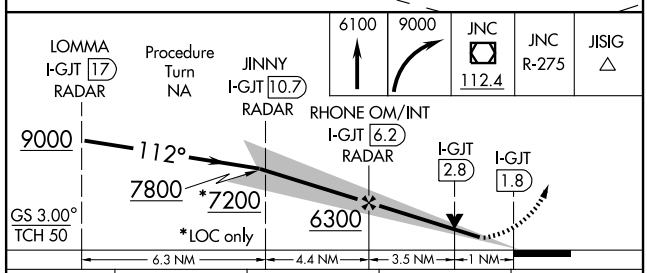
LOCALIZER 110.3 I-GJT Chan 40

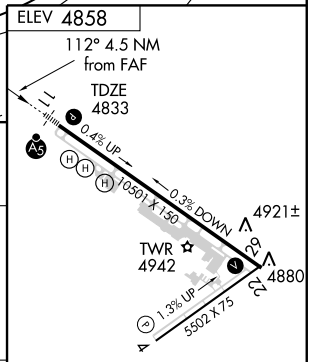
GRAND JUNCTION 112.4 JNC Chan 71

MSA JNC 25 NM
10200
240°
040°
11700

FEEDER FACILITIES
ENROUTE FACILITIES
11 NM

8076
7254
7478
7225
6000





CATEGORY	A	B	C	D
S-ILS 11	# 5033/24 200 (200-½)			
S-LOC 11	5200/24 367 (400-½)			5200/40 367 (400-¾)
CIRCLING	5360-1 502 (600-1)	5380-1 522 (600-1)	5440-1½ 582 (600-1½)	5540-2¼ 682 (700-2¼)

REIL Rwys 4, 22 and 29
MIRL Rwy 4-22
HIRL Rwy 11-29 L

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

SW-1, 22 OCT 2009 to 19 NOV 2009

GRAND JUNCTION, COLORADO

AL-634 (FAA)

LOC/DME I-ACD	APP CRS	Rwy Idg	10501
109.7	312°	TDZE	4858
Chan 34		Apt Elev	4858

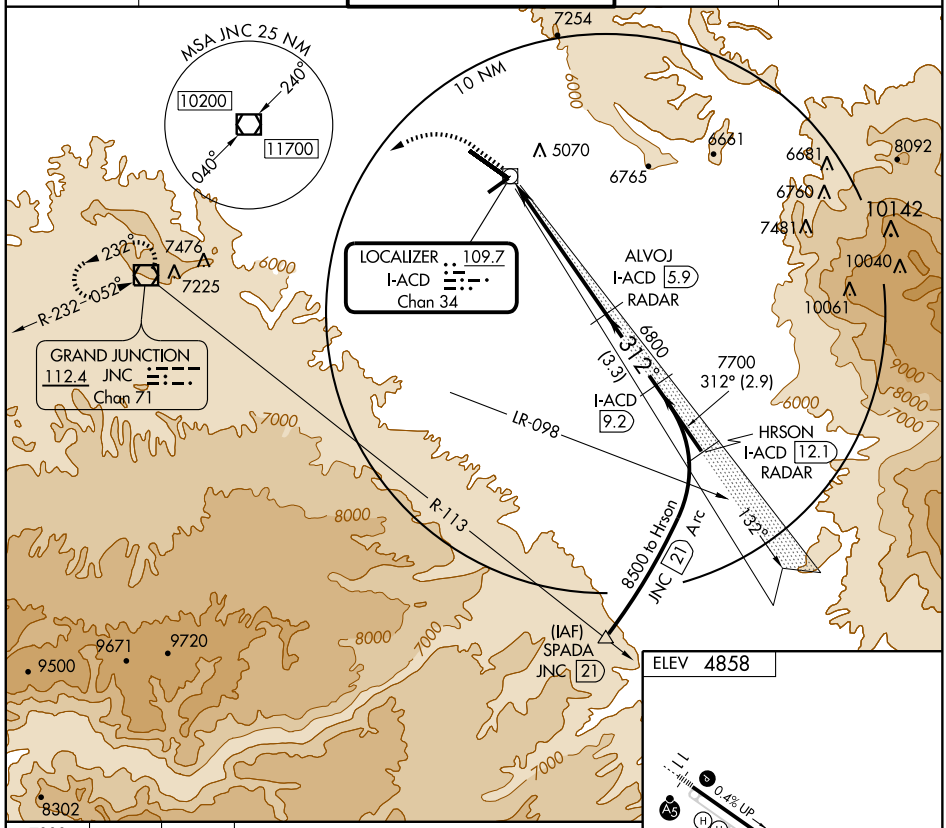
LDA/DME RWY 29

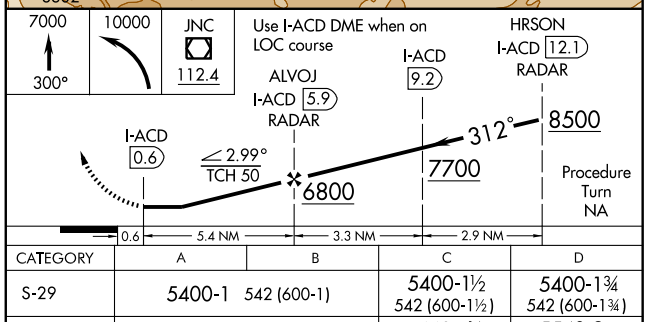
GRAND JUNCTION RGNL (GJT)

T A — Auto-coupled approach not authorized inside 2.0 DME.

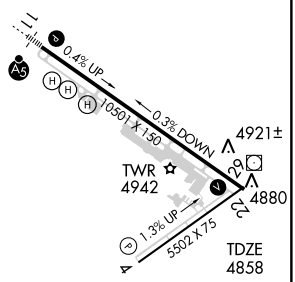
MISSED APPROACH: Climb to 7000 via heading 300°, then climbing left turn to 10000 direct JNC VORTAC and hold.

ATIS	DENVER APP CON ★	GRAND JUNCTION TOWER ★	GND CON	UNICOM
118.55	119.7 317.4	118.1 (CTAF) L 257.8	121.7 257.8	122.95





ELEV 4858



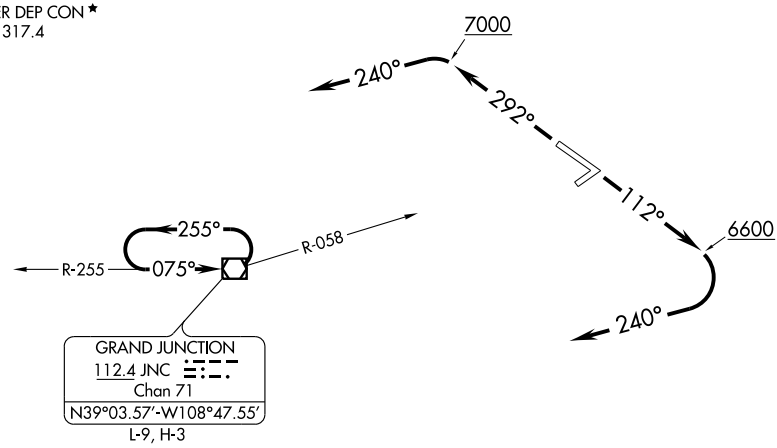
CATEGORY	A	B	C	D
S-29	5400-1	542 (600-1)	5400-1½ 542 (600-1½)	5400-1¾ 542 (600-1¾)
CIRCLING	5400-1	542 (600-1)	5440-1½ 582 (600-1½)	5540-2¼ 682 (700-2¼)

REIL Rwys 4 and 22
MIRL Rwy 4-22
HIRL Rwy 11-29 L

SW-1, 22 OCT 2009 to 19 NOV 2009

MONUMENT ONE DEPARTURE (OBSTACLE)

ATIS 118.55
GND CON
121.7 257.8
GRAND JUNCTION TOWER ★
118.1 257.8
DENVER DEP CON ★
119.7 317.4



TAKE-OFF OBSTACLE NOTES

Rwy 11: Pole and light beginning 252' from DER, 266' left of centerline, up to 20' AGL/4880' MSL. Tree 3238' from DER, 1351' left of centerline, 100' AGL/5019' MSL.

TAKE-OFF MINIMUMS

Rwy 4: NA - Obstacles.
Rwy 22: NA - Obstacles, facility reception (JNC VORTAC).
Rwy 11: Standard with a minimum climb of 390' per NM to 5100, or 3000-3 for climb in visual conditions.
Rwy 29: Standard with a minimum climb of 220' per NM to 7000, or 3000-3 for climb in visual conditions.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Climb heading 112° to 6600, then climbing right turn via heading 240° until receiving JNC VORTAC, then proceed direct JNC VORTAC. Thence . . . . , or for climb in visual conditions cross Grand Junction Rgnl Airport westbound at or above 7700, then proceed on JNC R-058 to JNC VORTAC. Thence . . . .

TAKE-OFF RUNWAY 29: Climb heading 292° to 7000, then climbing left turn via heading 240° until receiving JNC VORTAC, then proceed direct JNC VORTAC. Thence . . . . , or for climb in visual conditions cross Grand Junction Rgnl Airport westbound at or above 7700, then proceed on JNC R-058 to JNC VORTAC. Thence . . . .

. . . . Cross JNC VORTAC at or above MEA/MCA for route of flight. If required, continue climb in JNC holding pattern to cross JNC at or above MEA/MCA for route of flight.

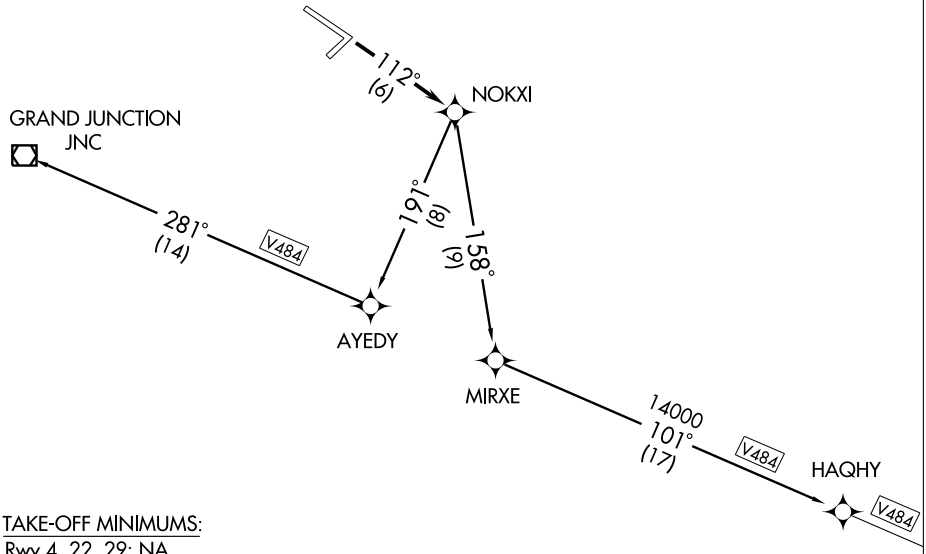
NOKXI ONE DEPARTURE (RNAV)

SL-634 (FAA)

GRAND JUNCTION RGNL (GJT)
GRAND JUNCTION, COLORADO

GRAND JUNCTION TOWER★
118.1 257.8
DENVER DEP CON★
119.7 317.4

NOTE: 1. GPS Required.
2. RNAV 1



TAKE-OFF MINIMUMS:
Rwy 4, 22, 29: NA.
Rwy 11: GRAND JUNCTION TRANSITION: 2300-3 or standard with a minimum climb of 250′ per NM from take-off to 8000′. HAQHY TRANSITION: 5500-3 or standard with a minimum climb of 280′ per NM from take-off to 11,000.

GRAND JUNCTION TRANSITION: Do not exceed 200 KIAS until AYEDY WP, cross JNC VORTAC at MEA/MCA for direction of flight.

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Climb via 112° course to NOKXI WP.

GRAND JUNCTION TRANSITION (NOKXI1.JNC)

HAQHY TRANSITION (NOKXI1.HAQHY)

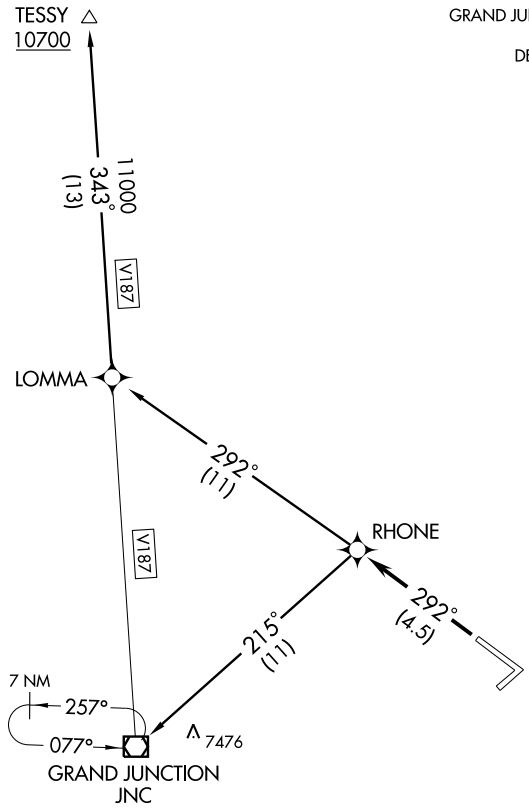
SW-1, 22 OCT 2009 to 19 NOV 2009

RHONE TWO DEPARTURE (RNAV)

SL-634 (FAA)

GRAND JUNCTION RGNL (GJT)
GRAND JUNCTION, COLORADO

ATIS 118.55
GND CON
121.7 257.8
GRAND JUNCTION TOWER ★
118.1 257.8
DENVER DEP CON ★
119.7 317.4
UNICOM 122.95



TAKE-OFF MINIMUMS

Rwy 4, 11, 22: NA.

Rwy 29: GRAND JUNCTION TRANSITION: 2700-2 or standard with a minimum climb of 280′ per NM from take-off to 8000′

TESSY TRANSITION: 2700-2 or standard with a minimum climb of 220′ per NM from LOMMA WP to TESSY INT or 210′ per NM from take-off to 10700′.

NOTE: 1. GPS Required.
2. RNAV 1

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 29: Climb via 292° course to RHONE WP.

GRAND JUNCTION TRANSITION (RHONE2.JNC)

TESSY TRANSITION (RHONE2.TESSY)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 97514 W11A	APP CRS 112°	Rwy Idg 10501 TDZE 4833 Apt Elev 4858

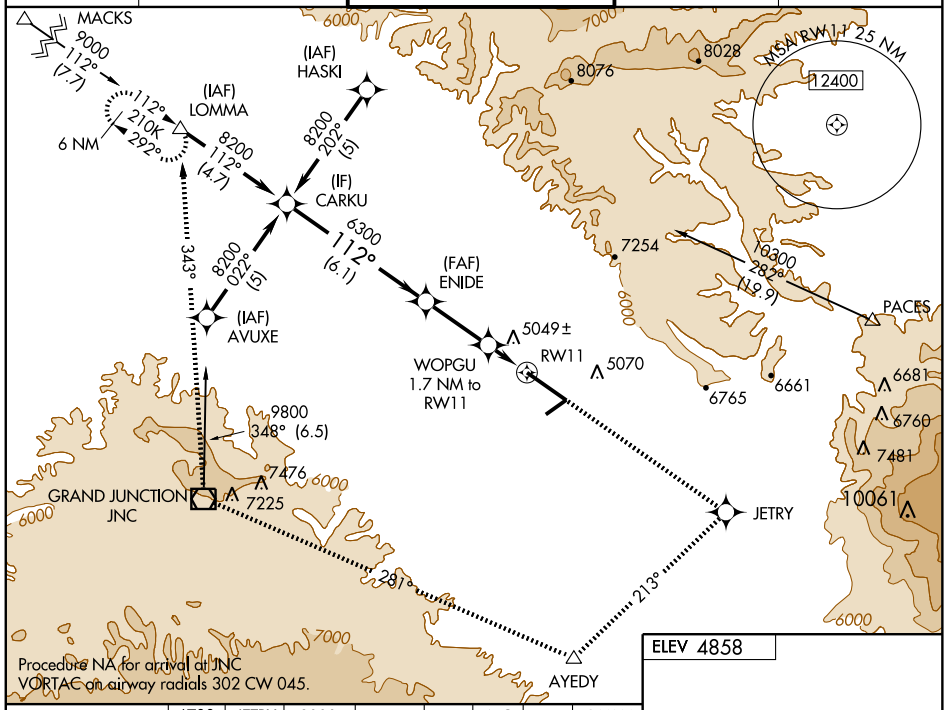
RNAV (GPS) RWY 11
GRAND JUNCTION RGNL (GJT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, procedure NA.

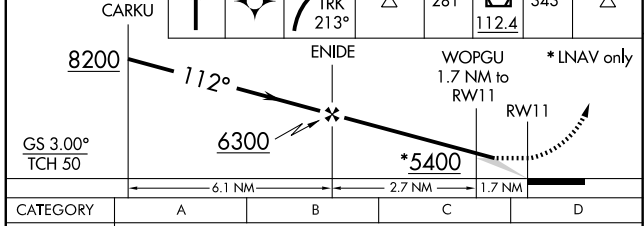
MALSR

MISSED APPROACH: Climb to 6700 direct JETRY then climbing right turn to 9000 via track 213° to AYEDY and via track 343° to LOMMA and hold.

ATIS	DENVER APP CON ★	GRAND JUNCTION TOWER ★	GND CON	UNICOM
118.55	119.7 317.4	118.1 (CTAF) L 257.8	121.7 257.8	122.95

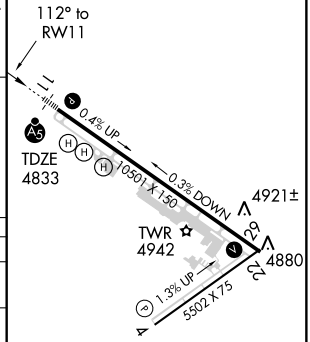


Procedure Turn NA	6700	JETRY	9000 TRK 213°	AYEDY	TRK 281°	JNC 112.4	TRK 343°	LOMMA



CATEGORY	A	B	C	D
LPV DA	5033/24 200 (200-½)			
LNAV/VNAV DA	5492-1¾ 659 (700-1¾)			
LNAV MDA	5300/24 467 (500-½)		5300/40 467 (500-¾)	5300/50 467 (500-1)
CIRCLING	5360-1 502 (600-1)	5380-1 522 (600-1)	5440-1½ 582 (600-1½)	5540-2¼ 682 (700-2¼)

ELEV 4858



REIL Rwys 4 and 22
MIRL Rwy 4-22
HIRL Rwy 11-29 L

SW-1, 22 OCT 2009 to 19 NOV 2009

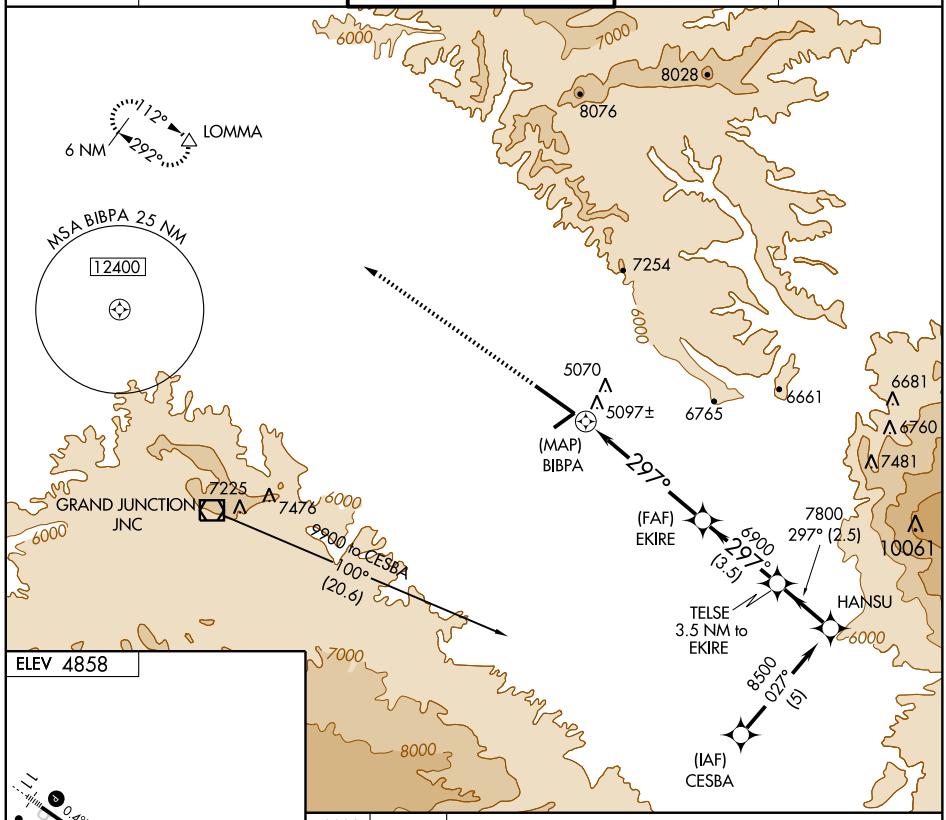
APP CRS	Rwy Idg	10501
297°	TDZE	4858
	Apt Elev	4858

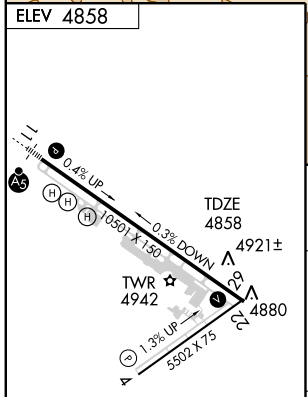
RNAV (GPS) RWY 29
GRAND JUNCTION RGNL (GJT)

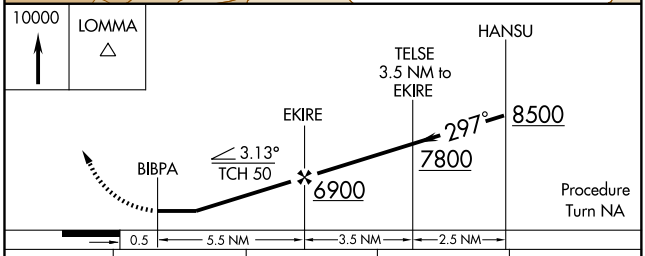
T A NA — GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 10000 direct to LOMMA WP and hold.

ATIS	DENVER APP CON ★	GRAND JUNCTION TOWER ★	GND CON	UNICOM
118.55	119.7 317.4	118.1 (CTAF) L 257.8	121.7 257.8	122.95







CATEGORY	A	B	C	D
LNAV MDA	5340-1	482 (500-1)	5340-1¼ 482 (500-1¼)	5340-1½ 482 (500-1½)
CIRCLING	5400-1	542 (600-1)	5540-2 682 (700-2)	5640-2½ 782 (800-2½)

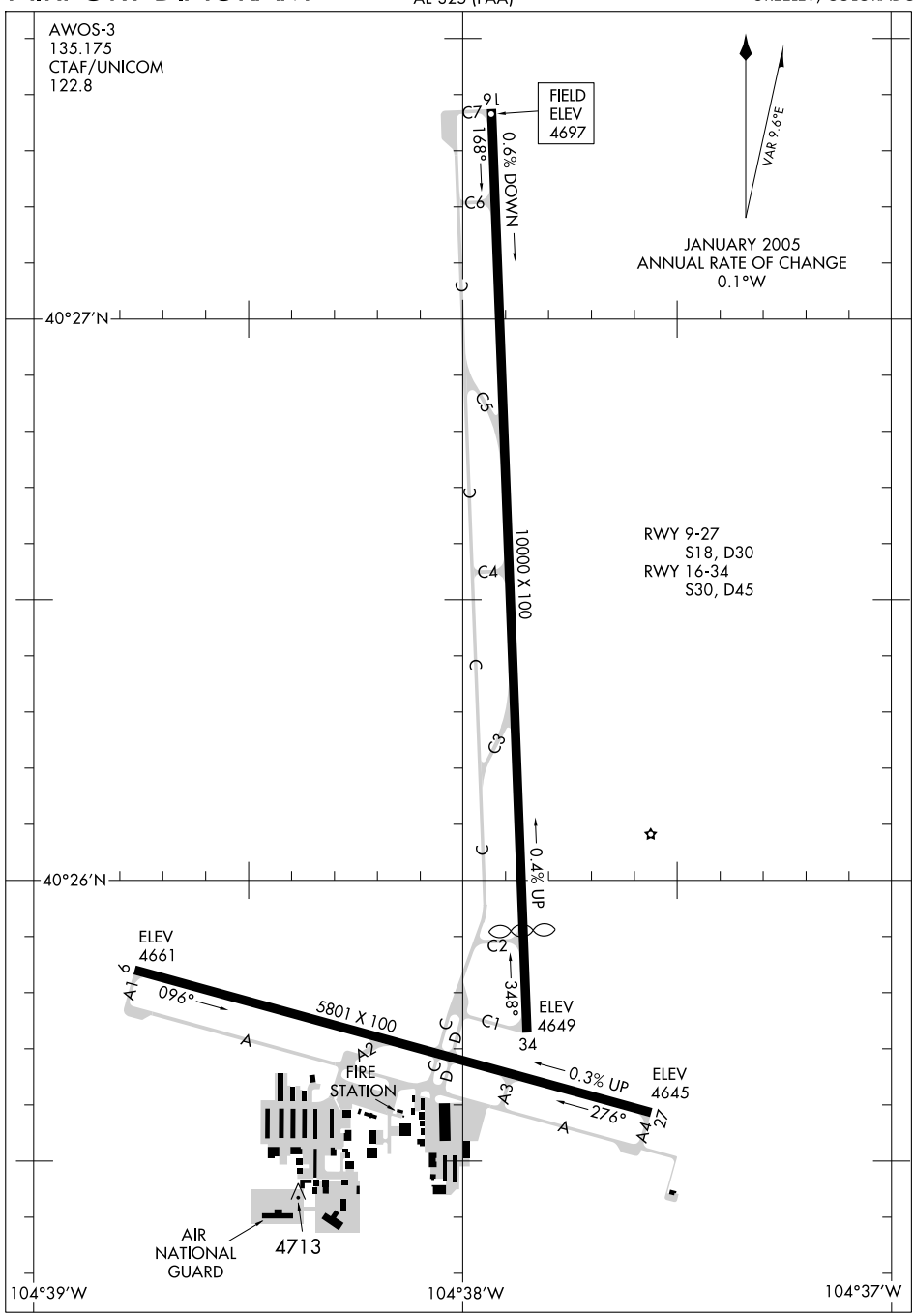
REIL Rwys 4 and 22
MIRL Rwy 4-22
HIRL Rwy 11-29 L

SW-1, 22 OCT 2009 to 19 NOV 2009

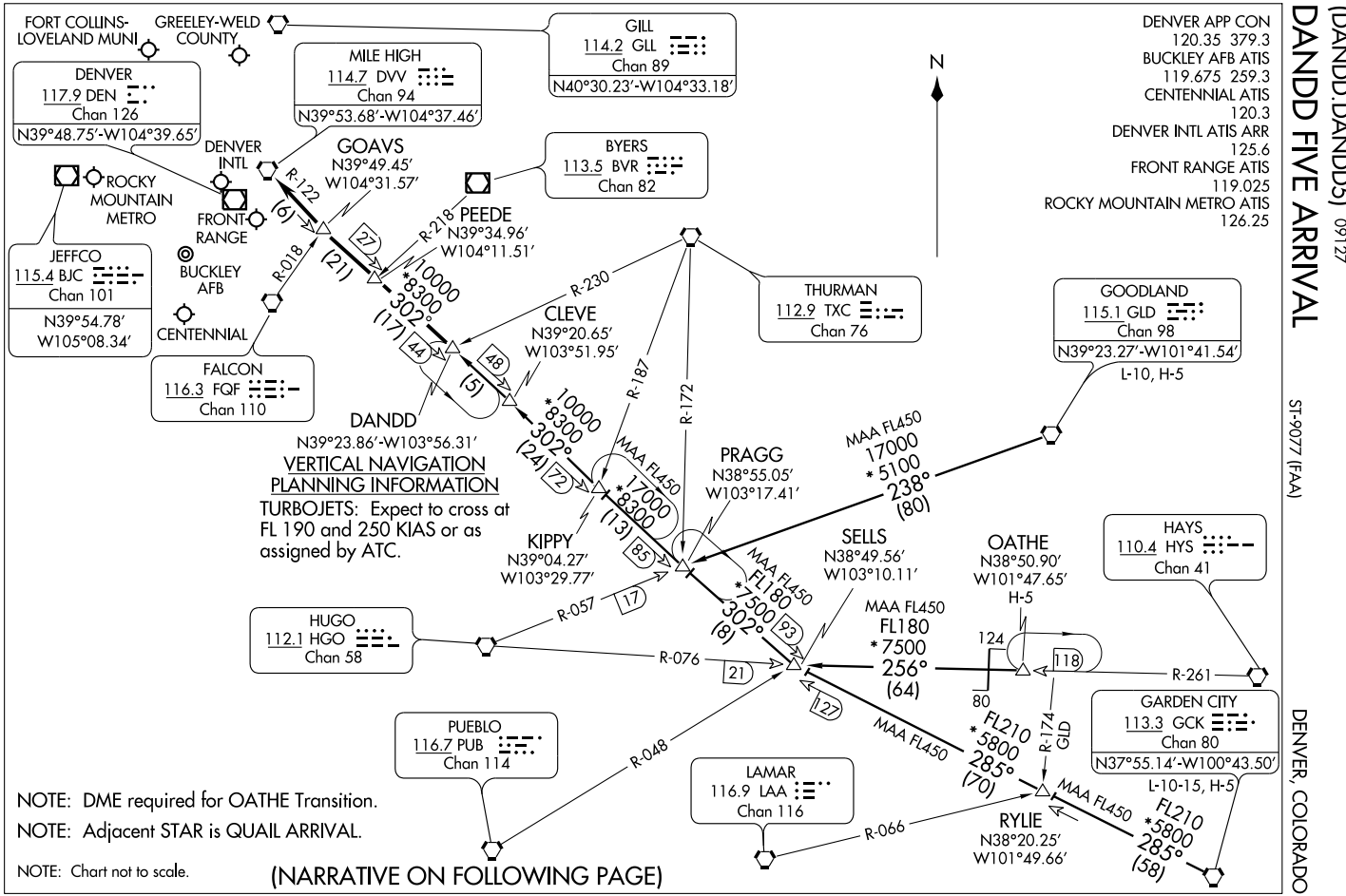
AIRPORT DIAGRAM

AL-325 (FAA)

GREELEY-WELD COUNTY (GXY)
GREELEY, COLORADO



SW-1, 22 OCT 2009 to 19 NOV 2009


DANDD FIVE ARRIVAL
(DANDD.DANDD5) 09127
ST-9077 (FAA)
DENVER, COLORADO
DENVER APP CON
120.35 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
N
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
GILL
114.2 GLL
Chan 89
N40°30.23'-W104°33.18'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'-W104°37.46'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
DENVER INTL
GOAVS
N39°49.45'
W104°31.57'
BYERS
113.5 BVR
Chan 82
ROCKY MOUNTAIN METRO
FRONT RANGE
PEEDE
N39°34.96'
W104°11.51'
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
BUCKLEY AFB
CENTENNIAL
THURMAN
112.9 TXC
Chan 76
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
FALCON
116.3 FQF
Chan 110
CLEVE
N39°20.65'
W103°51.95'
DANDD
N39°23.86'-W103°56.31'
PRAGG
N38°55.05'
W103°17.41'
KIPPY
N39°04.27'
W103°29.77'
SELLS
N38°49.56'
W103°10.11'
OATHE
N38°50.90'
W101°47.65'
H-5
HAYS
110.4 HYS
Chan 41
HUGO
112.1 HGO
Chan 58
PUEBLO
116.7 PUB
Chan 114
LAMAR
116.9 LAA
Chan 116
RYLIE
N38°20.25'
W101°49.66'
GARDEN CITY
113.3 GCK
Chan 80
N37°55.14'-W100°43.50'
L-10-15, H-5
R-122
(6)
R-218
(27)
(21)
R-018
10000
*8300
302°
(17)
44
48
(5)
R-230
R-187
R-172
10000
*8300
302°
(24)
72
MAA FL450
17000
*8300
(13)
85
MAA FL450
17000
*5100
238°
(80)
MAA FL450
FL180
*7500
302°
(8)
93
MAA FL450
FL180
*7500
256°
(64)
124
118
80
R-261
R-057
17
R-076
21
127
MAA FL450
FL210
*5800
285°
(70)
R-174
GLD
MAA FL450
FL210
*5800
285°
(58)
R-048
R-066
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at FL 190 and 250 KIAS or as assigned by ATC.
NOTE: DME required for OATHE Transition.
NOTE: Adjacent STAR is QUAIL ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL DESCRIPTION

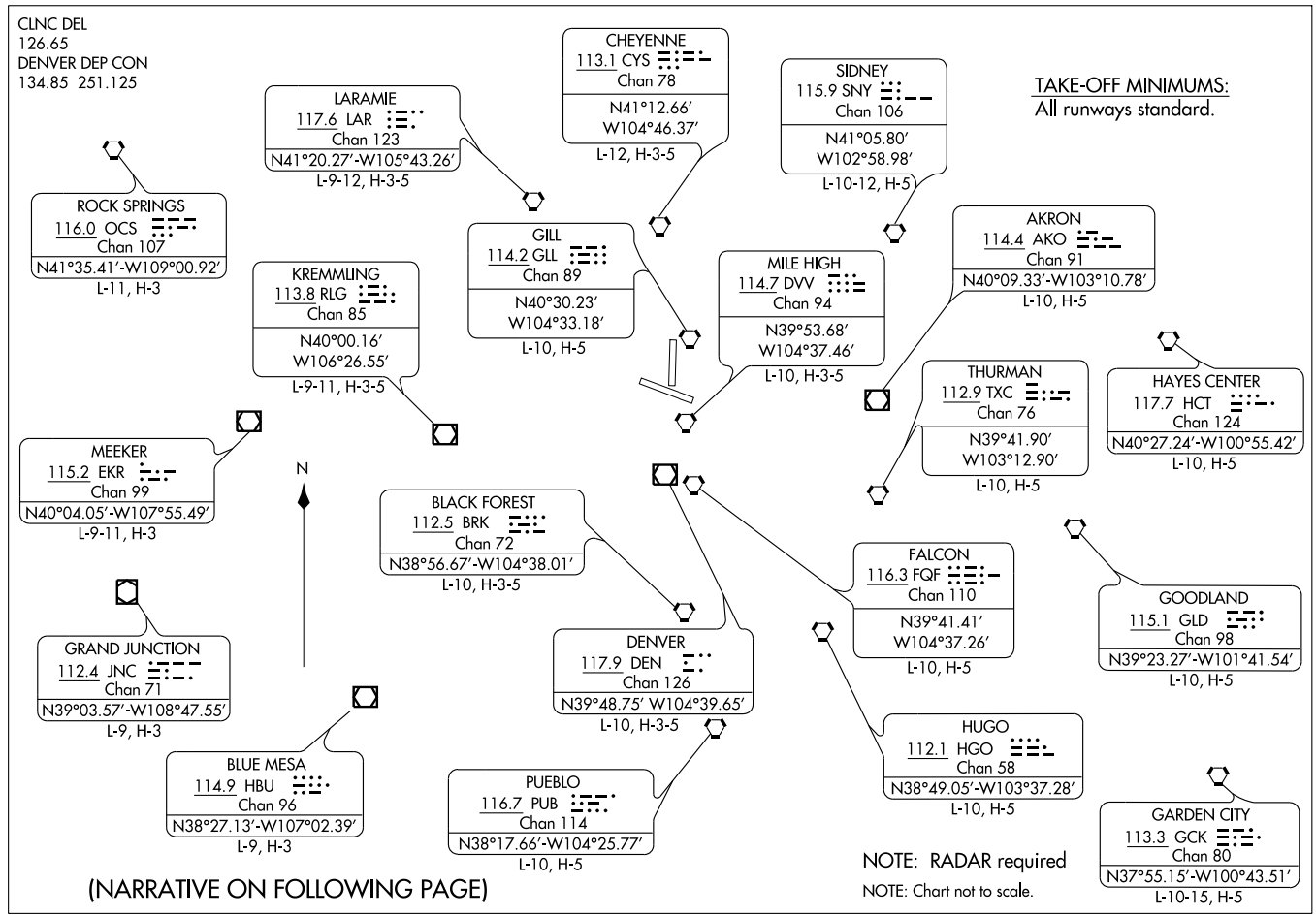
GARDEN CITY TRANSITION (GCK.DANDD5): From over GCK VORTAC via GCK R-285 and DVV R-122 to DANDD INT. Thence....

GOODLAND TRANSITION (GLD.DANDD5): From over GLD VORTAC via GLD R-238 and HGO R-057 to PRAGG INT; then via DVV R-122 to DANDD INT. Thence....

OATHE TRANSITION (OATHE.DANDD5): From over OATHE INT via HYS R-261 and HGO R-076 to SELLS INT; then via DVV R-122 to DANDD INT. Thence....

....From over DANDD INT via DVV R-122 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



(DENVR5.DENVR) 09295

DENVER FIVE DEPARTURE

SL-325 (FAA)

GREELEY-WELD COUNTY (GXY)
GREELEY, COLORADO

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-DCI	APP CRS	Rwy Idg	8900
110.3	347°	TDZE	4665
Chan 40		Apt Elev	4697

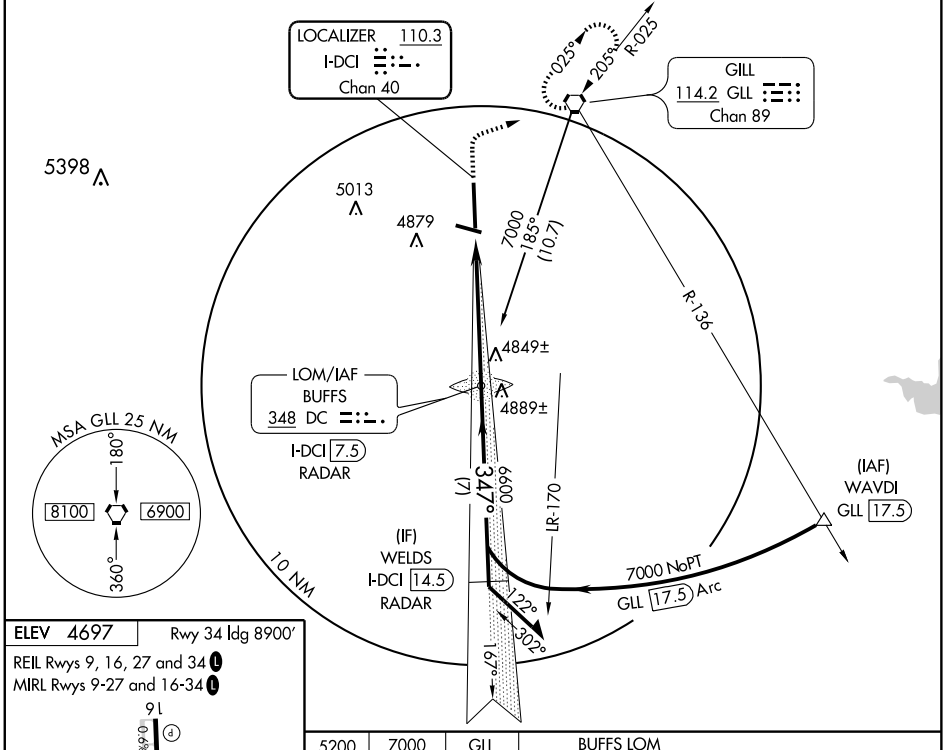
ILS or LOC RWY 34

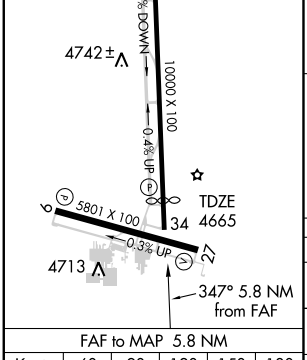
GREELEY-WELD COUNTY (GXY)

Use I-DCI DME when on localizer course.
When local altimeter setting not received, use Fort Collins-Loveland Muni altimeter setting and increase DA to 4950 feet and all visibility ¼ mile; increase all MDA 100 feet and Cat C/D visibility ¼ mile.
VDP NA when using Fort Collins-Loveland Muni altimeter setting.

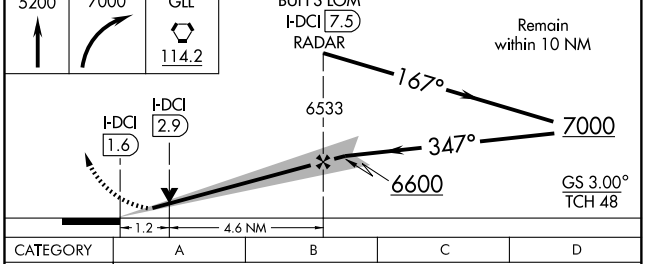
MISSED APPROACH: Climb to 5200 then climbing right turn to 7000 direct GLL VORTAC and hold, continue climb-in-hold to 7000.

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.175	134.85 251.125	126.65	122.8 (CTAF) L



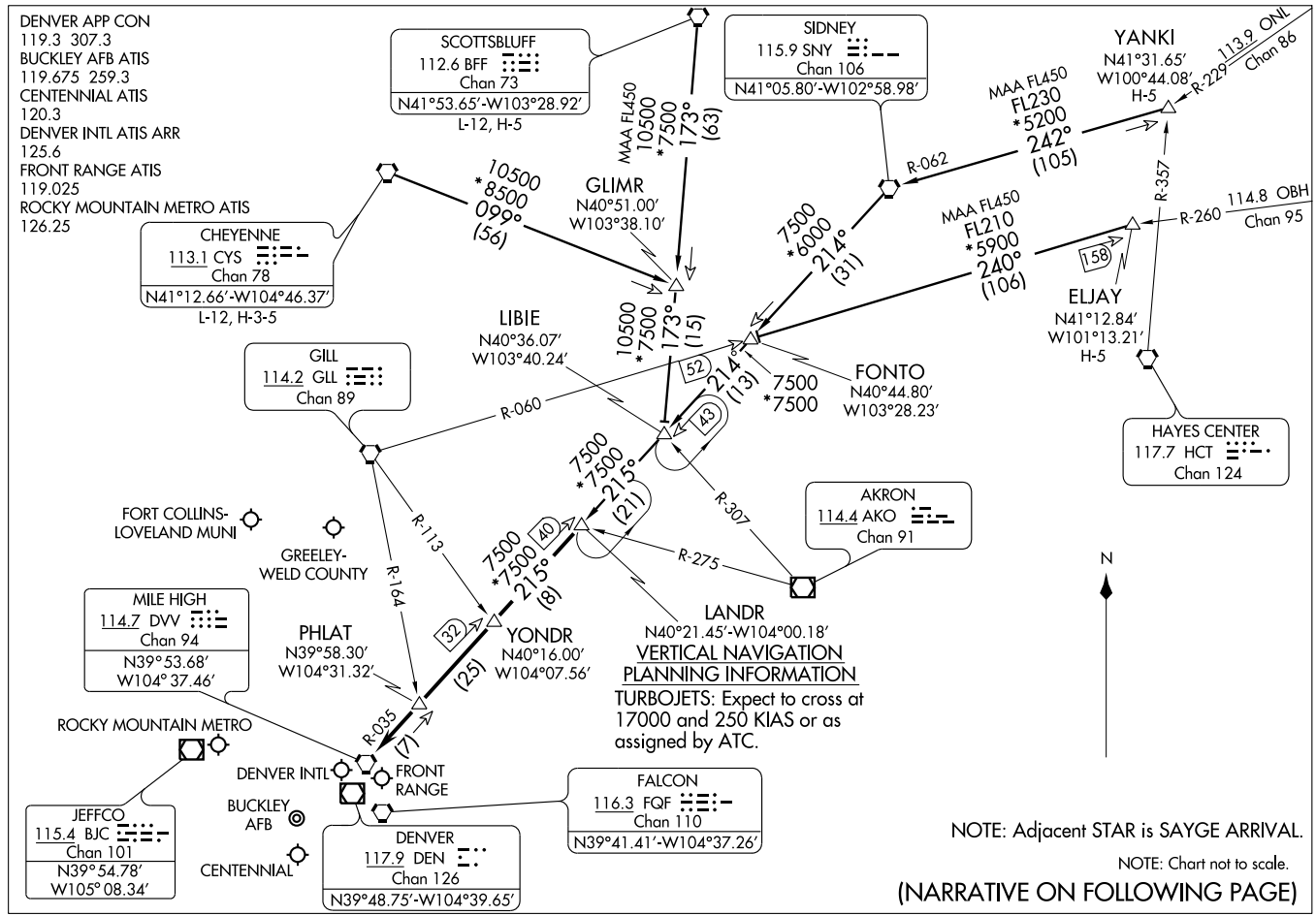


FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56



CATEGORY	A	B	C	D
S-ILS 34	4865-¾ 200 (200-¾)			
S-LOC 34	5100-1 435 (500-1)		5100-1¼ 435 (500-1¼)	5100-1½ 435 (500-1½)
CIRCLING	5120-1 423 (500-1)	5160-1 463 (500-1)	5200-1½ 503 (600-1½)	5260-2 563 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009



LANDR FIVE ARRIVAL

(LANDR.LANDR5) 07298

ST-9077 (FAA)

DENVER, COLORADO

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.LANDR5): From over CYS VORTAC via CYS R-099 and BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

ELJAY TRANSITION (ELJAY.LANDR5): From over ELJAY INT via GLL R-060 to FONTO INT, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

SCOTTSBLUFF TRANSITION (BFF.LANDR5): From over BFF VORTAC via BFF R-173 to LIBIE INT; then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

YANKI TRANSITION (YANKI.LANDR5): From over YANKI INT via SNY R-062 to SNY VORTAC, then via SNY R-214 and DVV R-035 to LANDR INT. Thence....

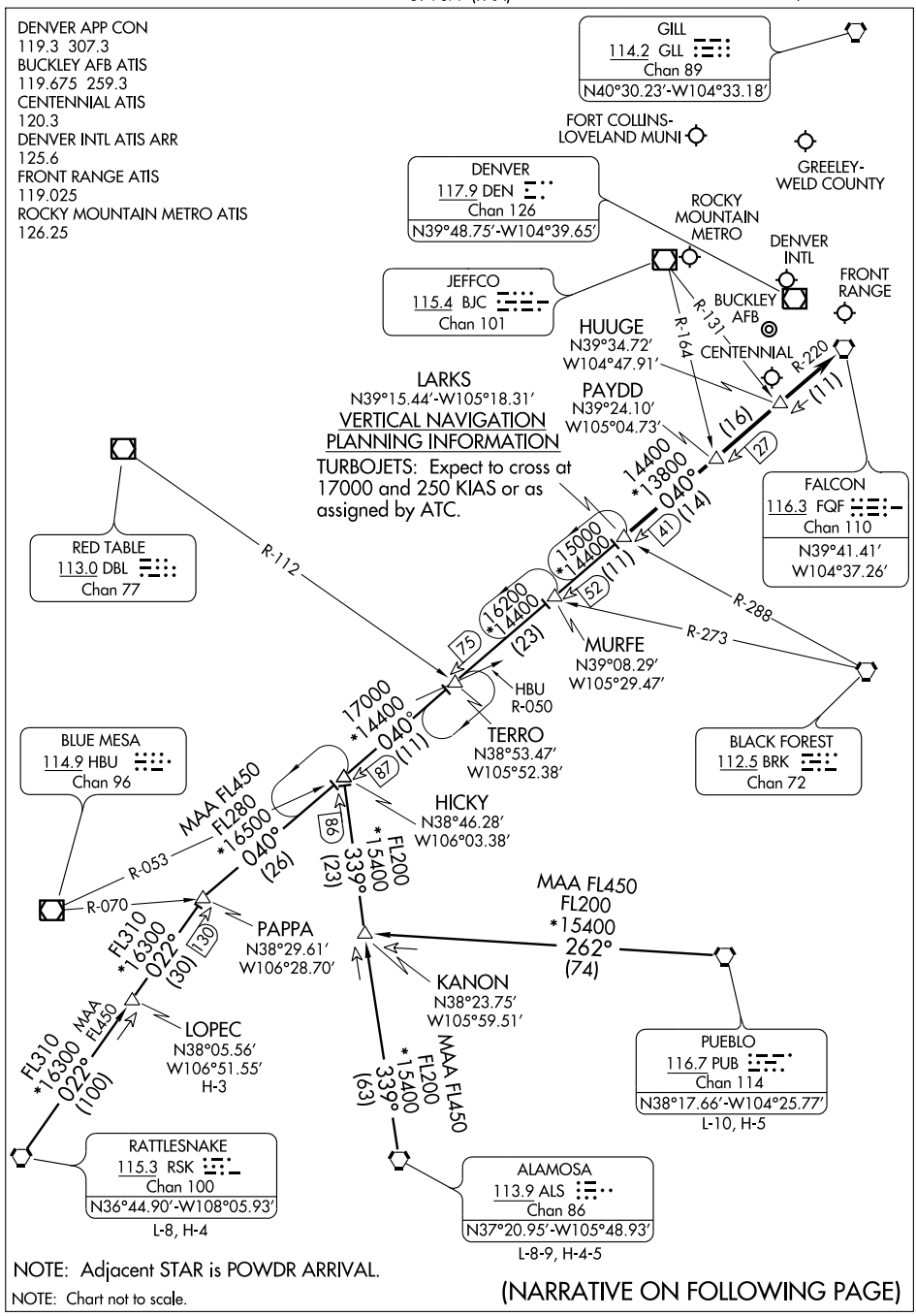
....From over LANDR INT via DVV R-035 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is POWDR ARRIVAL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-1, 22 OCT 2009 to 19 NOV 2009

LARKS SIX ARRIVAL

ARRIVAL DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS6): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS6): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS6): From over PUB VORTAC via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS6): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

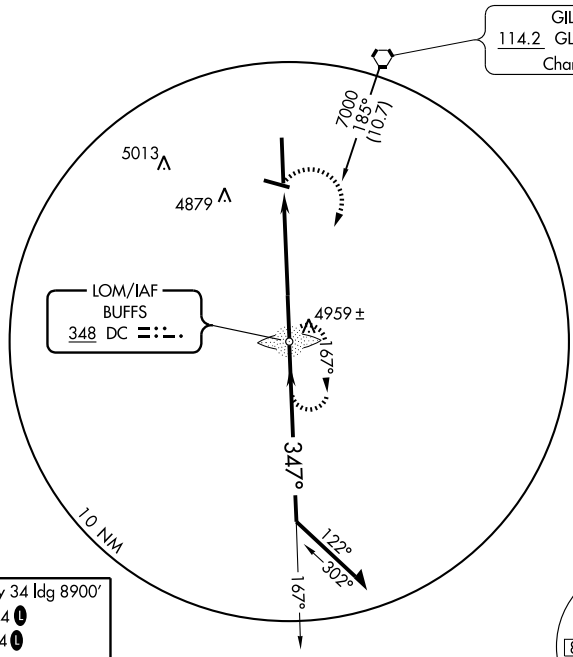
LOM DC	APP CRS	Rwy Idg	8900
348	347°	TDZE	4665
		Apt Elev	4697

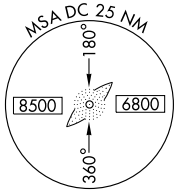
NDB RWY 34

GREELEY-WELD COUNTY (GXY)

MISSED APPROACH: Climbing right turn to 7000 direct BUFFS LOM and hold, continue climb-in-hold to 7000.

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.175	134.85 251.125	126.65	122.8 (CTAF) L

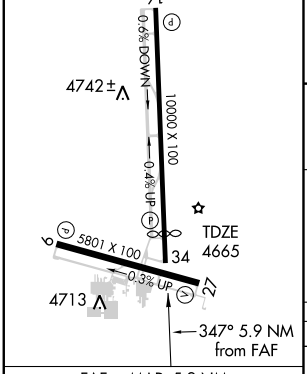




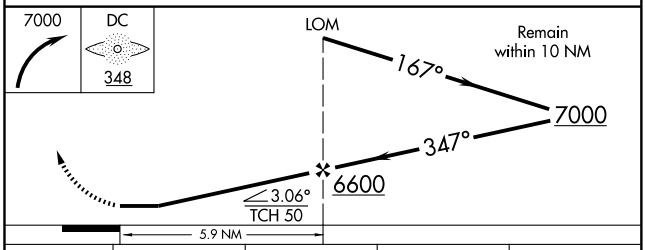
ELEV 4697 Rwy 34 ldg 8900'

REIL Rwys 9, 16, 27 and 34 L

MIRL Rwys 9-27 and 16-34 L



FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



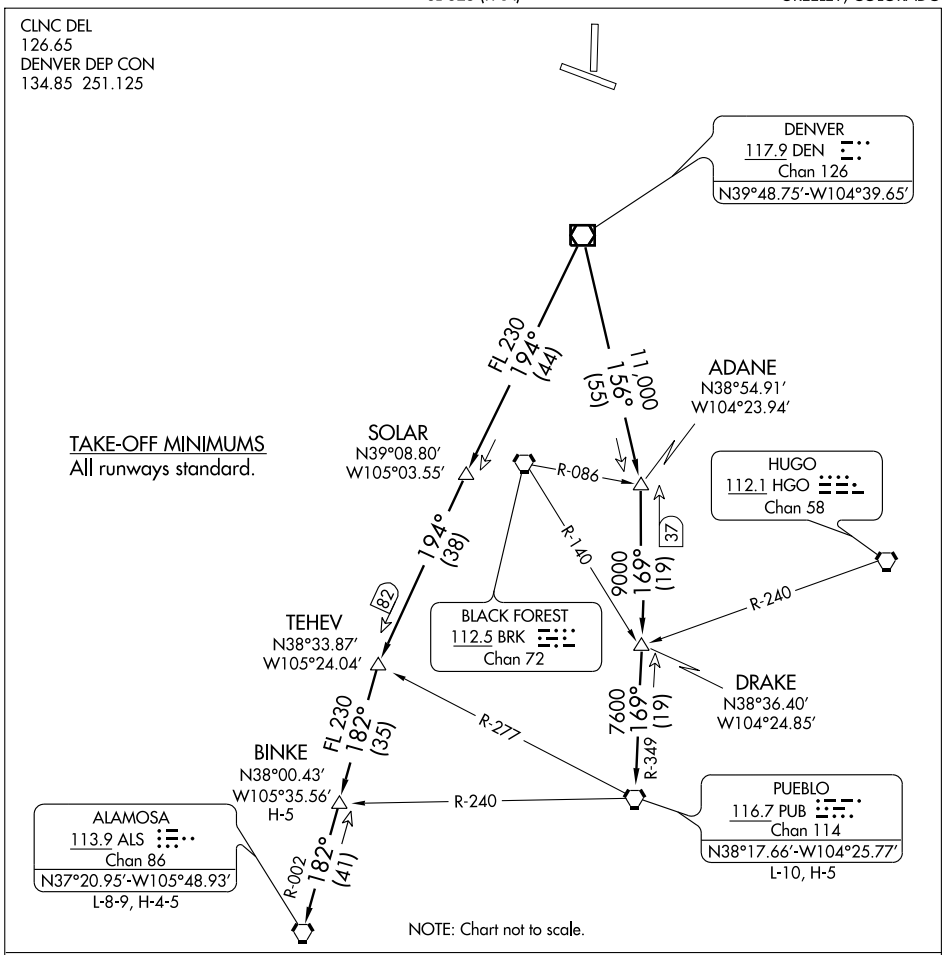
CATEGORY	A	B	C	D
S-34	5180-1 515 (500-1)		5180-1½ 515 (500-1½)	5180-1¾ 515 (500-1¾)
CIRCLING	5180-1 483 (500-1)		5200-1½ 503 (600-1½)	5260-2 563 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

PIKES FOUR DEPARTURE

SL-325 (FAA)

GREELEY-WELD COUNTY (GXY)
GREELEY, COLORADO



DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

ALAMOSA TRANSITION (PIKES4.ALS): From over DEN VOR/DME via DEN R-194 and ALS R-002 to ALS VORTAC.

BINKE TRANSITION (PIKES4.BINKE): From over DEN VOR/DME via DEN R-194 and ALS R-002 to BINKE INT.

PUEBLO TRANSITION (PIKES4.PUB): From over DEN VOR/DME via DEN R-156 and PUB R-349 to PUB VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

PLAINS FOUR DEPARTURE

SL-325 (FAA)

GREELEY-WELD COUNTY (GXY)
GREELEY, COLORADO

CLNC DEL
126.65
DENVER DEP CON
134.85 251.125

AKRON
114.4 AKO
Chan 91
N40°09.33′-W103°10.79′
L-10, H-5

ASHBY
N40°19.03′
W102°00.09′
L-10,H-5

HAYES CENTER
117.7 HCT
Chan 124
N40°27.24′-W100°55.42′
L-10, H-5

EEONS
N40°01.29′
W103°46.18′

EMMYS
N39°53.03′
W103°44.09′

EXTAN
N39°44.60′-W103°45.43′

TEKMY
N39°58.57′
W102°21.21′

BELKE
N40°01.38′
W102°00.51′
H-5

MC COOK
115.3 MCK
Chan 100
N40°12.23′-W100°35.65′
L-10, H-5

CABET
N39°35.65′
W102°00.65′
H-5

DENVER
117.9 DEN
Chan 126
N39°48.75′-W104°39.65′

EPKEE
N39°35.57′
W103.47.97′

GOODLAND
115.1 GLD
Chan 98
N39°23.27′-W101°41.54′
L-10, H-5

THURMAN
112.9 TXC
Chan 76
N39°41.90′-W103°12.90′
L-10, H-5

WEEDS
N39°06.72′
W102°00.78′

GARDEN CITY
113.3 GCK
Chan 80
N37°55.14′-W100°43.50′
L-10-15, H-5

TAKE-OFF MINIMUMS
All runways standard.

NOTE: RADAR REQUIRED.
NOTE: Chart not to scale.

(Continued on next page)

PLAINS FOUR DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10,000 feet, cross DEN VOR/DME at or above 11,000 feet.

AKRON TRANSITION (PLAIN4.AKO): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME.

ASHBY TRANSITION (PLAIN4.ASHBY): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to ASHBY INT.

BELKE TRANSITION (PLAIN4.BELKE): From over DEN VOR/DME via DEN R-073 and MCK R-253 to BELKE INT.

CABET TRANSITION (PLAIN4.CABET): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-084 to CABET INT.

GARDEN CITY TRANSITION (PLAIN4.GCK): From over DEN VOR/DME via DEN R-097 and GCK R-309 to GCK VORTAC.

GOODLAND TRANSITION (PLAIN4.GLD): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC, then via TXC R-092 and GLD R-273 to GLD VORTAC.

HAYES CENTER TRANSITION (PLAIN4.HCT): From over DEN VOR/DME via DEN R-062 and AKO R-241 to AKO VOR/DME, then via AKO R-066 and HCT R-250 to HCT VORTAC.

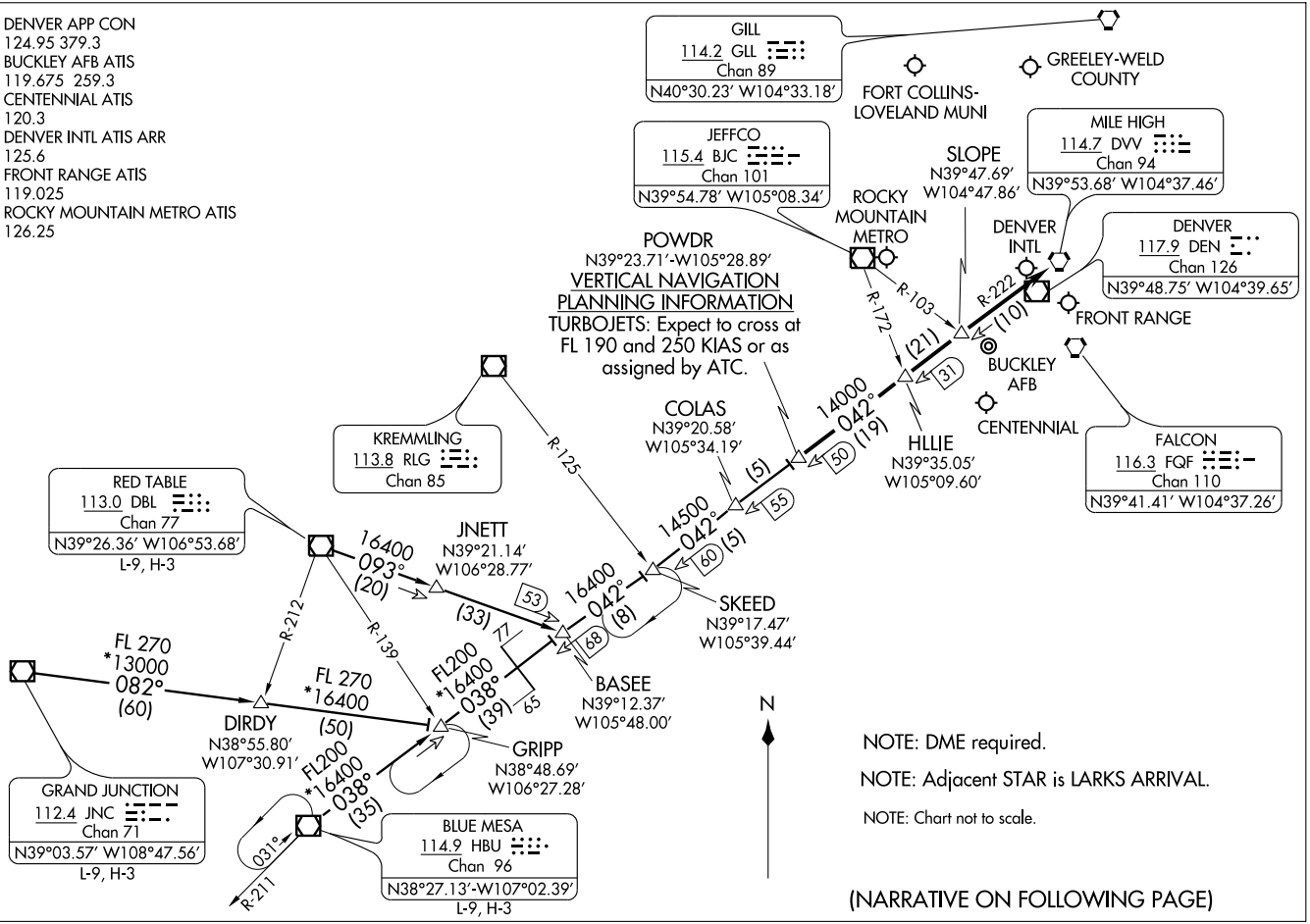
MCCOOK TRANSITION (PLAIN4.MCK): From over DEN VOR/DME via DEN R-073 and MCK R-253 to MCK VOR/DME.

THURMAN TRANSITION (PLAIN4.TXC): From over DEN VOR/DME via DEN R-084 and TXC R-264 to TXC VORTAC.

WEEDS TRANSITION (PLAIN4.WEEDS): From over DEN VOR/DME via DEN R-097 to WEEDS INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER APP CON
124.95 379.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25



POWDR SEVEN ARRIVAL

ARRIVAL DESCRIPTION

BLUE MESA TRANSITION (HBU.POWDR7): From over HBU VOR/DME via HBU R-038 and DVV R-222 to POWDR INT. Thence....

GRAND JUNCTION TRANSITION (JNC.POWDR7): From over JNC VORTAC via JNC R-082 to GRIPP INT; then via HBU R-038 and DVV R-222 to POWDR INT. Thence....

RED TABLE TRANSITION (DBL.POWDR7): From over DBL VOR/DME via DBL R-093 and DVV R-222 to POWDR INT. Thence....

....from over POWDR INT via DVV VORTAC R-222 to HLLIE, then via DVV VORTAC R-222 to SLOPE, then via DVV VORTAC R-222 to DVV. Expect radar vectors to the final approach course at or before DVV VORTAC.

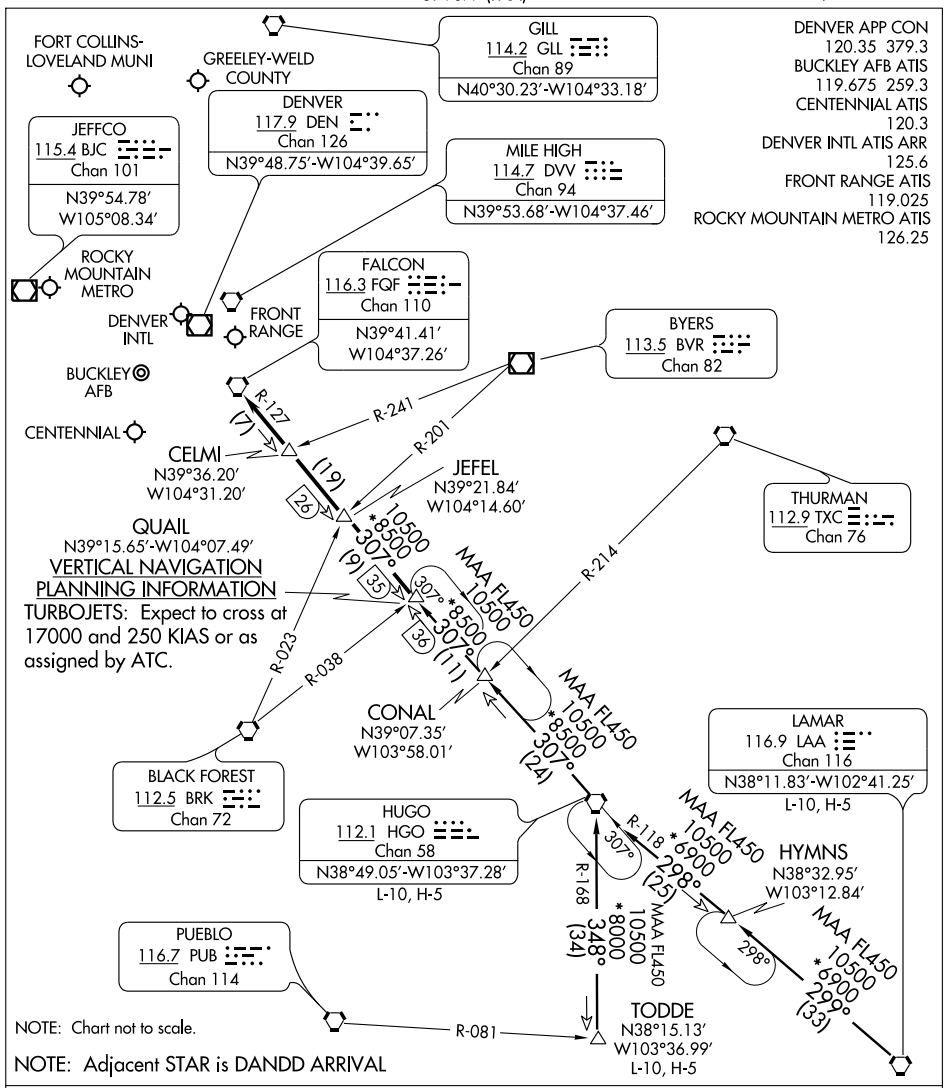
SW-1, 22 OCT 2009 to 19 NOV 2009

(QUAIL.QUAIL6) 09127

QUAIL SIX ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO



NOTE: Adjacent STAR is DANDD ARRIVAL

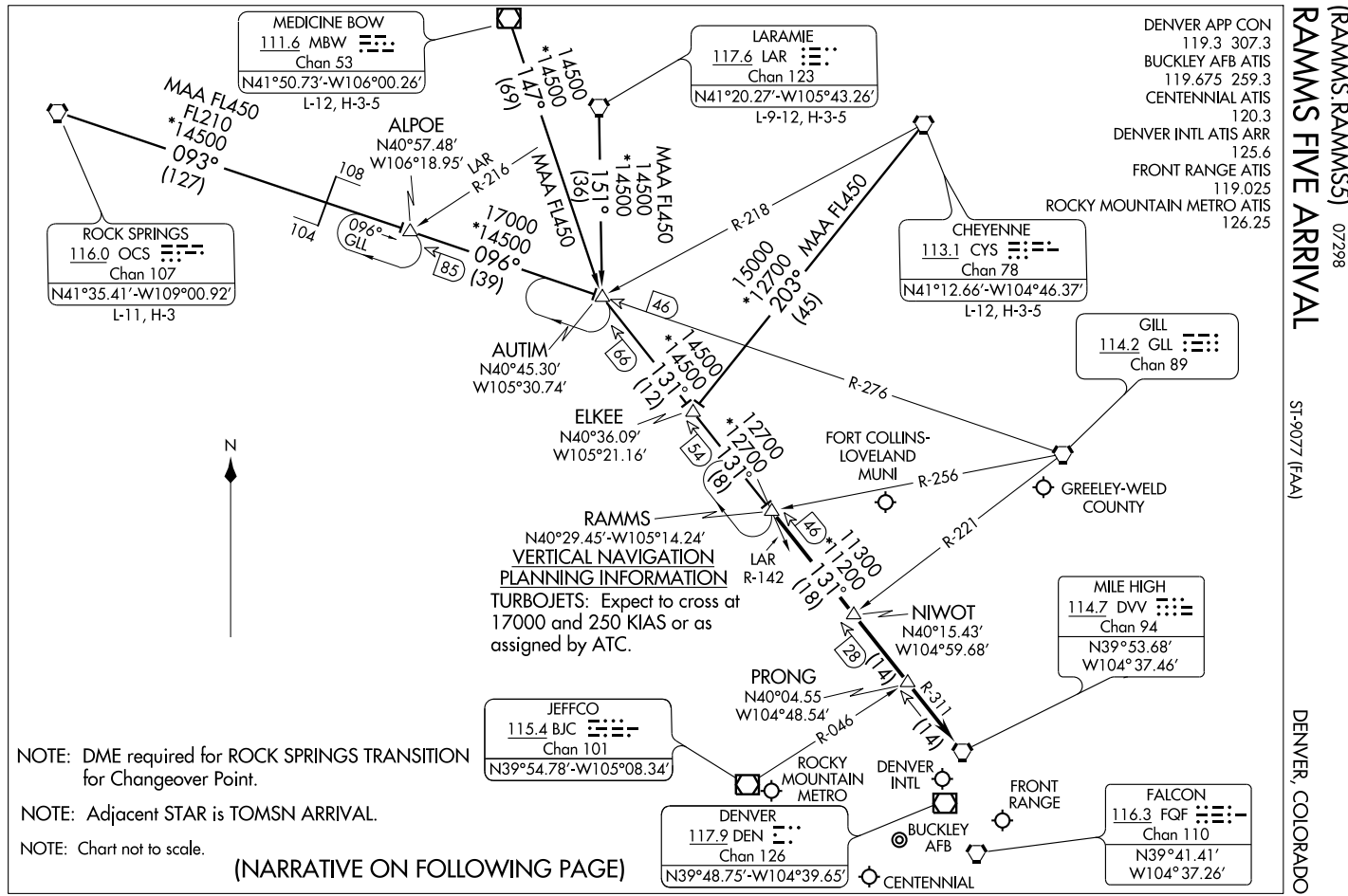
HUGO TRANSITION (HGO.QUAIL6): From over HGO VORTAC via HGO R-307 to CONAL INT; then via 306° course to QUAIL INT. Thence....

LAMAR TRANSITION (LAA.QUAIL6): From over LAA VORTAC via LAA R-299 to HYMNS INT; then via 298° course to HGO VORTAC; then via HGO R-307 to CONAL INT then via 306° course to to QUAIL INT. Thence....

TODDE TRANSITION (TODDE.QUAIL6): From over TODDE INT via HGO R-168 to HGO VORTAC; then via HGO R-307 to QUAIL INT. Thence....

....From over QUAIL INT via HGO R-307 and FQF R-127 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009


RAMMS FIVE ARRIVAL (RAMMS.RAMMS5) 07298
DENVER, COLORADO
ST-9077 (FAA)
DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
MEDICINE BOW
111.6 MBW
Chan 53
N41°50.73'-W106°00.26'
L-12, H-3-5
LARAMIE
117.6 LAR
Chan 123
N41°20.27'-W105°43.26'
L-9-12, H-3-5
ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41'-W109°00.92'
L-11, H-3
CHEYENNE
113.1 CYS
Chan 78
N41°12.66'-W104°46.37'
L-12, H-3-5
GILL
114.2 GLL
Chan 89
JEFFCO
115.4 BJC
Chan 101
N39°54.78'-W105°08.34'
DENVER
117.9 DEN
Chan 126
N39°48.75'-W104°39.65'
MILE HIGH
114.7 DVV
Chan 94
N39°53.68'
W104°37.46'
FALCON
116.3 FQF
Chan 110
N39°41.41'
W104°37.26'
ALPOE
N40°57.48'
W106°18.95'
AUTIM
N40°45.30'
W105°30.74'
ELKEE
N40°36.09'
W105°21.16'
RAMMS
N40°29.45'-W105°14.24'
NIWOT
N40°15.43'
W104°59.68'
PRONG
N40°04.55
W104°48.54'
FORT COLLINS-LOVELAND MUNI
GREELEY-WELD COUNTY
ROCKY MOUNTAIN METRO
DENVER INTL
FRONT RANGE
BUCKLEY AFB
CENTENNIAL
MAA FL450
FL210
*14500
093°
(127)
147°
(69)
*14500
14500
151°
(36)
14500
*14500
MAA FL450
R-218
MAA FL450
15000
*12700
203°
(45)
108
104
LAR
R-216
096°
GLL
17000
*14500
096°
(39)
85
46
66
14500
*14500
131°
(12)
R-276
54
12700
*12700
131°
(8)
R-256
R-221
46
11300
*11200
131°
(18)
LAR
R-142
28
(14)
R-311
(14)
R-046
VERTICAL NAVIGATION PLANNING INFORMATION
TURBOJETS: Expect to cross at 17000 and 250 KIAS or as assigned by ATC.
NOTE: DME required for ROCK SPRINGS TRANSITION for Changeover Point.
NOTE: Adjacent STAR is TOMSN ARRIVAL.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
N

ARRIVAL DESCRIPTION

CHEYENNE TRANSITION (CYS.RAMMS5): From over CYS VORTAC via CYS R-203 and DVV R-311 to RAMMS INT. Thence....

LARAMIE TRANSITION (LAR.RAMMS5): From over LAR VORTAC via LAR R-151 and DVV R-311 to RAMMS INT. Thence....

MEDICINE BOW TRANSITION (MBW.RAMMS5): From over MBW VOR/DME via MBW R-147 and DVV R-311 to RAMMS INT. Thence....

ROCK SPRINGS TRANSITION (OCS.RAMMS5): From over OCS VORTAC via OCS R-093 and GLL R-276 to AUTIM INT, then via DVV R-311 to RAMMS INT. Thence....

....From over RAMMS INT via DVV R-311 to DVV VORTAC. Expect radar vectors to the final approach course at or before DVV VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 62900 W09A	APP CRS 094°	Rwy Idg 5801 TDZE 4661 Apt Elev 4697

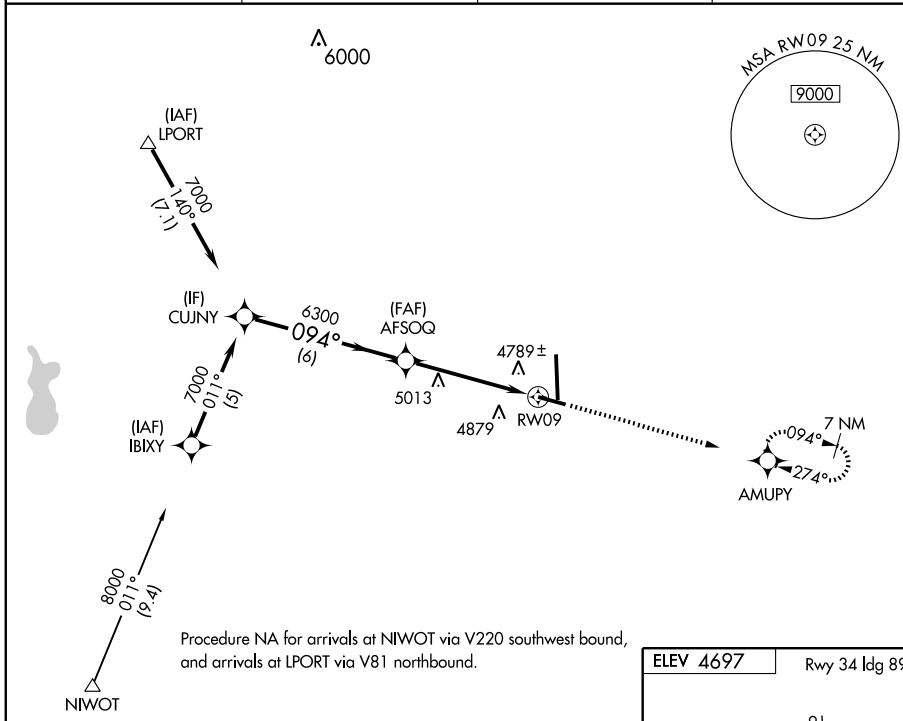
RNAV (GPS) RWY 9

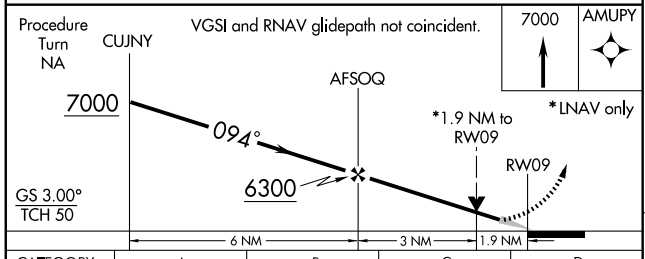
GREELEY-WELD COUNTY (GXY)

DME/DME RNP-0.3 NA.
Baro-VNAV NA below -24°C (-11°F).

MISSED APPROACH: Climb to 7000 direct AMUPY and hold.

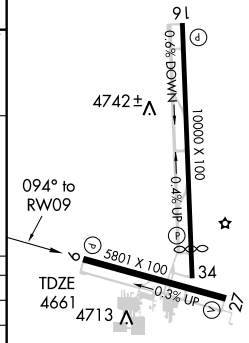
AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.175	134.85 251.125	126.65	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4911-¾ 250 (300-¾)			
LNAV/VNAV DA	5201-2 540 (600-2)			
LNAV MDA	5320-1 659 (700-1)		5320-1¾ 659 (700-1¾)	5320-2 659 (700-2)
CIRCLING	5320-2 623 (700-2)			

ELEV 4697 Rwy 34 ldg 8900′



REIL Rwys 9, 27, 16 and 34 L
MIRL Rwys 9-27 and 16-34 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10000
CH 72708	167°	TDZE	4697
W16A		Apt Elev	4697

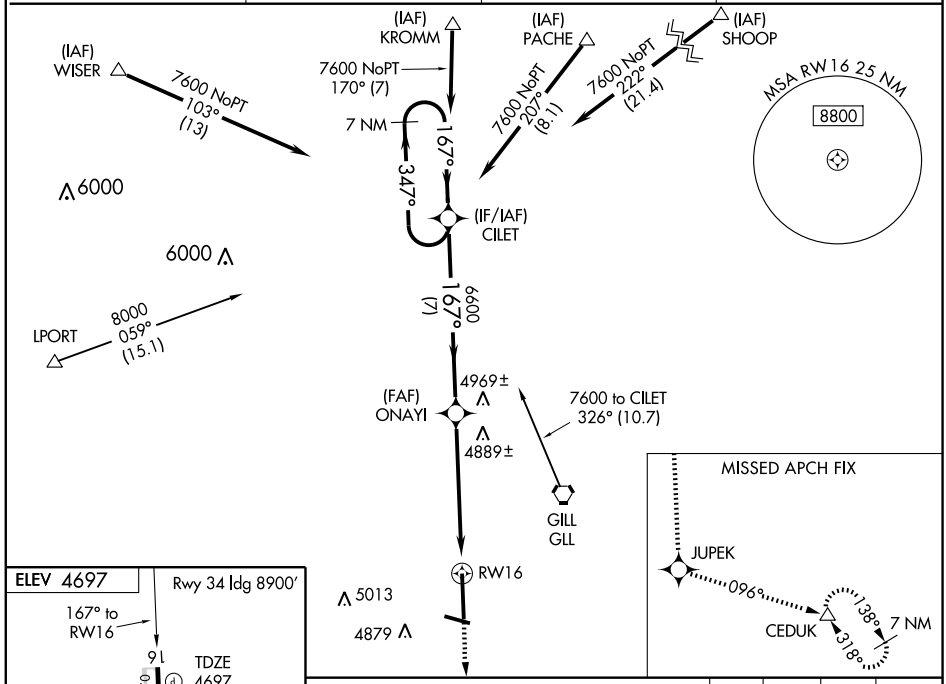
RNAV (GPS) RWY 16

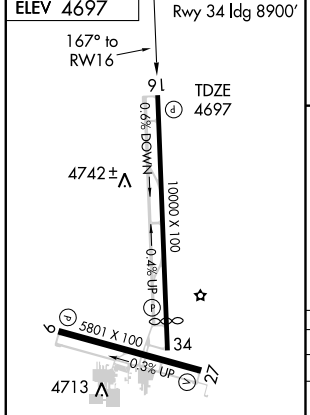
GREELEY-WELD COUNTY (GXY)

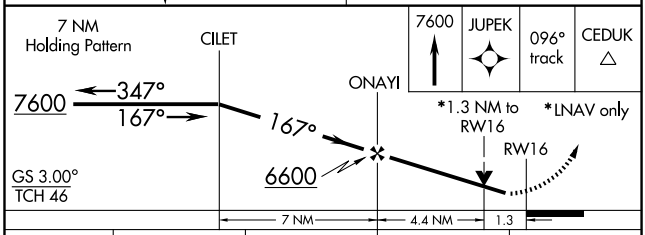
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F).
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
VDP and Baro-VNAV NA when using Fort Collins-Loveland Muni altimeter setting.
When local altimeter setting not received, use Fort Collins-Loveland Muni altimeter setting and increase LPV DA to 5063 feet and visibility all Cats ¼ mile. Increase LNAV/VNAV DA to 5207 and visibility all Cats ¼ mile. Increase all MDA 100 feet and LNAV visibility Cats C and D ¼ mile. Increase Circling visibility Cat C ¼ mile.

MISSED APPROACH: Climb to 7600 direct JUPEK and via 096° track to CEDUK and hold.

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.175	134.85 251.125	126.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	4978-1 281 (300-1)			
LNAV/VNAV DA	5122-1½ 425 (500-1½)			
LNAV MDA	5140-1 443 (500-1)		5140-1¼ 443 (500-1¼)	5140-1½ 443 (500-1½)
CIRCLING	5140-1 443 (500-1)	5160-1 463 (500-1)	5200-1½ 503 (600-1½)	5260-2 563 (600-2)

REIL Rwys 9, 16, 27 and 34 L
MIRL Rwys 9-27 and 16-34 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 86808 W27A	APP CRS 275°	Rwy Idg 5801 TDZE 4650 Apt Elev 4697

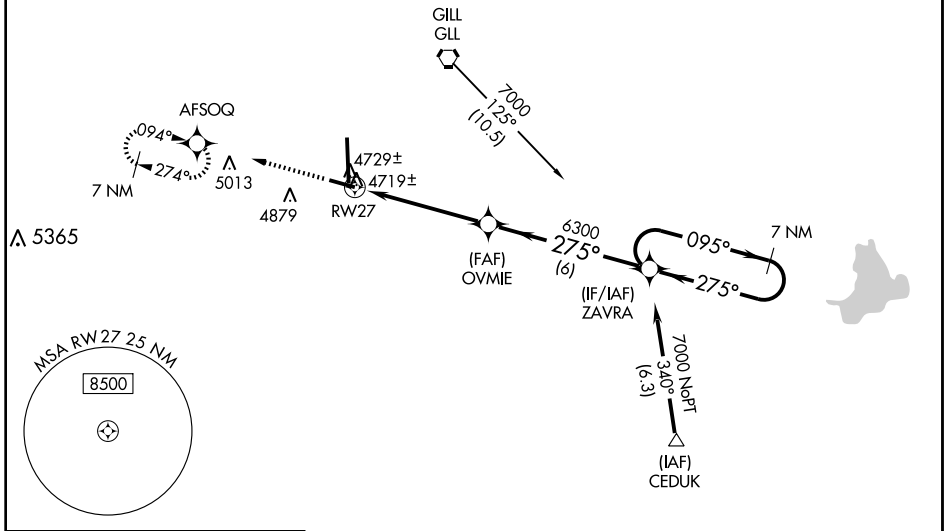
RNAV (GPS) RWY 27
GREELEY-WELD COUNTY (GXY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F). DME/DME RNP -0.3 NA.
VDP and Baro-VNAV NA when using Fort Collins-Loveland Muni altimeter setting.
When local altimeter setting not received, use Fort Collins-Loveland Muni altimeter setting and increase LPV DA to 4985 and visibility all Cats ½ mile. Increase LNAV/VNAV DA to 5074 and visibility all Cats ¼ mile. Increase all MDA 100 feet and LNAV visibility Cat C ¼ mile and Cat D ½ mile. Increase Circling Cat C visibility ¼ mile.

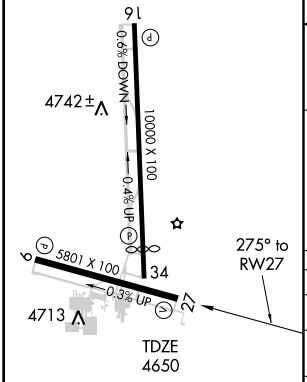
MISSED APPROACH: Climb to 8500 direct AFSOQ and hold, continue climb-in-hold to 8500.

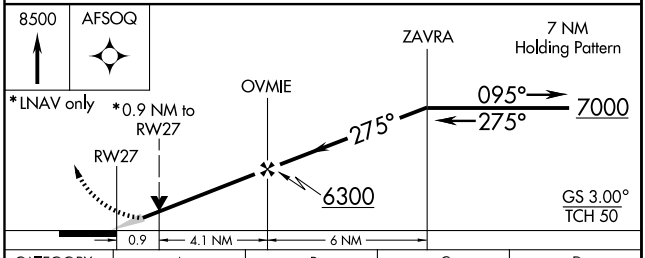
AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.175	134.85 251.125	126.65	122.8 (CTAF) L

Procedure NA for arrivals at GLL VORTAC via V220 west bound and V4 northwest bound.



ELEV 4697 Rwy 34 Idg 8900′





CATEGORY	A	B	C	D
LPV DA	4900-¾ 250 (300-¾)			
LNAV/VNAV DA	4989-1¼ 339 (300-1¼)			
LNAV MDA	4980-1 330 (300-1)			
CIRCLING	5120-1 423 (500-1)	5160-1 463 (500-1)	5200-1½ 503 (600-1½)	5260-2 563 (600-2)

REIL Rwys 9, 16, 27 and 34 L
MIRL Rwys 9-27 and 16-34 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	8900
CH 69607	347°	TDZE	4665
W34A		Apt Elev	4697

RNAV (GPS) RWY 34

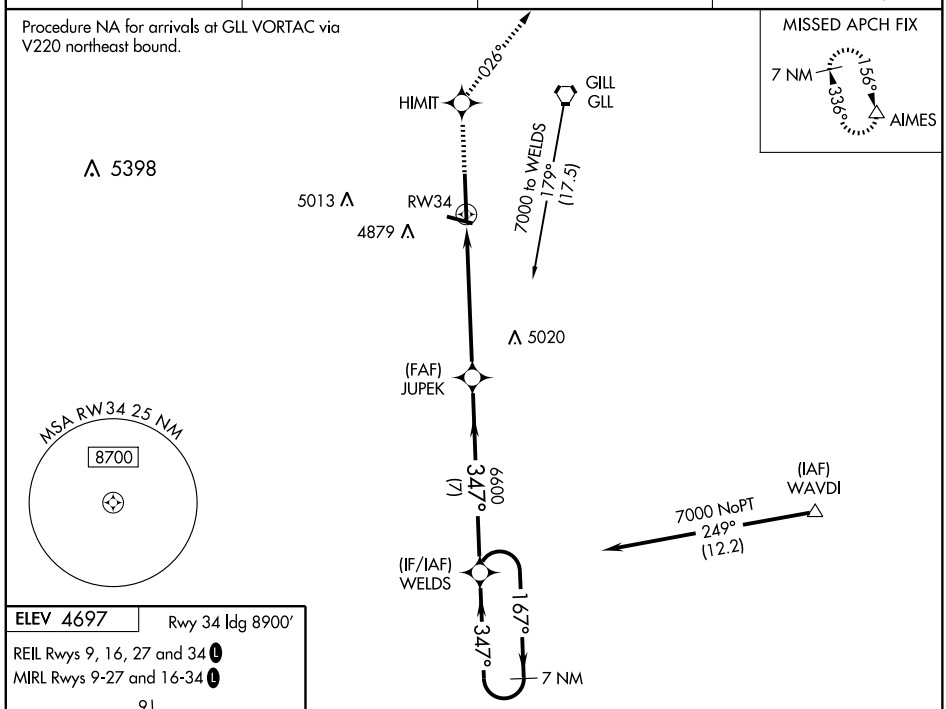
GREELEY-WELD COUNTY (GXY)

T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F). DME/DME RNP -0.3 NA. VDP and Baro-VNAV NA when using Fort Collins-Loveland Muni altimeter setting. When local altimeter setting not received, use Fort Collins-Loveland Muni altimeter setting and increase LPV DA to 5000 feet and visibility all Cats ¼ mile. Increase LNAV/VNAV DA to 5073 feet and visibility all Cats ¼ mile. Increase all MDA 100 feet and LNAV visibility Cats C and D ¼ mile. Increase Circling visibility Cat C ¼ mile.

MISSED APPROACH: Climb to 8000 direct HIMIT and via 026° track to AIMES and hold, continue climb-in-hold to 8000.

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.175	134.85 251.125	126.65	122.8 (CTAF) L

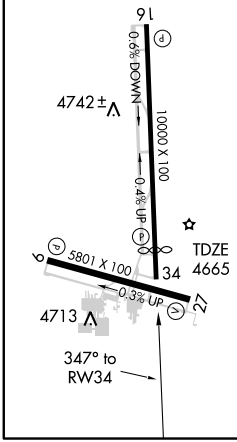
Procedure NA for arrivals at GLL VORTAC via V220 northeast bound.

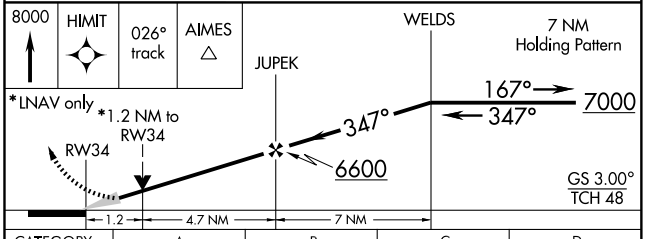


ELEV 4697 Rwy 34 Idg 8900′

REIL Rwys 9, 16, 27 and 34 L

MIRL Rwys 9-27 and 16-34 L





CATEGORY	A	B	C	D
LPV DA	4915-1 250 (300-1)			
LNAV/VNAV DA	4988-1¼ 323 (300-1¼)			
LNAV MDA	5100-1 435 (500-1)		5100-1¼ 435 (500-1¼)	5100-1½ 435 (500-1½)
CIRCLING	5120-1 423 (500-1)	5160-1 463 (500-1)	5200-1½ 503 (600-1½)	5260-2 563 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

ROCKIES SEVEN DEPARTURE

CLNC DEL
126.65
DENVER DEP CON
134.85 251.125

TAKE-OFF OBSTACLE NOTES

RWY 27: Tree 1634′ from DER, 836′ left of centerline, 56′ AGL/4717′ MSL.
Fence 237′ from DER, 422′ right of centerline, 9′ AGL/4670′ MSL.
Fence 99′ from DER, 423′ left of centerline, 4′ AGL/4665′ MSL.
RWY 34: Multiple trees beginning 1860′ from DER, 595′ right of centerline, up to 67′ AGL/4785′ MSL.
Tree 2854′ from DER, 524′ left of centerline, 73′ AGL/4770′ MSL.

KREMMLING
113.8 RLG
Chan 85
N40°00.16′-W106°26.55′
L-9-11, H-3-5

ZIMMR
N40°01.78′
W105°39.93′

MEEKER
115.2 EKR
Chan 99
N40°04.05′-W107°55.49′
L-9-11, H-3

R-078
16000
260°
(68)

R-073
16000
253°
(36)

16000
275°
(48)

CONNR
N39°41.94′
W105°39.95′

16300
251°
(47)

R-344

R-148

RIFLE
110.6 RIL
Chan 43
N39°31.69′ - W107°42.98′

16500
242°
(59)

FL 200
240°
(47)

DENVER
117.9 DEN
Chan 126
N39°48.75′-W104°39.65′

R-062

FL 200
240°
(28)

BAYLR
N39°33.20′
W105°37.10′

75

N

R-134

RED TABLE
113.0 DBL
Chan 77
N39°26.36′-W106°53.68′
L-9, H-3

TEHRU
N39°14.56′
W106°43.25′

FL 280
240°
(27)

102

BOBBA
N39°23.70′
W106°11.17′

FL 280
219°
(71)

FL 200
201°
(69)

NOTE: DME required for RED TABLE, KREMMLING, and MEEKER TRANSITIONS.

NOTE: RADAR required.

TAKE-OFF MINIMUMS
All runways standard.

DOVE CREEK
114.6 DVC
Chan 93
N37°48.52′-W108°55.88′
L-9, H-3

R-039

R-021

BLUE MESA
114.9 HBU
Chan 96
N38°27.13′-W107°02.39′
L-9, H-3

FL 280
218°
(64)

MONTROSE
117.1 MTJ
Chan 118
N38°30.39′-W107°53.96′
L-9, H-3

R-035

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

ROCKIES SEVEN DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

BLUE MESA (HI) TRANSITION (ROCKI7.HBU): From over DEN VOR/DME via DEN R-240 and HBU R-021 to HBU VOR/DME.

DOVE CREEK (HI) TRANSITION (ROCKI7.DVC): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME, then via MTJ R-218 and DVC R-035 to DVC VORTAC.

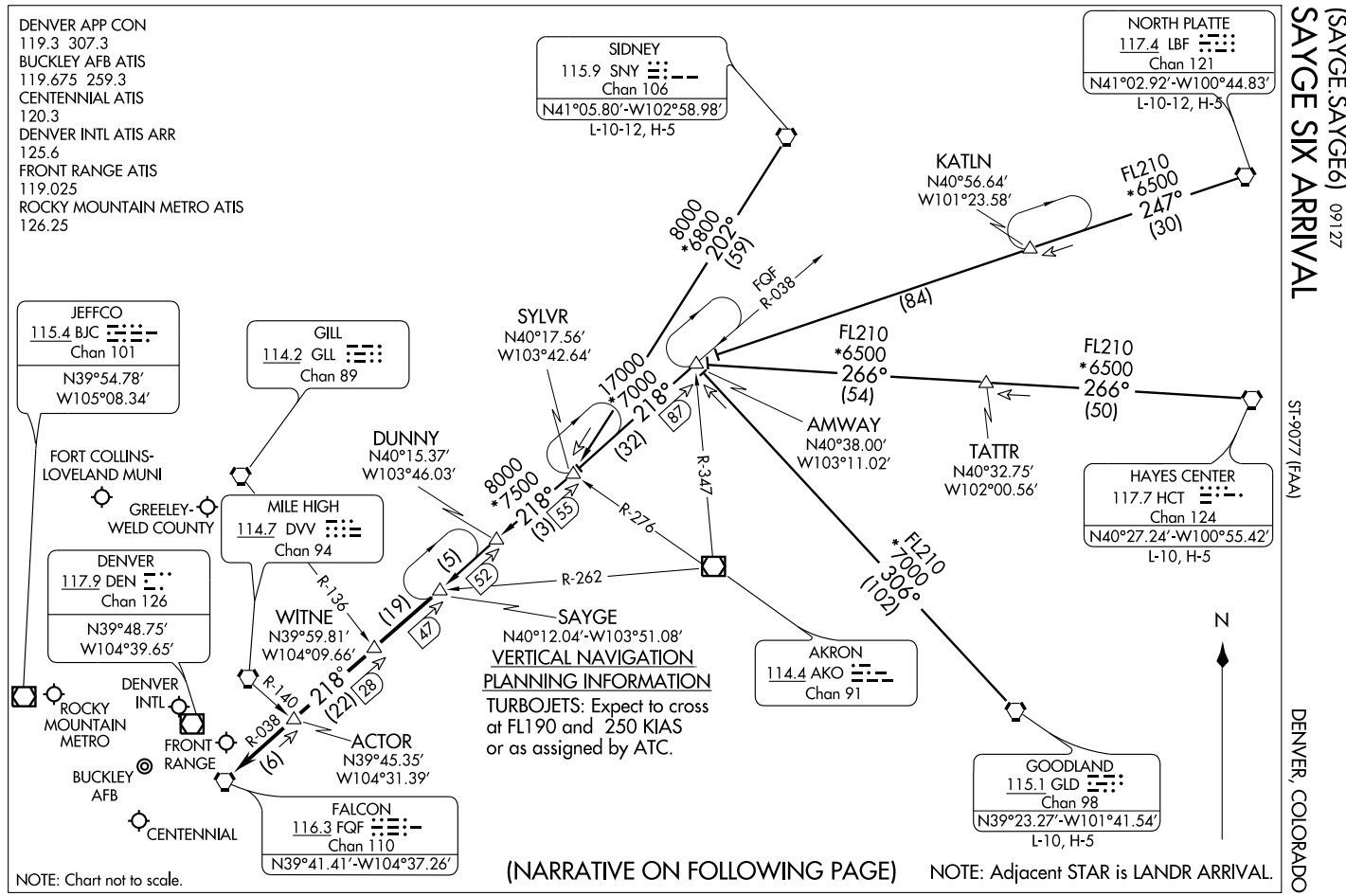
KREMMLING TRANSITION (ROCKI7.RLG): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME.

MEEKER TRANSITION (ROCKI7.EKR): From over DEN VOR/DME via DEN R-275 and RLG R-073 to RLG VOR/DME, then via RLG R-260 and EKR R-078 to EKR VOR/DME.

MONTROSE TRANSITION (ROCKI7.MTJ): From over DEN VOR/DME via DEN R-240 and MTJ R-039 to MTJ VOR/DME.

RED TABLE TRANSITION (ROCKI7.DBL): From over DEN VOR/DME via DEN R-251 and DBL R-062 to DBL VOR/DME.

SW-1, 22 OCT 2009 to 19 NOV 2009


DENVER APP CON
119.3 307.3
BUCKLEY AFB ATIS
119.675 259.3
CENTENNIAL ATIS
120.3
DENVER INTL ATIS ARR
125.6
FRONT RANGE ATIS
119.025
ROCKY MOUNTAIN METRO ATIS
126.25
SIDNEY
115.9 SNY
Chan 106
N41°05.80'-W102°58.98'
L-10-12, H-5
NORTH PLATTE
117.4 LBF
Chan 121
N41°02.92'-W100°44.83'
L-10-12, H-5
KATLN
N40°56.64'
W101°23.58'
8000
*6800
202°
(59)
FQF
R-038
(84)
FL210
*6500
247°
(30)
SYLVR
N40°17.56'
W103°42.64'
17000
*7000
218°
(32)
87
FL210
*6500
266°
(54)
FL210
*6500
266°
(50)
AMWAY
N40°38.00'
W103°11.02'
TATTR
N40°32.75'
W102°00.56'
HAYES CENTER
117.7 HCT
Chan 124
N40°27.24'-W100°55.42'
L-10, H-5
JEFFCO
115.4 BJC
Chan 101
N39°54.78'
W105°08.34'
GILL
114.2 GLL
Chan 89
FORT COLLINS-
LOVELAND MUNI
GREELEY-
WELD COUNTY
MILE HIGH
114.7 DVV
Chan 94
DUNNY
N40°15.37'
W103°46.03'
8000
*7500
218°
(3)
55
R-347
R-276
R-262
(5)
52
DENVER
117.9 DEN
Chan 126
N39°48.75'
W104°39.65'
R-136
WITNE
N39°59.81'
W104°09.66'
(19)
47
SAYGE
N40°12.04'-W103°51.08'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS: Expect to cross
at FL190 and 250 KIAS
or as assigned by ATC.
FL210
*7000
306°
(102)
AKRON
114.4 AKO
Chan 91
N
DENVER
INTL
ROCKY
MOUNTAIN
METRO
FRONT
RANGE
R-140
218°
(22)
28
R-038
(6)
ACTOR
N39°45.35'
W104°31.39'
BUCKLEY
AFB
CENTENNIAL
FALCON
116.3 FQF
Chan 110
N39°41.41'-W104°37.26'
GOODLAND
115.1 GLD
Chan 98
N39°23.27'-W101°41.54'
L-10, H-5
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Adjacent STAR is LANDR ARRIVAL.
(SAYGE.SAYGE6) 09127
SAYGE SIX ARRIVAL
ST-9077 (FAA)
DENVER, COLORADO

SAYGE SIX ARRIVAL

ARRIVAL DESCRIPTION

GOODLAND TRANSITION (GLD.SAYGE6): From over GLD VORTAC via GLD R-306 and FQF R-038 to SAYGE INT. Thence....

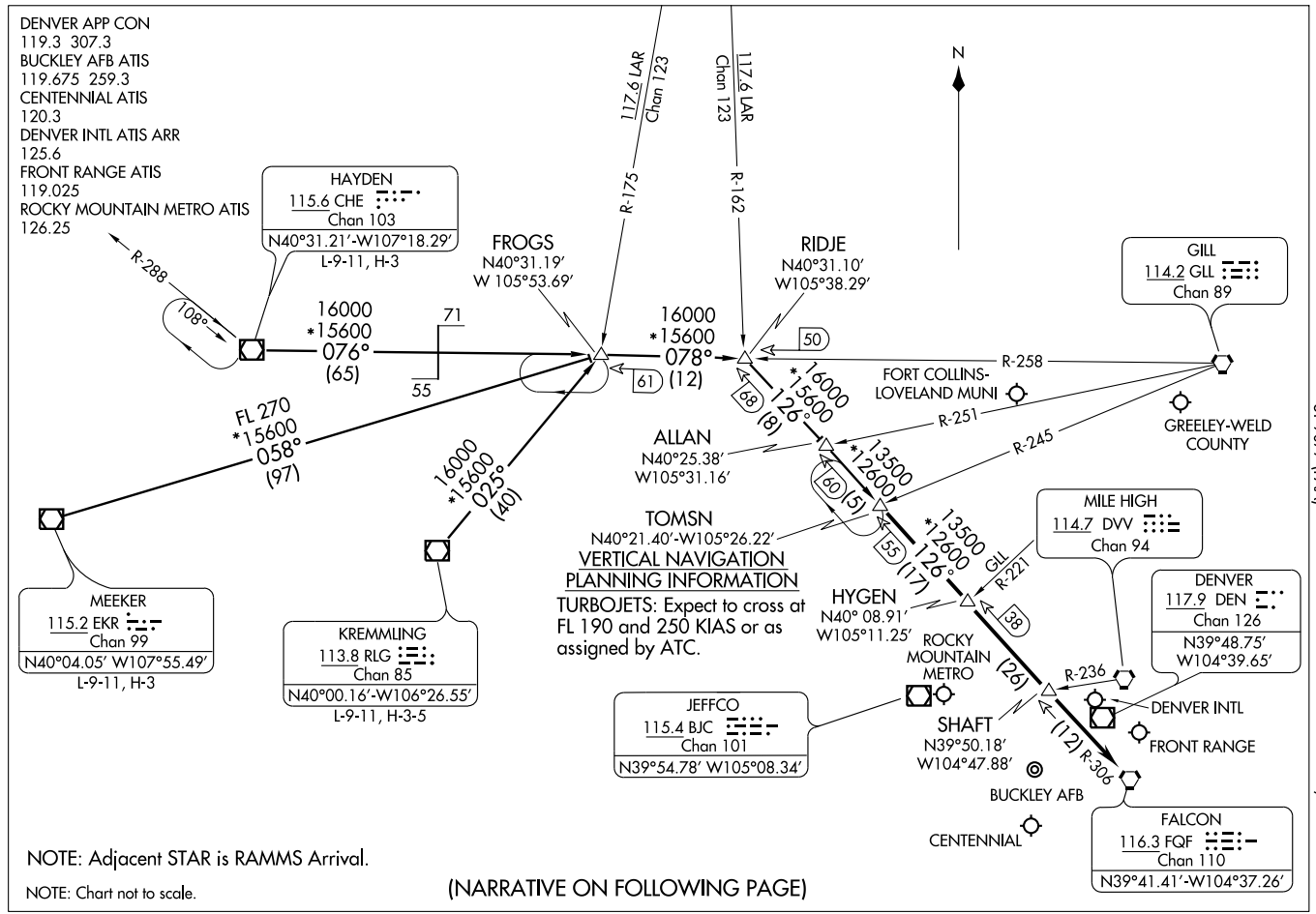
HAYES CENTER TRANSITION (HCT.SAYGE6): From over HCT VORTAC via HCT R-266 and FQF R-038 to SAYGE INT. Thence....

NORTH PLATTE TRANSITION (LBF.SAYGE6): From over LBF VORTAC via LBF R-247 and FQF R-038 to SAYGE INT. Thence....

SIDNEY TRANSITION (SNY.SAYGE6): From over SNY VORTAC via SNY R-202 and FQF R-038 to SAYGE INT. Thence....

....From over SAYGE INT via FQF R-038 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009



(TOMSN.TOMSN4) 07298

TOMSN FOUR ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO

TOMSN FOUR ARRIVAL

ARRIVAL DESCRIPTION

HAYDEN TRANSITION (CHE.TOMSN4): From over CHE VOR/DME via CHE R-076 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

KREMMLING TRANSITION (RLG.TOMSN4): From over RLG VOR/DME via RLG R-025 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

MEEKER TRANSITION (EKR.TOMSN4): From over EKR VOR/DME via EKR R-058 and GLL R-258 to RIDJE INT; then via FQF R-306 to TOMSN INT. Thence....

....From over TOMSN INT via FQF R-306 to FQF VORTAC. Expect radar vectors to the final approach course at or before FQF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC GLL 114.2 Chan 89	APP CRS 205°	Rwy Idg N/A TDZE N/A Apt Elev 4697

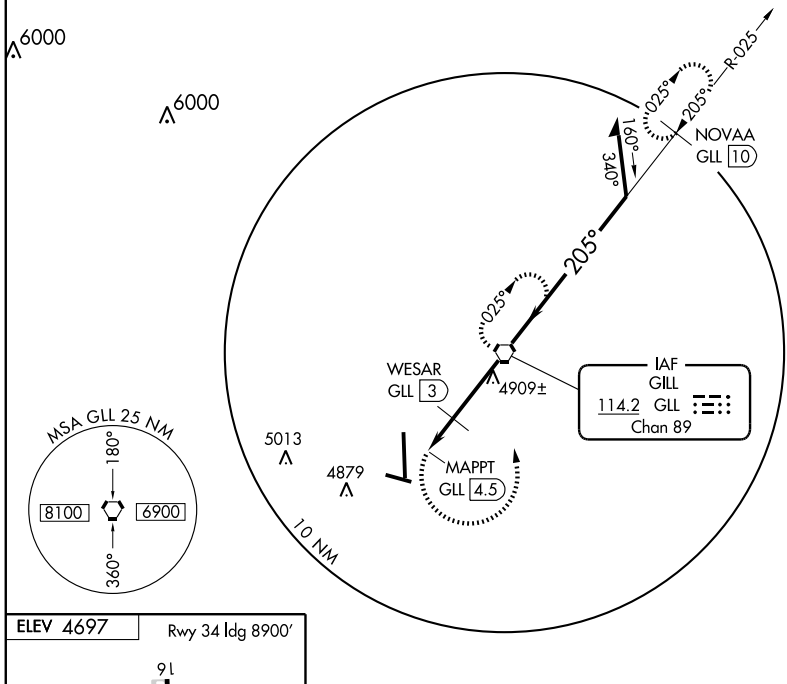
VOR or TACAN-A

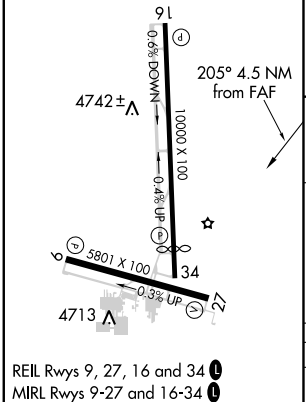
GREELEY-WELD COUNTY (GXY)

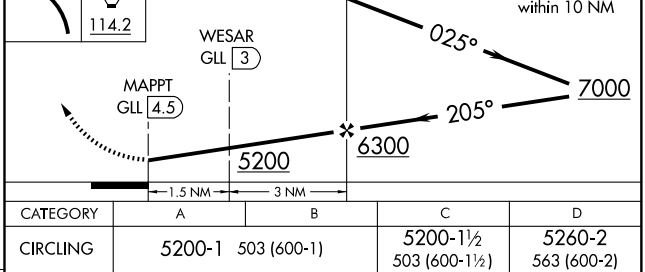
When local altimeter setting not received, use Fort Collins-Loveland Muni altimeter setting and increase all MDA 100 feet. Increase Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 7000 direct GLL VORTAC and hold, continue climb-in-hold to 7000. (TACAN Aircraft continue via GLL R-025 to NOVAA/10 DME and hold NE, right turns, 205° inbound.)

AWOS-3	DENVER APP CON	CLNC DEL	UNICOM
135.175	134.85 251.125	126.65	122.8 (CTAF) L







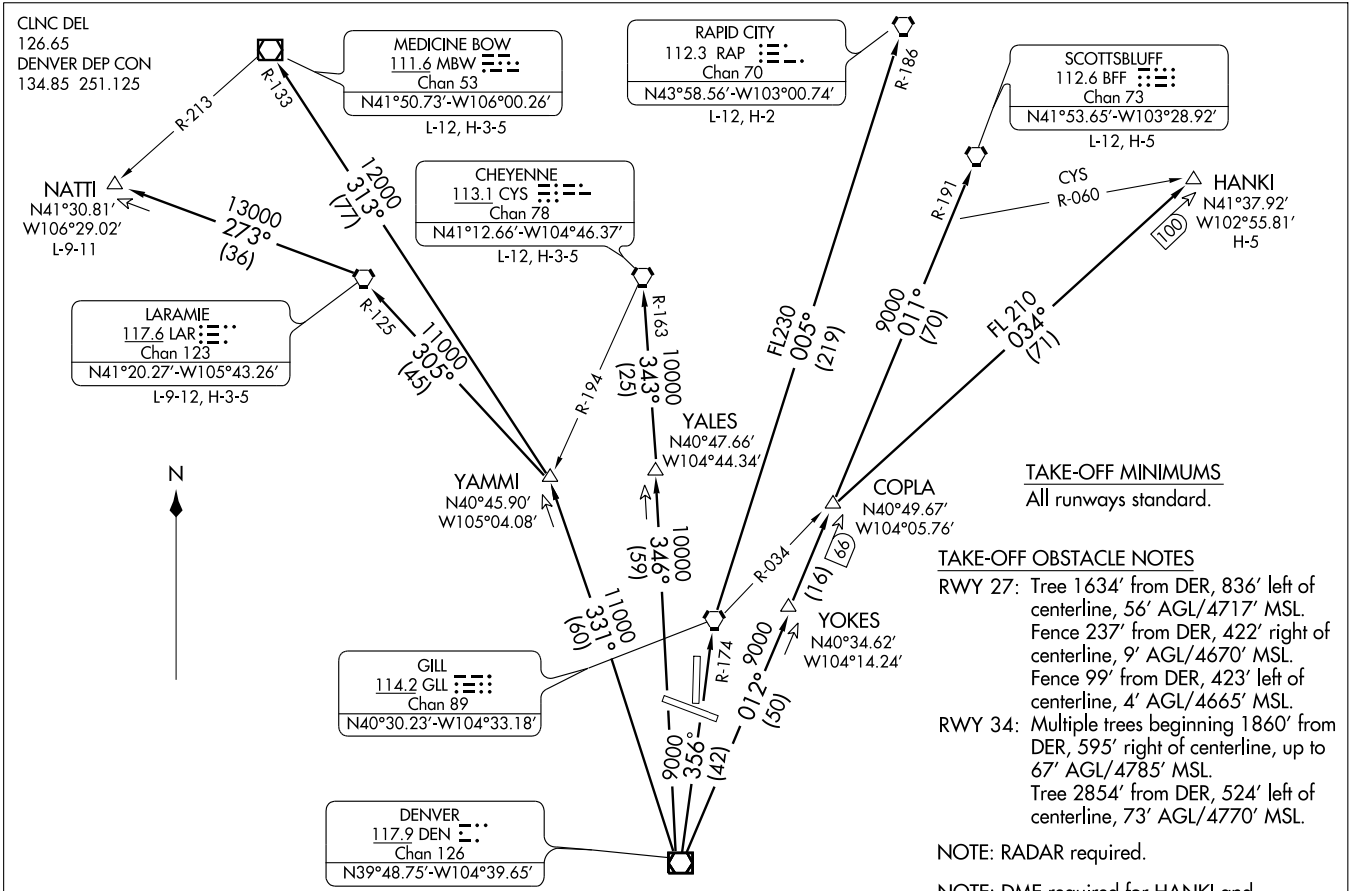
REIL Rwys 9, 27, 16 and 34 L
MIRL Rwys 9-27 and 16-34 L

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

CATEGORY	A	B	C	D
CIRCLING	5200-1	503 (600-1)	5200-1½ 503 (600-1½)	5260-2 563 (600-2)
	WESAR FIX MINIMUMS			
CIRCLING	5120-1 423 (500-1)	5160-1 463 (500-1)	5200-1½ 503 (600-1½)	5260-2 563 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

YELLOWSTONE SIX DEPARTURE



TAKE-OFF MINIMUMS

All runways standard.

TAKE-OFF OBSTACLE NOTES

RWY 27: Tree 1634' from DER, 836' left of centerline, 56' AGL/4717' MSL.
Fence 237' from DER, 422' right of centerline, 9' AGL/4670' MSL.
Fence 99' from DER, 423' left of centerline, 4' AGL/4665' MSL.

RWY 34: Multiple trees beginning 1860' from DER, 595' right of centerline, up to 67' AGL/4785' MSL.
Tree 2854' from DER, 524' left of centerline, 73' AGL/4770' MSL.

NOTE: RADAR required.

NOTE: DME required for HANKI and CHEYENNE transition.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

GREELEY-WELD COUNTY (GXY)
GREELEY, COLORADO

YELLOWSTONE SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly assigned heading and altitude for radar vectors to assigned transition.
Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, maintain assigned heading until 7000 feet, then climb to filed altitude via direct DEN VOR/DME, thence via assigned transition. If filed altitude is above 10000 feet, cross DEN VOR/DME at or above 11000 feet.

CHEYENNE TRANSITION (YELLO6.CYS): From over DEN VOR/DME via DEN R-346 and CYS R-163 to CYS VORTAC.

HANKI TRANSITION (YELLO6.HANKI): From over DEN VOR/DME via DEN R-012 and GLL R-034 to HANKI INT.

LARAMIE TRANSITION (YELLO6.LAR): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC.

MEDICINE BOW TRANSITION (YELLO6.MBW): From over DEN VOR/DME via DEN R-331 and MBW R-133 to MBW VOR/DME.

NATTI TRANSITION (YELLO6.NATTI): From over DEN VOR/DME via DEN R-331 and LAR R-125 to LAR VORTAC, then via LAR R-273 to NATTI INT.

RAPID CITY TRANSITION (YELLO6.RAP): From over DEN VOR/DME via DEN R-356 and GLL R-174 to GLL VORTAC, then via GLL R-005 and RAP R-186 to RAP VORTAC.

SCOTTSBLUFF TRANSITION (YELLO6.BFF): From over DEN VOR/DME via DEN R-012 and BFF R-191 to BFF VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
245°	TDZE	N/A
	Apt Elev	7680

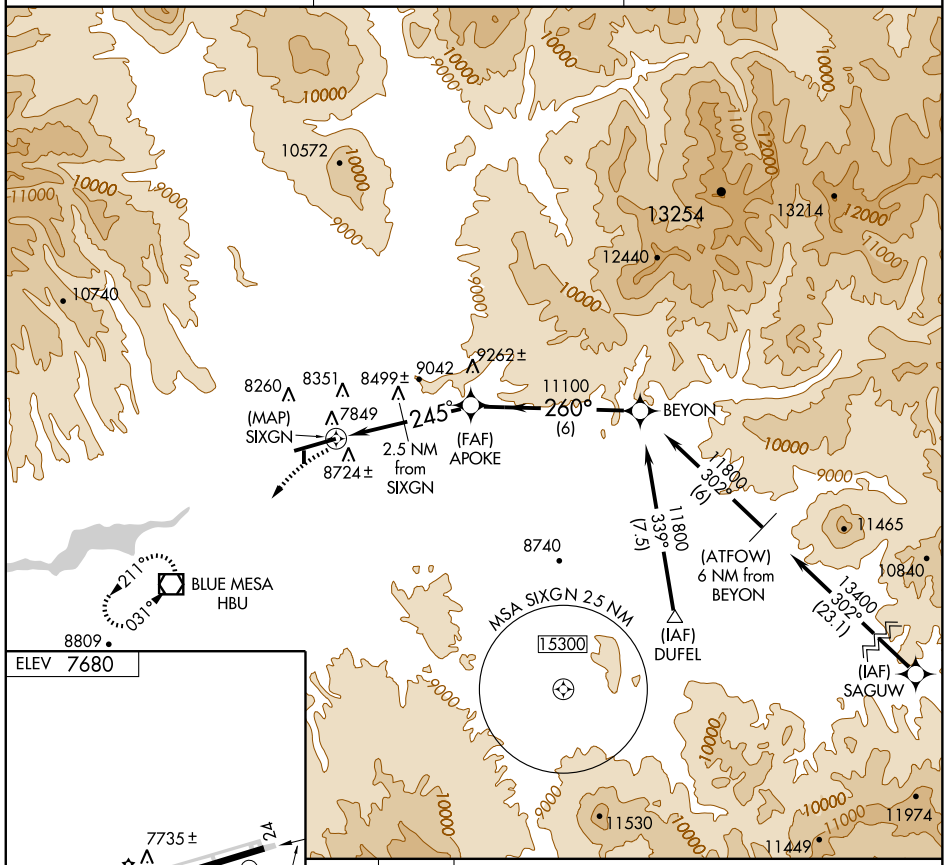
GPS-B

GUNNISON-CRESTED BUTTE RGNL (GUC)

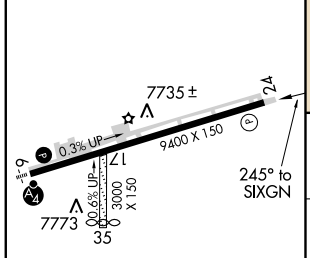
T NA — Procedure not authorized when airport closed except by prior arrangement. DME/DME RNP- 0.3 NA.

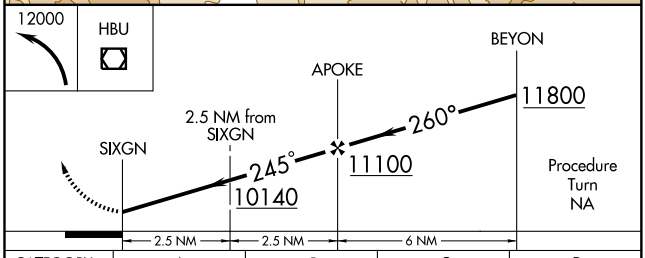
MISSED APPROACH: Climbing left turn to 12000 direct HBU VOR/DME and hold.

AWOS-3	DENVER CENTER	UNICOM
135.075	125.35 354.05	122.7 (CTAF) L



ELEV 7680





CATEGORY	A	B	C	D
CIRCLING	9180-1¼ 1500 (1500-1¼)	9180-1½ 1500 (1500-1½)	9180-3 1500 (1500-3)	

HIRL Rwy 6-24
REIL Rwy 24

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-GUC	APP CRS	Rwy Idg	9400
110.5	062°	TDZE	7667
Chan 42		Apt Elev	7680

ILS or LOC RWY 6

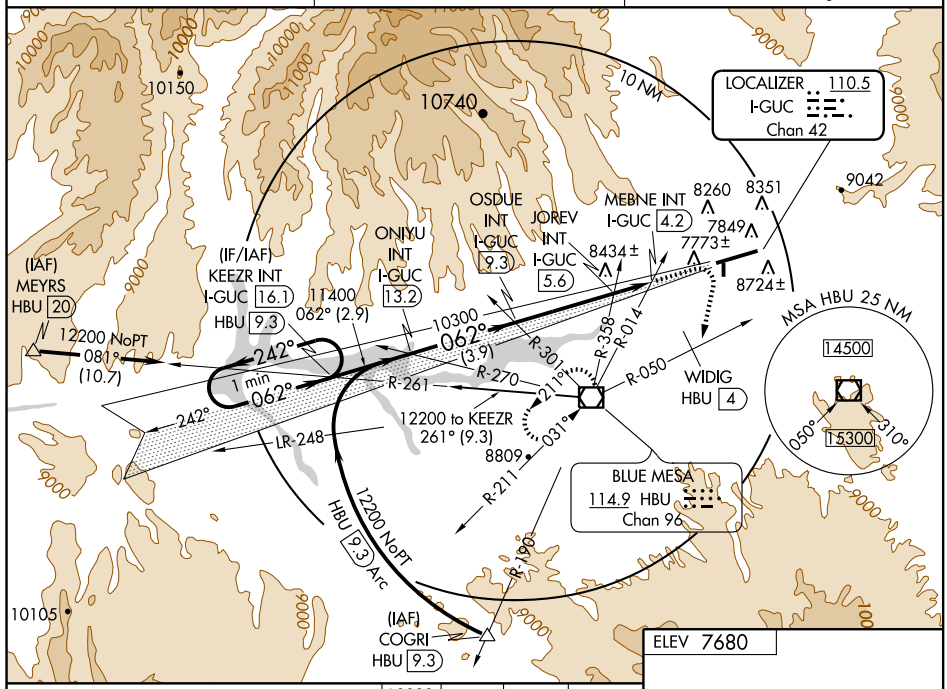
GUNNISON-CRESTED BUTTE RGNL (GUC)

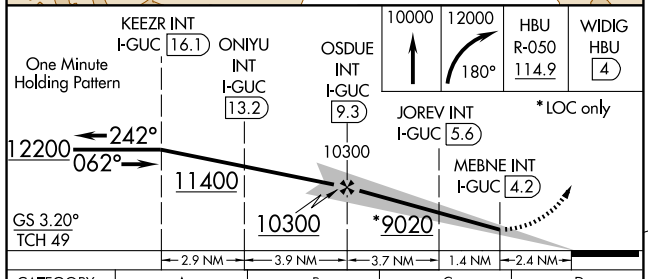
Circling NA at night. Inoperative table does not apply. When local altimeter setting not received, procedure NA. DME required. Visibility reduction by helicopters NA. Procedure NA when airport closed except by prior arrangement.

MALSF

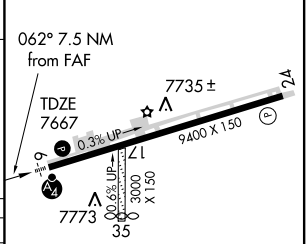
MISSED APPROACH: Climb to 10000 then climbing right turn to 12000 via heading 180° and HBU VOR/DME R-050 to WIDIG/HBU 4 DME continue via HBU VOR/DME R-050 to HBU VOR/DME and hold.

AWOS-3	DENVER CENTER	UNICOM
135.075	125.35 354.05	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-ILS 6	8590-3 923 (1000-3)			NA
S-LOC 6	9020-3 1353 (1400-3)			
CIRCLING	9260-3 1580 (1600-3)			
JOREV FIX MINIMUMS				
S-LOC 6	8640-3 973 (1000-3)			
CIRCLING	9260-3 1580 (1600-3)			



HIRL Rwy 6-24
REIL Rwy 24

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9400
061°	TDZE	7667
	Apt Elev	7680

RNAV (RNP) RWY 6

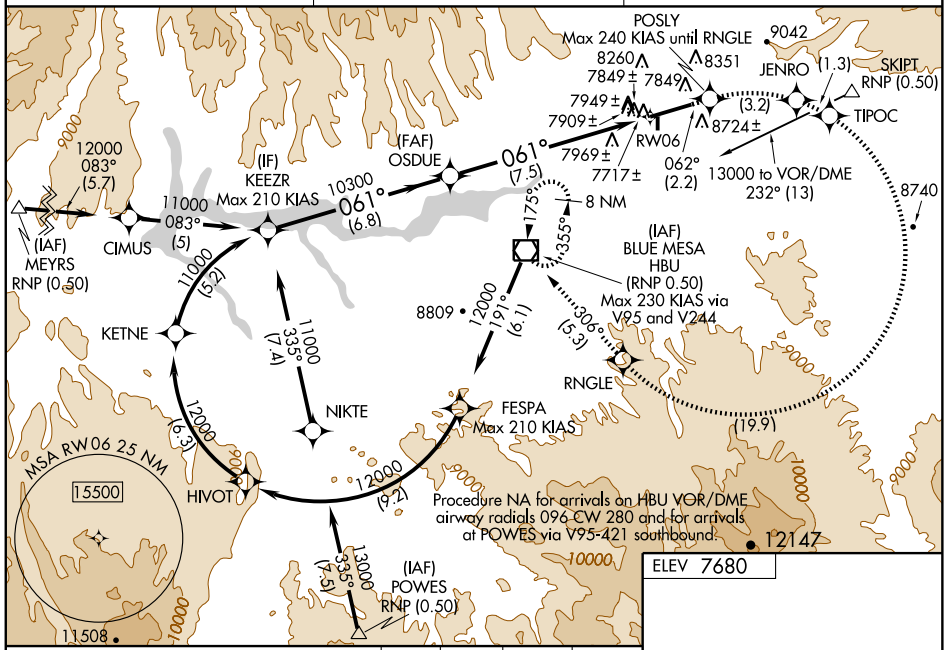
GUNNISON-CRESTED BUTTE RGNL (GUC)

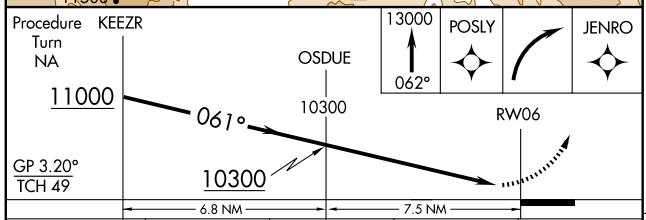
RF and GPS required. When local altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, procedure NA below -29°C (-20°F) or above 54°C (130°F). When VGSI inoperative, procedure NA at night. Visibility reduction by helicopters NA. Missed approach requires RNP less than 1.0.
* Missed approach requires minimum climb of 310 feet per NM to 9000.
** Missed approach requires minimum climb of 260 feet per NM to 9000.
*** Missed approach requires minimum climb of 230 feet per NM to 9000.
For inoperative MALSF, increase RNP 0.11* visibility to 1½, RNP 0.20** to 1¾ , RNP 0.26*** to 2, and RNP 0.30 to 2¼.

MALSF

MISSED APPROACH: (Do not exceed 240 KIAS until RNGLE) Climb to 13000 via track 062° to POSLY, and via right turn to JENRO, and via right turn to TIPOC, and via right turn to RNGLE, and via track 306° to HBU VOR/DME and hold.

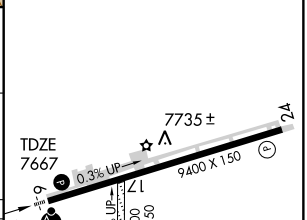
AWOS-3	DENVER CENTER	UNICOM
135.075	125.35 354.05	122.7 (CTAF) L





CATEGORY	A	B	C	D
RNP 0.11 DA*	NA	8125-1¼	458 (500-1¼)	NA
RNP 0.20 DA**	NA	8219-1½	552 (600-1½)	NA
RNP 0.26 DA***	NA	8294-1¾	627 (700-1¾)	NA
RNP 0.30 DA	NA	8354-2	687 (700-2)	NA

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED



HIRL Rwy 6-24
REIL Rwy 24

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME HBU	APP CRS	Rwy Idg	N/A
114.9	031°	TDZE	N/A
Chan 96		Apt Elev	7680

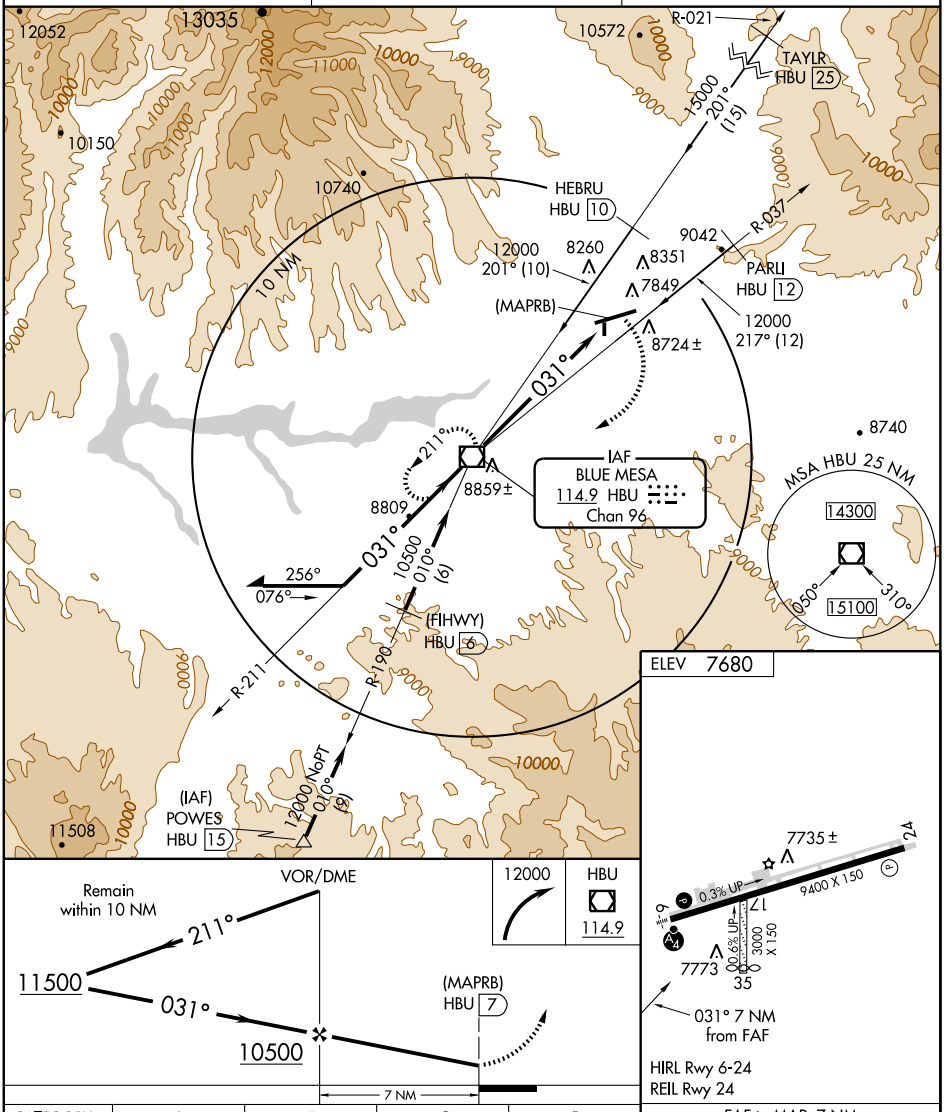
VOR or GPS-A

GUNNISON-CRESTED BUTTE RGNL (GUC)

Procedure NA when airport closed except by prior arrangement.
Obtain local altimeter setting on CTAF; when not received, procedure NA.

MISSED APPROACH: Climbing right turn to 12000 direct HBU VOR/DME and hold.

AWOS-3	DENVER CENTER	UNICOM
135.075	125.35 354.05	122.7 (CTAF)



CATEGORY	A	B	C	D
CIRCLING	9260-2 1580 (1600-2)	9340-2 1660 (1700-2)	9340-3 1660 (1700-3)	9900-3 2220 (2300-3)

FAF to MAP 7 NM					
Knots	60	90	120	150	180
Min:Sec	7:00	4:40	3:30	2:48	2:20

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-HDN	APP CRS	Rwy Idg	9490
109.9	101°	TDZE	6587
Chan 36		Apt Elev	6602

ILS or LOC/DME Y RWY 10

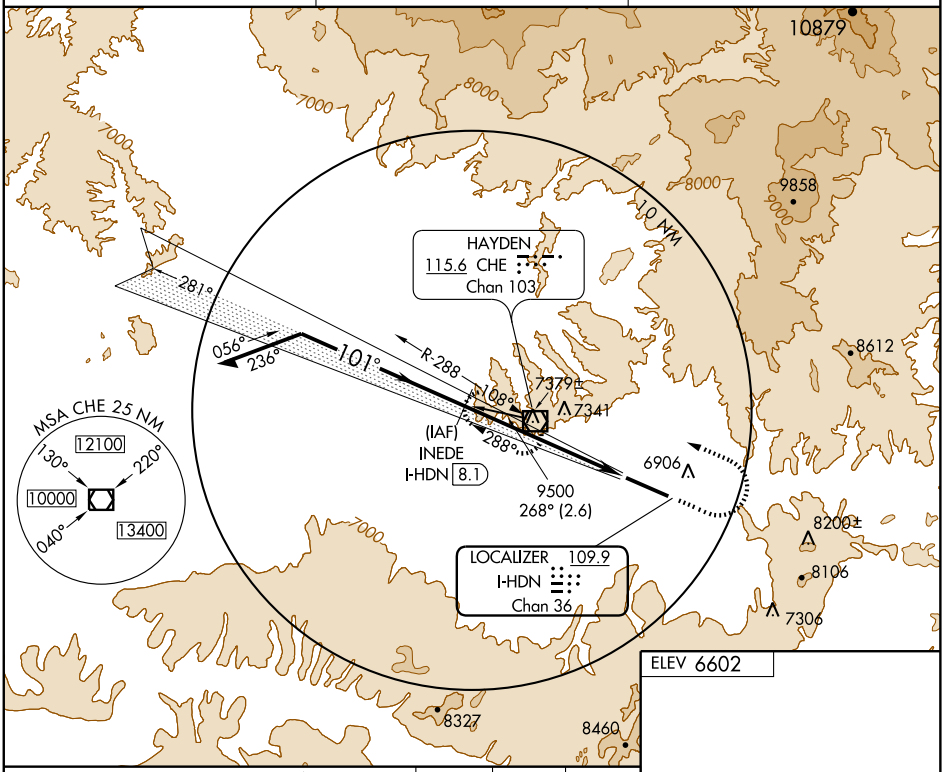
HAYDEN/ YAMPA VALLEY (HDN)

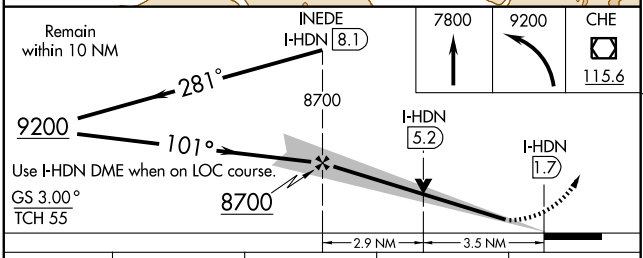
T A Inoperative table does not apply.

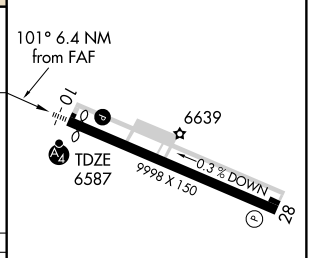
MALSF

MISSED APPROACH: Climb to 7800 then climbing left turn to 9200 direct CHE VOR/DME and hold.

AWOS-3	DENVER CENTER	UNICOM
119.275	120.475 235.975	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 10	7047-1½ 460 (500-1½)			
S-LOC 10	7740-1¼ 1153 (1200-1¼)	7740-1½ 1153 (1200-1½)	7740-3 1153 (1200-3)	
CIRCLING	7740-1½ 1138 (1200-1½)		7740-3 1138 (1200-3)	

REIL Rwy 28 L
HIRL Rwy 10-28 L

SW-1, 22 OCT 2009 to 19 NOV 2009

HAYDEN, COLORADO

AL-5983 (FAA)

APP CRS	Rwy Idg	9998
296°	TDZE	6602
	Apt Elev	6602

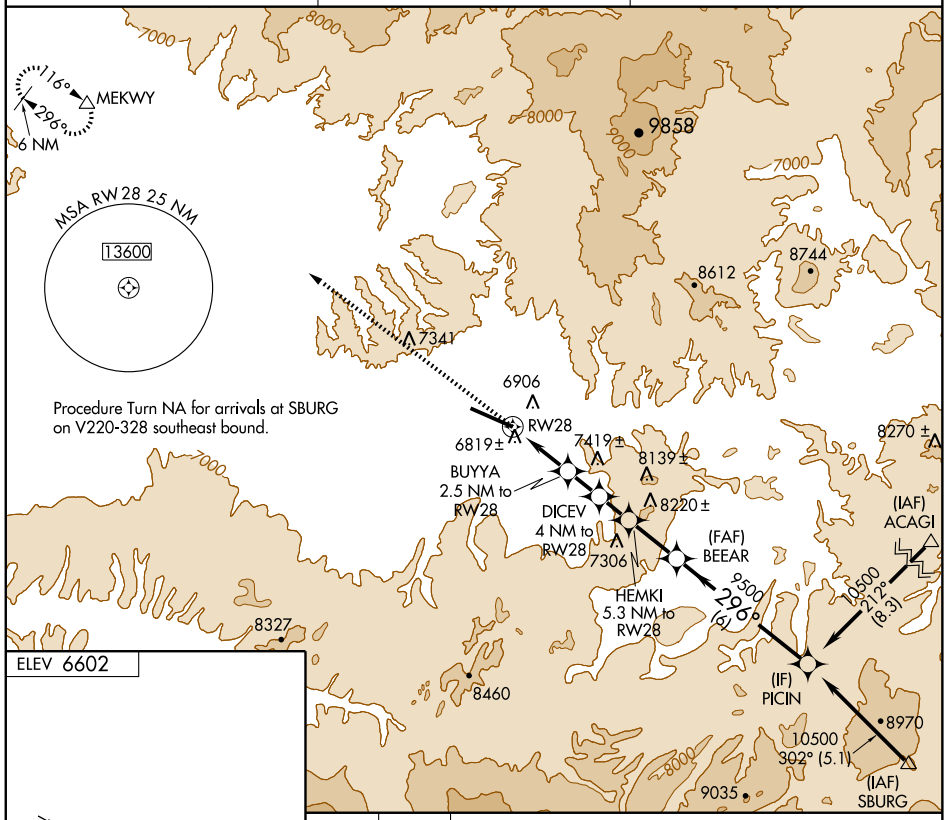
RNAV (GPS) RWY 28

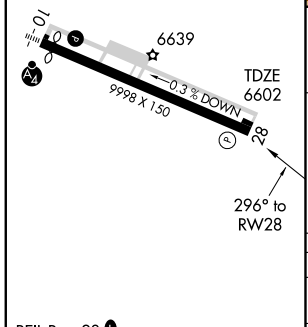
HAYDEN/ YAMPA VALLEY (HDN)

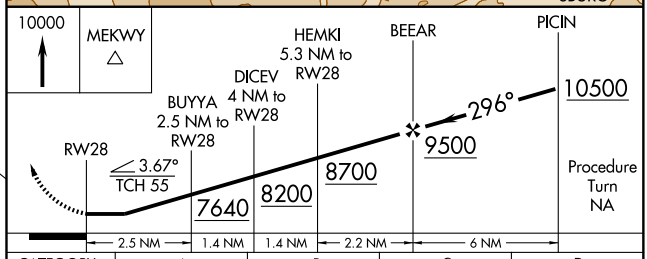
NA — GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Straight in minimums NA at night.

MISSED APPROACH: Climb to 10000 direct MEKWY WP and hold.

AWOS-3	DENVER CENTER	UNICOM
119.275	120.475 235.975	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7140-1 538 (600-1)		7140-1½ 538 (600-1½)	NA
CIRCLING	7220-1 618 (700-1)		7220-1¾ 618 (700-1¾)	7320-2¼ 718 (800-2¼)

REIL Rwy 28 L
HIRL Rwy 10-28 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	9490
CH 53410	101°	TDZE	6587
W10A		Apt Elev	6602

RNAV (GPS) Y RWY 10

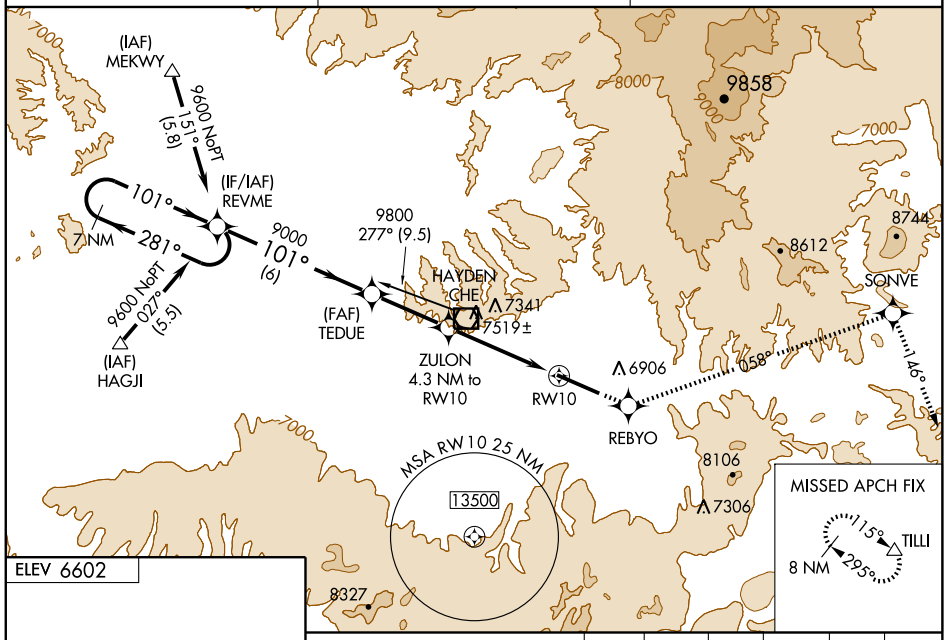
HAYDEN/ YAMPA VALLEY (HDN)

T Inoperative table does not apply. DME/DME RNP-0.3 NA.
A Baro-VNAV NA when using Craig-Moffat altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C (-18°F) or above 36°C (96°F).
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Craig-Moffat altimeter setting and increase all DA/MDA 100 feet, and LPV all Cats visibility ½ mile.
VDP NA when using Craig-Moffat altimeter setting.

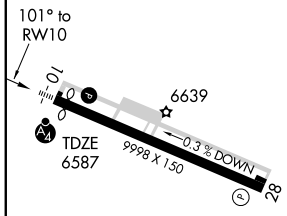
MALSF

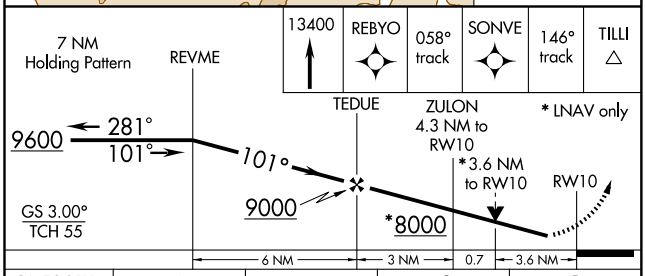
MISSED APPROACH: Climb to 13400 direct REBYO and via 058° track to SONVE and via 146° track to TILLI and hold, continue climb-in-hold to 13400.

AWOS-3	DENVER CENTER	UNICOM
119.275	120.475 235.975	123.0 (CTAF) L



ELEV 6602





CATEGORY	A	B	C	D
LPV DA	7042-1½ 455 (500-1½)			
LNAV/VNAV DA	8356-7 1769 (1800-7)			
LNAV MDA	7780-1¼ 1193 (1200-1¼)	7780-1½ 1193 (1200-1½)	7780-3 1193 (1200-3)	
CIRCLING	7780-1¼ 1178 (1200-1¼)	7780-1½ 1178 (1200-1½)	7780-3 1178 (1200-3)	

REIL Rwy 28 L
HIRL Rwy 10-28 L

SW-1, 22 OCT 2009 to 19 NOV 2009

HAYDEN, COLORADO

AL-5983 (FAA)

APP CRS	Rwy Idg	9490
101°	TDZE	6587
	Apt Elev	6602

RNAV (RNP) Z RWY 10

HAYDEN/ YAMPA VALLEY (HDN)

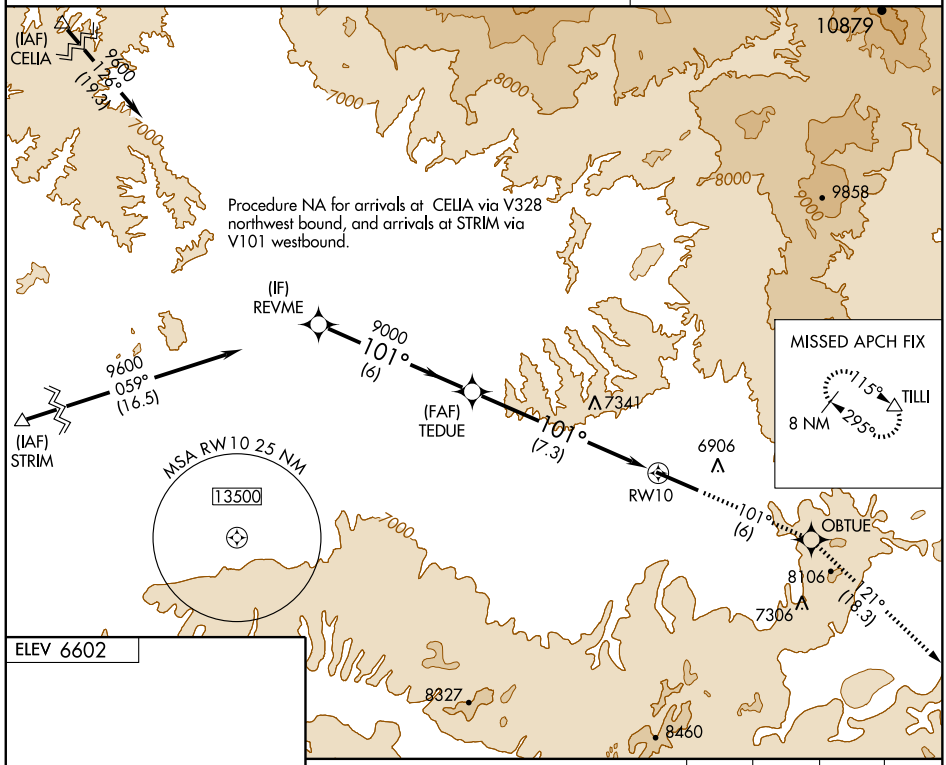
GPS required. Inoperative table does not apply.
For uncompensated Baro-VNAV systems, procedure NA below -26°C (-15°F) or above 54°C (130°F).
*Missed approach requires minimum climb of 315 feet per NM to 9200.

NA

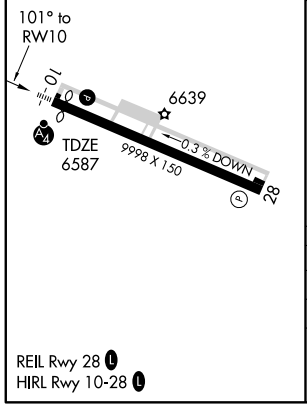
MALSF

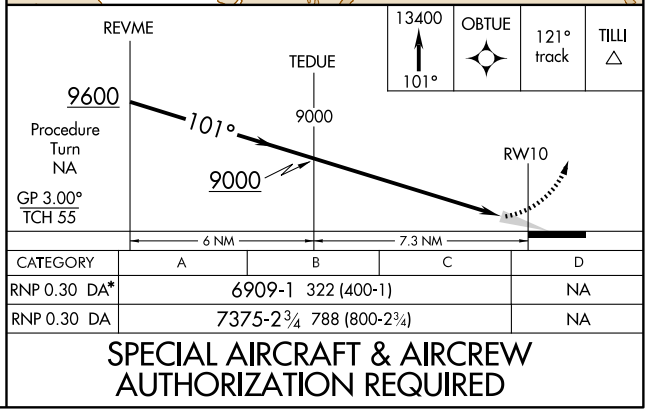
MISSED APPROACH: Climb to 13400 via 101° track to OBTUE and via 121° track to TILLI and hold, continue climb-in-hold to 13400.

AWOS-3	DENVER CENTER	UNICOM
119.275	120.475 235.975	123.0 (CTAF) L



ELEV 6602





CATEGORY	A	B	C	D
RNP 0.30 DA*	6909-1 322 (400-1)			NA
RNP 0.30 DA	7375-2¾ 788 (800-2¾)			NA

REIL Rwy 28 L
HIRL Rwy 10-28 L

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME CHE 115.6 Chan 103	APP CRS 285°	Rwy Idg N/A TDZE N/A Apt Elev 6602

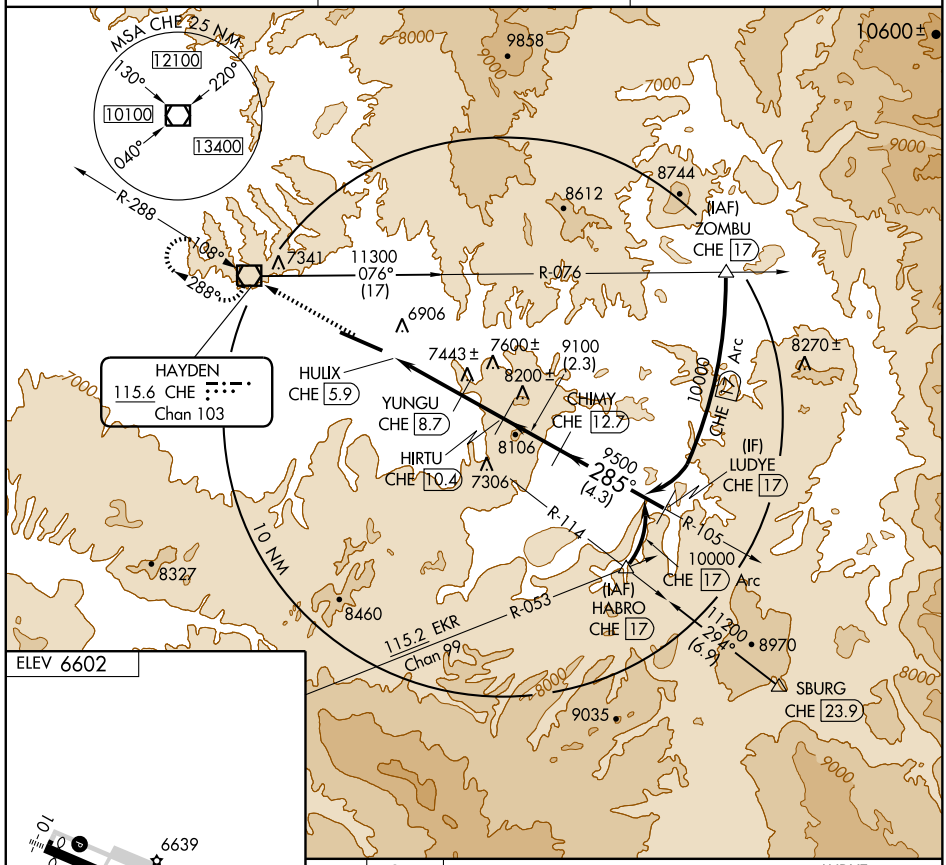
VOR/DME-B

HAYDEN/ YAMPA VALLEY (HDN)

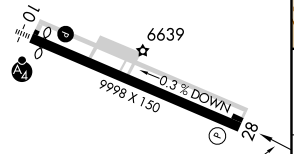
If local altimeter setting not received, use Craig-Moffat altimeter setting and increase all MDAs 100 feet. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 9200 direct CHE VOR/DME and hold.

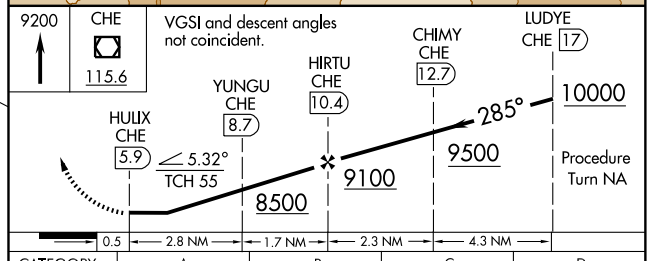
AWOS-3	DENVER CENTER	UNICOM
119.275	120.475 235.975	123.0 (CTAF) L



ELEV 6602



285° 5 NM from FAF



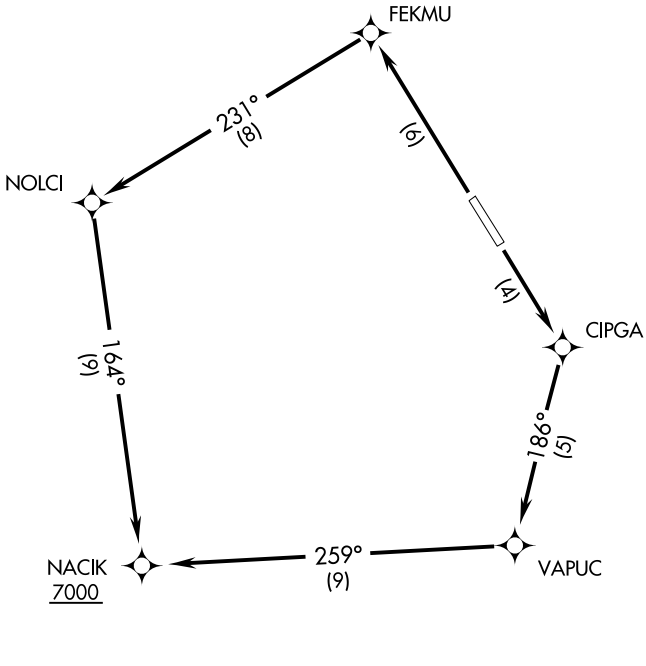
CATEGORY	A	B	C	D
CIRCLING	7900-1¼ 1298 (1300-1¼)	7900-1½ 1298 (1300-1½)	7900-3	1298 (1300-3)

REIL Rwy 28 L
HIRL Rwy 10-28 L

SW-1, 22 OCT 2009 to 19 NOV 2009

HOLYOKE TWO DEPARTURE (RNAV)

AWOS-3 119.275
DENVER CENTER
118.475 225.4
UNICOM 122.7 (CTAF)



TAKE-OFF MINIMUMS
Rwy 14, 32: Standard.

TAKE-OFF OBSTACLE NOTES
Rwy 14: Trees 2012′ from DER, 29′ left of centerline, 100′ AGL/3829′ MSL.
Rwy 32: Trees 1009′ from DER, 697′ left of centerline, 100′ AGL/3839′ MSL.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 14: Climb direct CIPGA, then via depicted route to cross NACIK at or above 7000.

TAKE-OFF RUNWAY 32: Climb direct FEKMU, then via depicted route to cross NACIK at or above 7000.

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5000
141°	TDZE	3730
	Apt Elev	3730

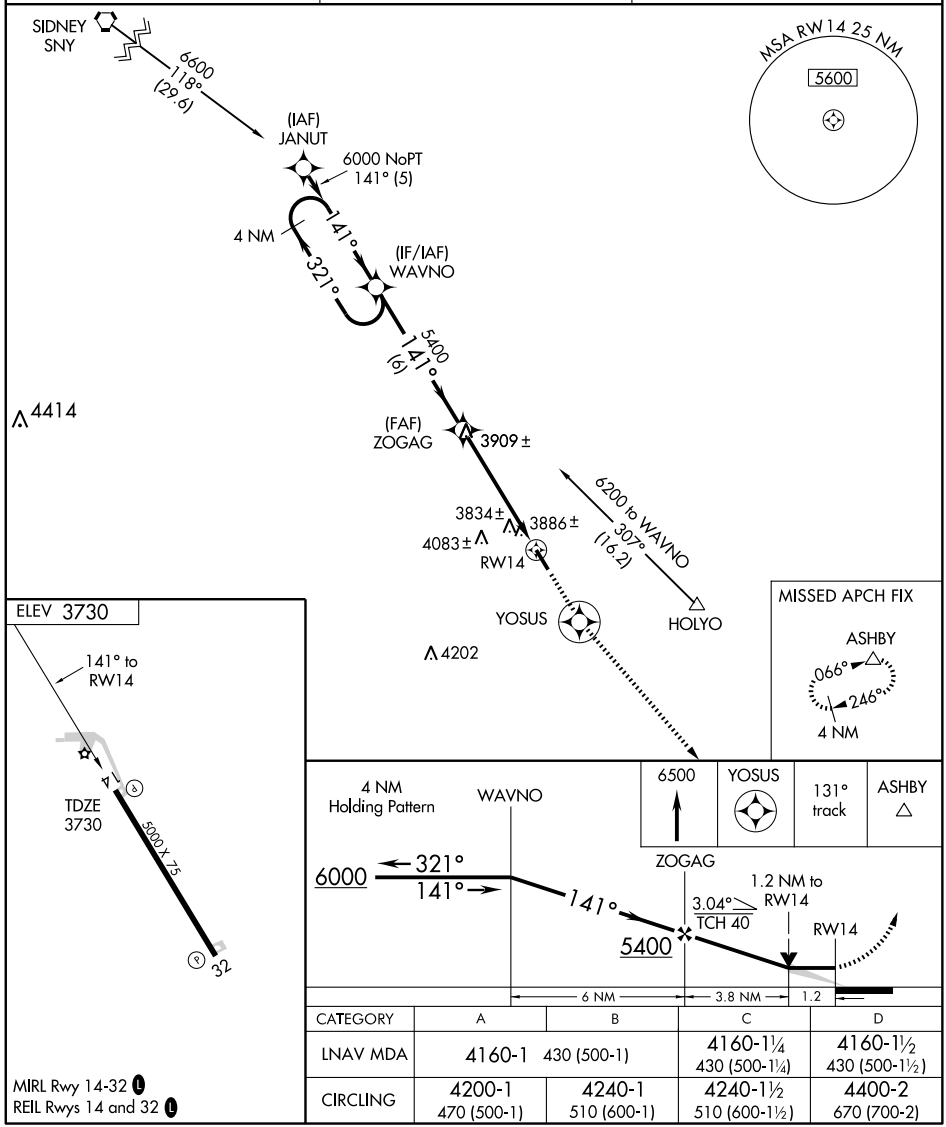
RNAV (GPS) RWY 14
HOLYOKE (HEQ)

DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Sidney Muni/ Lloyd W. Carr Field altimeter setting and increase all MDAs 200 feet and increase LNAV Cat C/D visibility ½ mile, Circling Cat C visibility ½ mile and Circling Cat D visibility ¾ mile.
VDP NA when using Sidney Muni/Lloyd W. Carr Field altimeter setting.

NA

MISSED APPROACH: Climb to 6500 direct YOSUS and via 131° track to ASHBY and hold.

AWOS-3	DENVER CENTER	UNICOM
119.275	118.475 225.4	122.7 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	4160-1	430 (500-1)	4160-1¼ 430 (500-1¼)	4160-1½ 430 (500-1½)
CIRCLING	4200-1 470 (500-1)	4240-1 510 (600-1)	4240-1½ 510 (600-1½)	4400-2 670 (700-2)

MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5000
321°	TDZE	3727
	Apt Elev	3730

RNAV (GPS) RWY 32

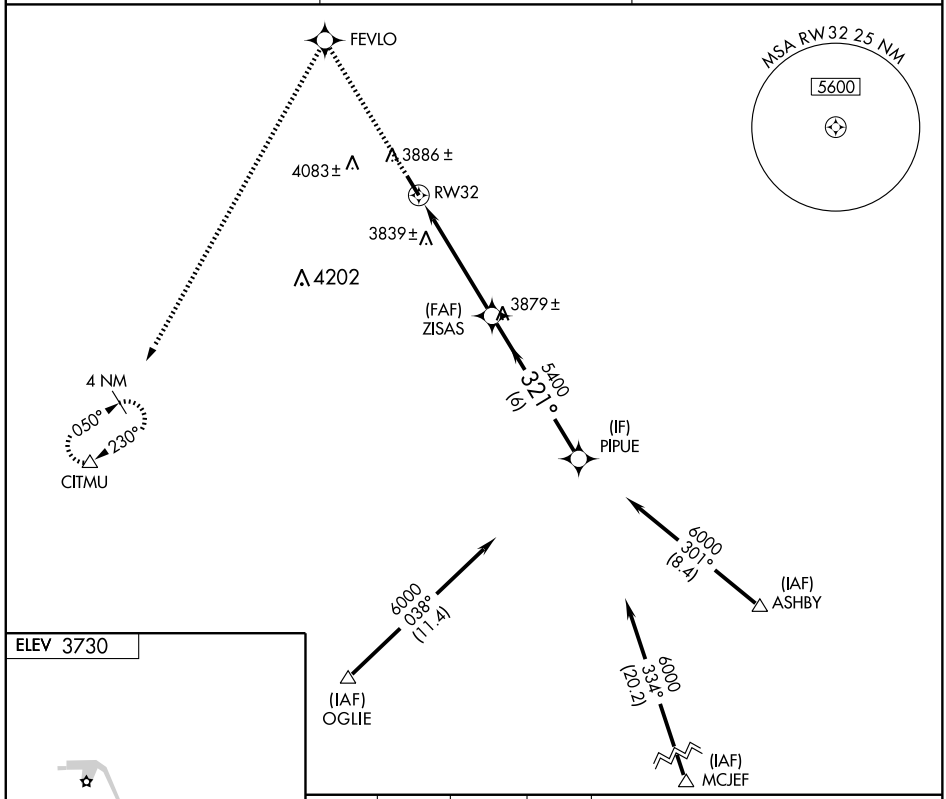
HOLYOKE (HEQ)

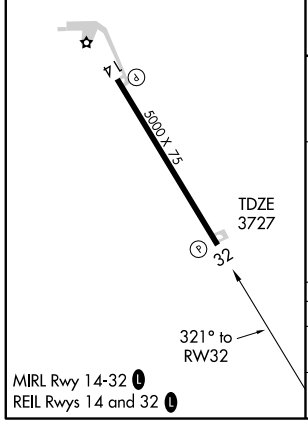
T A NA

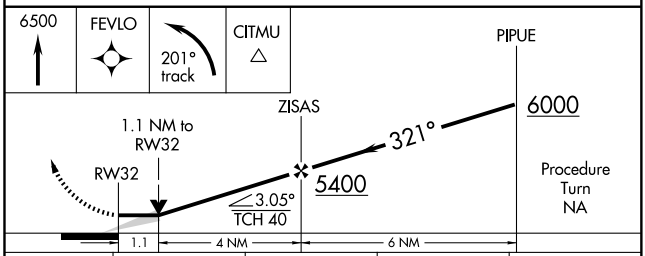
DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Sidney Muni / Lloyd W. Carr Field altimeter setting and increase all MDAs 200 feet and increase LNAV Cat. C/D visibility ½ mile, Circling Cat. B/C visibility ¼ mile and Circling Cat. D visibility ¾ mile. VDP NA when using Sidney Muni / Lloyd W. Carr Field altimeter setting.

MISSED APPROACH: Climb to 6500 direct FEVLO and left turn via 201° track to CITMU and hold.

AWOS-3	DENVER CENTER	UNICOM
119.275	118.475 225.4	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4100-1 373 (400-1)			4100-1¼ 373 (400-1¼)
CIRCLING	4200-1 470 (500-1)	4240-1 510 (600-1)	4240-1½ 510 (600-1½)	4400-2 670 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

KREMMLING, COLORADO

AL-6734 (FAA)

APP CRS	Rwy Idg	5540
272°	TDZE	7400
	Apt Elev	7411

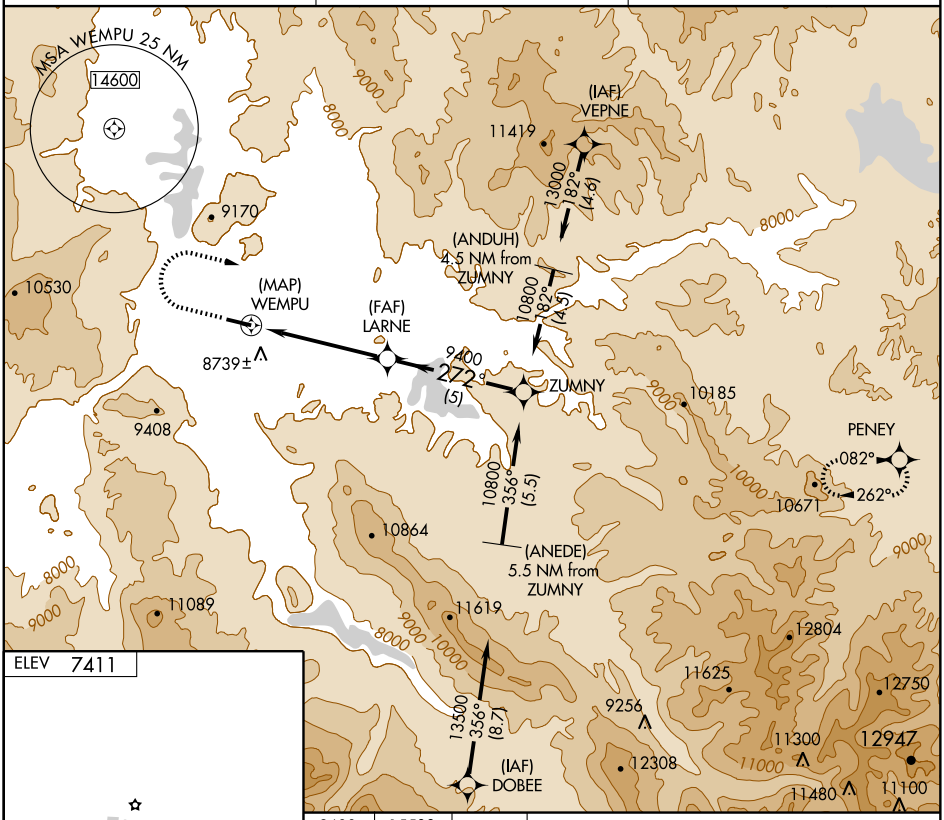
GPS RWY 27

KREMMLING/MC ELROY AIRFIELD (2ØV)

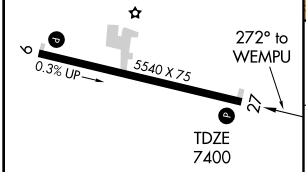
T
NA — Obtain local altimeter setting on UNICOM 122.8; when not available, procedure not authorized.

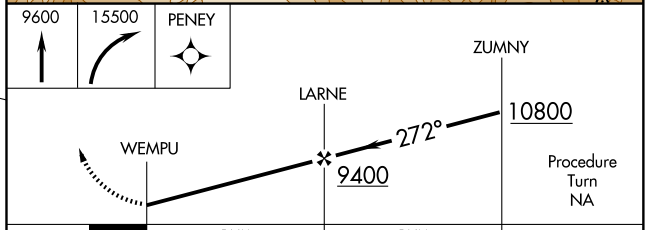
MISSED APPROACH: Climb to 9600 then climbing right turn to 15500 direct PENEY WP and hold.

AWOS-3	DENVER CENTER	UNICOM
118.425	128.65 282.2	122.8 (CTAF) L



ELEV 7411





CATEGORY	A	B	C	D
S-27	9180-1¼ 1780 (1800-1¼)	9180-1½ 1780 (1800-1½)	9180-3 1780 (1800-3)	NA
CIRCLING	9180-1¼ 1769 (1800-1¼)	9180-1½ 1769 (1800-1½)	9180-3 1769 (1800-3)	NA

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

SW-1, 22 OCT 2009 to 19 NOV 2009

KREMMLING, COLORADO

AL-6734 (FAA)

VOR/DME RLG	APP CRS	Rwy Idg	N/A
113.8	034°	TDZE	N/A
Chan 85		Apt Elev	7411

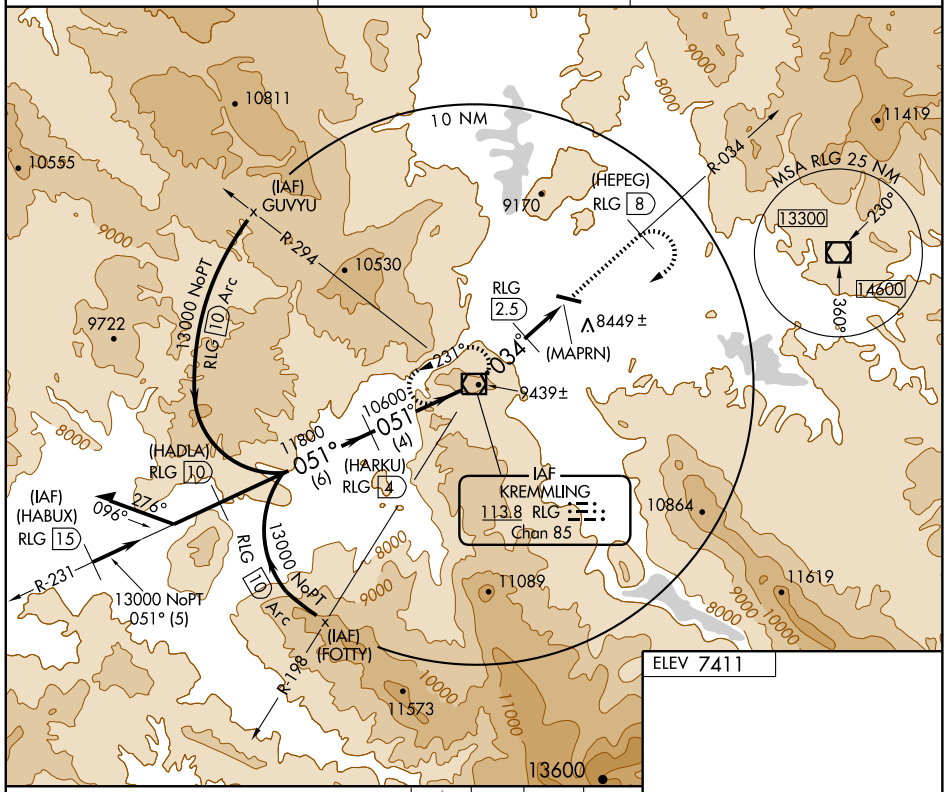
VOR/DME or GPS-A

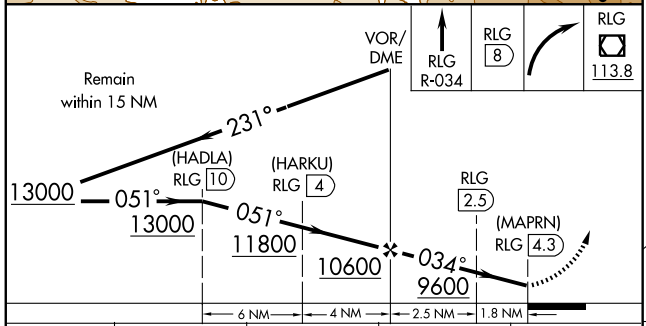
KREMMLING/ MC ELROY AIRFIELD (2ØV)

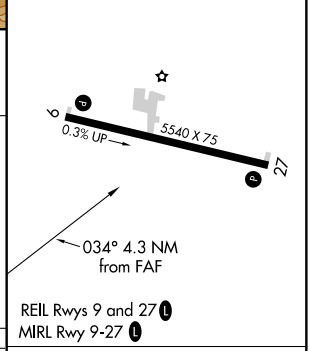
T
NA — Obtain local altimeter setting on CTAF; when not received procedure not authorized.

MISSED APPROACH: Climb to 8 DME via RLG R-034, then climbing right turn direct RLG VOR/DME. Continue climb to 13000 in holding pattern.

AWOS-3	DENVER CENTER	UNICOM
118.425	128.65 282.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	9040-1¼ 1629 (1700-1¼)	9180-1½ 1769 (1800-1½)	9180-3 1769 (1800-3)	NA

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

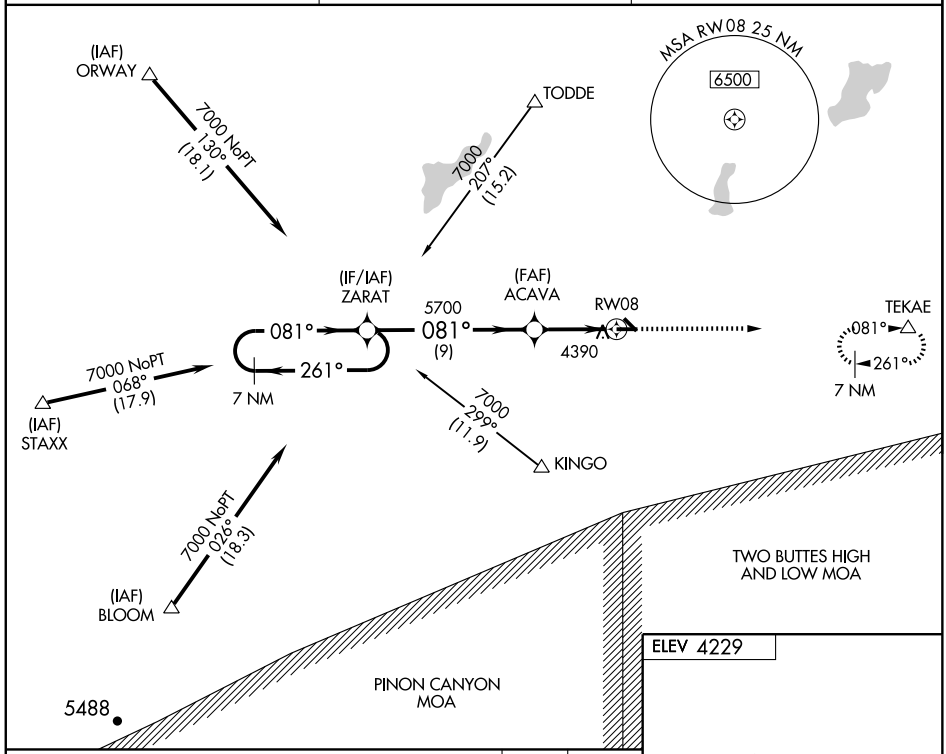
WAAS	APP CRS	Rwy Idg	6849
CH 97613	081°	TDZE	4229
W08A		Apt Elev	4229

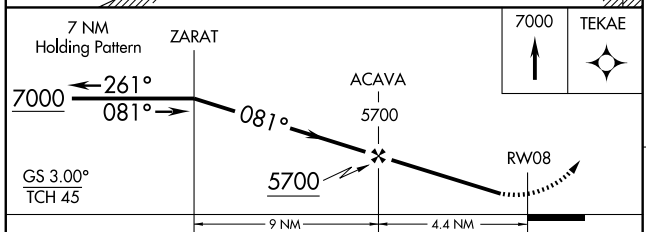
RNAV (GPS) RWY 8
LA JUNTA MUNI (LHX)

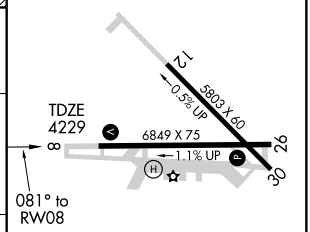
Baro-VNAV NA when using Lamar altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 40°C (104°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Lamar altimeter setting and increase all DA/MDA 180 feet and increase all visibilities ¾ mile.

MISSED APPROACH: Climb to 7000 direct TEKAE and hold.

ASOS	DENVER CENTER	UNICOM
135.525	128.375 379.95	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	4528-1 299 (300-1)			
LNAV/VNAV DA	4738-1¾ 509 (600-1¾)			
LNAV MDA	4700-1 471 (500-1)		4700-1¼ 471 (500-1¼)	4700-1½ 471 (500-1½)
CIRCLING	4740-1 511 (600-1)		4740-1½ 511 (600-1½)	4780-2 551 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwys 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

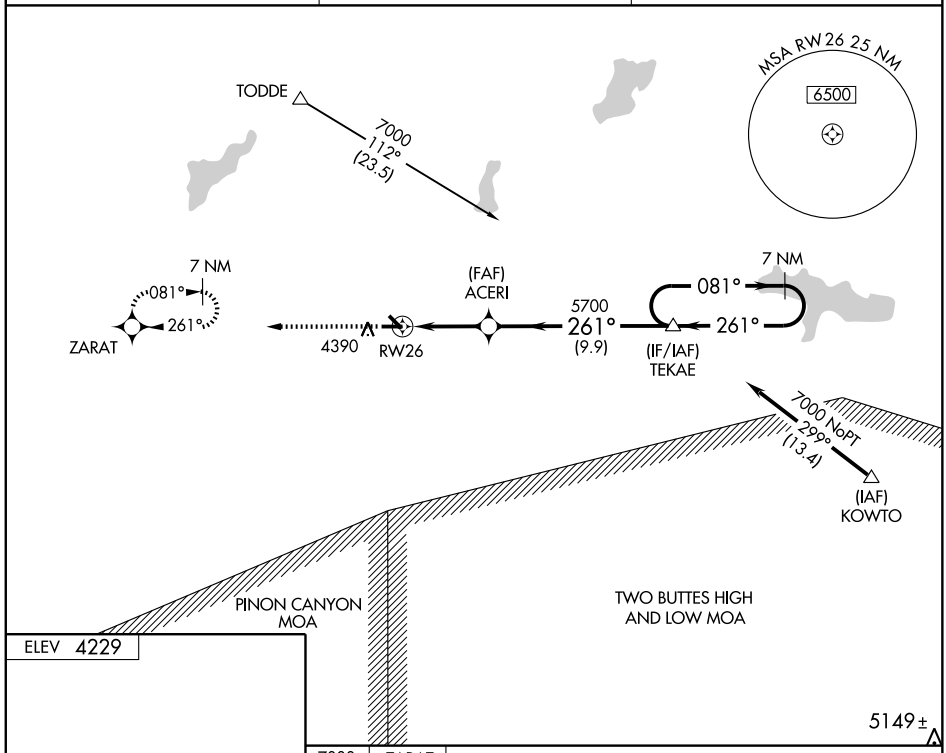
WAAS	APP CRS	Rwy Idg	6849
CH 93813	261°	TDZE	4188
W26A		Apt Elev	4229

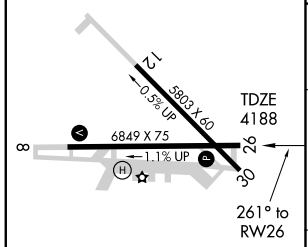
RNAV (GPS) RWY 26
LA JUNTA MUNI (LHX)

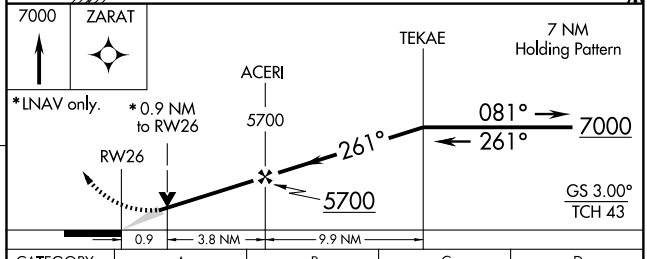
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 40°C (104°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Lamar altimeter setting. When local altimeter setting not received, use Lamar altimeter setting and increase all DA/MDA 180 feet and increase all visibility ¾ mile.

MISSED APPROACH: Climb to 7000 direct ZARAT and hold.

ASOS	DENVER CENTER	UNICOM
135.525	128.375 379.95	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA		4438-1	250 (300-1)	
LNAV/VNAV DA		4438-1	250 (300-1)	
LNAV MDA		4480-1	292 (300-1)	
CIRCLING	4740-1 511 (600-1)		4740-1½ 511 (600-1½)	4780-2 551 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwys 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5001
079°	TDZE	3685
	Apt Elev	3706

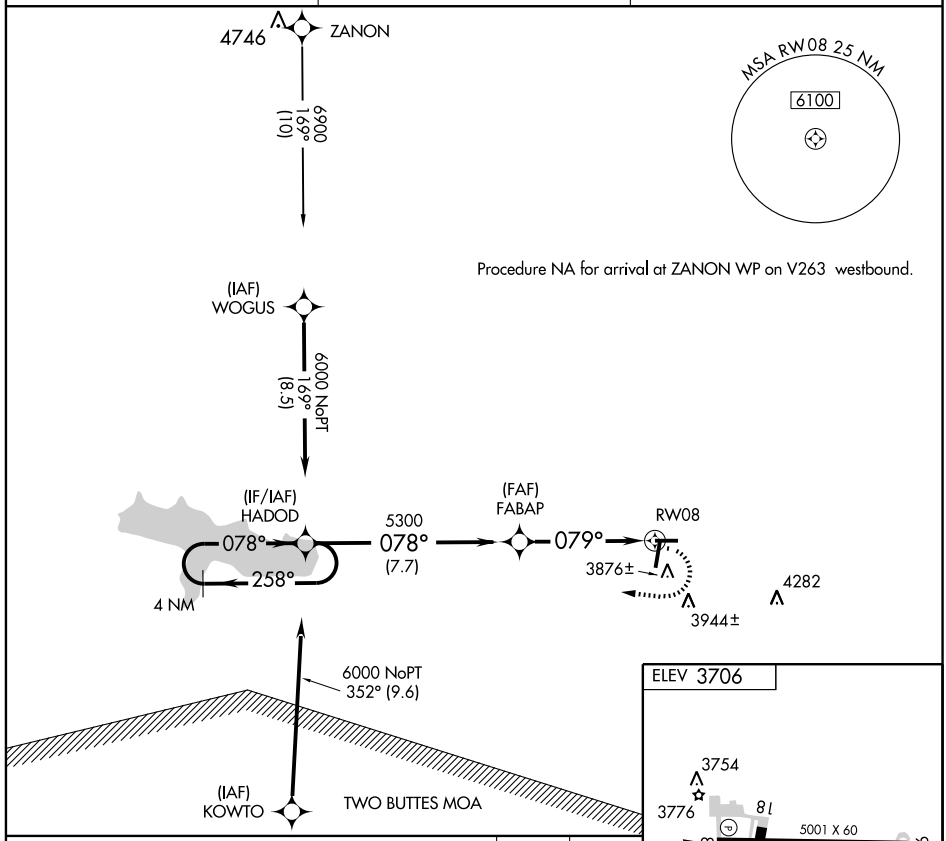
RNAV (GPS) RWY 8

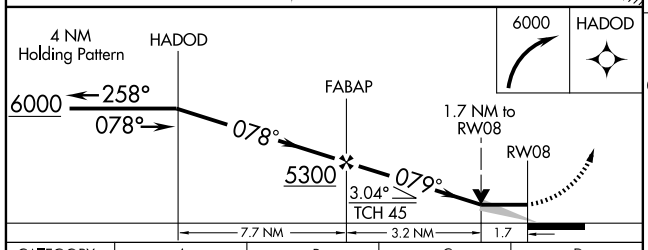
LAMAR MUNI (LAA)

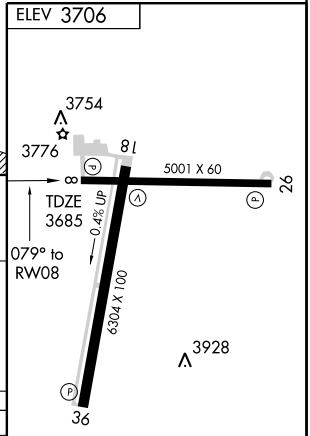
Circling NA at night to Rwy 8, 26 and 36.
NA Straight-in NA at night to Rwy 8.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 6000 direct HADOD WP and hold.

ASOS	DENVER CENTER	UNICOM
135.625	133.4 377.175	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4280-1	595 (600-1)	4280-1½ 595 (600-1½)	4280-1¾ 595 (600-1¾)
CIRCLING	4420-1	714 (800-1)	4420-2 714 (800-2)	4420-2¼ 714 (800-2¼)

REIL Rwy 18 and 36
MIRL Rwys 8-26 and 18-36 L

SW-1, 22 OCT 2009 to 19 NOV 2009

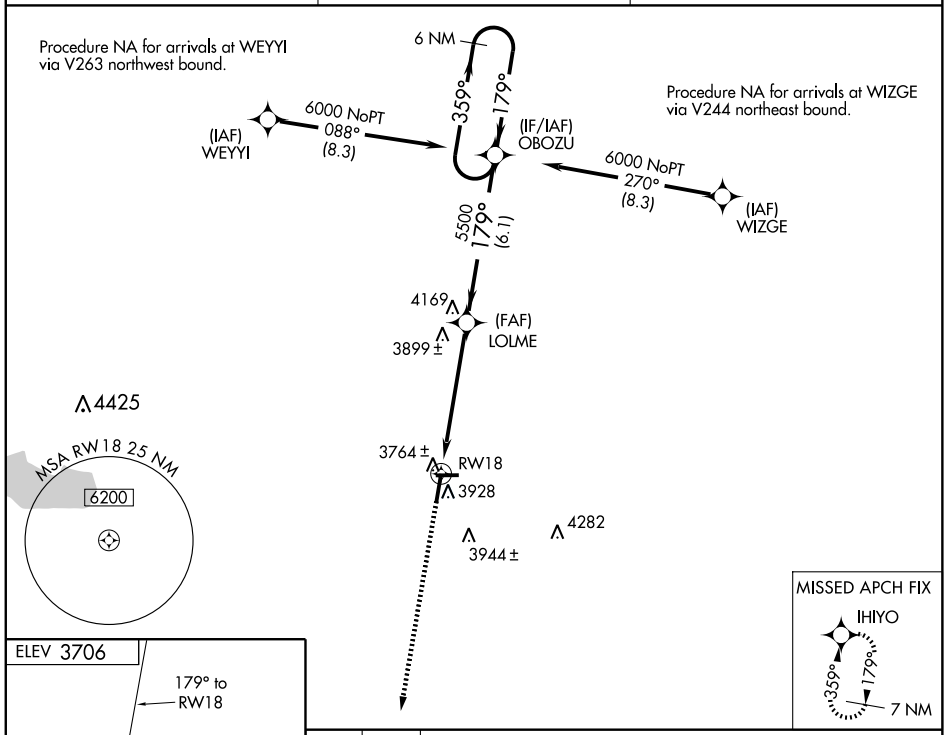
WAAS	APP CRS	Rwy Idg	6304
CH 86613	179°	TDZE	3695
W18A		Apt Elev	3706

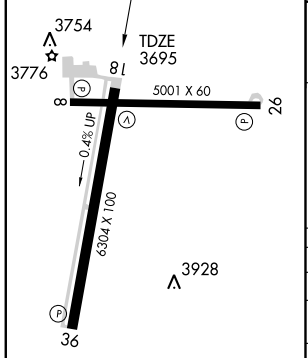
RNAV (GPS) RWY 18
LAMAR MUNI (LAA)

Circling to Rwy 8, 26 and 36 NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using La Junta altimeter setting. When local altimeter setting not received, use La Junta altimeter setting and increase all DA 163 feet and all MDA 180 feet, increase LPV, LNAV/VNAV visibility all Cats ½ mile; increase LNAV visibility Cat C/D ½ mile, increase Circling visibility Cat B ¼ mile,Cat C ¾ mile Cat D ½ mile.

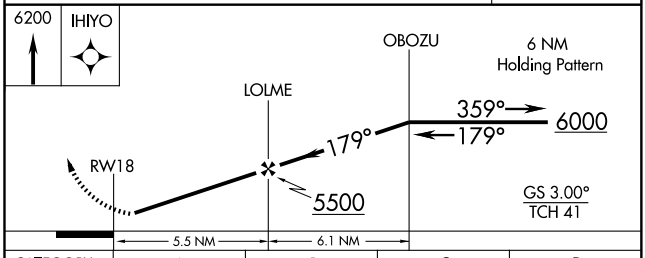
MISSED APPROACH: Climb to 6200 direct IHIYO and hold.

ASOS	DENVER CENTER	UNICOM
135.625	133.4 377.175	122.8 (CTAF) L





REIL Rwy 18 and 36
MIRL Rwys 8-26 and 18-36 L



CATEGORY	A	B	C	D
LPV DA		3945-1	250 (300-1)	
LNAV/VNAV DA		4014-1¼	319 (400-1¼)	
LNAV MDA	4160-1 465 (500-1)		4160-1¼ 465 (500-1¼)	4160-1½ 465 (500-1½)
CIRCLING	4280-1 574 (600-1)		4280-1½ 574 (600-1½)	4280-2 574 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5001
259°	TDZE	3689
	Apt Elev	3706

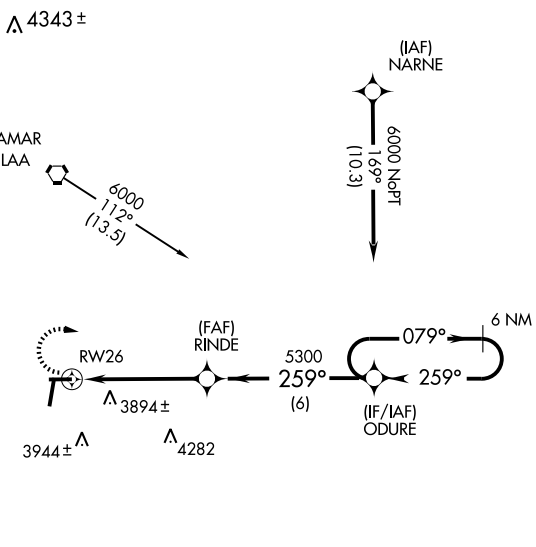
RNAV (GPS) RWY 26

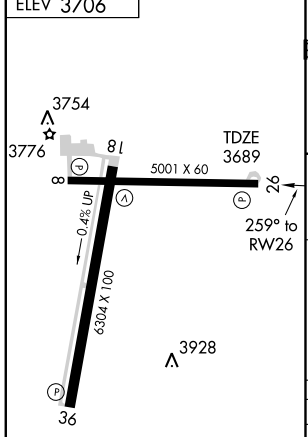
LAMAR MUNI (LAA)

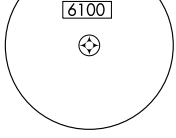
Circling NA at night to Rwy 26, 8, and 36.
Straight in NA at night to Rwy 26.
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

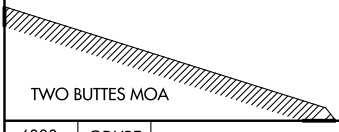
MISSED APPROACH: Climbing right turn to 6000 direct ODURE WP and hold.

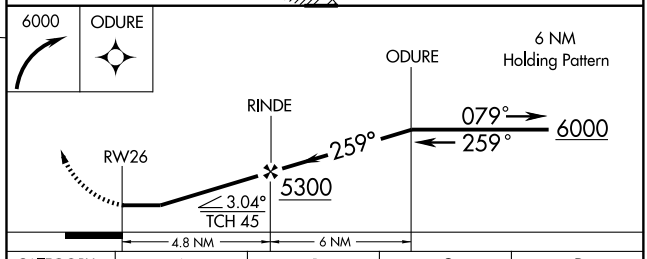
ASOS	DENVER CENTER	UNICOM
135.625	133.4 377.175	122.8 (CTAF) L











CATEGORY	A	B	C	D
LNAV MDA	4180-1 491 (500-1)		4180-1¼ 491 (500-1¼)	4180-1½ 491 (500-1½)
CIRCLING	4420-1 714 (800-1)		4420-2 714 (800-2)	4420-2¼ 714 (800-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	6304
Chan 99400	359°	TDZE	3706
W36A		Apt Elev	3706

RNAV (GPS) RWY 36
LAMAR MUNI (LAA)

DME/DME RNP-0.3 NA.
Baro-VNAV NA below -22°C (-7°F).
Straight-in minimums NA at night.
Circling to Rwy 36, 8, and 26 NA at night.

MISSED APPROACH: Climb to 6000 direct LOVIY then left turn via 347° track to LAA VORTAC and hold.

ASOS	DENVER CENTER	UNICOM
135.625	133.4 377.175	122.8 (CTAF) L

Procedure NA for arrival at WIZGE on V244 northeastbound.

6 NM 349° 169° LAMAR LAA

WIZGE

6200 186° (24.8)

LOVIY

RW36

3742±

3944 ±

4282

(FAF) LAMZY

MSA RW36 25 NM 6100

KOWTO

6200 094° (11.5)

TWO BUTTES HIGH & LOW MOA

5700 359° (6)

(IF/IAF) IHIYO

(IAF) KUSKY

359° 179°

6200 NoPT 269° (5) 4449±

8 NM

ELEV 3706

3754

3776

8 L

5001 X 60

8

26

0.4% UP

6304 X 100

3928

TDZE 3706

36

359° to RW36

REIL Rwy 18 and 36
MIRL Rwys 8-26 and 18-36 L

8 NM Holding Pattern

IHIYO

LAMZY

6000 LOVIY 347° LAA

VGSI and RNAV glidepath not coincident.

6200 179° 359° 359°

5700

RW36

GS 3.00°
TCH 50

6 NM 6 NM

CATEGORY	A	B	C	D
LPV DA	3956-1 250 (300-1)			
LNAV/ VNAV DA	4250-2 544 (600-2)			
LNAV MDA	4380-1 674 (700-1)		4380-2 674 (700-2)	4380-2¼ 674 (700-2¼)
CIRCLING	4420-2 714 (800-2)			4420-2¼ 714 (800-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

LAMAR, COLORADO

AL-5290 (FAA)

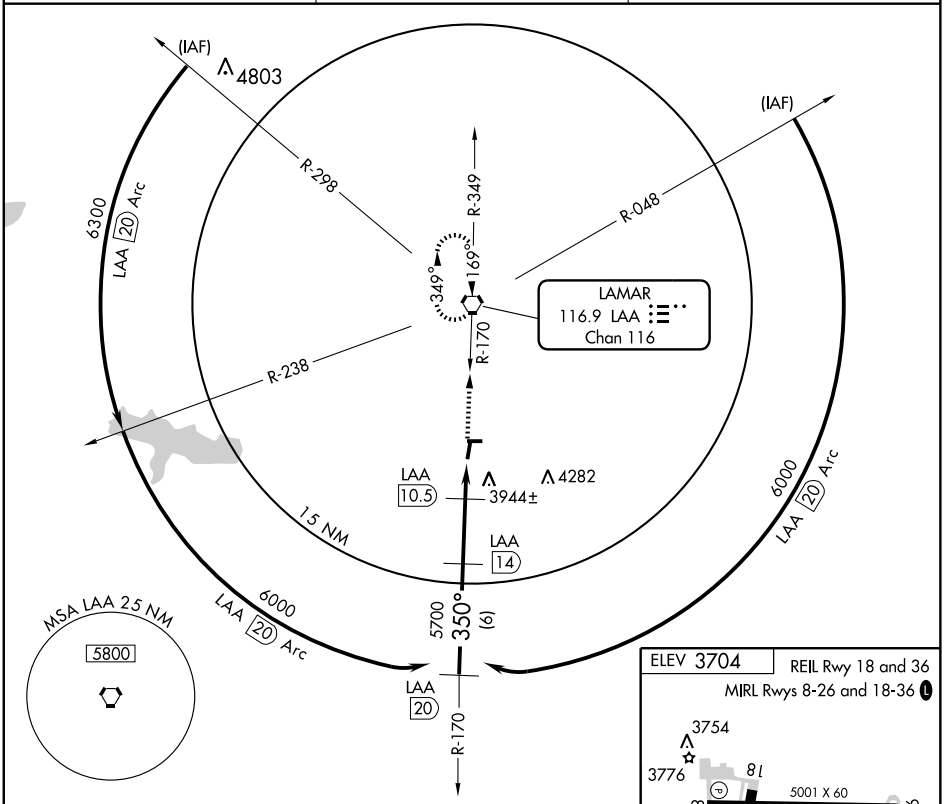
VORTAC LAA	APP CRS	Rwy Idg	6304
116.9	350°	TDZE	3704
Chan 116		Apt Elev	3704

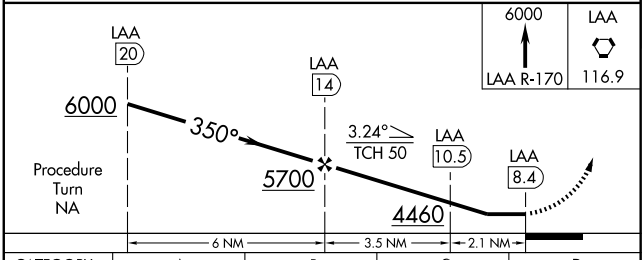
VOR/DME RWY 36

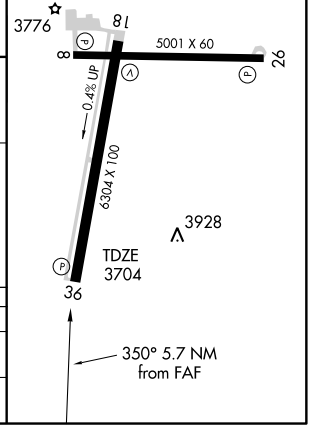
LAMAR MUNI (LAA)

MISSED APPROACH: Climb to 6000 via LAA R-170 to LAA VORTAC and hold.

ASOS	DENVER CENTER	UNICOM
135.625	133.4 377.175	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-36	4200-1 496 (500-1)		4200-1¼ 496 (500-1¼)	4200-1½ 496 (500-1½)
CIRCLING	4200-1 496 (500-1)	4220-1 516 (600-1)	4240-1½ 536 (600-1½)	4260-2 556 (600-2)

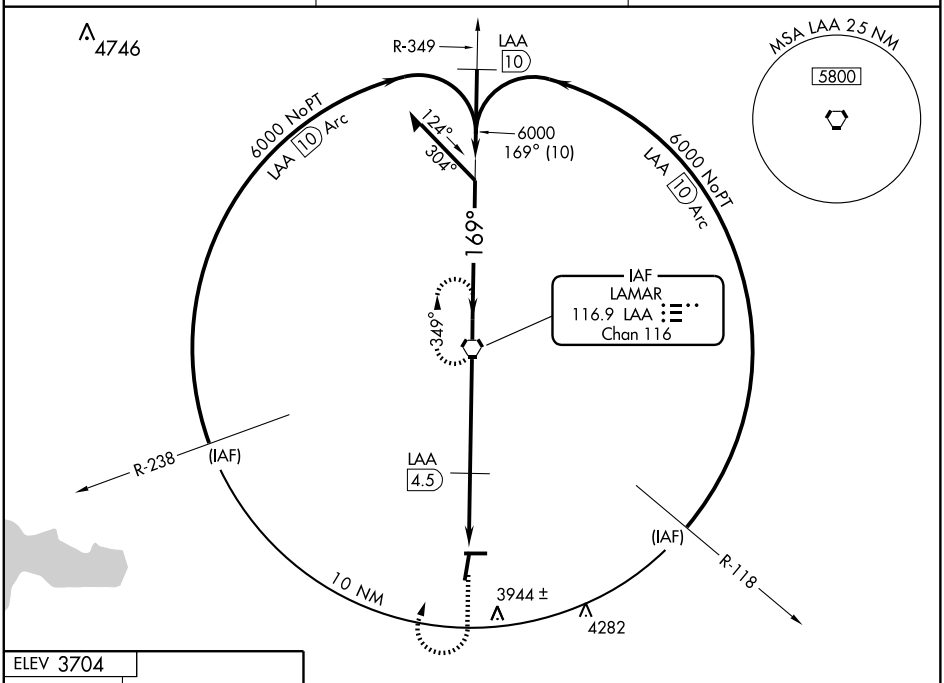
SW-1, 22 OCT 2009 to 19 NOV 2009

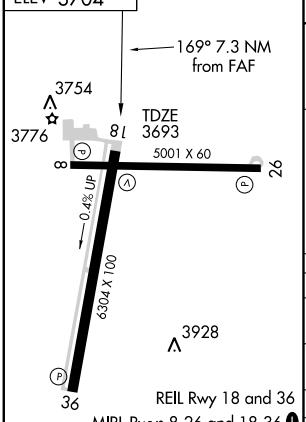
VORTAC LAA	APP CRS	Rwy Idg	6304
116.9	169°	TDZE	3693
Chan 116		Apt Elev	3704

VOR RWY 18
LAMAR MUNI (LAA)

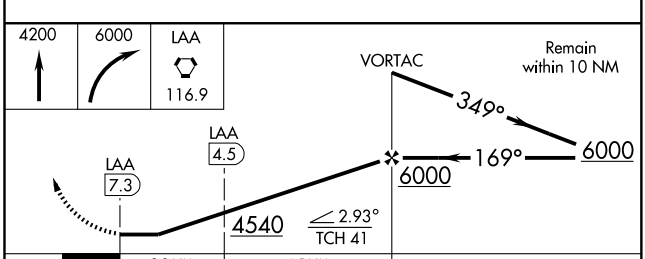
MISSED APPROACH: Climb to 4200, then climbing right turn to 6000 direct LAA VORTAC and hold.

ASOS	DENVER CENTER	UNICOM
135.625	133.4 377.175	122.8 (CTAF) L





FAF to MAP 7.3 NM					
Knots	60	90	120	150	180
Min:Sec	7:18	4:52	3:39	2:55	2:26



CATEGORY	A	B	C	D
S-18	4540-1 847 (900-1)	4540-1¼ 847 (900-1¼)	4540-2½ 847 (900-2½)	4540-2¾ 847 (900-2¾)
CIRCLING	4540-1 836 (900-1)	4540-1¼ 836 (900-1¼)	4540-2½ 836 (900-2½)	4540-2¾ 836 (900-2¾)
DME MINIMA				
S-18	4040-1 347 (400-1)			4040-1¼ 347 (400-1¼)
CIRCLING	4200-1 496 (500-1)	4220-1 516 (600-1)	4240-1½ 536 (600-1½)	4260-2 556 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

DAVVY ONE DEPARTURE (RNAV) (OBSTACLE)

DENVER CENTER
119.85 363.15

NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.

TAKE-OFF MINIMUMS

Rwy 34: Standard with minimum climb of 364' per NM to 13500.
Rwy 16: NA, ATC.

TAKE-OFF OBSTACLE NOTES

Multiple trees beginning 71' from DER, 378' right of centerline, up to 100' AGL/10042' MSL.
Tree 37' from DER, 140' left of centerline, 100' AGL/10019 MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34: Climb to 16000 direct OLOWI and via 343° track to DAVVY. Then via assigned route.

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6400
161°	TDZE	9928
	Apt Elev	9928

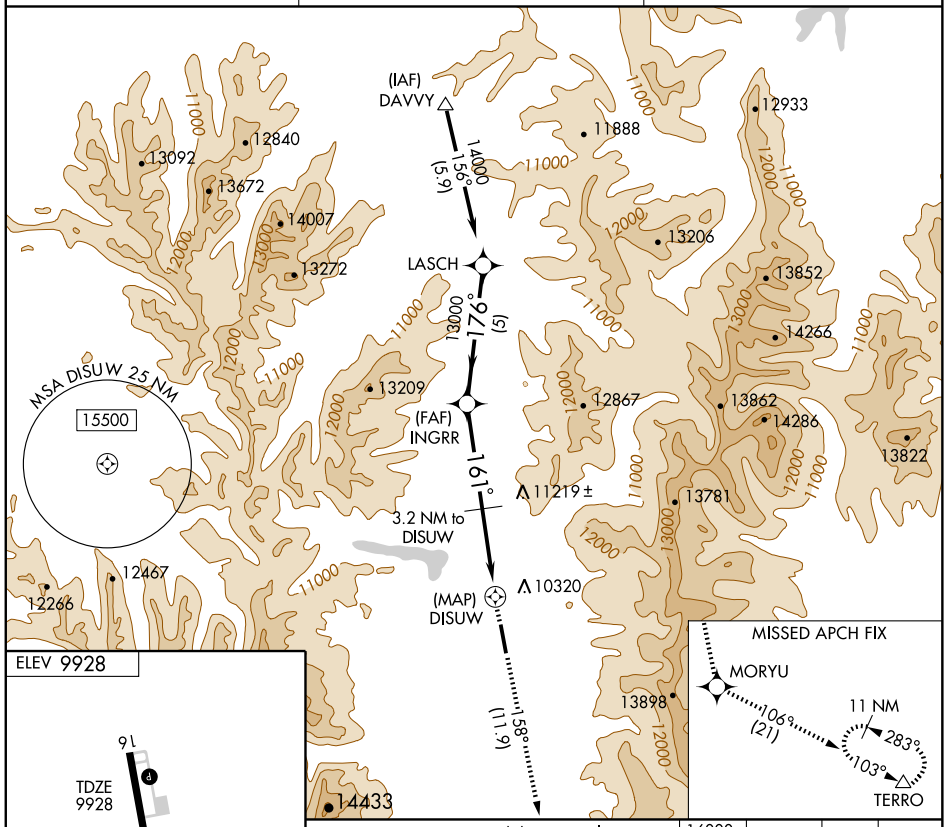
GPS RWY 16

LEADVILLE/LAKE COUNTY (LXV)

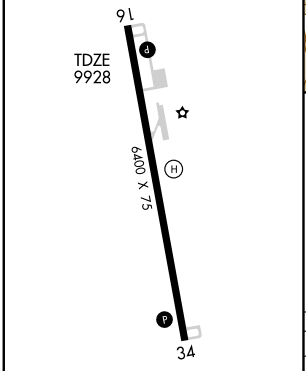
T
NA

MISSED APPROACH: Climb to 16000 via 158° course to MORYU WP, then via 106° course to TERRO WP and hold.

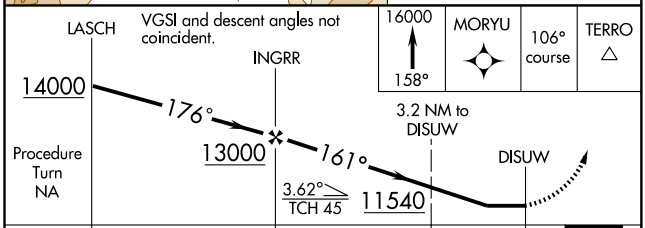
ASOS	DENVER CENTER	UNICOM
118.375	119.85 363.15	122.8 (CTAF) L



ELEV 9928



MIRL Rwy 16-34 L

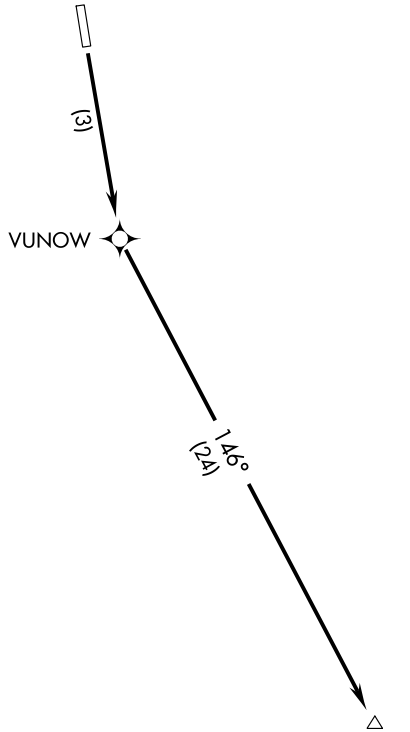


CATEGORY	A	B	C	D
S-16	11360-1¼ 1432 (1500-1¼)	11360-1½ 1432 (1500-1½)	NA	
CIRCLING	11360-1¼ 1432 (1500-1¼)	11360-1½ 1432 (1500-1½)	NA	

SW-1, 22 OCT 2009 to 19 NOV 2009

LOZUL TWO DEPARTURE (RNAV) (OBSTACLE)

DENVER CENTER
119.85 363.15



NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.

TAKE-OFF MINIMUMS
Rwy 16: Standard with minimum climb of 322′ per NM to 14300.
Rwy 34: NA, ATC.

TAKE-OFF OBSTACLE NOTE
Multiple trees beginning 47′ from DER, 453′ left of centerline, up to 100′ AGL/10079′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 16200′ direct VUNOW and via 146° track to LOZUL. Then via assigned route.

APP CRS	Rwy Idg	N/A
346°	TDZE	N/A
	Apt Elev	5052

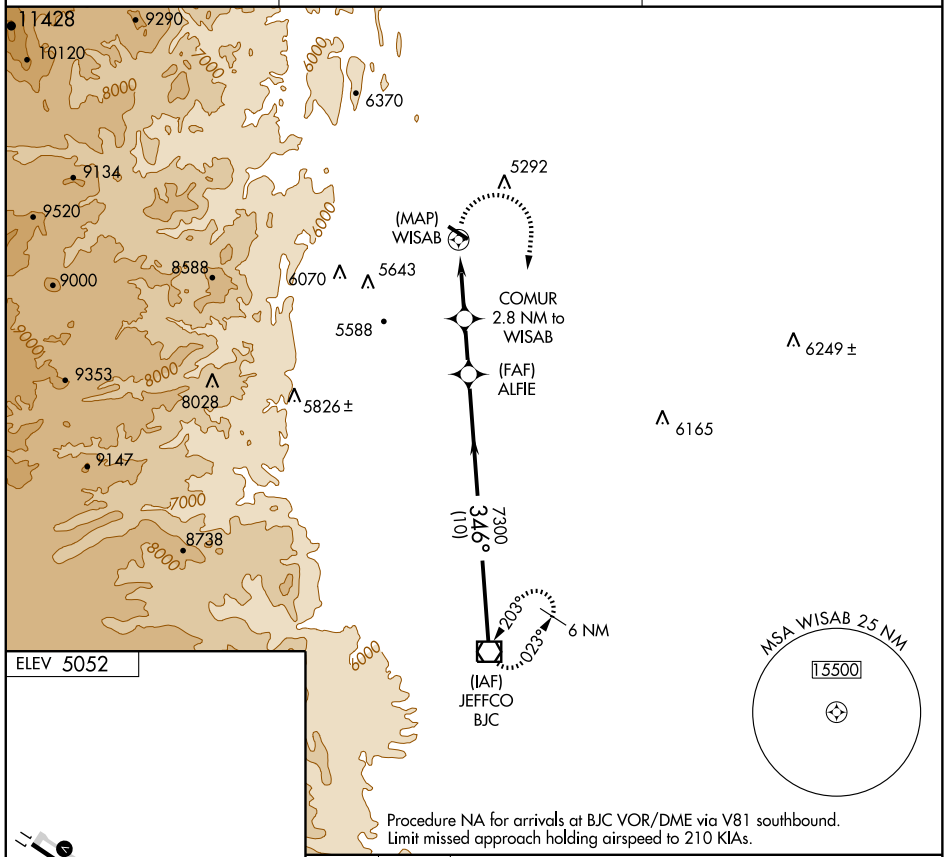
RNAV (GPS)-B

LONGMONT/ VANCE BRAND (LMO)

Use Denver Intl altimeter setting.
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

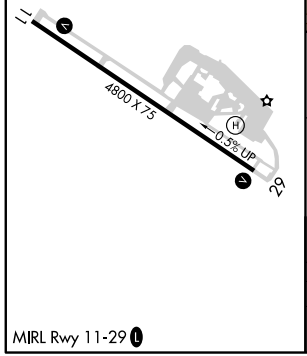
MISSED APPROACH: Climbing right turn to 8000 direct BJC VOR/DME and hold.

AWOS-3	DENVER APP CON	UNICOM
120.0	126.1 360.75	122.975 (CTAF) L

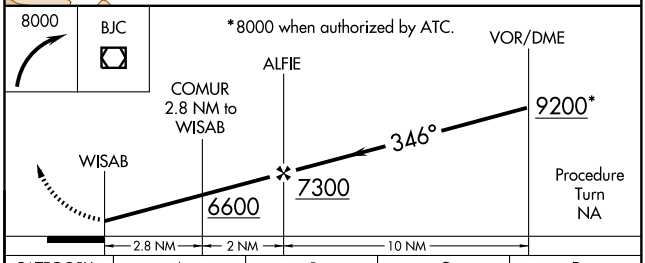


Procedure NA for arrivals at BJC VOR/DME via V81 southbound.
Limit missed approach holding airspeed to 210 KIAs.

ELEV 5052



MIRL Rwy 11-29 L



CATEGORY	A	B	C	D
CIRCLING	5700-1 648 (700-1)	5720-1 668 (700-1)	5740-2 688 (700-2)	5740-2¼ 688 (700-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4800
293°	TDZE	5044
	Apt Elev	5052

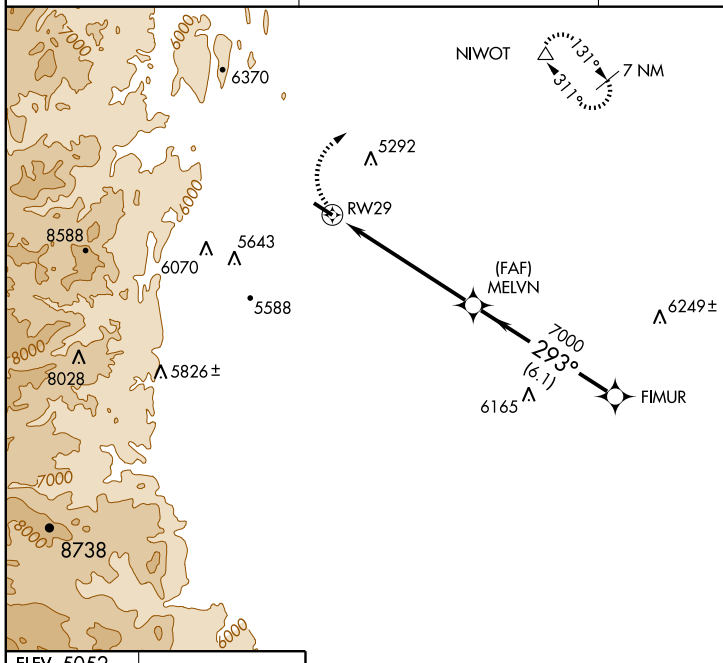
RNAV (GPS) RWY 29

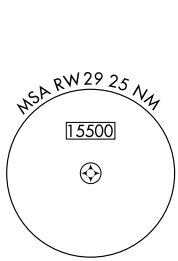
LONGMONT/ VANCE BRAND (LMO)

Use Denver Intl altimeter setting.
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing right turn to 7300 direct NIWOT WP and hold.

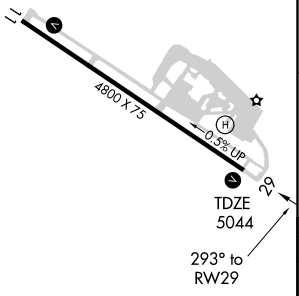
AWOS-3	DENVER APP CON	UNICOM
120.0	126.1 360.75	122.975 (CTAF)



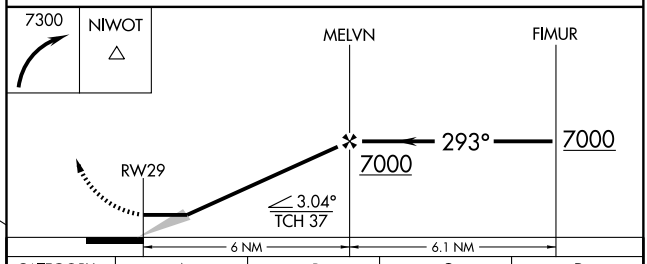


ELEV 5052

RADAR REQUIRED



MIRL Rwy 11-29 (L)



CATEGORY	A	B	C	D
LNAV MDA	5640-1 596 (600-1)		5640-1½ 596 (600-1½)	5640-1¾ 596 (600-1¾)
CIRCLING	5700-1 648 (700-1)	5720-1 668 (700-1)	5740-2 688 (700-2)	5740-2¼ 688 (700-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME BJC	APP CRS	Rwy Idg	N/A
115.4	345°	TDZE	N/A
Chan 101		Apt Elev	5052

VOR/DME-A

LONGMONT/ VANCE BRAND (LMO)

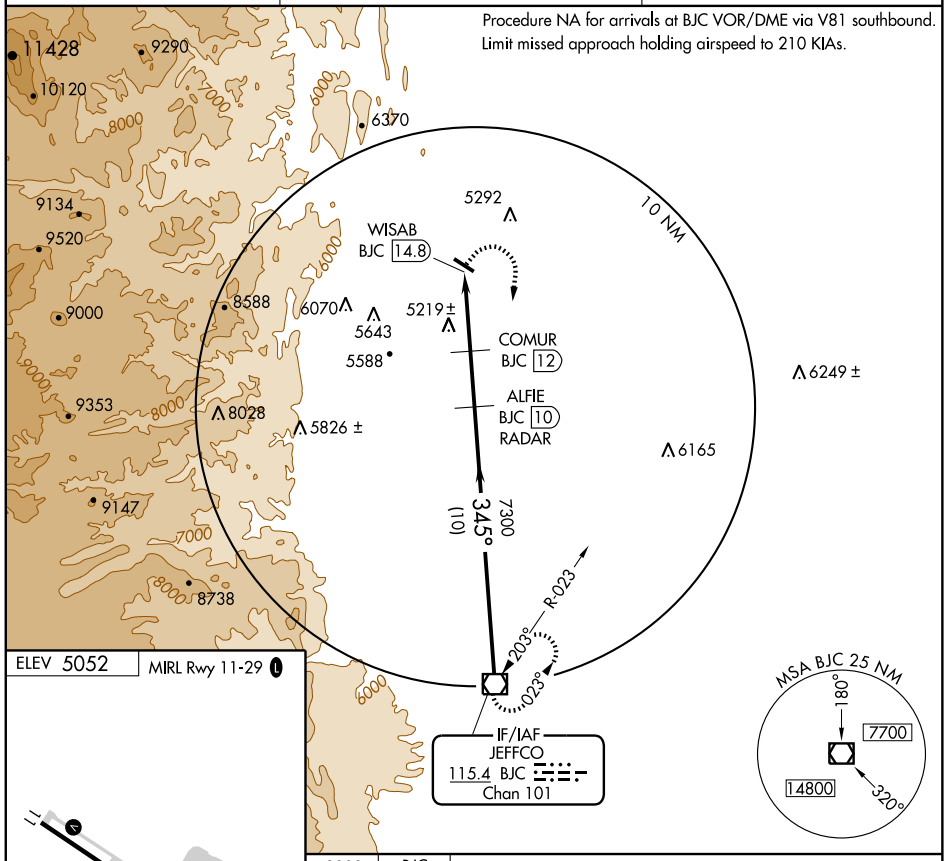
NA

Use Denver Intl altimeter setting.

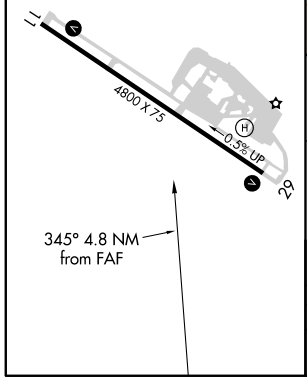
MISSED APPROACH: Climbing right turn to 8000 direct BJC VOR/DME and hold.

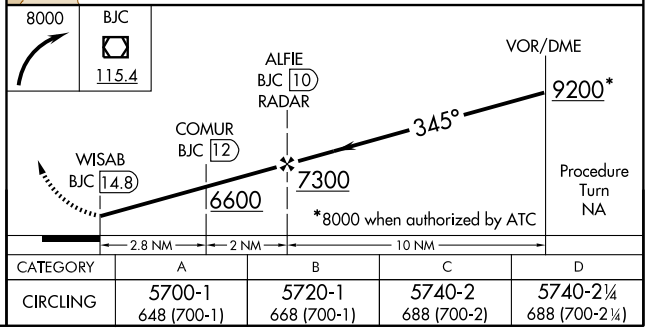
AWOS-3	DENVER APP CON	UNICOM
120.0	126.1 360.75	122.975 (CTAF) L

Procedure NA for arrivals at BJC VOR/DME via V81 southbound.
Limit missed approach holding airspeed to 210 KIAs.



ELEV 5052 MIRL Rwy 11-29 L





CATEGORY	A	B	C	D
CIRCLING	5700-1 648 (700-1)	5720-1 668 (700-1)	5740-2 688 (700-2)	5740-2¼ 688 (700-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

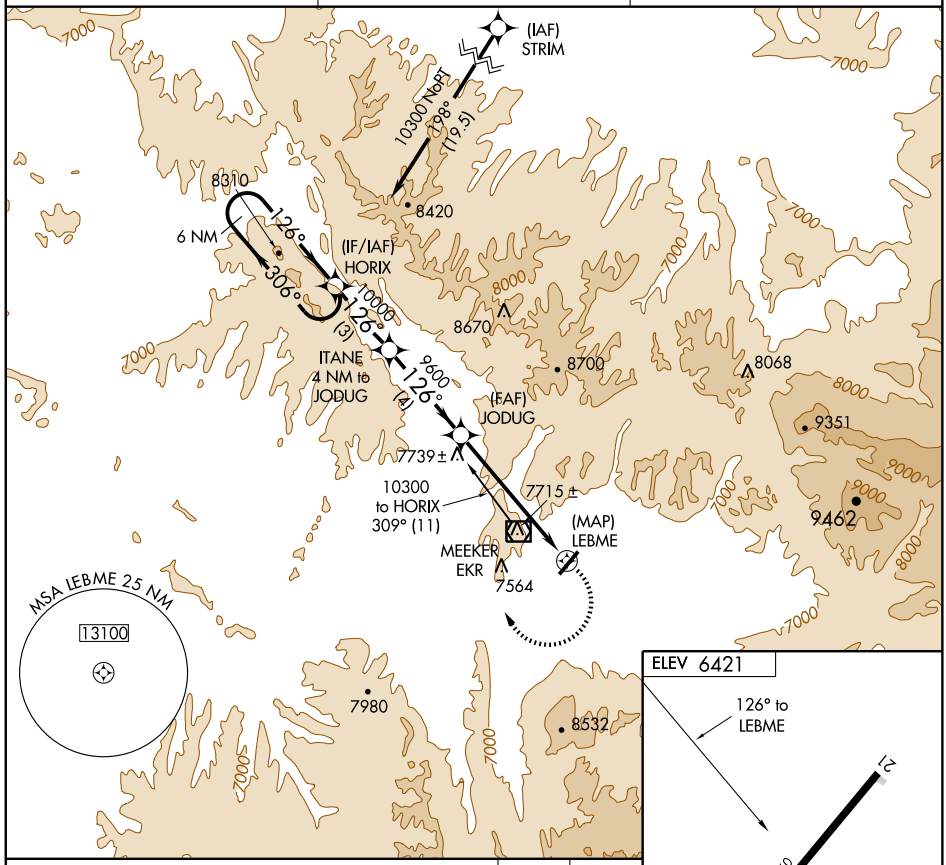
APP CRS	Rwy Idg	N/A
126°	TDZE	N/A
	Apt Elev	6421

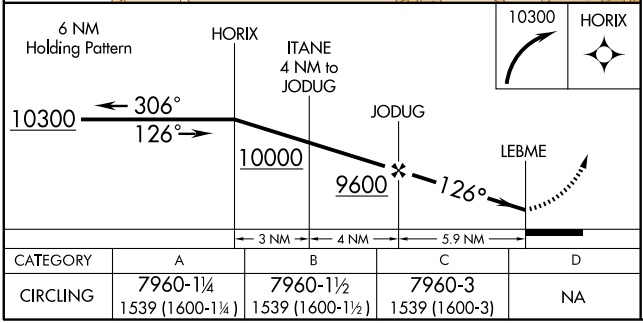
RNAV (GPS)-B
MEEKER (EEO)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Circling not authorized west of Rwy 3-21.

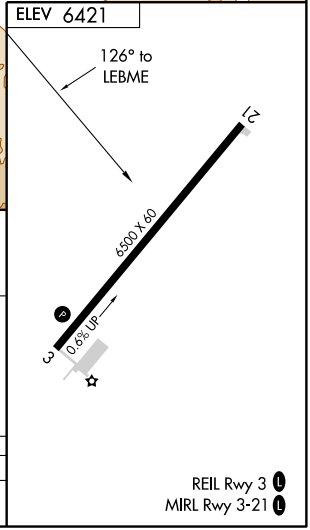
MISSED APPROACH: Climbing right turn to 10300 direct HORIX WP and hold.

ASOS	DENVER CENTER	UNICOM
135.525	134.5 327.8	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	7960-1¼ 1539 (1600-1¼)	7960-1½ 1539 (1600-1½)	7960-3 1539 (1600-3)	NA



REIL Rwy 3 L
MIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009

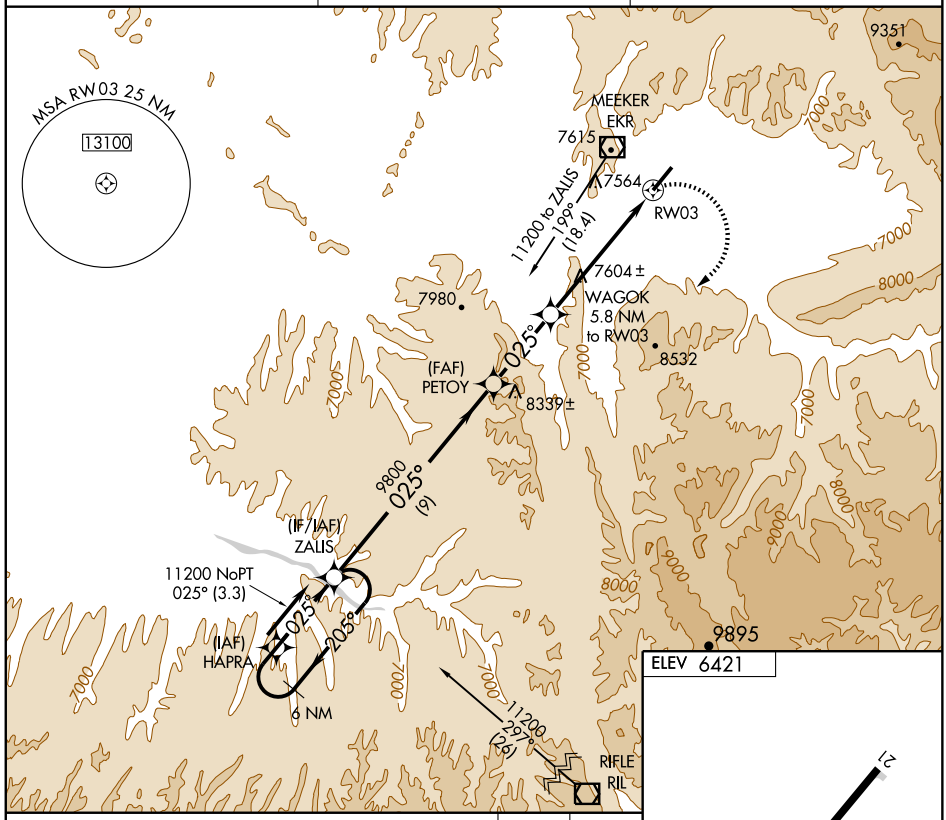
APP CRS	Rwy Idg	6500
025°	TDZE	6367
	Apt Elev	6421

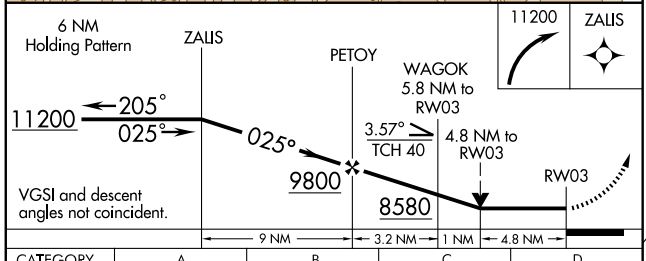
RNAV (GPS) RWY 3
MEEKER (EEO)

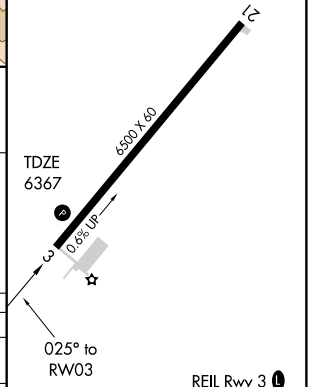
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Circling not authorized west of Rwy 3-21.

MISSED APPROACH: Climbing right turn to 11200 direct ZALIS WP and hold.

ASOS	DENVER CENTER	UNICOM
135.525	134.5 327.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7920-1¼ 1553 (1500-1¼)	7920-1½ 1553 (1500-1½)	7920-3 1553 (1500-3)	NA
CIRCLING	7920-1¼ 1499 (1500-1¼)	7920-1½ 1499 (1500-1½)	7920-3 1499 (1500-3)	NA

REIL Rwy 3 L
MIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME EKR	APP CRS	Rwy Idg	N/A
115.2	107°	TDZE	N/A
Chan 99		Apt Elev	6421

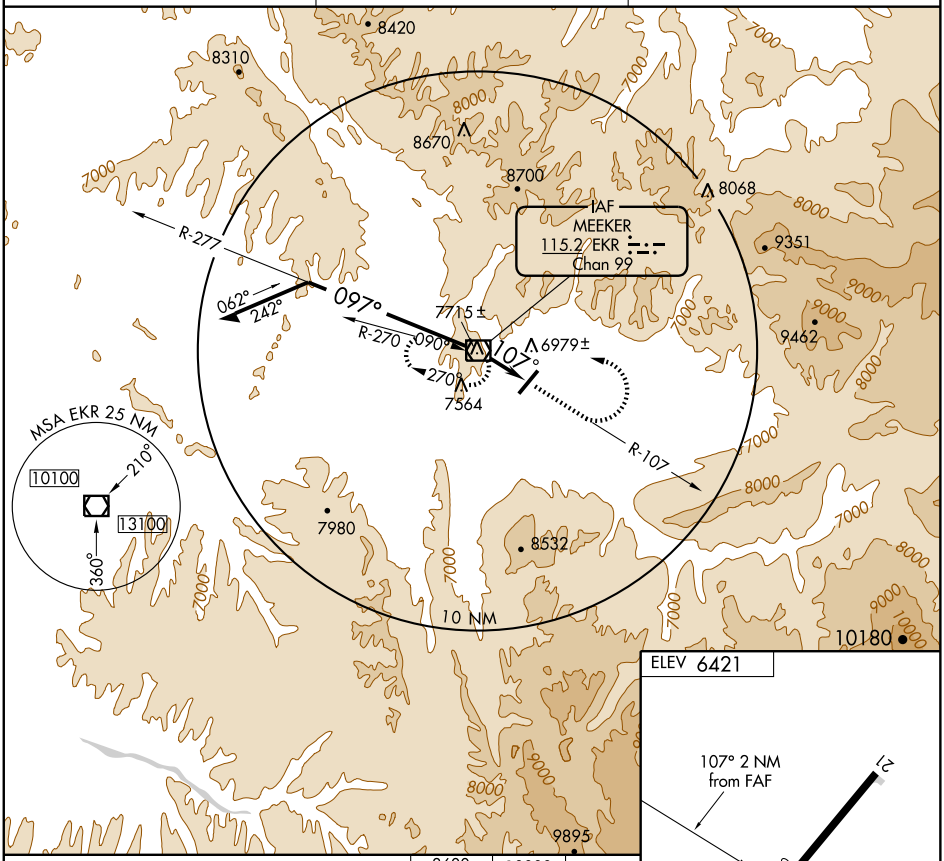
VOR-A
MEEKER (EEO)

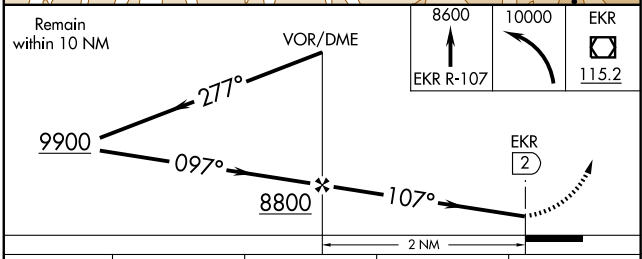
NA

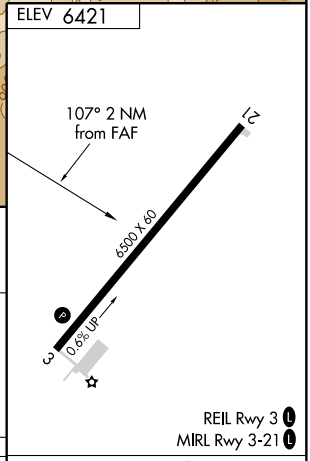
Circling not authorized west of Rwy 3-21.

MISSED APPROACH: Climb via EKR VOR/DME R-107 to 8600, then climbing left turn to 10000 direct EKR VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
135.525	134.5 327.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	8000-1¼ 1579 (1600-1¼)	8000-1½ 1579 (1600-1½)	8000-3 1579 (1600-3)	NA

FAF to MAP 2 NM					
Knots	60	90	120	150	180
Min:Sec	2:00	1:20	1:00	0:48	0:40

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5900
197°	TDZE	7605
	Apt Elev	7608

GPS RWY 20
MONTE VISTA MUNI (MVI)

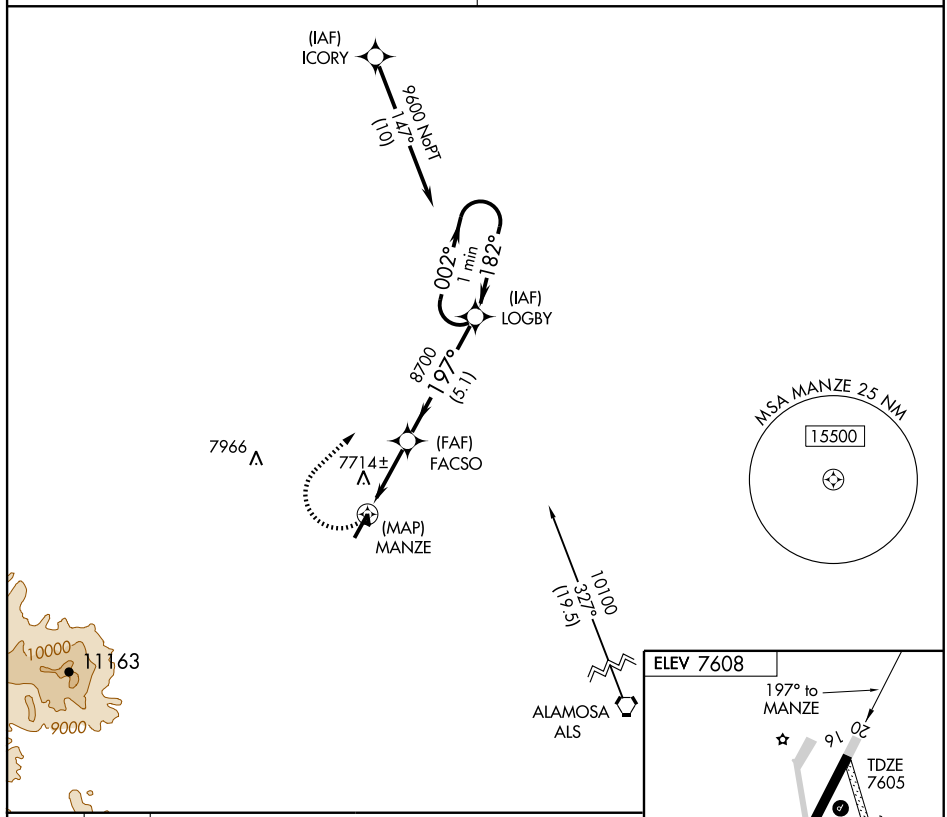
NA

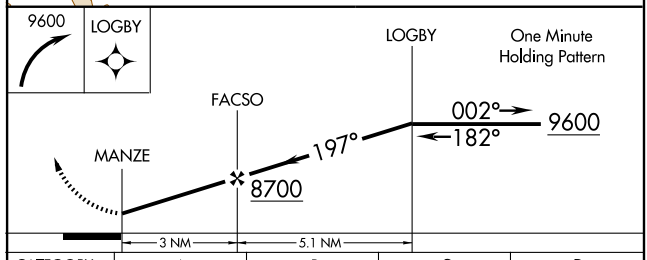
Use Alamosa altimeter setting.

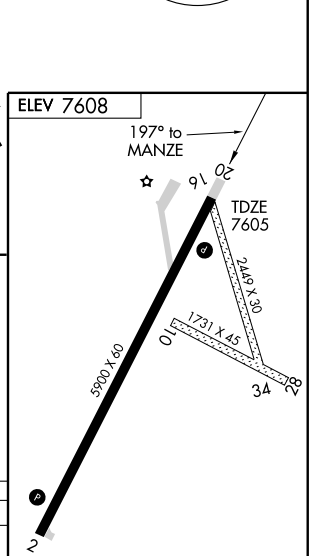
MISSED APPROACH: Climbing right turn to 9600 direct LOGBY WP and hold.

DENVER CENTER
128.375 379.95

UNICOM
122.8 (CTAF) L







CATEGORY	A	B	C	D
S-20	8000-1 395 (400-1)			8000-1¼ 395 (400-1¼)
CIRCLING	8060-1 452 (500-1)		8060-1½ 452 (500-1½)	8160-2 552 (600-2)

MIRL Rwy 2-20 L

SW-1, 22 OCT 2009 to 19 NOV 2009

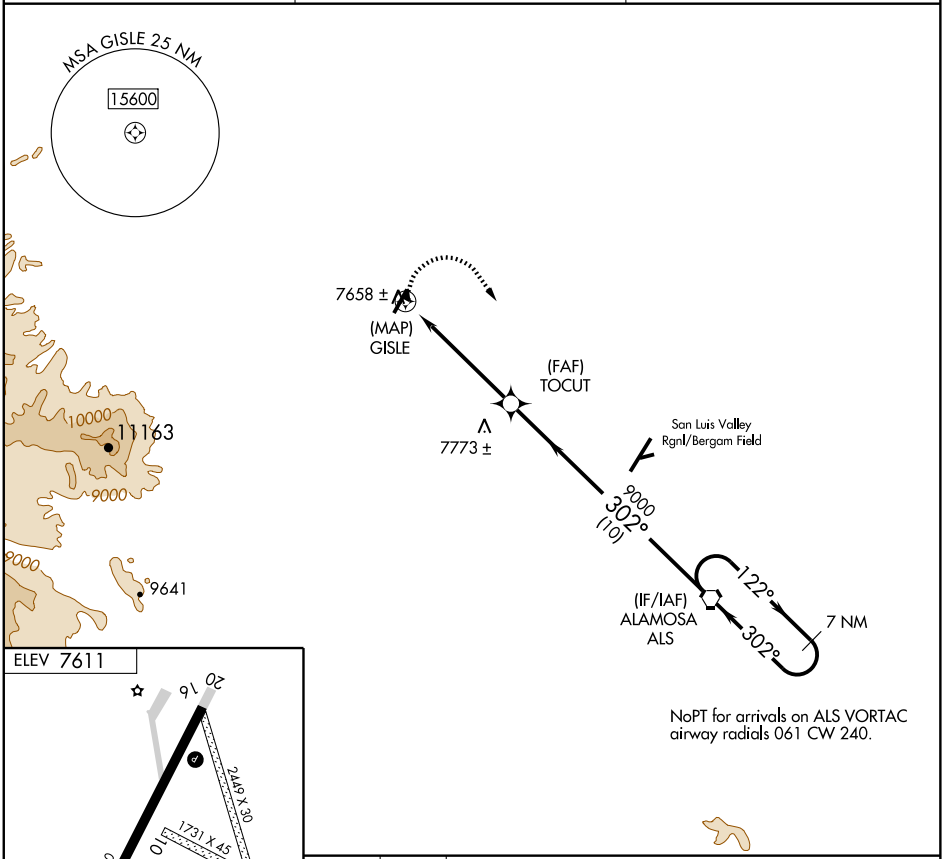
APP CRS	Rwy Idg	N/A
302°	TDZE	N/A
	Apt Elev	7611

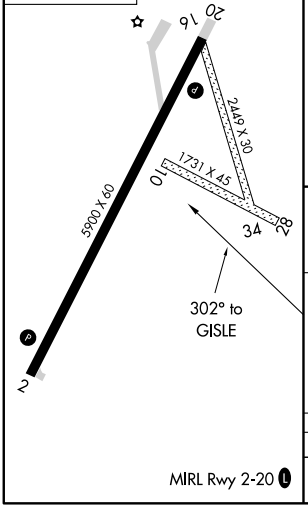
RNAV (GPS)-B
MONTE VISTA MUNI (MVI)

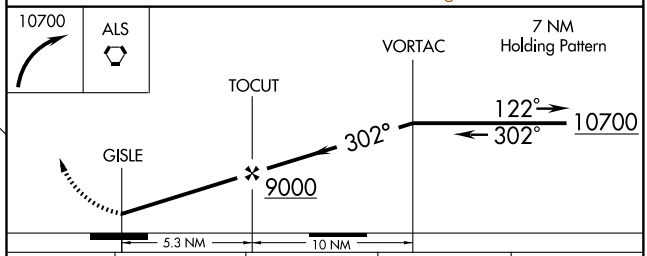
Use Alamosa altimeter setting.
Circling to RWY 10-28 and RWY 16-34 NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 10700 direct ALS VORTAC and hold.

ALAMOSA ASOS	DENVER CENTER	UNICOM
135.175	128.375 379.95	122.8 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	8020-1 409 (500-1)	8080-1 469 (500-1)	8080-1 ½ 469 (500-1½)	8180-2 569 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

MONTE VISTA, COLORADO

AL-6427 (FAA)

VORTAC ALS	APP CRS	Rwy Idg	N/A
113.9	301°	TDZE	N/A
Chan 86		Apt Elev	7611

VOR/DME-A

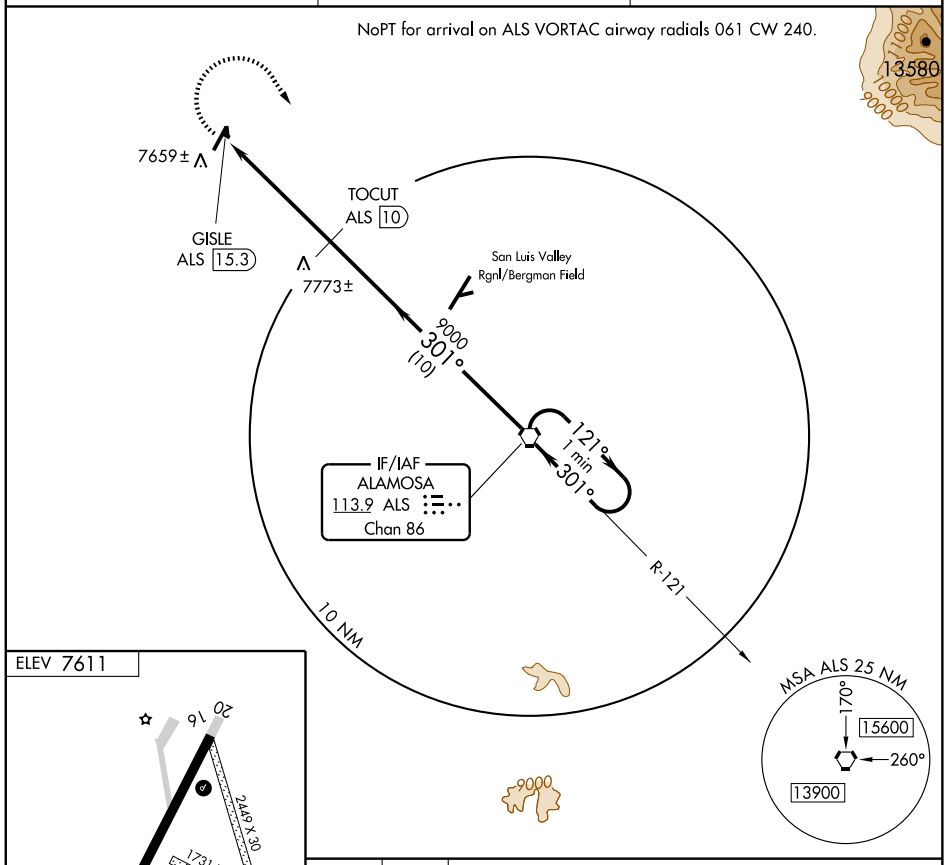
MONTE VISTA MUNI (MVI)

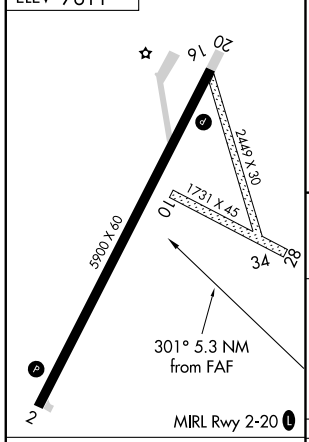
T
A NA — Circling to Rwy 10-28 and Rwy 16-34 NA. Use Alamosa altimeter setting.

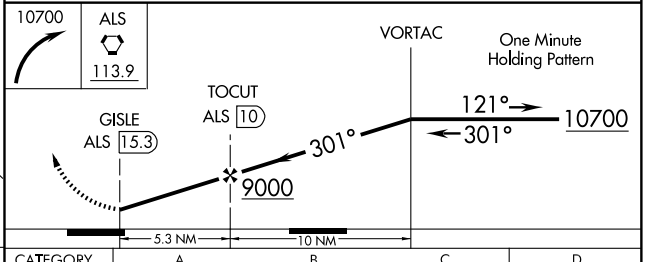
MISSED APPROACH: Climbing right turn to 10700 direct ALS VORTAC and hold.

ALAMOSA ASOS	DENVER CENTER	UNICOM
135.175	128.375 379.95	122.8 (CTAF) L

NoPT for arrival on ALS VORTAC airway radials 061 CW 240.







Knots	60	90	120	150	180
Min:Sec					

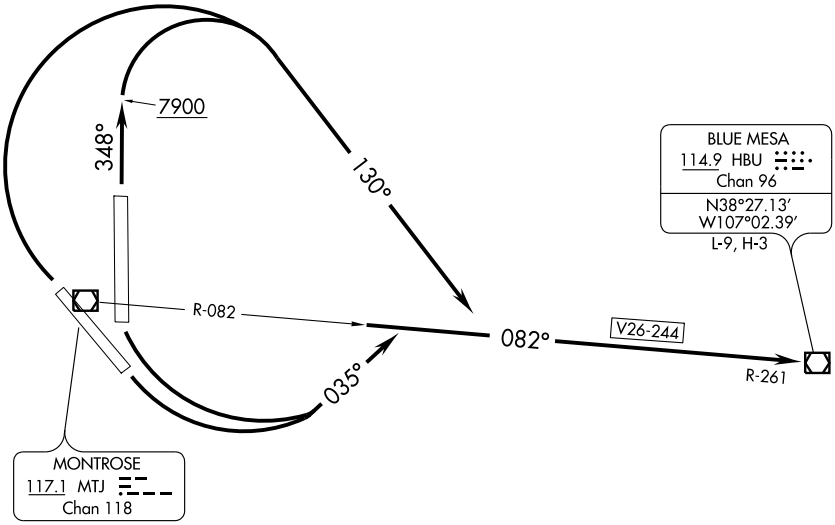
CATEGORY	A	B	C	D
CIRCLING	8020-1 409 (500-1)	8080-1 469 (500-1)	8080-1 ½ 469 (500-1½)	8180-2 569 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

BLUE MESA ONE DEPARTURE

MONTROSE RGNL (MTJ)
MONTROSE, COLORADO

DENVER RADIO
122.65
DENVER CENTER
125.35 354.05
UNICOM
122.8



TAKE-OFF MINIMUMS

Rwy 13: Standard with minimum climb of 450′ per NM to 11300.
Rwy 17: Standard with minimum climb of 420′ per NM to 11300.
Rwy 31: Standard with minimum climb of 450′ per NM to 11300.
Rwy 35: Standard with minimum climb of 460′ per NM to 11300.

TAKE-OFF OBSTACLE NOTES

Rwy 13: Multiple trees beginning 776′ from DER, 273′ left of centerline, up to 50′ AGL/5878′ MSL. Multiple trees and towers beginning 2590′ from DER, 38′ right of centerline, up to 110′ AGL/5910′ MSL.
Rwy 31: Multiple trees beginning 315′ from DER, 378′ left of centerline, up to 50′ AGL/5749′ MSL.
Rwy 35: Multiple trees beginning 218′ from DER, 511′ left of centerline, up to 50′ AGL/5709′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

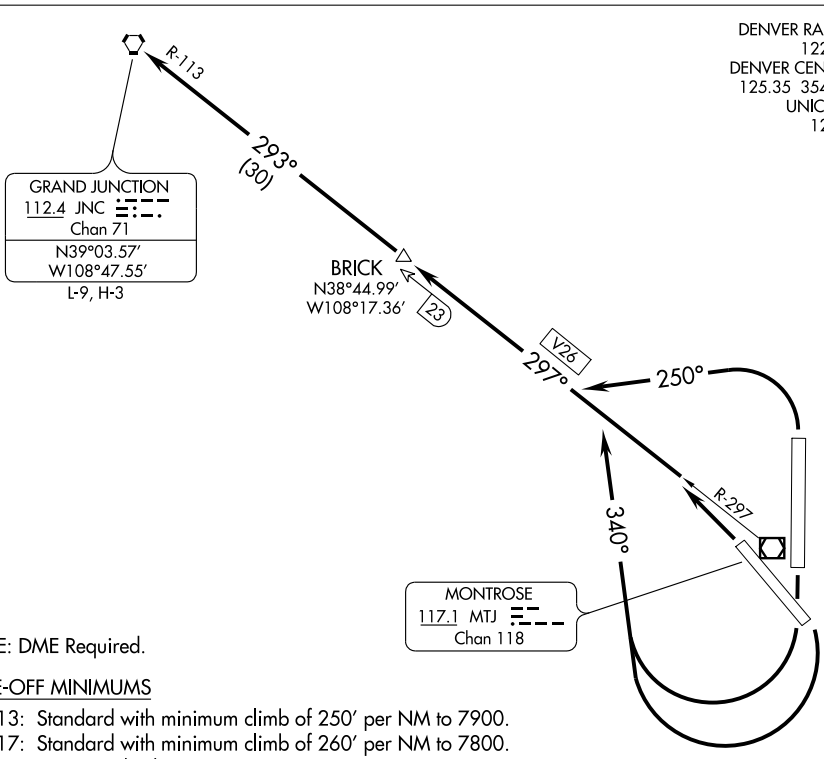
TAKE-OFF RUNWAYS 13, 17: Climbing left turn to 12500 via heading 035° and MTJ R-082 to HBU VOR/DME, then via assigned route.

TAKE-OFF RUNWAY 31: Climbing right turn to 12500 via heading 130° and MTJ R-082 to HBU VOR/DME, then via assigned route.

TAKE-OFF RUNWAY 35: Climb heading 348° to 7900 then climbing right turn to 12500 via heading 130° and MTJ R-082 to HBU VOR/DME, then via assigned route.

SW-1, 22 OCT 2009 to 19 NOV 2009

BRICK ONE DEPARTURE



NOTE: DME Required.

TAKE-OFF MINIMUMS

Rwy 13: Standard with minimum climb of 250′ per NM to 7900.
Rwy 17: Standard with minimum climb of 260′ per NM to 7800.
Rwys 31, 35: Standard.

TAKE-OFF OBSTACLE NOTES

Rwy 13: Multiple trees beginning 776′ from DER, 273′ left of centerline, up to 50′ AGL/5878′ MSL. Multiple trees and towers beginning 2590′ from DER, 38′ right of centerline, up to 110′ AGL/5910′ MSL.
Rwy 31: Multiple trees beginning 315′ from DER, 378′ left of centerline, up to 50′ AGL/5749′ MSL.
Rwy 35: Multiple trees beginning 218′ from DER, 511′ left of centerline, up to 50′ AGL/5709′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13, 17: Climbing right turn to 11000 via heading 340° and MTJ R-297 to BRICK/MTJ 23 DME, Thence. . . .

TAKE-OFF RUNWAY 31: Climbing left turn to 11000 via MTJ R-297 to BRICK/MTJ 23 DME, Thence . . . .

TAKE-OFF RUNWAY 35: Climbing left turn to 11000 via heading 250° and MTJ R-297 to BRICK/MTJ 23 DME, Thence . . . .

. . . . Via V26 to JNC VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-MTJ	APP CRS	Rwy Idg	10000
111.3	168°	TDZE	5704
		Apt Elev	5759

ILS or LOC/DME RWY 17

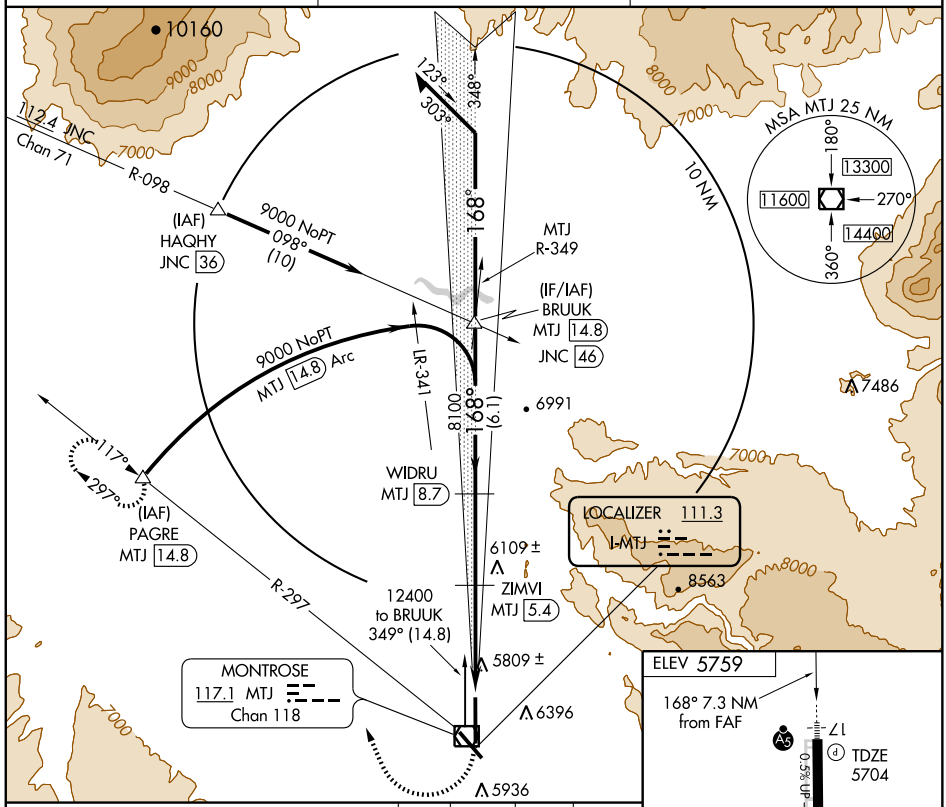
MONTROSE RGNL (MTJ)

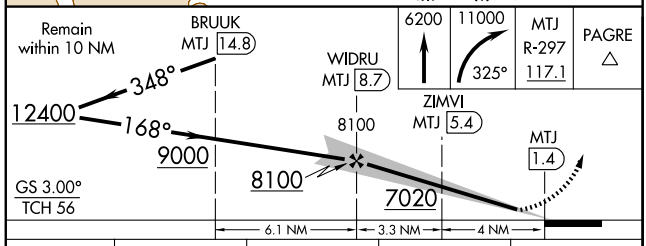
DME required.
DME from MTJ VOR/DME. Simultaneous reception of I-MTJ and MTJ DME required.

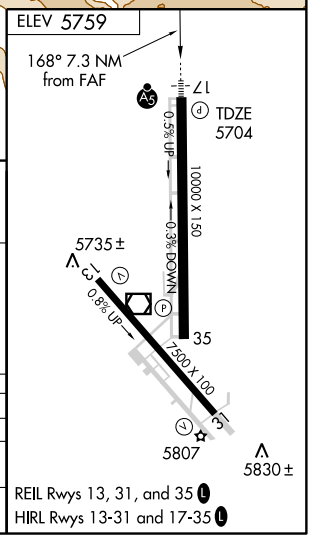
MALSR

MISSED APPROACH: Climb to 6200 then climbing right turn to 11000 via heading 325° and MTJ VOR/DME R-297 to PAGRE/ MTJ 14.8 DME and hold, continue climb-in-hold to 11000.

ASOS	DENVER CENTER	UNICOM
135.225	125.35 354.05	122.8 (CTAF) L







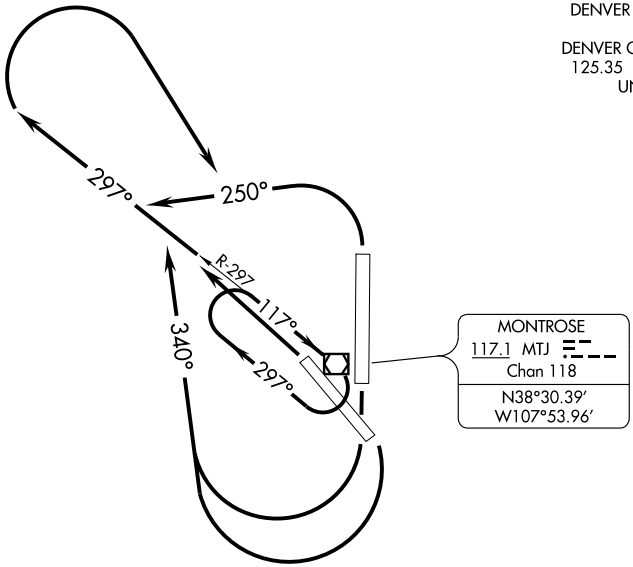
CATEGORY	A	B	C	D
S-ILS 17	5904-½ 200 (200-½)			
S-LOC 17	6060-½ 356 (400-½)			6060-¾ 356 (400-¾)
CIRCLING	6240-1 481 (500-1)	6300-1 541 (600-1)	6660-2¾ 901 (1000-2¾)	6700-3 941 (1000-3)

REIL Rwys 13, 31, and 35 L
HIRL Rwys 13-31 and 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

MONTROSE ONE DEPARTURE (OBSTACLE)

DENVER RADIO
122.65
DENVER CENTER
125.35 354.05
UNICOM
122.8



TAKE-OFF MINIMUMS

Rwy 13: Standard with minimum climb of 250' per NM to 8100, or 5000-3 for climb in visual conditions.
Rwy 17: Standard with minimum climb of 260' per NM to 8100, or 5000-3 for climb in visual conditions.
Rwys 31, 35: Standard.

TAKE-OFF OBSTACLE NOTES

Rwy 13: Multiple trees beginning 776' from DER, 273' left of centerline, up to 50' AGL/5878' MSL. Multiple trees and towers beginning 2590' from DER, 38' right of centerline, up to 110' AGL/5910' MSL.
Rwy 31: Multiple trees beginning 315' from DER, 378' left of centerline, up to 50' AGL/5749' MSL.
Rwy 35: Multiple trees beginning 218' from DER, 511' left of centerline, up to 50' AGL/5709' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13, 17: Climbing right turn to 8100 via heading 340° and MTJ R-297, then climbing right turn to 11000 direct MTJ VOR/DME, Thence. . . .
Or, for climb in visual conditions: Cross Montrose Rgnl Airport at or above 10600 before proceeding on course.

TAKE-OFF RUNWAY 31: Climbing left turn to 8100 via MTJ R-297, then climbing right turn to 11000 direct MTJ VOR/DME, Thence . . . .

TAKE-OFF RUNWAY 35: Climbing left turn to 8600 via heading 250° and MTJ R-297, then climbing right turn to 11000 direct MTJ VOR/DME, Thence . . . .

. . . . Continue climb-in-hold in MTJ VOR/DME holding pattern to cross MTJ VOR/DME at or above 11000, then proceed via assigned route.

SW-1, 22 OCT 2009 to 19 NOV 2009

MONTROSE, COLORADO

AL-668 (FAA)

APP CRS	Rwy Idg	7500
127°	TDZE	5719
	Apt Elev	5759

RNAV (GPS) RWY 13

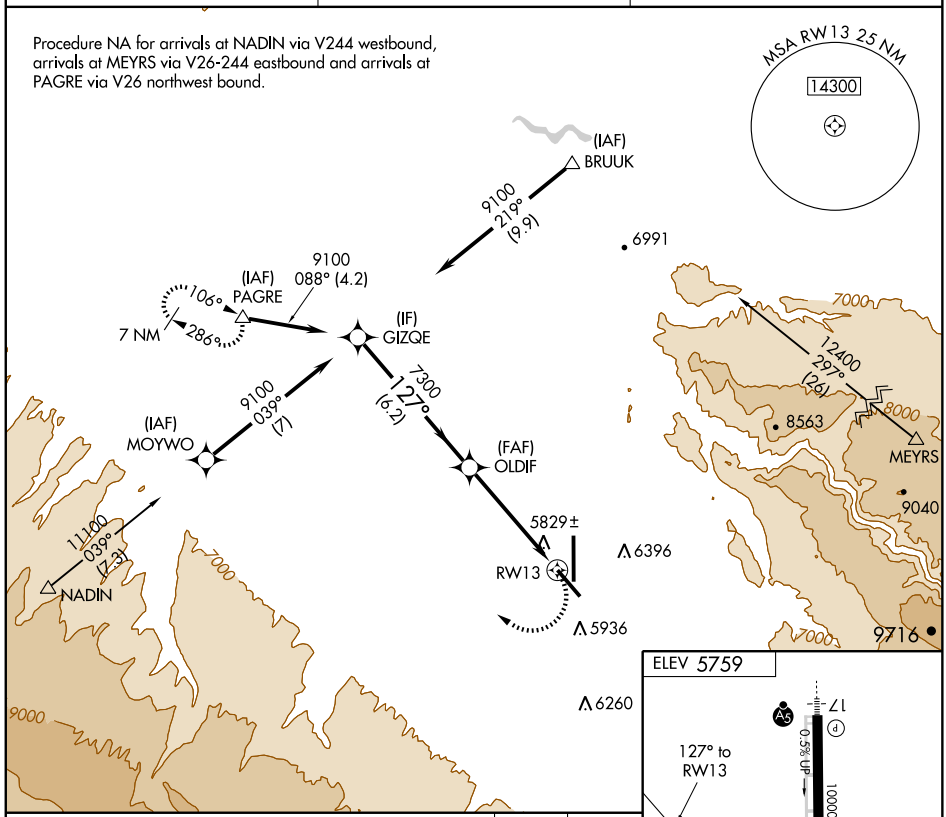
MONTROSE RGNL (MTJ)

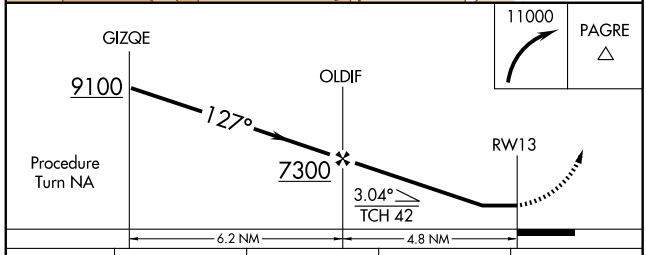
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

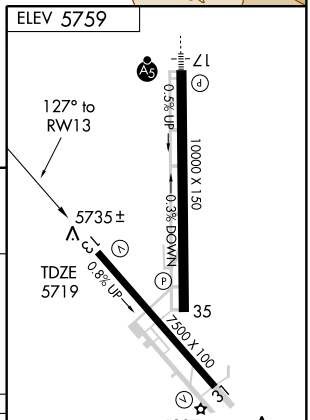
MISSED APPROACH: Climbing right turn to 11000 direct PAGRE and hold, continue climb-in-hold to 11000.

ASOS	DENVER CENTER	UNICOM
135.225	125.35 354.05	122.8 (CTAF) L

Procedure NA for arrivals at NADIN via V244 westbound, arrivals at MEYRS via V26-244 eastbound and arrivals at PAGRE via V26 northwest bound.







CATEGORY	A	B	C	D
LNAV MDA	6160-1 441 (500-1)		6160-1¼ 441 (500-1¼)	6160-1½ 441 (500-1½)
CIRCLING	6240-1 481 (500-1)	6300-1 541 (600-1)	6660-2¾ 901 (1000-2¾)	6700-3 941 (1000-3)

REIL Rwys 13, 31 and 35 L
HIRL Rwys 13-31 and 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

MONTROSE, COLORADO

AL-668 (FAA)

APP CRS	Rwy Idg	10000
340°	TDZE	5730
	Apt Elev	5759

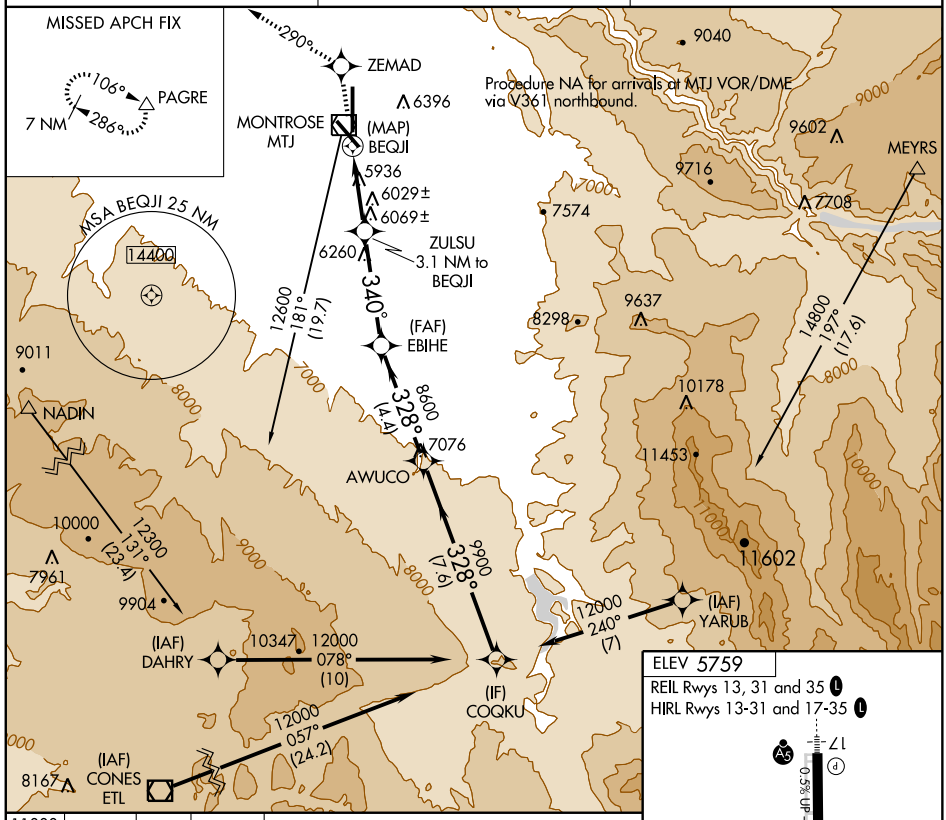
RNAV (GPS) RWY 35

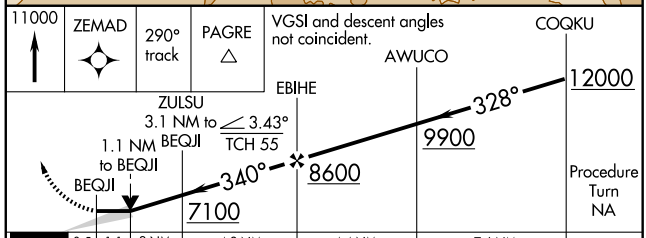
MONTROSE RGNL (MTJ)

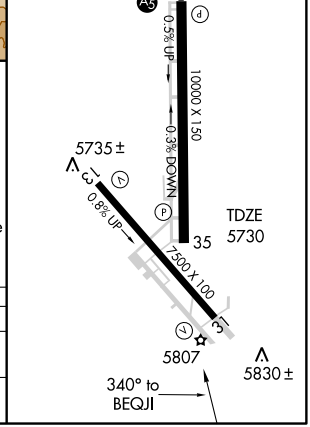
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 11000 direct ZEMAD and via 290° track to PAGRE and hold, continue climb-in-hold to 11000.

ASOS	DENVER CENTER	UNICOM
135.225	125.35 354.05	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	6280-1 550 (600-1)		6280-1½ 550 (600-1½)	6280-1¾ 550 (600-1¾)
CIRCLING	6280-1 521 (600-1)	6300-1 541 (600-1)	6660-2¾ 901 (1000-2¾)	6700-3 941 (1000-3)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10000
168°	TDZE	5704
	Apt Elev	5759

RNAV (GPS) Y RWY 17

MONTROSE RGNL (MTJ)

DME/DME RNP-0.3 NA.
For inoperative MALSR, increase LNAV Cat D visibility to 1¼ mile.

MALSR

MISSED APPROACH: Climbing right turn to 11000 direct PAGRE and hold, continue climb-in-hold to 11000.

ASOS	DENVER CENTER	UNICOM
135.225	125.35 354.05	122.8 (CTAF) L

Procedure NA for arrivals at GEJYU via V361 northeast bound and arrivals at HAQHY via V484 westbound.

DIRDY

13000 211° (11.7)

(IAF) HAQHY

9800 102° (10)

(IAF) GEJYU

9800 246° (10)

(IF) BRUUK

MSA RW17 25 NM

13400

11400 004° (9.6)

106° 286° 7 NM

PAGRE

8100 168° (6.1)

6991

7486

14800 319° (21.3)

(FAF) WIDRU

ZIMVI 4 NM to RW17

6669±

MEYRS

8563

11400 to HAQHY 014° (21.6)

NADIN

YECTU 2 NM to RW17

5869±

RW17

6396

9040

5936

9716

7574

ELEV 5759

168° to RW17

17

TDZE 5704

0.5% up

10000 X 150

0.3% DOWN

5735±

0.8% up

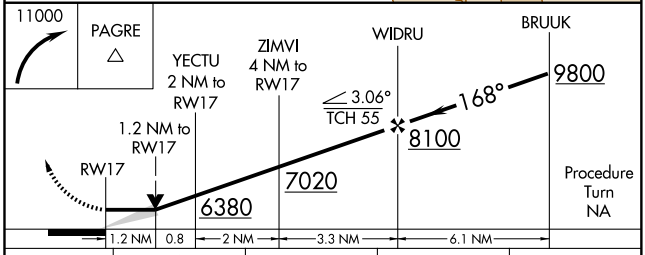
35

7500 X 100

5807

5830±

REIL Rwys 13, 31 and 35 L
HIRL Rwys 13-31 and 17-35 L



CATEGORY	A	B	C	D
LNAV MDA	6120-½ 416 (400-½)		6120-¾ 416 (400-¾)	6120-1 416 (400-1)
CIRCLING	6240-1 481 (500-1)	6300-1 541 (600-1)	6660-2¾ 901 (1000-2¾)	6700-3 941 (1000-3)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 40411 W17A	APP CRS 168°	Rwy Idg 10000 TDZE 5704 Apt Elev 5759

RNAV (GPS) Z RWY 17

MONTROSE RGNL (MTJ)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 11000 direct UGEYU and right turn via 268° track to WEGUK and via 320° track to PAGRE and hold, continue climb-in-hold to 11000.

ASOS	DENVER CENTER	UNICOM
135.225	125.35 354.05	122.8 (CTAF) L

Procedure NA for arrivals at GEJYU via V361 northeast bound and arrivals at HAQHY via V484 westbound.

MSA RW17 25 NM
13400

(IAF) HAQHY
9800
102°
(10)

(IF) BRUUK

(IAF) GEJYU
9800
246°
(10)

DIRDY
13000
211° (11.7)

11400
290°
(19)

106°
286°
7 NM
PAGRE

168°
(6.1)
8100

6991

7486

14800
319°
(21.3)

(FAF) WIDRU

ZIMVI
4 NM to RW17

6669±
6029±
5869±
6396
5936

RW17

MEYRS

8563
9040
9716
7574

7000
8000

11400 to HAQHY
014° (21.6)

NADIN

320°

268°

WEGUK

UGEYU
6260

ELEV 5759

168° to RW17

17

TDZE 5704

0.5% up

10000 X 150

0.3% DOWN

0.8% up

7500 X 100

35

5735±

5807

5830±

REIL Rwys 13, 31 and 35 L
HIRL Rwys 13-31 and 17-35 L

11000	UGEYU	268° track	WEGUK	320° track	PAGRE

* LNAV only

*1.6 NM to RW17

ZIMVI 4 NM to RW17

WIDRU

BRUUK

168°

9800

Procedure Turn NA

GS 3.00°
TCH 56

8100

7020*

RW17

1.6 NM | 2.4 NM | 3.3 NM | 6.1 NM

CATEGORY	A	B	C	D
LPV DA	5928-½ 224 (200-½)			
LNAV/VNAV DA	6388-2 684 (700-2)			
LNAV MDA	6260-½ 556 (600-½)		6260-1 556 (600-1)	6260-1¼ 556 (600-1¼)
CIRCLING	6260-1 501 (600-1)	6300-1 541 (600-1)	6660-2¾ 901 (1000-2¾)	6700-3 941 (1000-3)

SW-1, 22 OCT 2009 to 19 NOV 2009

MONTROSE, COLORADO

AL-668 (FAA)

VOR/DME MTJ	APP CRS	Rwy Idg	7500
117.1	117°	TDZE	5719
Chan 118		Apt Elev	5759

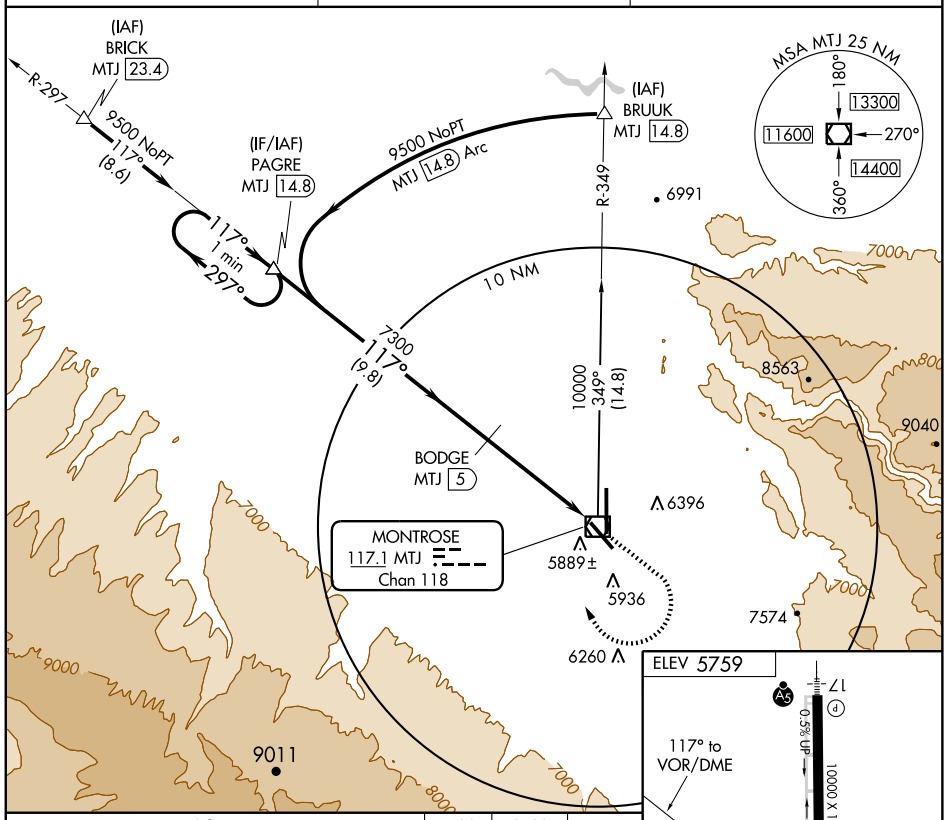
VOR/DME RWY 13

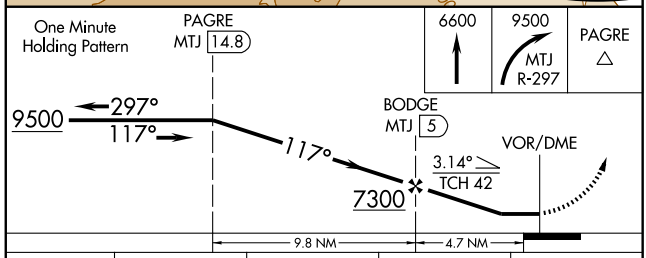
MONTROSE RGNL (MTJ)

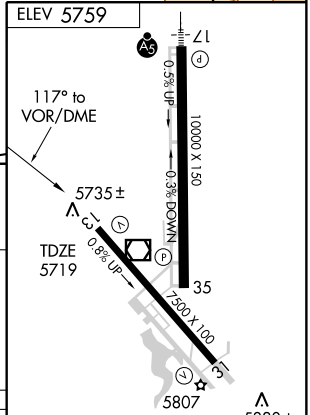
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 6600 then climbing right turn to 9500 via MTJ VOR/DME R-297 to PAGRE/14.8 DME and hold.

ASOS	DENVER CENTER	UNICOM
135.225	125.35 354.05	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	6140-1 421 (400-1)		6140-1¼ 421 (400-1¼)	
CIRCLING	6240-1 481 (500-1)	6300-1 541 (600-1)	6660-2 ¾ 901 (1000-2¾)	6700-3 941 (1000-3)

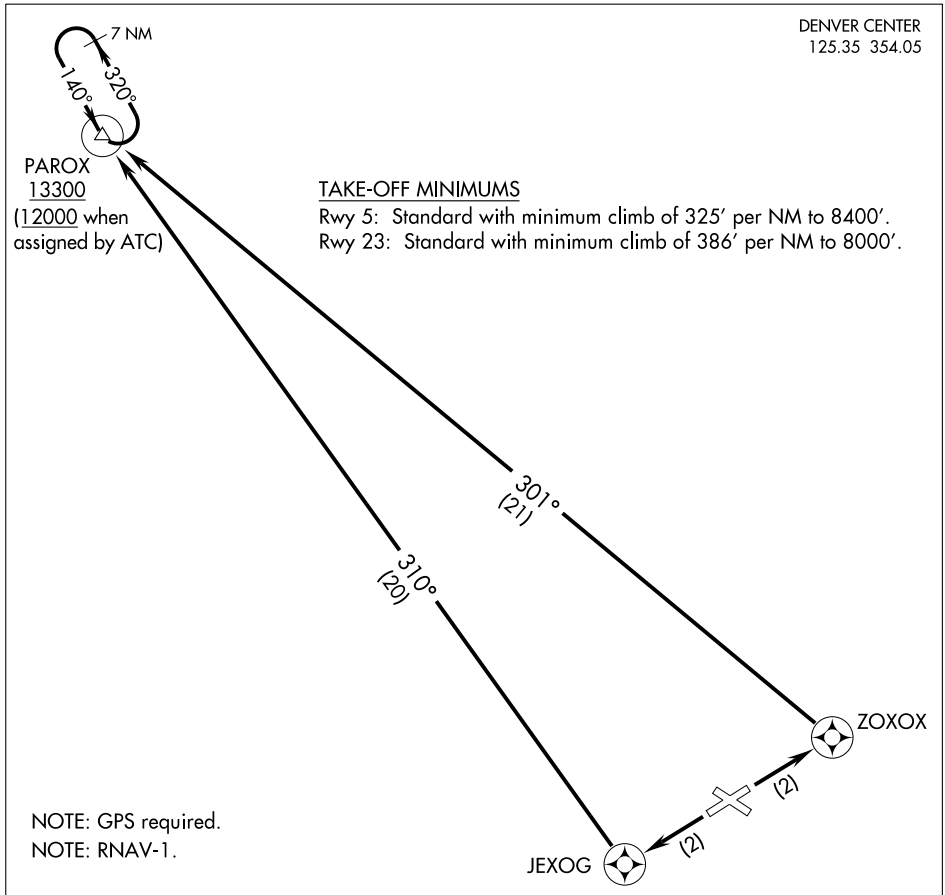
REIL Rwys 13, 31 and 35 L

HIRL Rwys 13-31 and 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

NUCLA ONE DEPARTURE (RNAV) (OBSTACLE)

DENVER CENTER
125.35 354.05



TAKE-OFF MINIMUMS

Rwy 5: Standard with minimum climb of 325′ per NM to 8400′.
Rwy 23: Standard with minimum climb of 386′ per NM to 8000′.

NOTE: GPS required.
NOTE: RNAV-1.

TAKE-OFF OBSTACLE NOTES

Rwy 5: Vehicle on road at DER, left and right of centerline, 15′ AGL/5962′ MSL.
Tree 202′ from DER, 309′ right of centerline, 20′ AGL/5979′ MSL.
Rwy 23: Tree 13′ from DER, 181′ right of centerline, 20′ AGL/5905′ MSL.
Vehicle on road 209′ from DER, left and right of centerline, 15′ AGL/ 5922′ MSL.
Tree 125′ from DER, 91′ left of centerline, 20′ AGL/ 5902′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 5: Climb to 12000 direct ZOXOX and left turn via 301° track to PAROX, thence . . .

TAKE-OFF RUNWAY 23: Climb to 12000 direct JEXOG and right turn via 310° track to PAROX, thence . . .

. . . climb in PAROX holding pattern (hold NW, left turns, 140° inbound) to cross PAROX at or above 13300 (12000 when assigned by ATC) before proceeding enroute.

SW-1, 22 OCT 2009 to 19 NOV 2009

NUCLA, COLORADO

AL-9483 (FAA)

APP CRS	Rwy Idg	N/A
126°	TDZE	N/A
	Apt Elev	5940

RNAV (GPS)-A

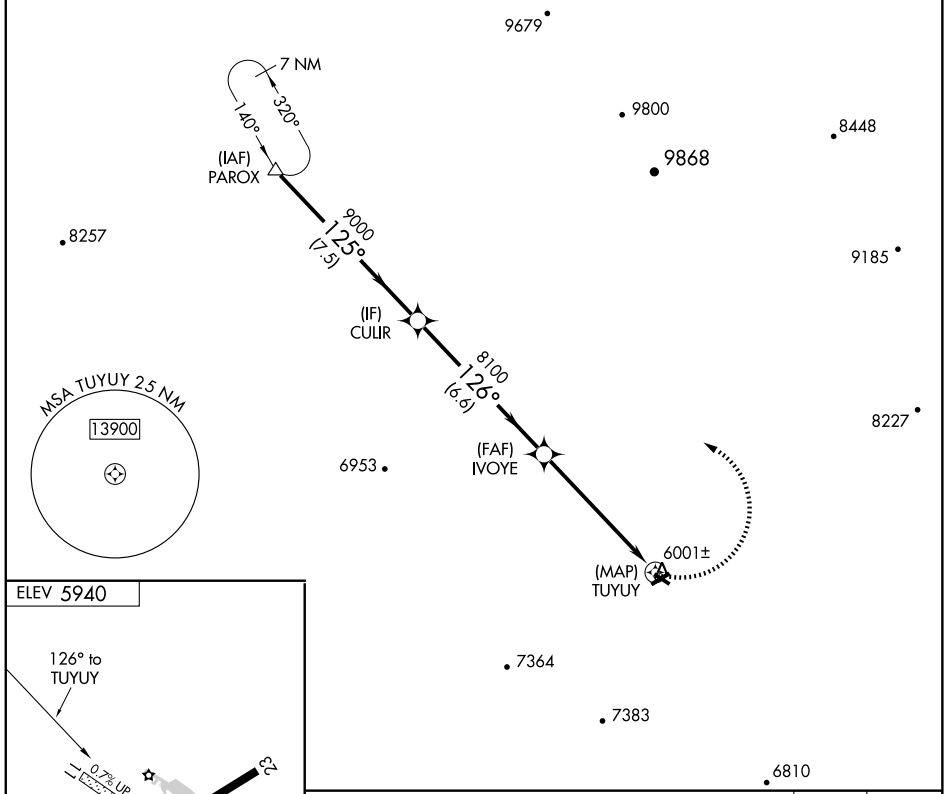
NUCLA/ HOPKINS FIELD (AIB)

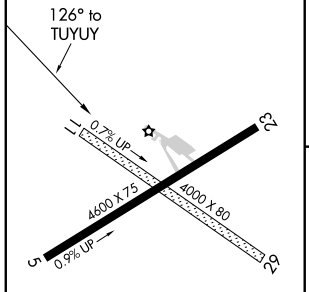
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.
Circling to Rwys 11/29 NA.

MISSED APPROACH: Climbing left turn to 12000 direct PAROX and hold, continue climb-in-hold to 12000.

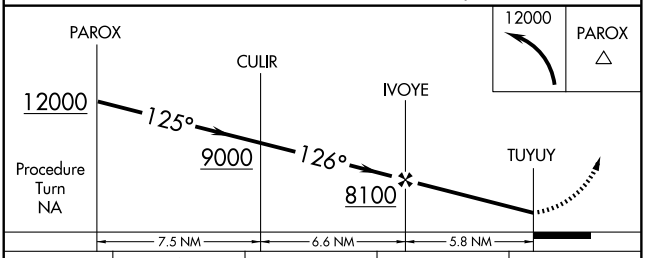
AWOS-3	DENVER CENTER	UNICOM
132.525	125.35 354.05	122.8 (CTAF)

NoPT for arrival at PAROX on V391 southbound.
All arrivals via V244 descend to 12000 in PAROX holding pattern before departing PAROX.





MIRL Rwy 5-23



CATEGORY	A	B	C	D
CIRCLING	6600-1	660 (700-1)	6600-1¾ 660 (700-1¾)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
349°	TDZE	N/A
	Apt Elev	7664

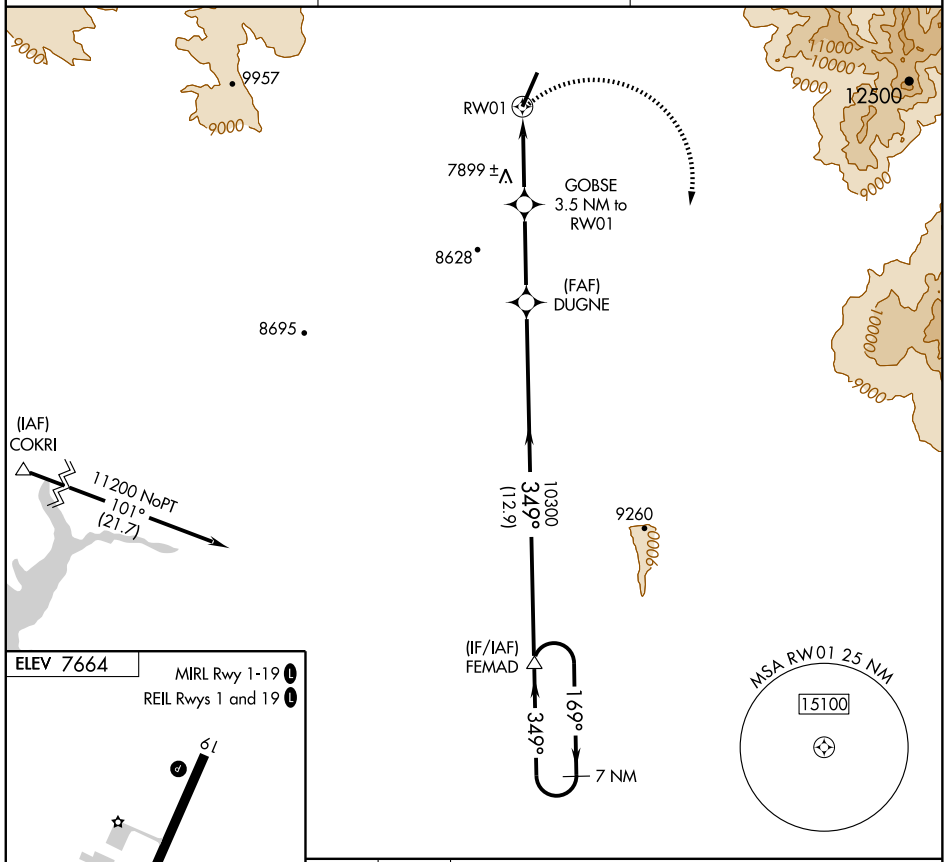
RNAV (GPS)-A

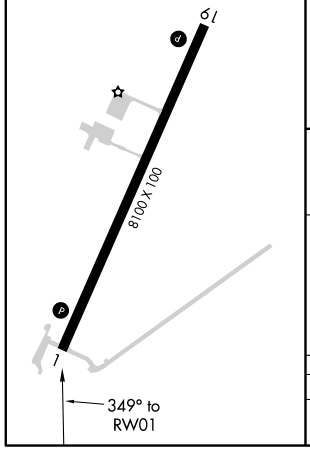
PAGOSA SPRINGS/ STEVENS FIELD (PSO)

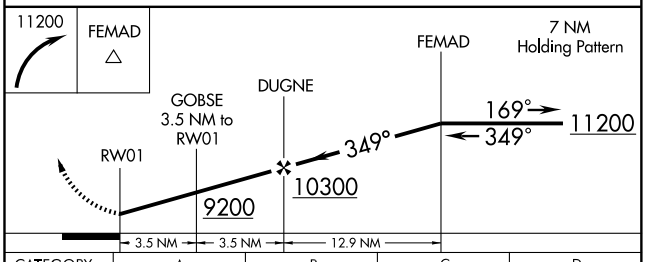
Circling to Rwy 19 NA at night. DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Durango altimeter setting: increase all MDAs 220 feet and visibility Cat. A ¼ mile, Cat. B ½ mile, Cat. C 1 mile.

MISSED APPROACH: Climbing right turn to 11200 direct FEMAD and hold.

AWOS-3	DENVER CENTER	UNICOM
127.175	118.575 348.7	122.7 (CTAF) L

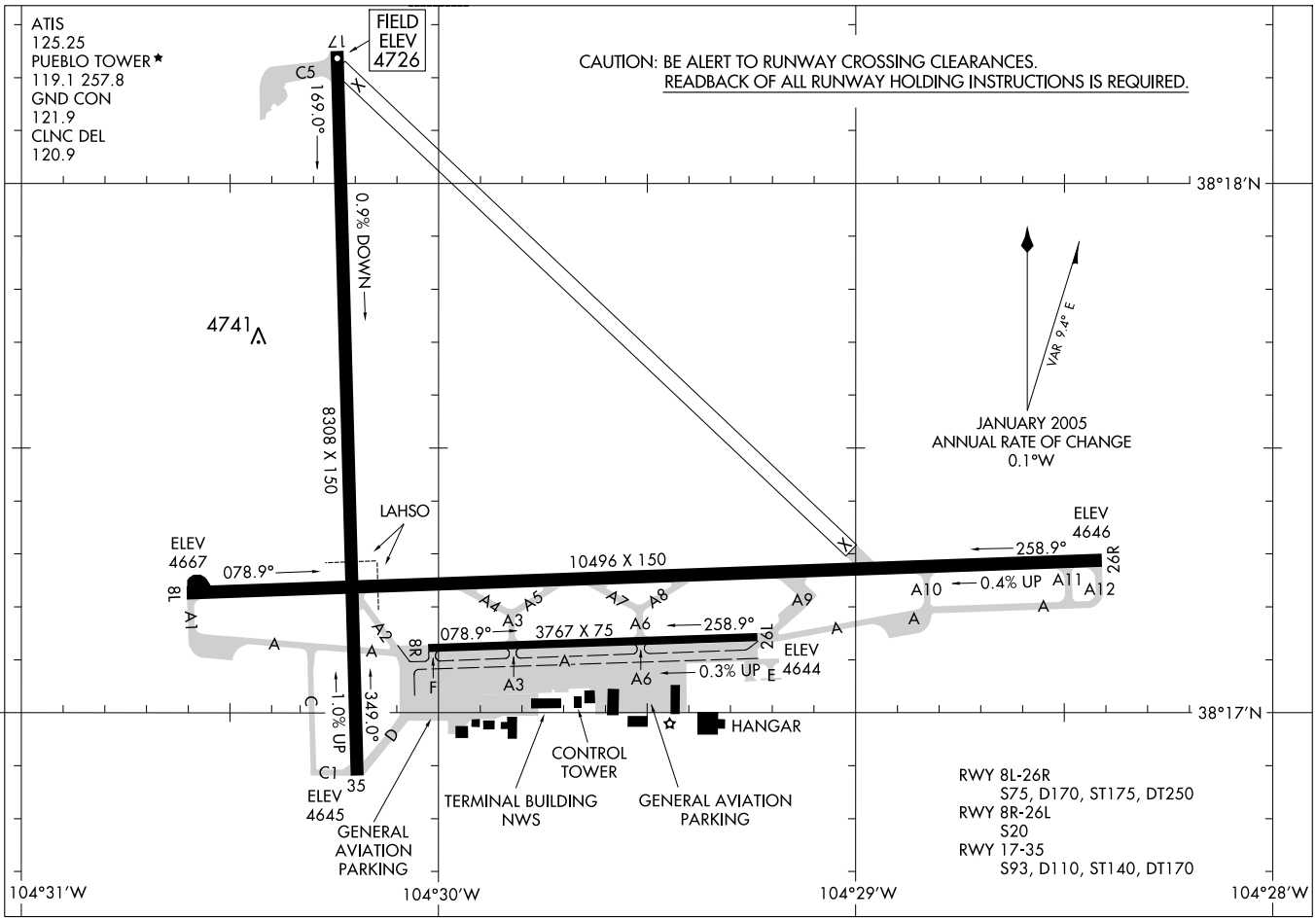






CATEGORY	A	B	C	D
CIRCLING	8400-1 736 (800-1)		8400-2 736 (800-2)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-334 (FAA)

PUEBLO MEMORIAL (PUB)

PUEBLO, COLORADO

CANYON ONE DEPARTURE

PUEBLO MEMORIAL (PUB)
PUEBLO, COLORADO

ATIS★
125.25
DENVER DEP CON★
120.1 290.5
DENVER CENTER★
128.375 379.95
PUEBLO TOWER★
119.1 257.8
GND CON
121.9

N

MEEKER
115.2 EKR
Chan 99
N40°04.05′-W107°55.49′
L-9-11, H-3

KREMMLING
113.8 RLG
Chan 85
N40°00.16′-W106°26.55′
L-9-11, H-3-5

CHEYENNE
113.1 CYS
Chan 78
N41°12.66′-W104°46.37′
L-12, H-3-5

MILE HIGH
114.7 DVV
Chan 94
N39°53.68′-W104°37.46′
L-10, H-3-5

AKRON
114.4 AKO
Chan 91
N40°09.33′-W103°10.78′
L-10, H-5

GOODLAND
115.1 GLD
Chan 98
N39°23.27′-W101°41.54′
L-10, H-5

RIFLE
110.6 RIL
Chan 43
N39°31.69′-W107°42.98′
L-9, H-3

FALCON
116.3 FQF
Chan 110
N39°41.41′-W104°37.26′
L-10, H-5

THURMAN
112.9 TXC
Chan 76
N39°41.90′-W103°12.90′
L-10, H-5

RED TABLE
113.7 DBL
Chan 77
N39°26.36′-W106°53.68′
L-9, H-3

GRAND JUNCTION
112.4 JNC
Chan 71
N39°03.57′-W108°47.55′
L-9, H-3

BLACK FOREST
112.5 BRK
Chan 72
N38°56.67′-W104°38.01′
L-10, H-3-5

HUGO
112.1 HGO
Chan 58
N38°49.05′-W103°37.28′
L-10, H-5

BLUE MESA
114.9 HBU
Chan 96
N38°27.13′-W107°02.39′
L-9, H-3

PUEBLO
116.7 PUB
Chan 114
N38°17.66′-W104°25.77′
L-10, H-5

LAMAR
116.9 LAA
Chan 116
N38°11.83′-W102°41.25′
L-10, H-5

DURANGO
108.2 DRO
Chan 19
N37°09.20′-W107°44.98′
L-8-9

ALAMOSA
113.9 ALS
Chan 86
N37°20.95′-W105°48.93′
L-8-9, H-4-5

TOBE
111.2 TBE
Chan 49
N37°15.52′-W103°36.00′
L-15, H-5

TAKE-OFF MINIMUMS
Rwy 8L, 8R, 26L, 26R, 17: Standard.
Rwy 35: Standard with minimum climb of 285′ per NM to 7000′.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8L: Climb assigned heading between 020° and 100° to 7000' or assigned ATC altitude. Thence. . . .

TAKE-OFF RUNWAY 8R: Climb assigned heading between 020° and 100° to 7000' or assigned ATC altitude. Thence. . . .

TAKE-OFF RUNWAY 26L: Climb assigned heading between 240° and 280° to 7000' or assigned ATC altitude. Thence. . . .

TAKE-OFF RUNWAY 26R: Climb assigned heading between 240° and 280° to 7000' or assigned ATC altitude. Thence. . . .

TAKE-OFF RUNWAY 17: Climb assigned heading between 150° and 190° to 7000' or assigned ATC altitude. Thence. . . .

TAKE-OFF RUNWAY 35: Climb assigned heading between 020° and 040° to 7000' or assigned ATC altitude. Thence. . . .

. . . . Expect RADAR vectors to intercept filed/assigned route or enroute FIX/NAVAID. Maintain ATC assigned altitude. Expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS

If no transmissions are received within 1 minute after departure, maintain assigned heading until 7,000' (Runway 26 departures will need to turn left direct PUB VORTAC due to antenna NW of departure end), then climb to filed altitude direct PUB VORTAC.

TAKE-OFF OBSTACLE NOTES

Runway 8L: Rising terrain 57' from DER, 123' left of centerline, up to 4649' MSL.
Runway 8R: Rising terrain 180' from DER, 58' left of centerline, up to 4659' MSL.
Runway 26L: Rising terrain 110' from DER, 182' right of centerline, up to 4659' MSL, rising terrain 128' from DER, 122' left of centerline, up to 4659' MSL.
Runway 26R: Rising terrain 208' from DER, 446' right of centerline, up to 4679' MSL.
Runway 35: Rising terrain 2' from DER, 7' left of centerline, up to 4749' MSL, rising terrain 196' from DER, 11' right of centerline up to 4793' MSL, transmission poles 1.1 NM from DER, 703' right of centerline, 46' AGL/4925' MSL, RADAR reflector 996' from DER, on centerline, 4' AGL/4757' MSL.

SW-1, 22 OCT 2009 to 19 NOV 2009

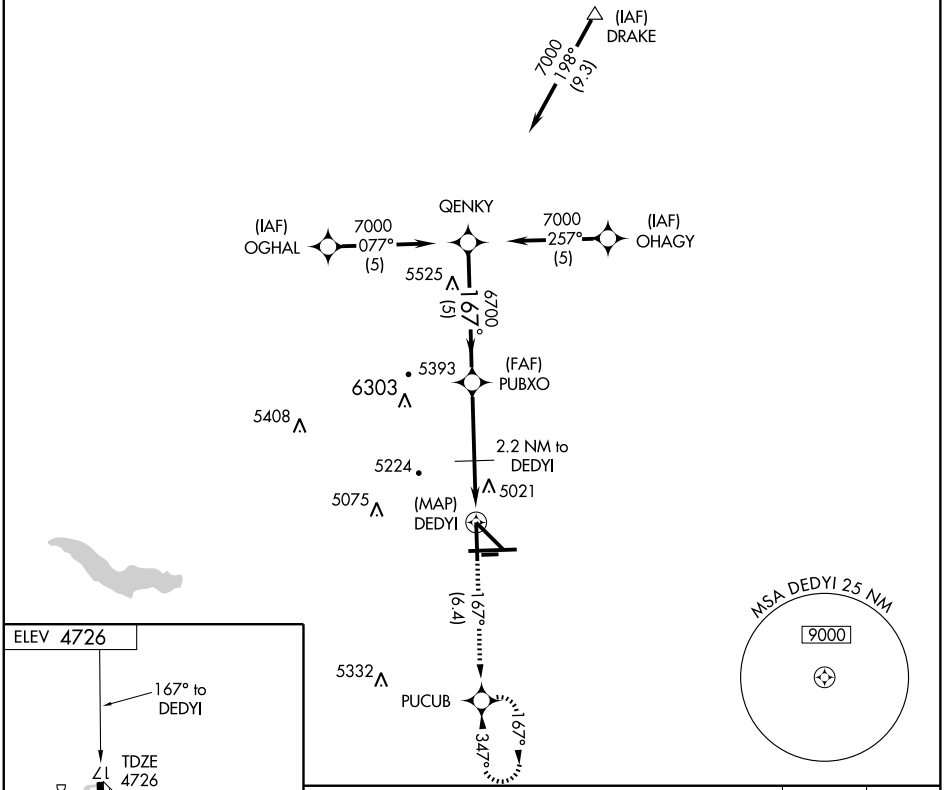
APP CRS	Rwy Idg	8308
167°	TDZE	4726
	Apt Elev	4726

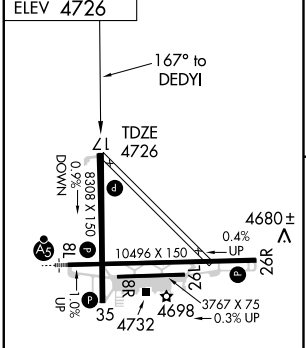
GPS RWY 17
PUEBLO MEMORIAL (PUB)

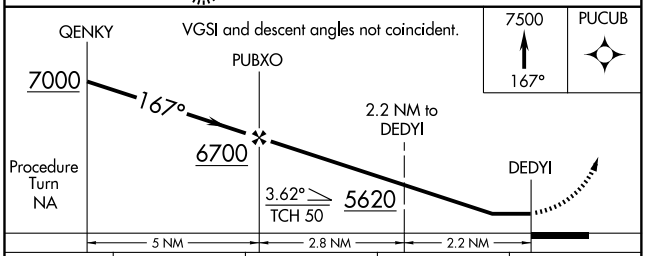
NA

MISSED APPROACH: Climb to 7500 via 167° course to PUCUB WP and hold.

ATIS ★	DENVER APP CON ★	PUEBLO TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	120.1 290.5	119.1 (CTAF) 257.8	121.9	120.9	122.95







MIRL Rwy 17-35 (L)
HIRL Rwy 8L-26R (L)
REIL Rwy 35
REIL Rwys 17 and 26R (L)

CATEGORY	A	B	C	D
S-17	5280-1	554 (600-1)	5280-1½ 554 (600-1½)	5280-1¾ 554 (600-1¾)
CIRCLING	5340-1	614 (700-1)	5340-1¾ 614 (700-1¾)	5380-2 654 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

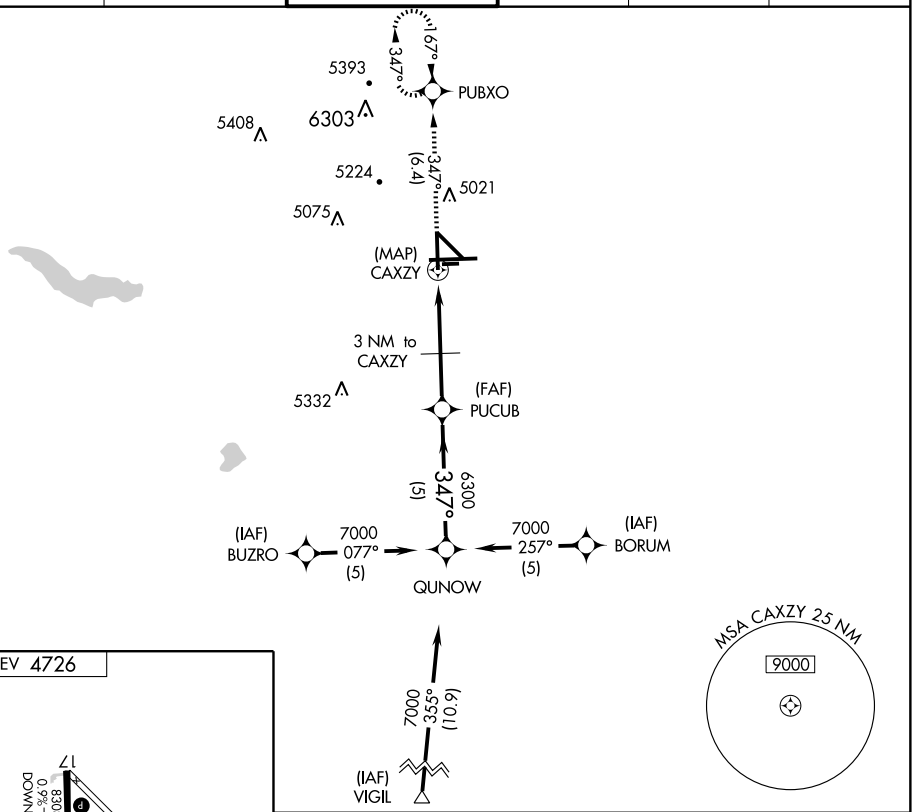
APP CRS	Rwy Idg	8308
347°	TDZE	4674
	Apt Elev	4726

GPS RWY 35
PUEBLO MEMORIAL (PUB)

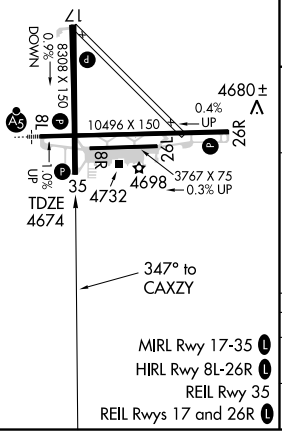
V
NA

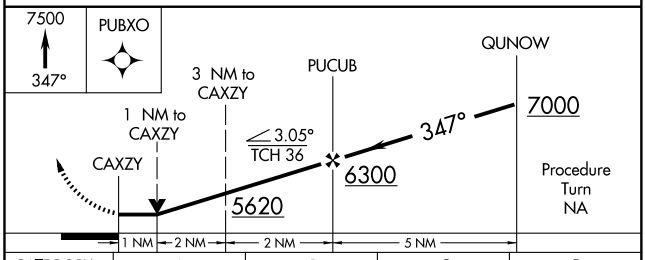
MISSED APPROACH: Climb to 7500 via 347° course to PUBXO WP and hold.

ATIS ★	DENVER APP CON ★	PUEBLO TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	120.1 290.5	119.1 (CTAF) 257.8	121.9	120.9	122.95



ELEV 4726





MIRL Rwy 17-35 L
HIRL Rwy 8L-26R L
REIL Rwy 35
REIL Rwys 17 and 26R L

CATEGORY	A	B	C	D
S-35	5000-1 326 (300-1)			
CIRCLING	5340-1 614 (700-1)		5340-1¾ 614 (700-1¾)	5360-2 634 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-PUB	APP CRS	Rwy Idg	10496
109.5	077°	TDZE	4668
		Apt Elev	4726

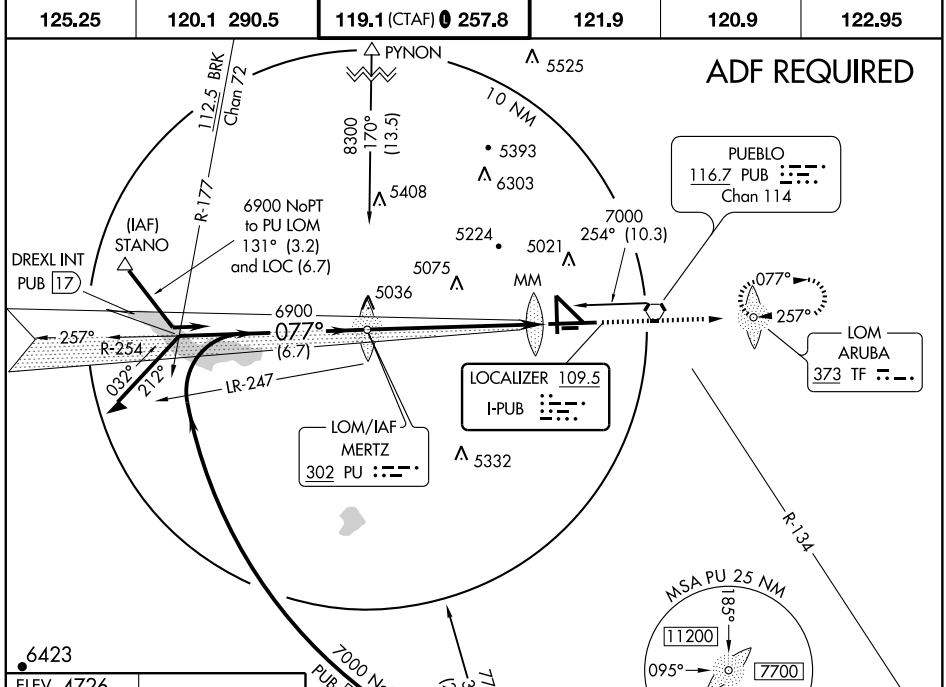
ILS or LOC RWY 8L
PUEBLO MEMORIAL (PUB)

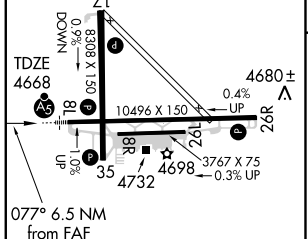
*Procedure turn not authorized for Cat. E aircraft.
Cat. E circling not authorized west of Rwy 17-35.
ILS glideslope unusable for coupled approaches below 4910 MSL.

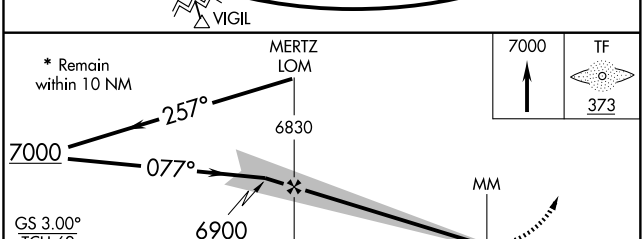
MALSR

MISSED APPROACH: Climb to 7000 direct ARUBA LOM and hold.

ATIS *	DENVER APP CON *	PUEBLO TOWER *	GND CON	CLNC DEL	UNICOM
125.25	120.1 290.5	119.1 (CTAF) 257.8	121.9	120.9	122.95







MIRL Rwy 17-35 L
HIRL Rwy 8L-26R L
REIL Rwy 35
REIL Rwys 17 and 26R L

FAF to MAP 6.5 NM

Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

CATEGORY	A	B	C	D	E
S-ILS 8L	4868-½ 200 (200-½)				
S-LOC 8L	5260-½ 592 (600-½)		5260-1 592 (600-1)	5260-1¼ 592 (600-1¼)	5260-1½ 592 (600-1½)
CIRCLING	5340-1 614 (700-1)		5340-1¾ 614 (700-1¾)	5380-2 654 (700-2)	5660-3 934 (1000-3)

SW-1, 22 OCT 2009 to 19 NOV 2009

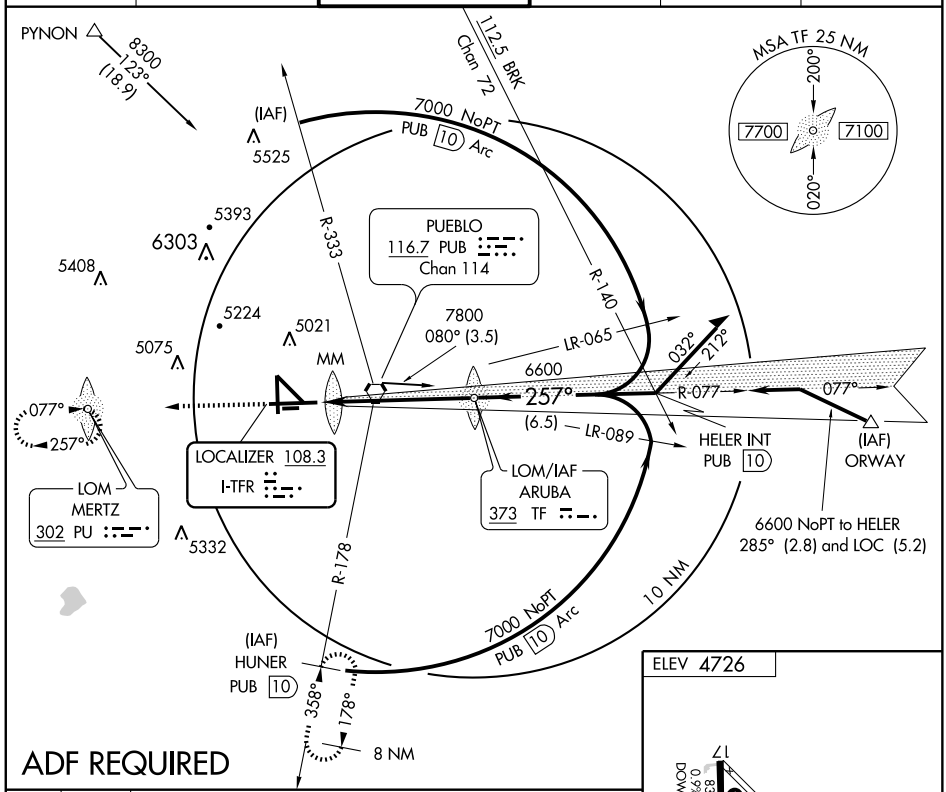
LOC I-TFR	APP CRS	Rwy Idg	10496
108.3	257°	TDZE	4656
		Apt Elev	4726

ILS or LOC RWY 26R
PUEBLO MEMORIAL (PUB)

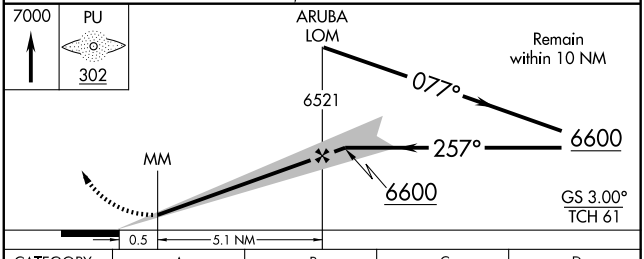
Procedure not authorized when Pueblo altimeter setting not available.

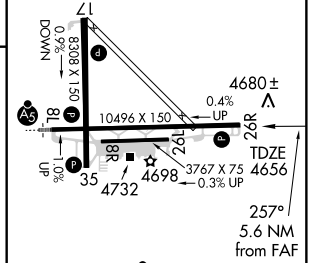
MISSED APPROACH: Climb to 7000 direct MERTZ LOM and hold. (TACAN aircraft climb to 5500 then climbing left turn to 8000 via PUB R-178 to HUNER 10 DME and hold south, right turns 358° inbound, 8 NM legs).

ATIS ★	DENVER APP CON ★	PUEBLO TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	120.1 290.5	119.1 (CTAF) 257.8	121.9	120.9	122.95



ADF REQUIRED





MIRL Rwy 17-35 L
HIRL Rwy 8L-26R L
REIL Rwy 35
REIL Rwys 17 and 26R L

CATEGORY	A	B	C	D
S-ILS 26R	4856-¾		200 (200-¾)	
S-LOC 26R	5060-1	404 (400-1)	5060-1 ¼	404 (400-1 ¼)
CIRCLING	5340-1	614 (700-1)	5340-1¾ 614 (700-1¾)	5380-2 654 (700-2)

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10496
CH 61011	077°	TDZE	4668
W08A		Apt Elev	4726

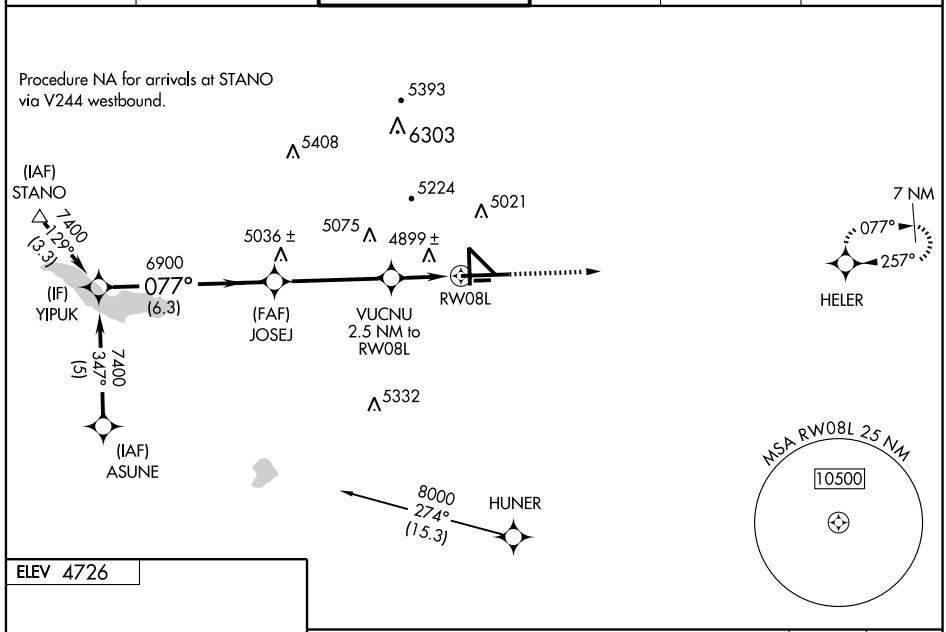
RNAV (GPS) RWY 8L
PUEBLO MEMORIAL (PUB)

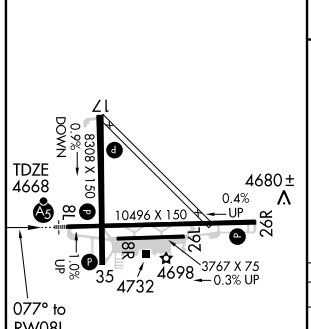
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 40°C (104°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use La Junta altimeter setting and increase all DA/MDA 200 feet and increase visibilities: LPV all Cats ½ mile, LNAV/VNAV all Cats ¾ mile, LNAV Cats C and D ¾ mile, and Circling Cat B ¼ mile and Cats C and D ¾ mile. When using La Junta altimeter setting, for inoperative MALSR increase LPV all Cats visibility ½ mile. Baro-VNAV and VDP NA when using La Junta altimeter setting.

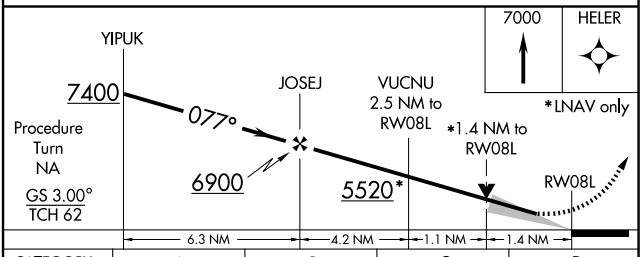
MALSR

MISSED APPROACH: Climb to 7000 direct HELER and hold.

ATIS ★	DENVER APP CON ★	PUEBLO TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	120.1 290.5	119.1 (CTAF) L 257.8	121.9	120.9	122.95







CATEGORY	A	B	C	D
LPV DA	4918-½ 250 (300-½)			
LNAV/ VNAV DA	5227-1½ 559 (600-1½)			
LNAV MDA	5160-½ 492 (500-½)		5160-¾ 492 (500-¾)	5160-1 492 (500-1)
CIRCLING	5340-1 614 (700-1)		5340-1¾ 614 (700-1¾)	5380-2 654 (700-2)

MIRL Rwy 17-35 L
HIRL Rwy 8L-26R L
REIL Rwy 35
REIL Rwys 17 and 26R L

SW-1, 22 OCT 2009 to 19 NOV 2009

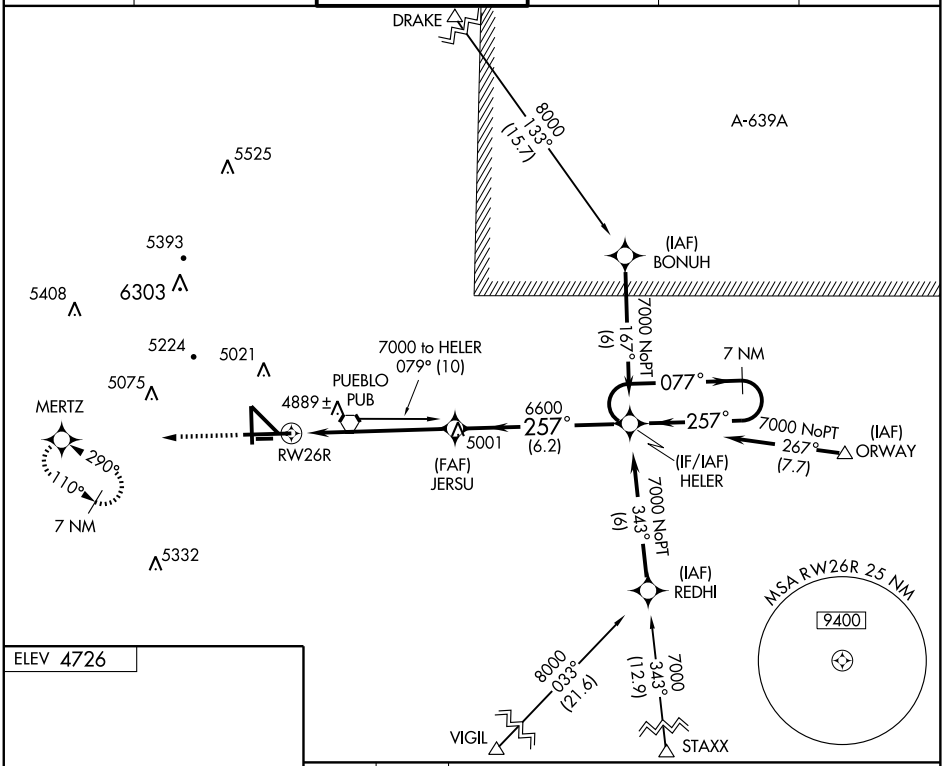
WAAS	APP CRS	Rwy Idg	10496
CH 45702	257°	TDZE	4656
W26A		Apt Elev	4726

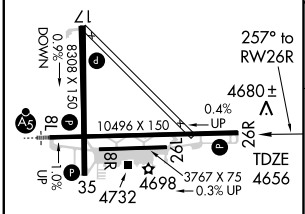
RNAV (GPS) RWY 26R
PUEBLO MEMORIAL (PUB)

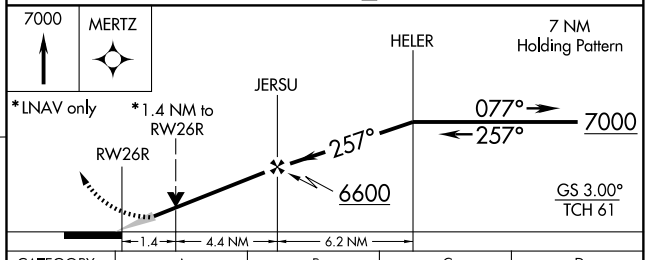
DME/DME RNP-0.3 NA.
If local altimeter setting not received, use city of Colorado Springs Muni altimeter setting and increase all DAs 369 feet and MDAs 380 feet.
VDP NA when using city of Colorado Springs Muni altimeter setting.

MISSED APPROACH: Climb to 7000 direct MERTZ and hold.

ATIS ★	DENVER APP CON ★	PUEBLO TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	120.1 290.5	119.1 (CTAF) L 257.8	121.9	120.9	122.95







CATEGORY	A	B	C	D
LPV DA	4856-¾ 200 (200-¾)			
LNAV MDA	5140-1 484 (500-1)		5140-1¼ 484 (500-1¼)	5140-1½ 484 (500-1½)
CIRCLING	5340-1 614 (700-1)		5340-1¾ 614 (700-1¾)	5380-2 654 (700-2)

MIRL Rwy 17-35 L
HIRL Rwy 8L-26R L
REIL Rwy 35
REIL Rwys 17 and 26R L

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC PUB	APP CRS	Rwy Idg	10496
116.7	244°	TDZE	4656
Chan 114		Apt Elev	4726

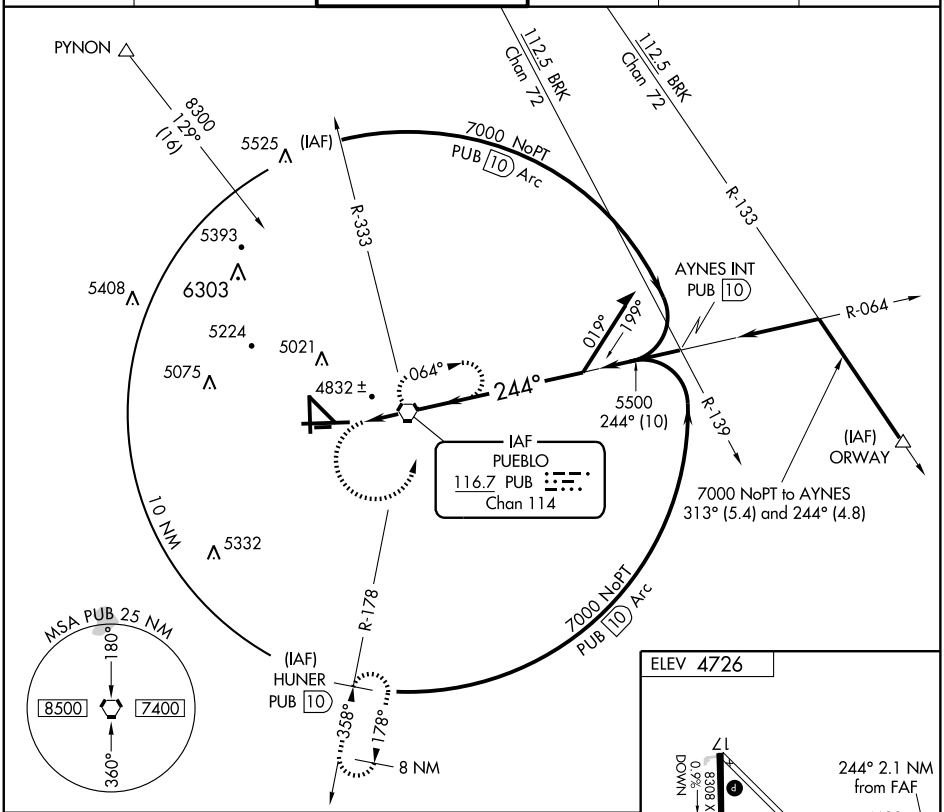
VOR or TACAN RWY 26R

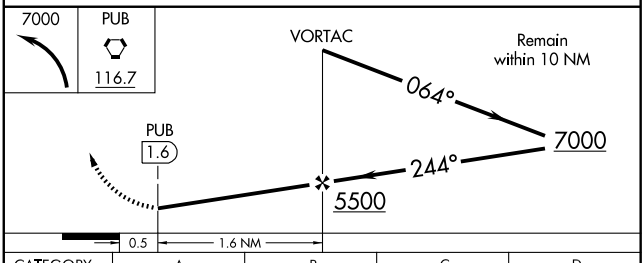
PUEBLO MEMORIAL (PUB)

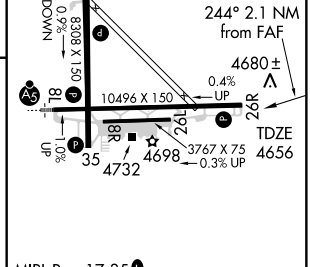
Procedure not authorized when Pueblo altimeter setting not available.

MISSED APPROACH: Climbing left turn to 7000 direct PUB VORTAC and hold. (TACAN aircraft climbing left turn to 8000 via PUB R-178 to HUNER 10 DME and hold south, right turns, 358° inbound, 8 NM legs.)

ATIS ★	DENVER APP CON ★	PUEBLO TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	120.1 290.5	119.1 (CTAF) 257.8	121.9	120.9	122.95







MIRL Rwy 17-35 L
HIRL Rwy 8L-26R L
REIL Rwy 35
REIL Rwys 17 and 26R L

CATEGORY	A	B	C	D
S-26R	5100-1 444 (400-1)		5100-1¼ 444 (400-1¼)	5100-1½ 444 (400-1½)
CIRCLING	5340-1 614 (700-1)		5340-1¾ 614 (700-1¾)	5380-2 654 (700-2)

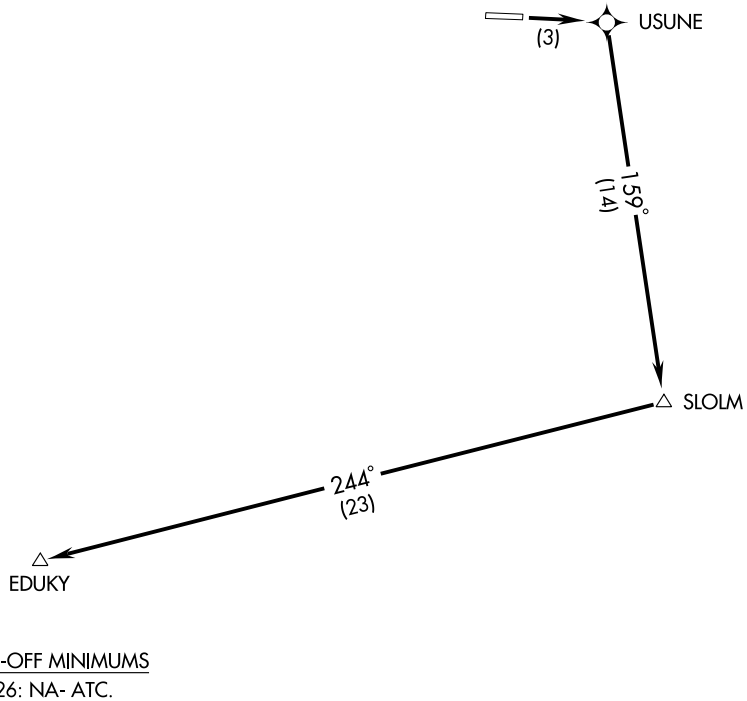
FAF to MAP 1.6 NM

Knots	60	90	120	150	180
Min:Sec	1:36	1:04	0:48	0:38	0:32

SW-1, 22 OCT 2009 to 19 NOV 2009

EDUKY TWO DEPARTURE (RNAV)

DENVER CENTER
134.5 327.8



TAKE-OFF MINIMUMS

Rwy 26: NA- ATC.

Rwy 8: Standard with a minimum climb of 396' per NM to 11100.

NOTE: GPS Required.

NOTE: RNAV 1

TAKE-OFF OBSTACLE NOTES

Rwy 8: Multiple transmission line towers beginning 1.2 NM from DER, 437' right of centerline, up to 150' AGL/6069' MSL.
Numerous trees beginning 1.9 NM from DER, 647' right of centerline, up to 100' AGL/5983' MSL.
Terrain beginning 124' from DER, 287' right of centerline, up to 5863' MSL.
Pole, 1083' from DER, 656' right of centerline, 28' AGL/5588' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb to 13000 direct USUNE, and via 159° track to SLOLM and via 244° track to EDUKY.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-RIL	APP CRS	Rwy Idg	7011
110.9	261°	TDZE	5548
Chan 46		Apt Elev	5548

ILS RWY 26

RIFLE/GARFIELD COUNTY RGNL (RIL)

Circling not authorized.
Use I-RIL DME when on localizer course.
Visibility reduction by helicopters NA.

ODALS

MISSED APPROACH: Climb to 13000 via RIL VOR/DME R-248 to TEKGU/RIL 19.2 DME and via EKR VOR/DME R-179 to WOKPA/EKR 44.2 DME and hold.

ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF) L

DME REQUIRED

MISSED APCH FIX

115.2 EKR Chan 99

R-179

110.6 RIL R-248 Chan 43

TEKGU RIL 19.2

359° 179°

WOKPA EKR 44.2

RIFLE 110.6 RIL Chan 43

(IAF) COMER RIL 20

R-052

RIL 20 Arc 12800

MSA RIL 25 NM

168° 348°

11100 12700 078° 258° 12500 13500

WUKLI I-RIL 13.5

7500 10400

261° (7.7) (IF)

12800 261° (5.1)

LR-075

081°

LOCALIZER 110.9 I-RIL Chan 46

DOWNY I-RIL 21.2

SOCKY I-RIL 26.3

14000 275° (13.6)

IAF RED TABLE 113.0 DBL Chan 77

15 NM

When glideslope not used, use LOC/DME-A procedure.

Missed approach obstructions require a minimum climb gradient of 266 feet per NM to 9200; if unable to meet climb gradient, see LOC/DME-A.

ELEV 5548

13000	TEKGU	EKR	WOKPA
RIL R-248 110.6	RIL 19.2	R-179 115.2	EKR 44.2

Procedure Turn NA

DOWNY I-RIL 21.2

WUKLI I-RIL 13.5

10400 261° 12800

10400

GS 3.60° TCH 56

12.2 NM 7.7 NM

261° 5600 26 8 7011 X 100 1.2% UP TDZE 5548 5588

5758

CATEGORY	A	B	C	D
S-ILS 26	6800-4 1252 (1300-4)			NA

MIRL Rwy 8-26 L

REIL Rwys 8 and 26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-RIL	APP CRS	Rwy Idg	N/A
110.9	261°	TDZE	N/A
Chan 46		Apt Elev	5548

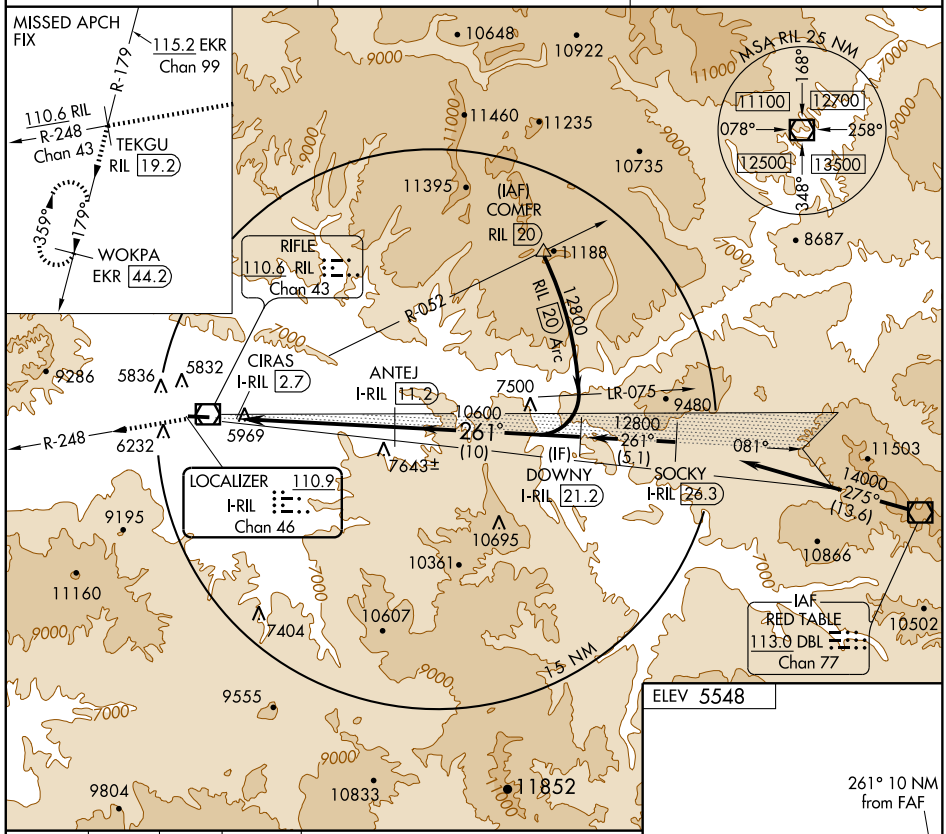
LOC/DME-A

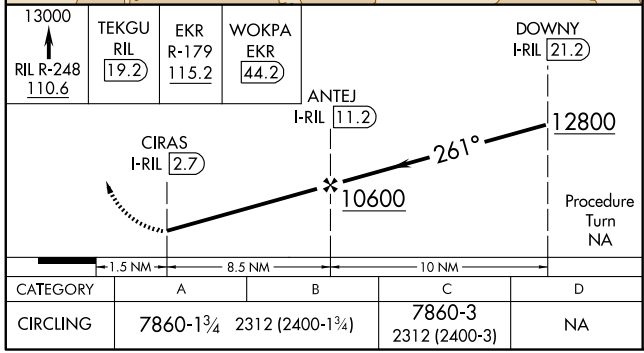
RIFLE/GARFIELD COUNTY RGNL (RIL)

Circling not authorized at night south of Rwy 8-26. Use I-RIL DME when on localizer course.

MISSED APPROACH: Climb to 13000 via RIL VOR/DME R-248 to TEKGU/RIL 19.2 DME and via EKR VOR/DME R-179 to WOKPA/EKR 44.2 DME and hold.

ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF)





CATEGORY	A	B	C	D
CIRCLING	7860-1¾ 2312 (2400-1¾)		7860-3 2312 (2400-3)	NA

MIRL Rwy 8-26 (L)
REIL Rwys 8 and 26 (L)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7011
261°	TDZE	5548
	Apt Elev	5548

RNAV (GPS) W RWY 26

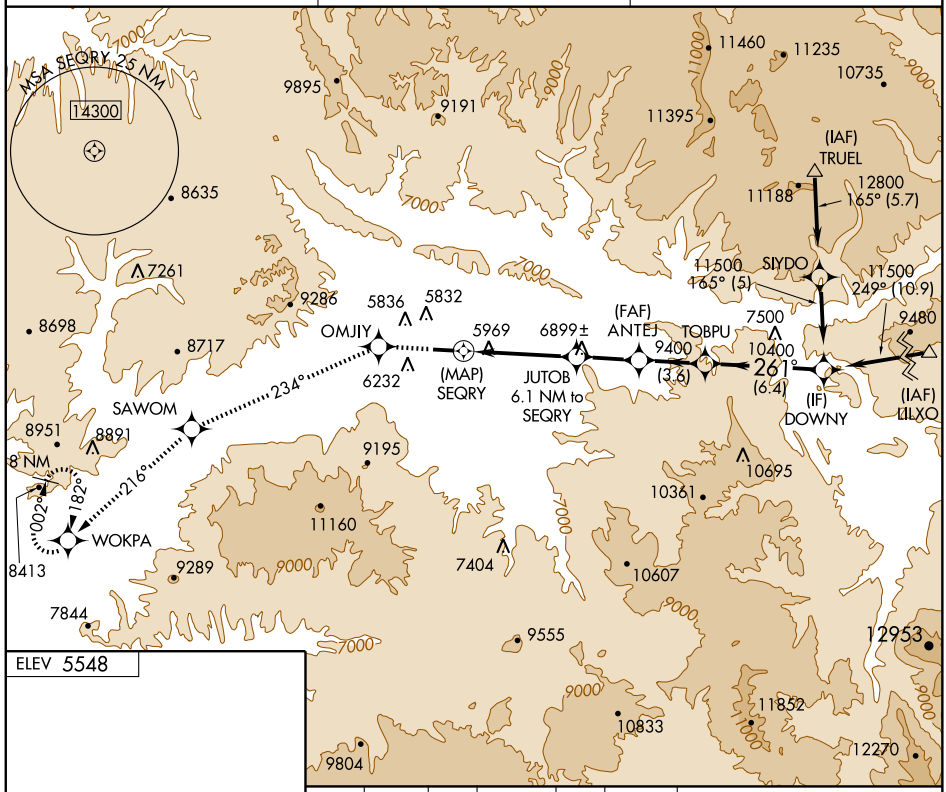
RIFLE/GARFIELD COUNTY RGNL (RIL)

Circling not authorized at night south of Rwy 8-26.
Visibility reduction by helicopters NA.
DME/DME RNP-0.3 NA.

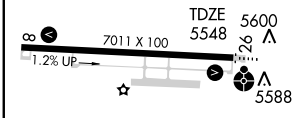
ODALS

MISSED APPROACH: Climb to 13000 direct OMJIY and via 234° track to SAWOM and via 216° track to WOKPA and hold.

ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF) L

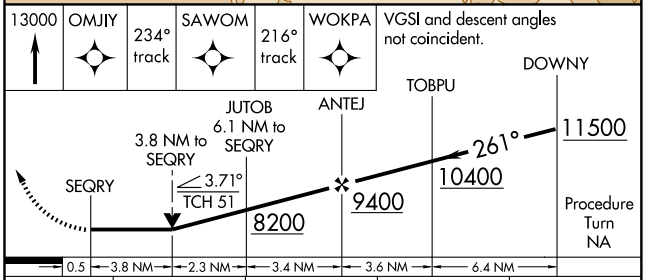


ELEV 5548



5758

MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L



CATEGORY	A	B	C	D
LNAV MDA	7180-1¼ 1632 (1700-1¼)	7180-1½ 1632 (1700-1½)	7180-3 1632 (1700-3)	NA
CIRCLING	7180-1¼ 1632 (1700-1¼)	7180-1½ 1632 (1700-1½)	7180-3 1632 (1700-3)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	7011
CH 93708	261°	TDZE	5548
W26A		Apt Elev	5548

RNAV (GPS) X RWY 26

RIFLE/GARFIELD COUNTY RGNL (RIL)

Visibility reduction by helicopters NA.
DME/DME RNP-0.3 NA.

ODALS

MISSED APPROACH: Climb to 13000 direct OMJIY and via 234° track to SAWOM and via 216° track to WOKPA and hold.

ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF) L

MSA RW 26 25 NM
13400
8635
7261
9895
9191
9286
8698
8717
5836
5832
OMJIY
6232
5969
RW26
261°
WUKLI
234°
SAWOM
8951
8891
8 NM
216°
182°
200°
WOKPA
8413
9289
9195
11160
7404
Missed approach obstructions require a minimum climb gradient of 231 feet per NM; if unable to meet climb gradient, see RNAV (GPS) W RWY 26.
11460
11235
10735
11395
(IAF)
TRUEL
11188
12800
165° (5.7)
SIYDO
11500
165° (5)
11500
249° (10.9)
9480
7500
10400
261°
(7.7)
(IF)
DOWNY
(IAF)
ULXO
10695
10361
10607
9555
12953
11852
10833
9804
12270

ELEV 5548
261° to RW26
5600
7011 X 100
1.2% UP
26
TDZE
5588
5548
5758

13000	OMJIY	234° track	SAWOM	216° track	WOKPA

Procedure Turn NA
DOWNY
VGSI and RNAV glidepath not coincident.
WUKLI
11500
10400
261°
RW26
10400
GS 3.60°
TCH 56
12.2 NM
7.7 NM

CATEGORY	A	B	C	D
LPV DA	6371-2½	823 (900-2½)		NA

MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7011
066°	TDZE	5498
	Apt Elev	5548

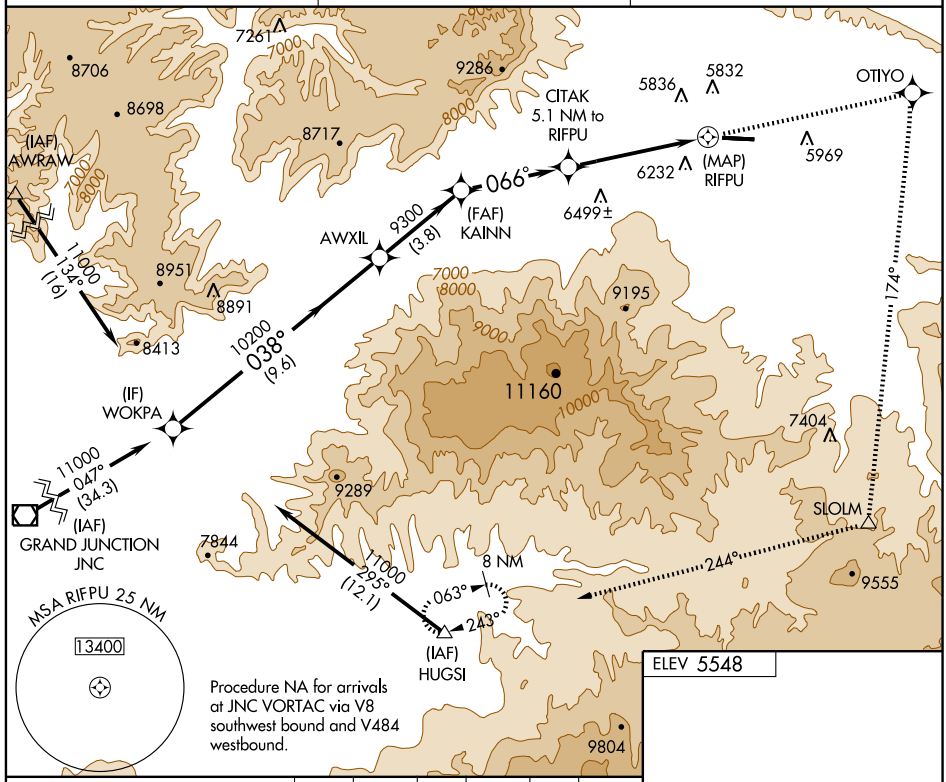
RNAV (GPS) Y RWY 8

RIFLE/GARFIELD COUNTY RGNL (RIL)

T Circling not authorized at night south of Rwy 8-26.
A Visibility reduction by helicopters NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 13000 direct OTIYO and via 174° track to SLOLM and via 244° track to HUGSI and hold.

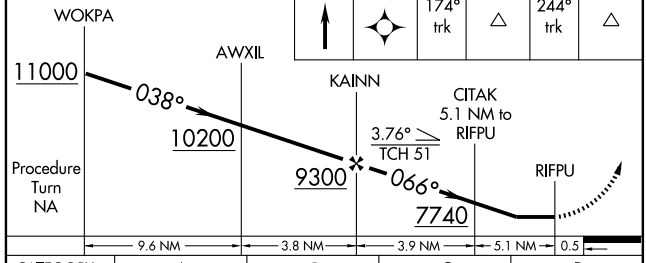
ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF) L

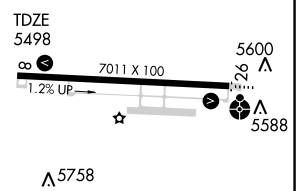


ELEV 5548

VGSI and descent angles not coincident.

13000	OTIYO	174° trk	SLOLM	244° trk	HUGSI





CATEGORY	A	B	C	D
LNAV MDA	7380-1¼ 1882 (1900-1¼)	7380-1½ 1882 (1900-1½)	7380-3 1882 (1900-3)	NA
CIRCLING	7380-1¼ 1832 (1900-1¼)	7380-1½ 1832 (1900-1½)	7380-3 1832 (1900-3)	NA

MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7011
261°	TDZE	5548
	Apt Elev	5548

RNAV (RNP) Y RWY 26

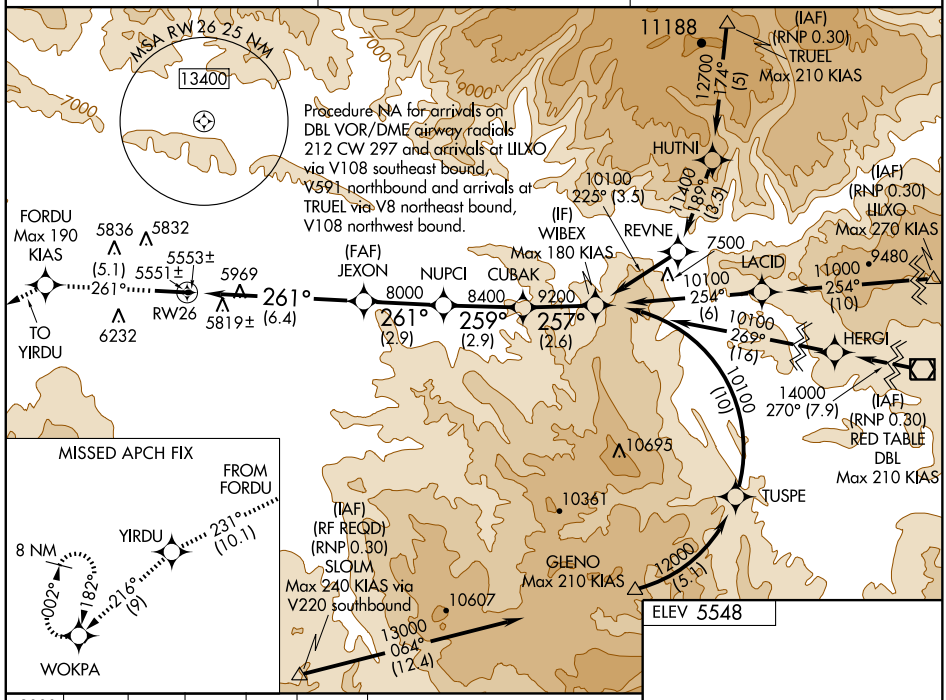
RIFLE/GARFIELD COUNTY RGNL (RIL)

GPS required. Visibility reduction by helicopters NA.
Procedure NA for aircraft with wingspan greater than 136 feet.
For uncompensated Baro-VNAV systems, procedure NA below -21°C (-6°F) or above 38°C (101°F).
*Missed approach requires minimum climb of 270 feet per NM to 7000. When VGSI inoperative, procedure NA at night.

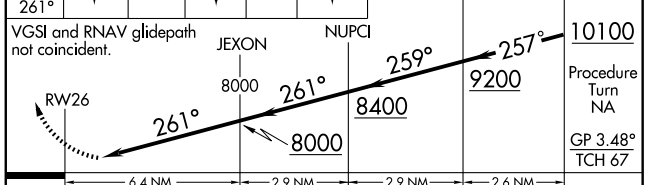
ODALS

MISSED APPROACH: (Do not exceed 190 KIAS until FORDU) Climb to 13000 via 261° track to FORDU and via 231° track to YIRDU and via 216° track to WOKPA and hold, continue climb-in-hold to 13000.

ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF) L

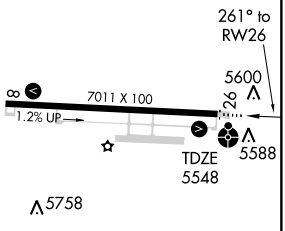


13000 261°	FORDU	231° track	YIRDU	216° track	WOKPA



CATEGORY	A	B	C	D
RNP 0.30 DA*	6205-2 657 (700-2)			NA
RNP 0.30 DA	6333-2¼ 785 (800-2¼)			NA

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED



MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7011
081°	TDZE	5498
	Apt Elev	5548

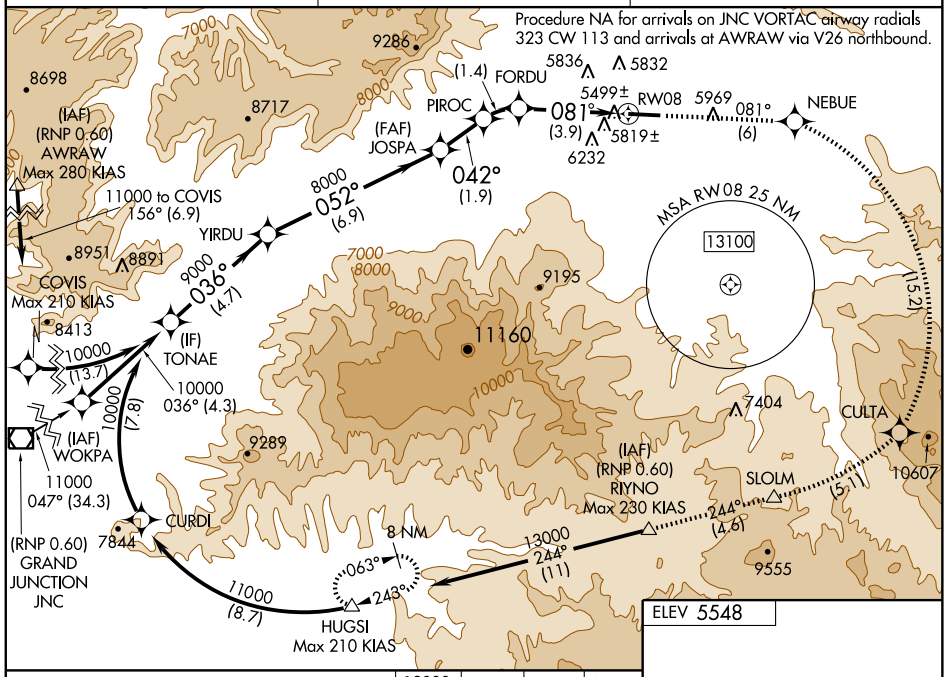
RNAV (RNP) Z RWY 8

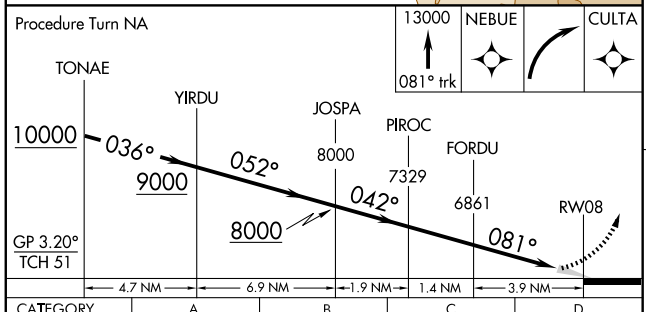
RIFLE/GARFIELD COUNTY RGNL (RIL)

Procedure NA for aircraft with wingspans greater than 136 feet.
For uncompensated Baro-VNAV systems, procedure NA below -21°C (-6°F) or above 54°C (130°F).
*Missed approach requires minimum climb of 425 feet per NM to 11000.
**Missed approach requires minimum climb of 425 feet per NM to 9700; if unable, see RNAV (GPS) Y RWY 8. RF and GPS required.

MISSED APPROACH: Climb to 13000 via 081° track to NEBUE and via right turn to CULTA and via right turn to SLOLM and via 244° track to RIYNO and via 244° track to HUGSI and hold.

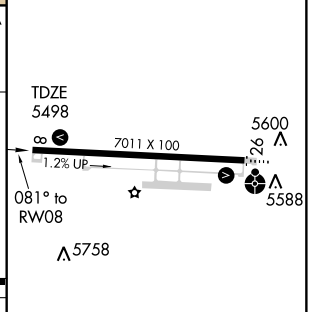
ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF) L





CATEGORY	A	B	C	D
RNP 0.10 DA*	5783-1	285 (300-1)		NA
RNP 0.30 DA**	6390-3	892 (900-3)		NA

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED



MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7011
261°	TDZE	5548
	Apt Elev	5548

RNAV (RNP) Z RWY 26

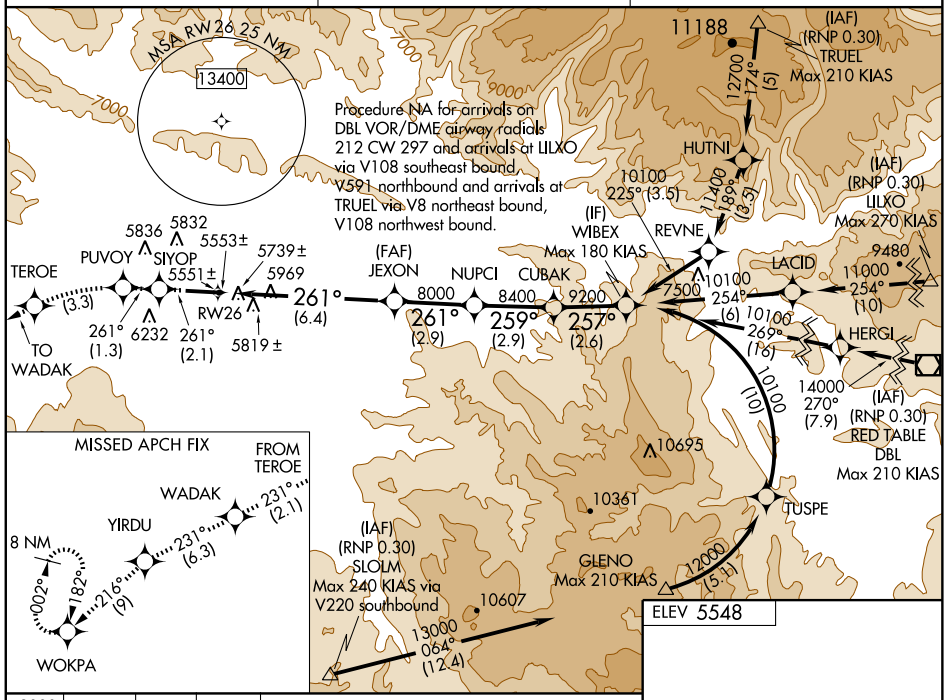
RIFLE/GARFIELD COUNTY RGNL (RIL)

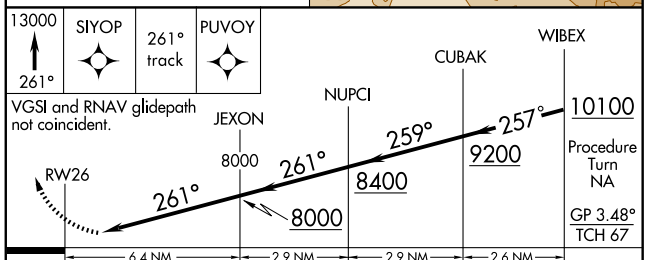
T A RF and GPS required. Visibility reduction by helicopters NA.
Procedure NA for aircraft with wingspan greater than 136 feet.
For uncompensated Baro-VNAV systems, procedure NA below -21°C (-6°F) or above 38°C (101°F). Missed approach requires RNP less than 1.0.
*Missed approach requires minimum climb of 425 feet per NM to 6500. When VGSI inoperative, procedure NA at night.

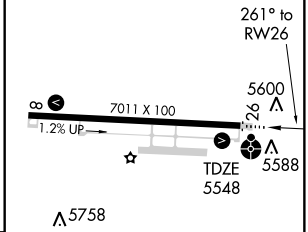
ODALS

MISSED APPROACH: Climb to 13000 via 261° track to SIYOP and via 261° track to PUVOY and via left turn to TEROE and via 231° track to WADAK and via 231° track to YIRDU and via 216° track to WOKPA and hold, continue climb-in-hold to 13000.

ASOS	DENVER CENTER	UNICOM
135.275	134.5 327.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
RNP 0.10 DA*	5990-1¼ 442 (500-1¼)			NA
RNP 0.30 DA	6193-2 645 (700-2)			NA

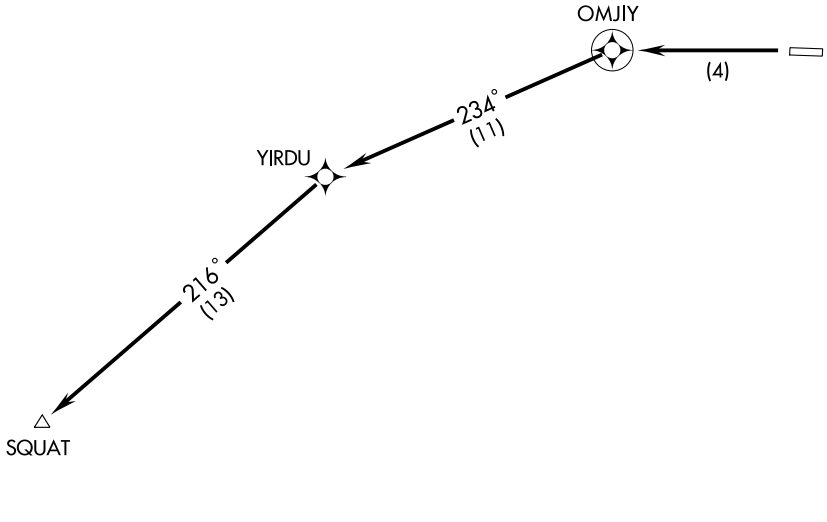
SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

SQUAT TWO DEPARTURE (RNAV) (OBSTACLE)

DENVER CENTER
134.5 327.8



TAKE-OFF MINIMUMS
Rwy 8: NA- ATC.
Rwy 26: Standard with minimum climb of 397' per NM to 9700.

NOTE: GPS Required.
NOTE: RNAV 1

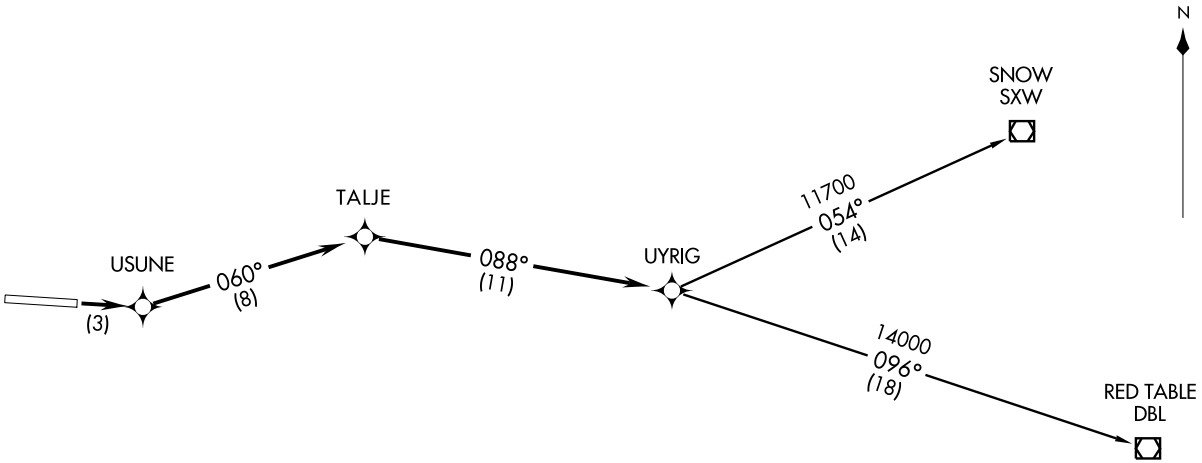
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 26: Climb to 10500 direct OMJIY, and via 234° track to YIRDU, and via 216° track to SQUAT.

SW-1, 22 OCT 2009 to 19 NOV 2009

DENVER CENTER
134.5 327.8



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb to 14000' direct USUNE, and via track 060° to TALJE, and via track 088° to UYRIG. Thence....
....via transition or assigned route.

RED TABLE TRANSITION (UYRIG2.DBL)

SNOW TRANSITION (UYRIG2.SXW)

NOTE: RNAV 1.
NOTE: GPS Required.

TAKE-OFF MINIMUMS

RWY 26: NA - ATC.
RWY 8: Standard with minimum climb of 335' per NM to 10000.

TAKE-OFF OBSTACLE NOTES

RWY 8: Transmission line towers beginning 1.2 NM from DER, 437' right of centerline, up to 150' AGL/6069' MSL.
Trees beginning 1.9 NM from DER, 647' right of centerline, up to 100' AGL/5983' MSL.
Terrain beginning 124' from DER, 287' right of centerline, up to 5863' MSL.
Pole 1083' from DER, 656' right of centerline, 28' AGL/5588' MSL.
Windsock 67' from DER, 263' right of centerline, 14' AGL/5563' MSL.

NOTE: Chart not to scale.

VOR/DME RIL 110.6 Chan 43	APP CRS 128°	Rwy Idg N/A TDZE N/A Apt Elev 5548

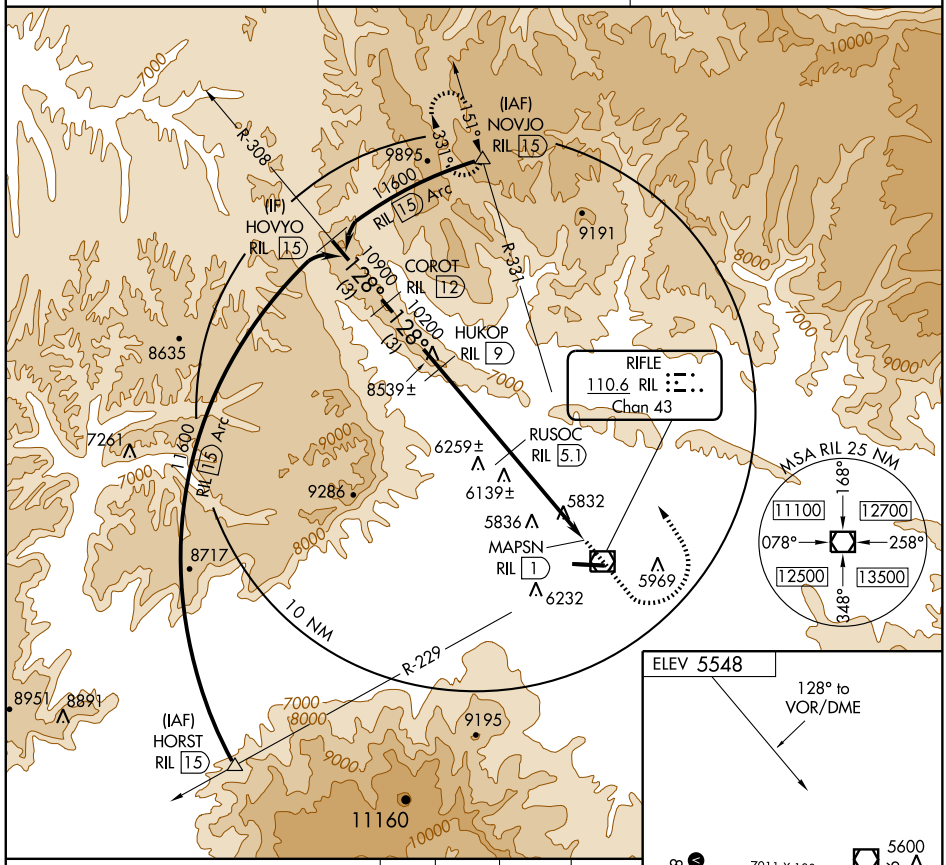
VOR/DME-C

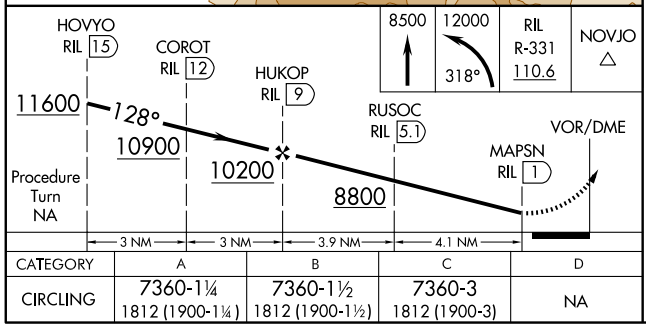
RIFLE/GARFIELD COUNTY RGNL (RIL)

T A Circling NA south of Rwy 8-26 at night.

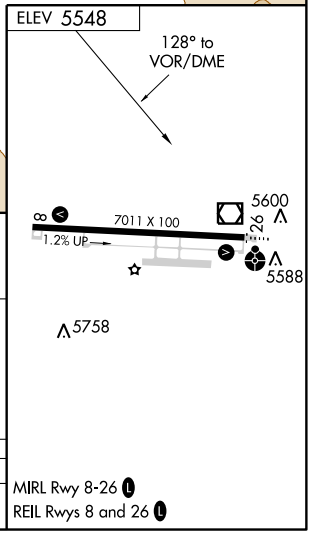
MISSED APPROACH: Climb to 8500, then climbing left turn to 12000 via heading 318° and RIL R-331 to NOVJO/15 DME and hold, continue climb-in-hold to 12000.

ASOS 135.275	DENVER CENTER 134.5 327.8	UNICOM 122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	7360-1¼ 1812 (1900-1¼)	7360-1½ 1812 (1900-1½)	7360-3 1812 (1900-3)	NA



MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

SALIDA, COLORADO

AL-10345 (FAA)

APP CRS	Rwy Idg	N/A
288°	TDZE	N/A
	Apt Elev	7523

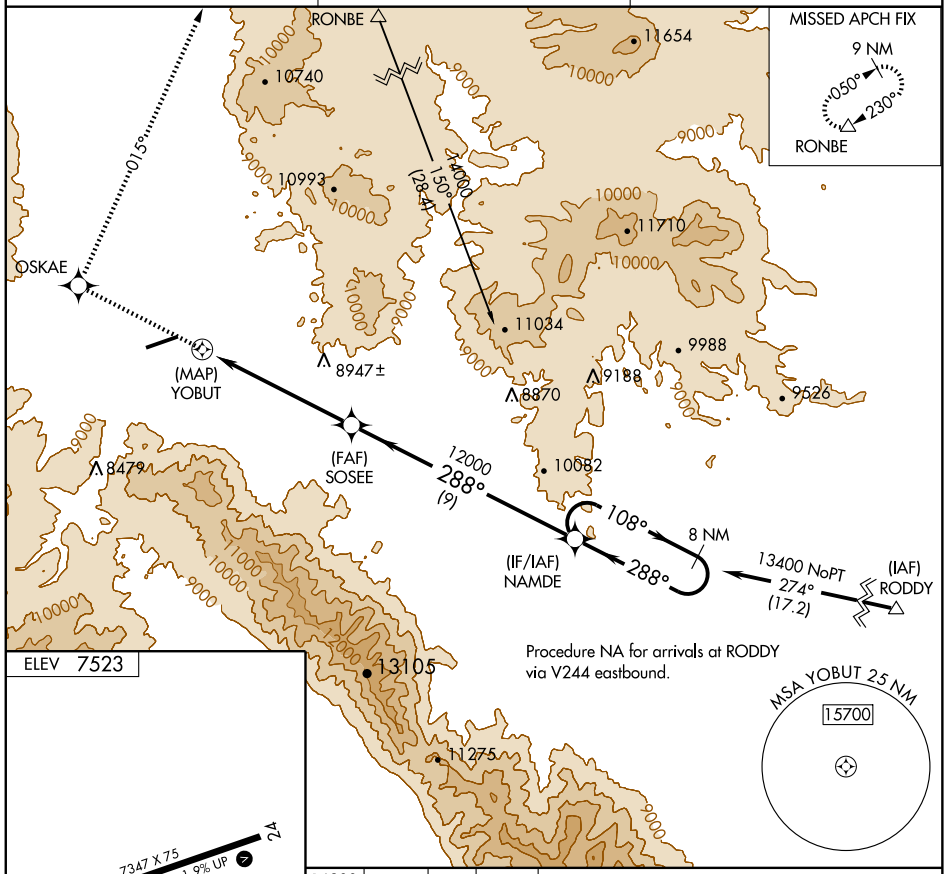
RNAV (GPS)-A

SALIDA/HARRIET ALEXANDER FIELD (ANK)

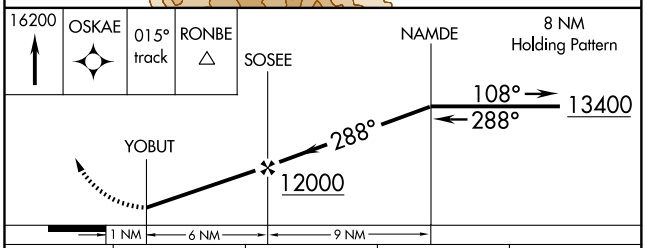
DME/DME RNP-0.3 NA.
NA Circling to Rwy 6 NA at night.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 16200 direct OSKAE and via 015° track to RONBE and hold, continue climb-in-hold to 16200.

AWOS-3	DENVER CENTER	UNICOM
133.85	128.375 379.95	122.7 (CTAF) L



ELEV 7523



CATEGORY	A	B	C	D
CIRCLING	9720-1¼ 2197 (2200-1¼)	9720-1½ 2197 (2200-1½)	NA	

MIRL Rwy 6-24 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	
171°	TDZE	4390
	Apt Elev	4390

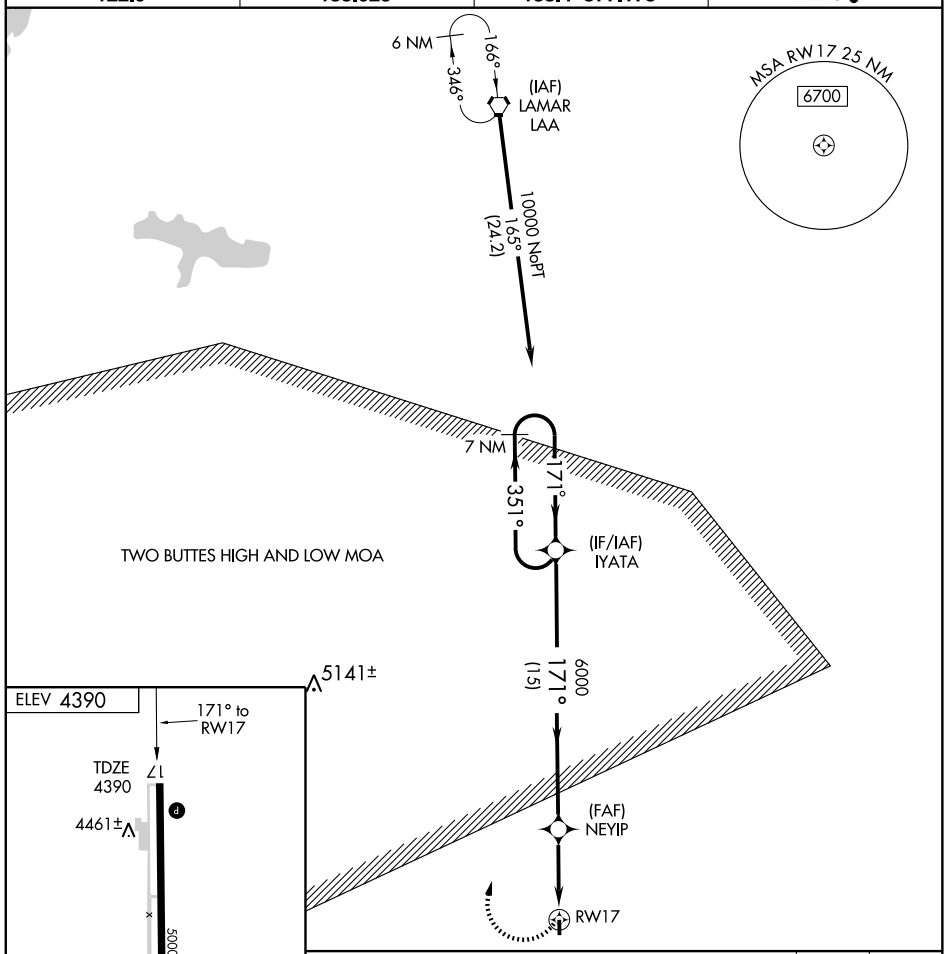
RNAV (GPS) RWY 17

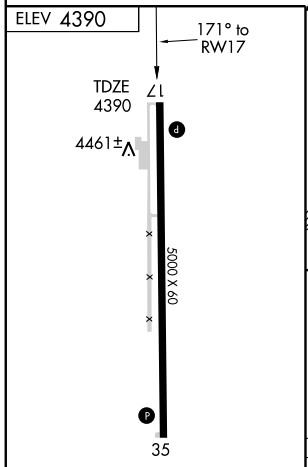
SPRINGFIELD MUNI (8V7)

Use Lamar altimeter setting, if not received use La Junta altimeter setting and increase all MDAs 20 feet. DME/DME RNP-0.3 NA.

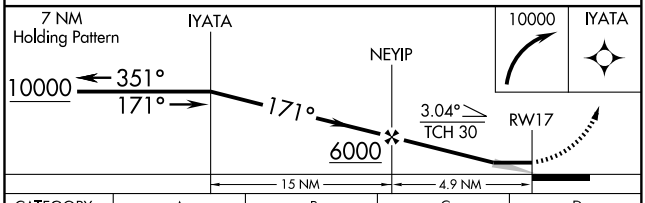
MISSED APPROACH: Climbing right turn to 10000 direct IYATA and hold, continue climb-in-hold to 10000.

AWOS-3	LAMAR MUNI ASOS	DENVER CENTER	CTAF
122.9	135.625	133.4 377.175	122.9 L





MIRL Rwy 17-35 L



CATEGORY	A	B	C	D
LNAV MDA	4960-1 570 (600-1)		NA	
CIRCLING	5020-1 630 (700-1)		NA	

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
323°	TDZE	N/A
	Apt Elev	6882

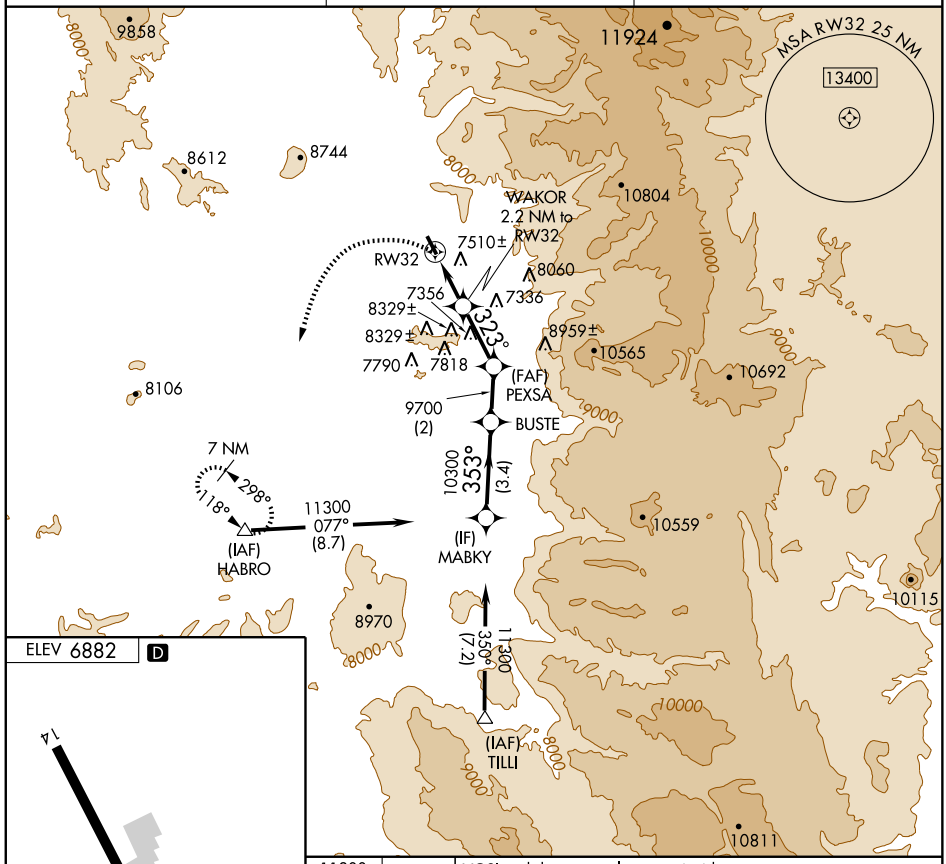
RNAV (GPS)-E

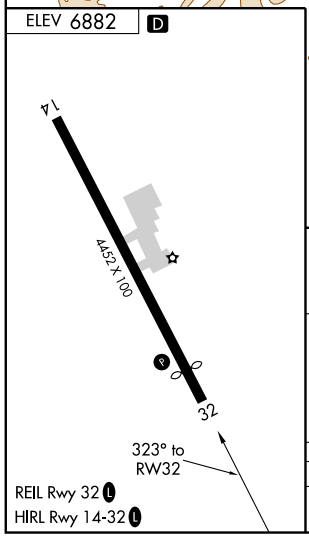
STEAMBOAT SPRINGS/BOB ADAMS FIELD (SBS)

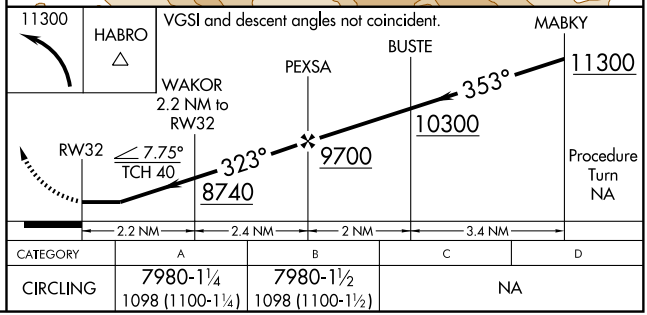
T NA — Circling NA northeast of Rwy 14-32.
DME/DME RNP- 0.3 NA.
When local altimeter setting not received, use Yampa Valley altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climbing left turn to 11300 direct HABRO and hold, continue climb-in-hold to 11300.

AWOS-3	DENVER CENTER	UNICOM
118.325	120.475 235.975	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	7980-1¼ 1098 (1100-1¼)	7980-1½ 1098 (1100-1½)	NA	

SW-1, 22 OCT 2009 to 19 NOV 2009

STEAMBOAT SPRINGS, COLORADO

AL-6404 (FAA)

VOR/DME BQZ	APP CRS	Rwy Idg	N/A
112.2	352°	TDZE	N/A
Chan 59		Apt Elev	6878

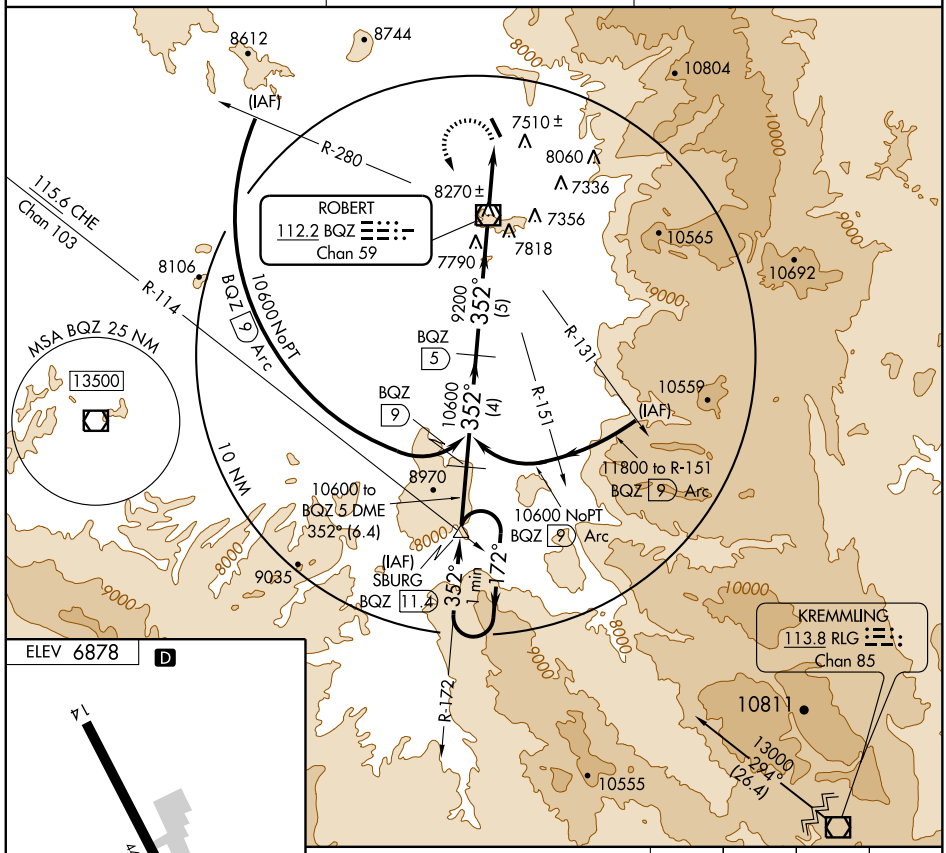
VOR/DME-C

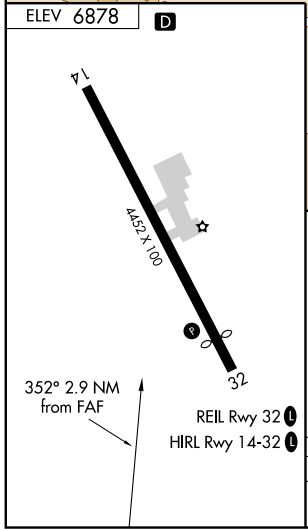
STEAMBOAT SPRINGS/ BOB ADAMS FIELD (SBS)

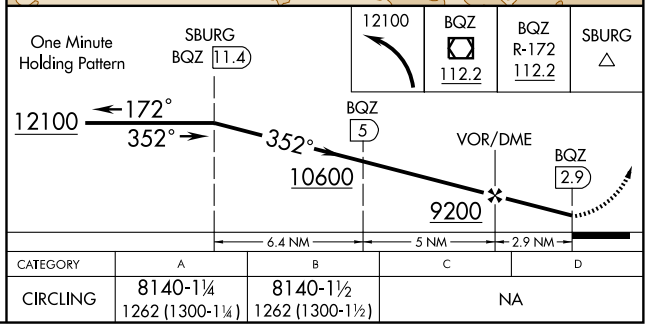
T
A NA
Obtain local altimeter setting on CTAF; when not received, procedure not authorized.
Procedure not authorized at night.
Circling not authorized northeast of Rwys 14 and 32.

MISSED APPROACH: Climbing left turn to 12100 direct BQZ VOR/DME then via BQZ VOR/DME R-172 to SBURG Int and hold.

AWOS-3	DENVER CENTER	UNICOM
118.325	120.475 235.975	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	8140-1¼ 1262 (1300-1¼)	8140-1½ 1262 (1300-1½)	NA	

SW-1, 22 OCT 2009 to 19 NOV 2009

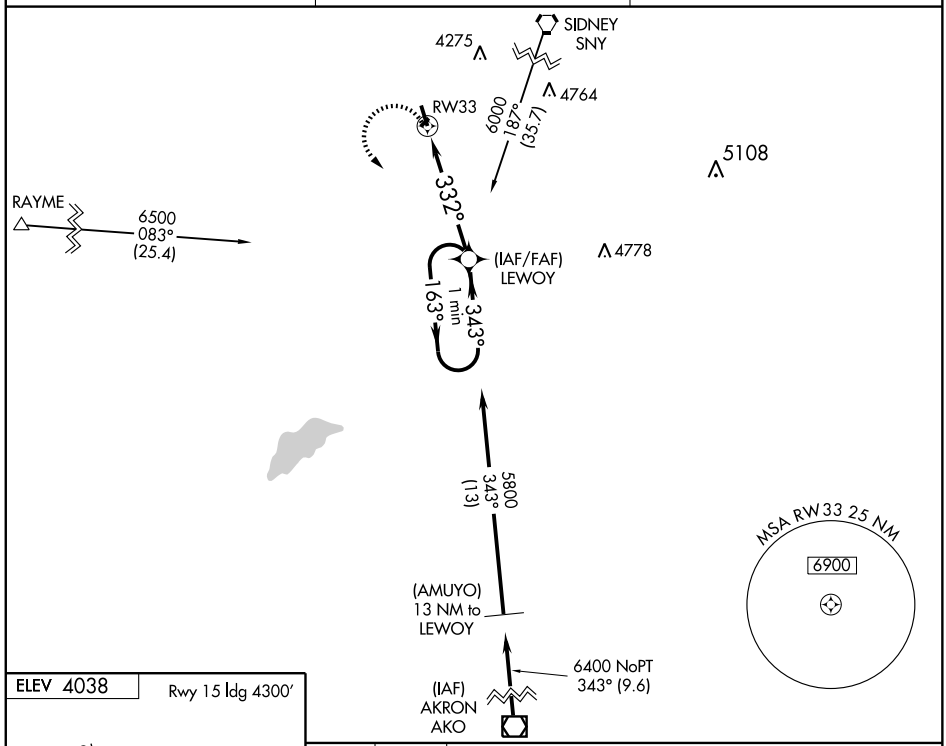
APP CRS	Rwy Idg	4708
332°	TDZE	4033
	Apt Elev	4038

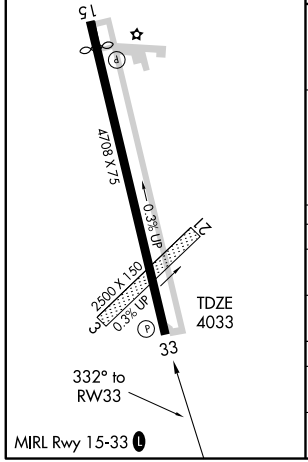
GPS RWY 33
STERLING MUNI (STK)

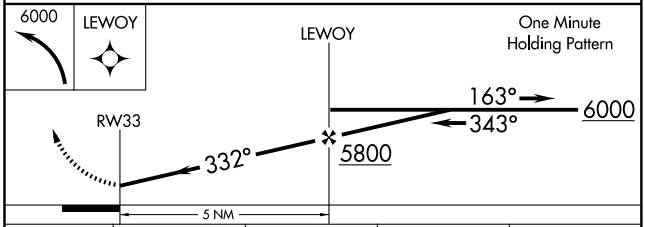
Obtain local altimeter setting on CTAF; when not received, use Akron-Washington County altimeter setting.

MISSED APPROACH: Climbing left turn to 6000 direct LEWOY WP and hold.

AWOS-3	DENVER CENTER	UNICOM
118.525	118.475 225.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-33	4460-1 427 (500-1)		4460-1¼ 427 (500-1¼)	4460-1½ 427 (500-1½)
CIRCLING	4520-1 482 (500-1)	4540-1 502 (600-1)	4580-1½ 542 (600-1½)	4600-2 562 (600-2)
AKRON-WASHINGTON COUNTY ALTIMETER SETTING MINIMUMS				
S-33	4620-1 587 (600-1)		4620-1½ 587 (600-1½)	4620-1¾ 587 (600-1¾)
CIRCLING	4680-1 642 (700-1)	4700-1 662 (700-1)	4740-2 702 (800-2)	4760-2¼ 722 (800-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

NDB BAJ 392	APP CRS 332°	Rwy Idg 4708 TDZE 4033 Apt Elev 4038

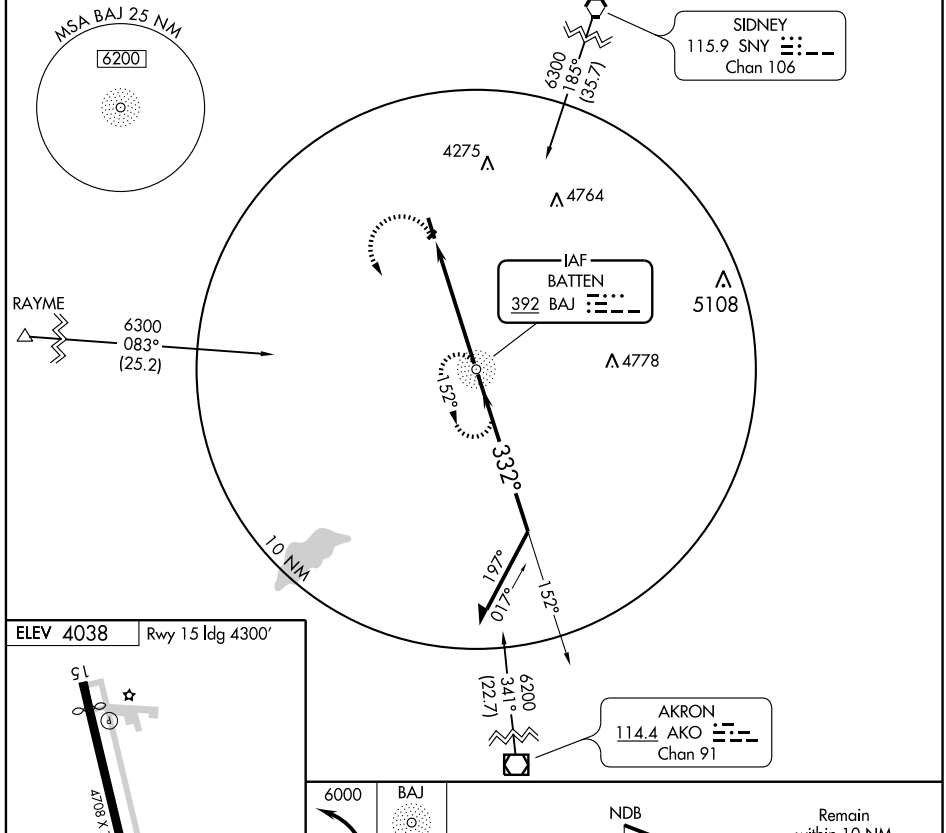
NDB RWY 33

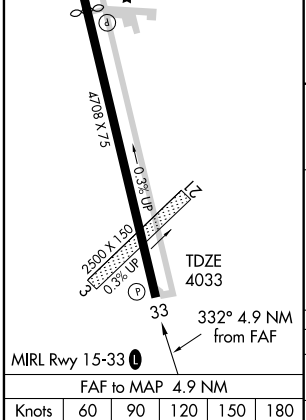
STERLING MUNI (STK)

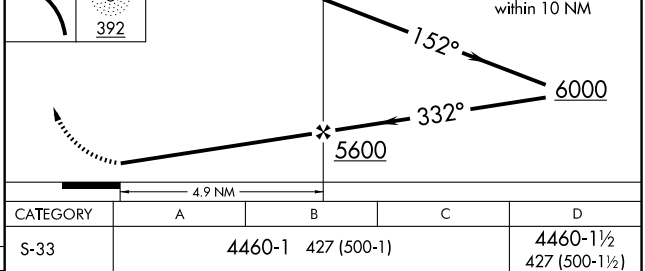
NA Obtain local altimeter setting on UNICOM 122.8 MHz. When not available: 1. Use Akron, CO altimeter setting. 2. Increase all MDAs 100 feet. Approach not authorized when Sterling, CO or Akron, CO altimeter setting not available.

MISSED APPROACH: Climbing left turn to 6000 direct to BAJ NDB and hold.

AWOS-3	DENVER CENTER	UNICOM
118.525	118.475 225.4	122.8 (CTAF) L







FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

CATEGORY	A	B	C	D
S-33	4460-1 427 (500-1)			4460-1½ 427 (500-1½)
CIRCLING	4460-1 423 (500-1)	4500-1 463 (500-1)	4500-1½ 463 (500-1½)	4600-2 563 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

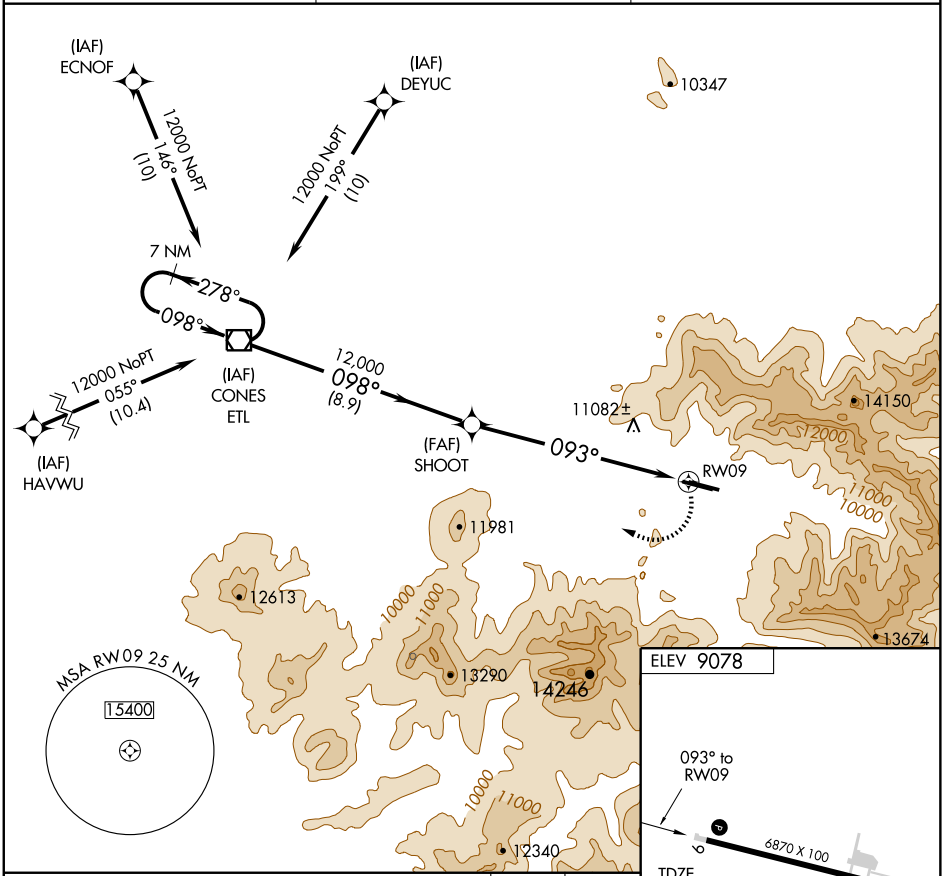
APP CRS	Rwy Idg	6870
093°	TDZE	9061
	Apt Elev	9078

GPS RWY 9
TELLURIDE RGNL (TEX)

Procedure not authorized at night. Circling not authorized north of Rwy 9-27.
NA

MISSED APPROACH: Climbing right turn to 13,000 direct ETL VOR/DME and hold.

AWOS-3	DENVER CENTER	UNICOM
118.325	125.35 354.05	123.0 (CTAF) L



CATEGORY	A	B	C	D
S-9	11,600-2	2539 (2600-2)	NA	
CIRCLING	11,600-2	2522 (2600-2)	NA	

REIL Rwys 9 and 27 L
MIRL Rwys 9-27 L

SW-1, 22 OCT 2009 to 19 NOV 2009

TELLURIDE, COLORADO

AL-6920 (FAA)

LOC/DME I-TEX	APP CRS	Rwy Idg	6870
109.3	090°	TDZE	9061
Chan 30		Apt Elev	9078

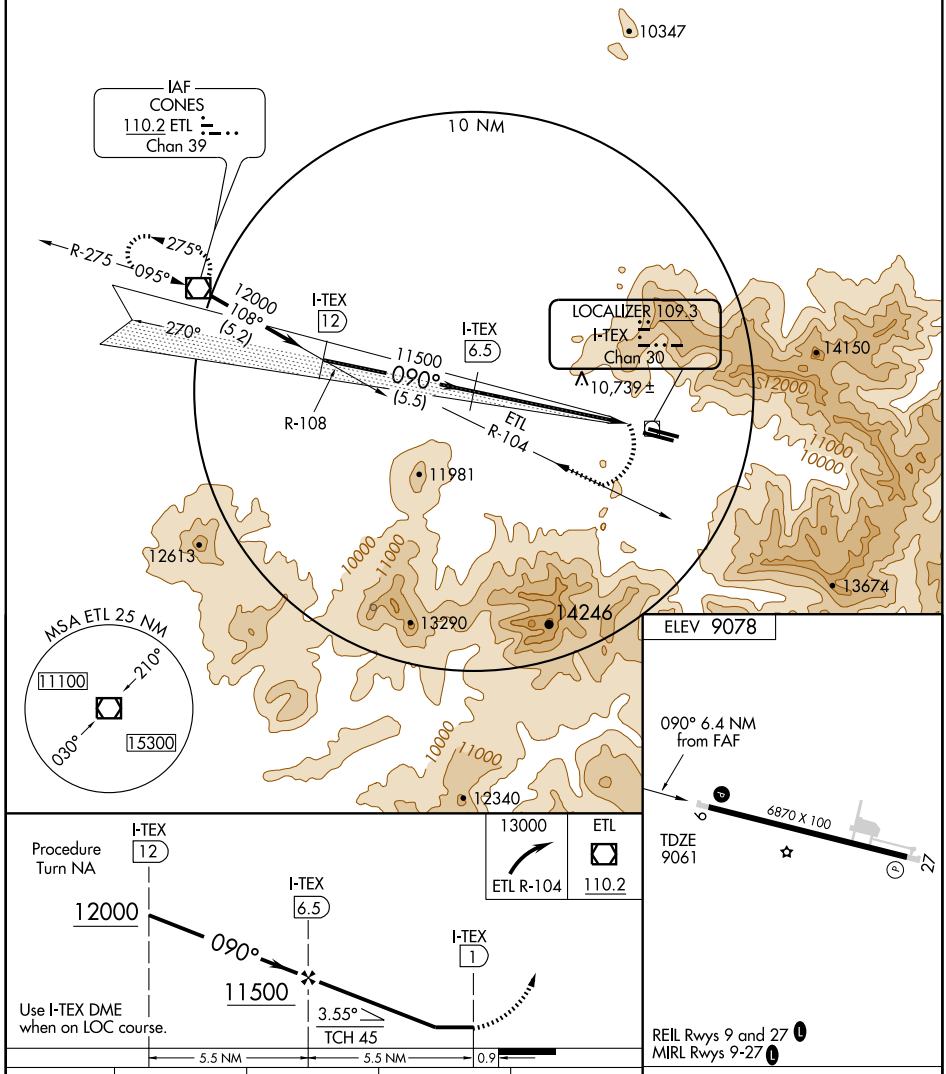
LOC/DME RWY 9

TELLURIDE RGNL (TEX)

Procedure not authorized at night. Circling not authorized north of runway 9-27. Localizer unusable from 1 DME to threshold.
NA

MISSED APPROACH: Climbing right turn to 13,000 via ETL VOR/DME R-104 to ETL VOR/DME and hold.

AWOS-3	DENVER CENTER	UNICOM
118.325	125.35 354.05	123.0 (CTAF) L



CATEGORY	A	B	C	D
S-9	11100-2 2039 (2100-2)		NA	
CIRCLING	11100-2 2022 (2100-2)		NA	

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME ETL 110.2 Chan 39	APP CRS 095°	Rwy Idg N/A TDZE N/A Apt Elev 9078

VOR/DME or GPS-A

TELLURIDE RGNL (TEX)

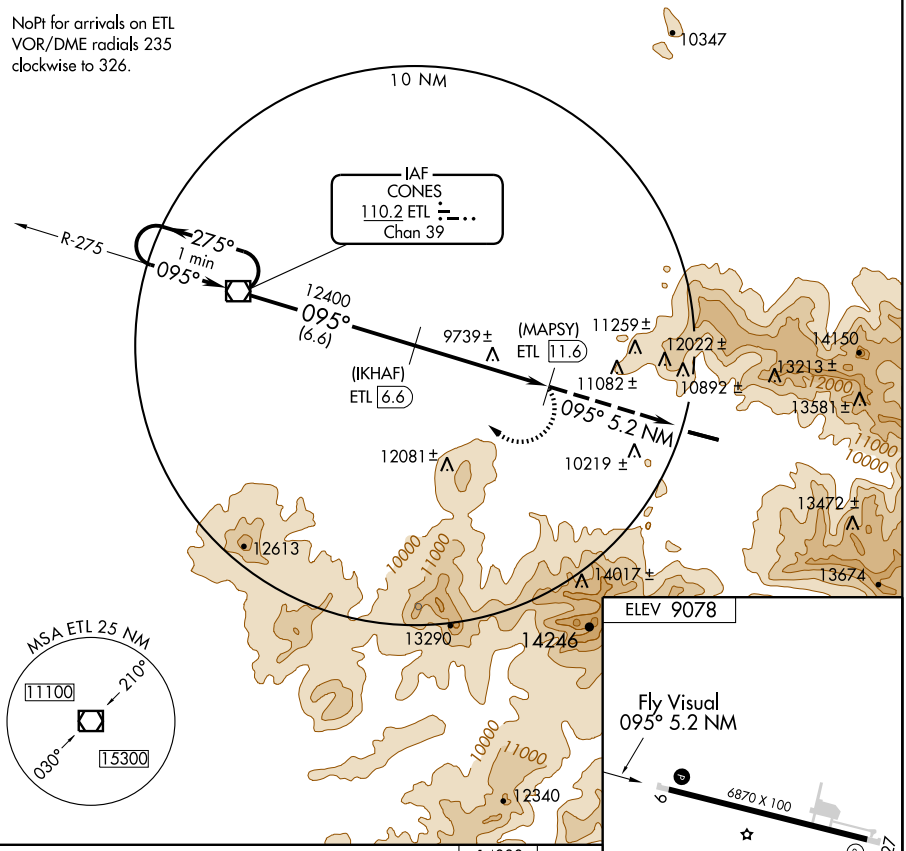
Obtain local altimeter setting on CTAF; if not received procedure not authorized. Procedure not authorized at night. Circling not authorized north of runway 9-27.

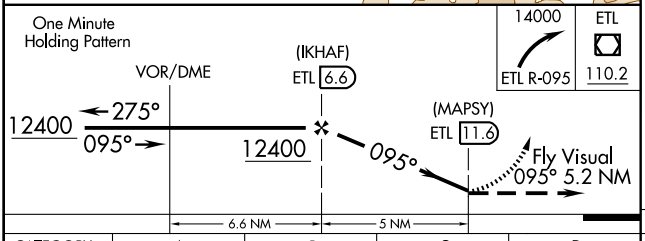
NA

MISSED APPROACH: Immediate climbing right turn to 14,000 via ETL R-095 to ETL VOR/DME and hold.

AWOS-3	DENVER CENTER	UNICOM
118.325	125.35 354.05	123.0 (CTAF) L

NoPt for arrivals on ETL VOR/DME radials 235 clockwise to 326.





REIL Rwys 9 and 27 L
MIRL Rwys 9-27 L

CATEGORY	A	B	C	D
CIRCLING	12380-6 3294 (3300-6)		NA	

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

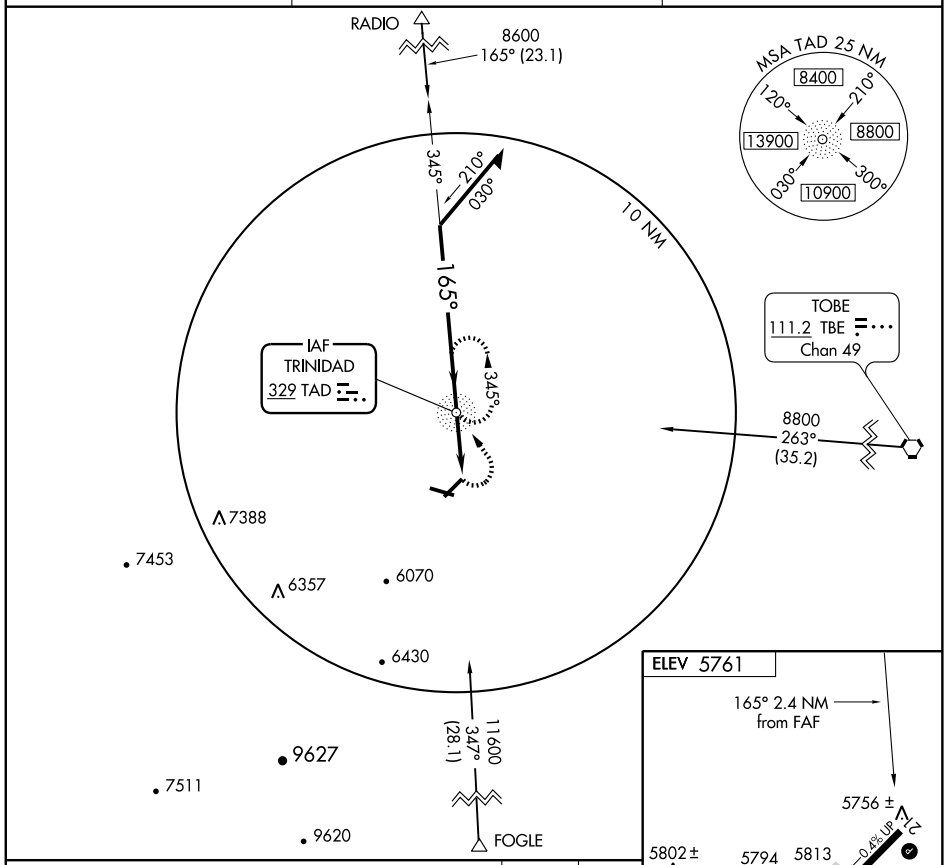
NDB TAD	APP CRS	Rwy Idg	N/A
329	165°	TDZE	N/A
		Apt Elev	5761

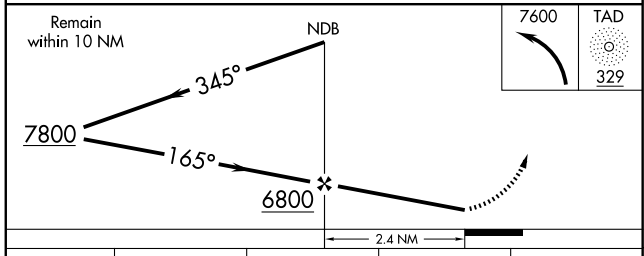
NDB-A

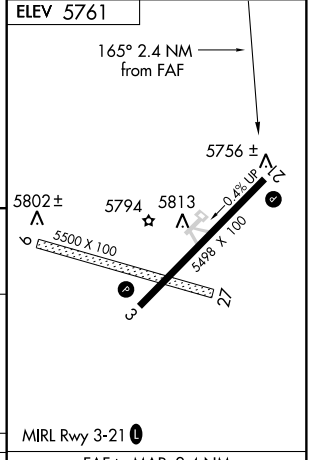
TRINIDAD/PERRY STOKES (TAD)

MISSED APPROACH: Climbing left turn to 7600 direct TAD NDB and hold.

ASOS	DENVER CENTER	UNICOM
119.025	128.375 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6200-1 439 (500-1)	6220-1 459 (500-1)	6220-1½ 459 (500-1½)	6360-2 599 (600-2)

FAF to MAP 2.4 NM

Knots	60	90	120	150	180
Min:Sec	2:24	1:36	1:12	0:58	0:48

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
166°	TDZE	N/A
	Apt Elev	5761

RNAV (GPS)-B

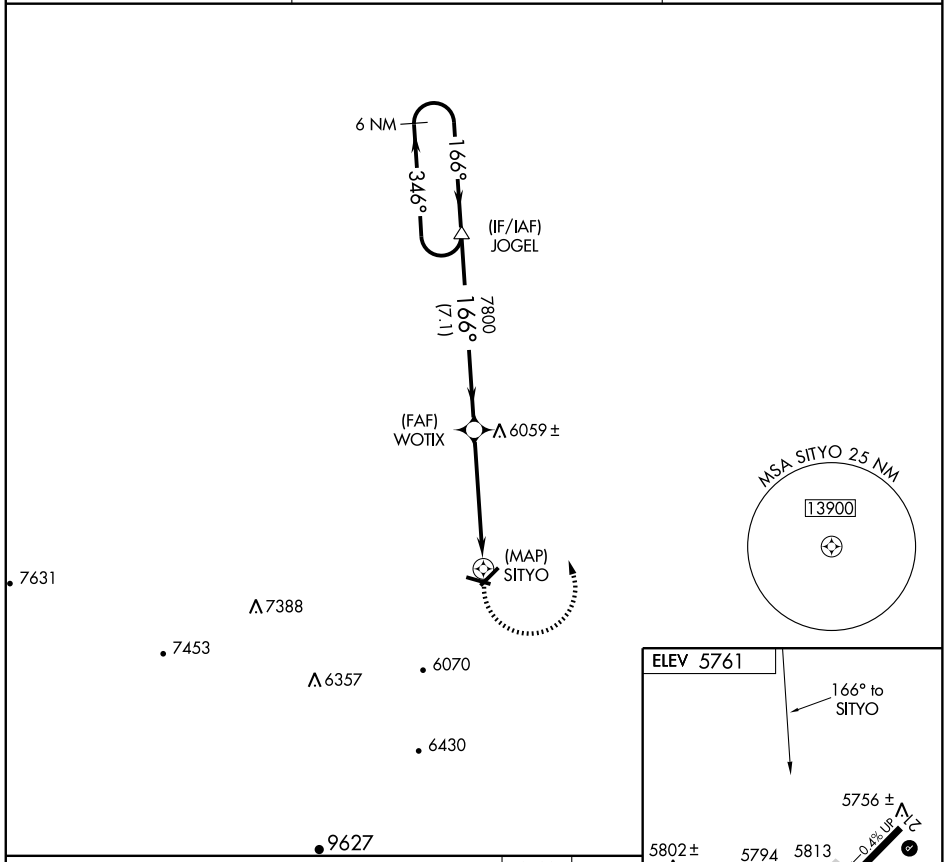
TRINIDAD/ PERRY STOKES (TAD)

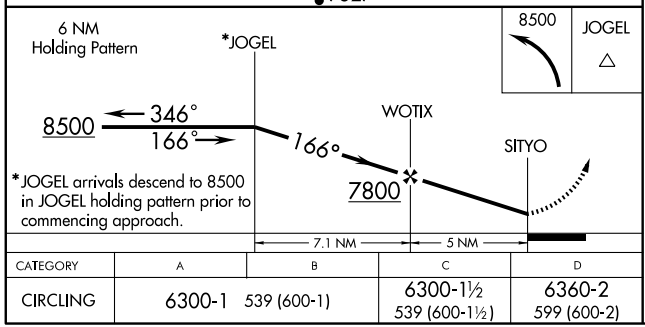
NA

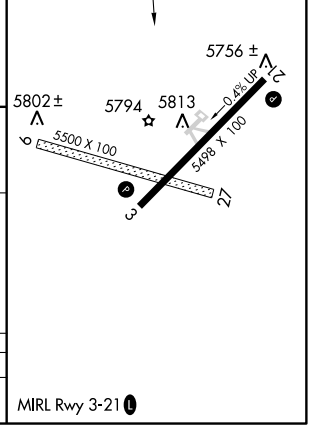
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 8500 direct JOGEL WP and hold.

ASOS	DENVER CENTER	UNICOM
119.025	128.375 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6300-1	539 (600-1)	6300-1½ 539 (600-1½)	6360-2 599 (600-2)

MIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5498
035°	TDZE	5756
	Apt Elev	5761

RNAV (GPS) RWY 3

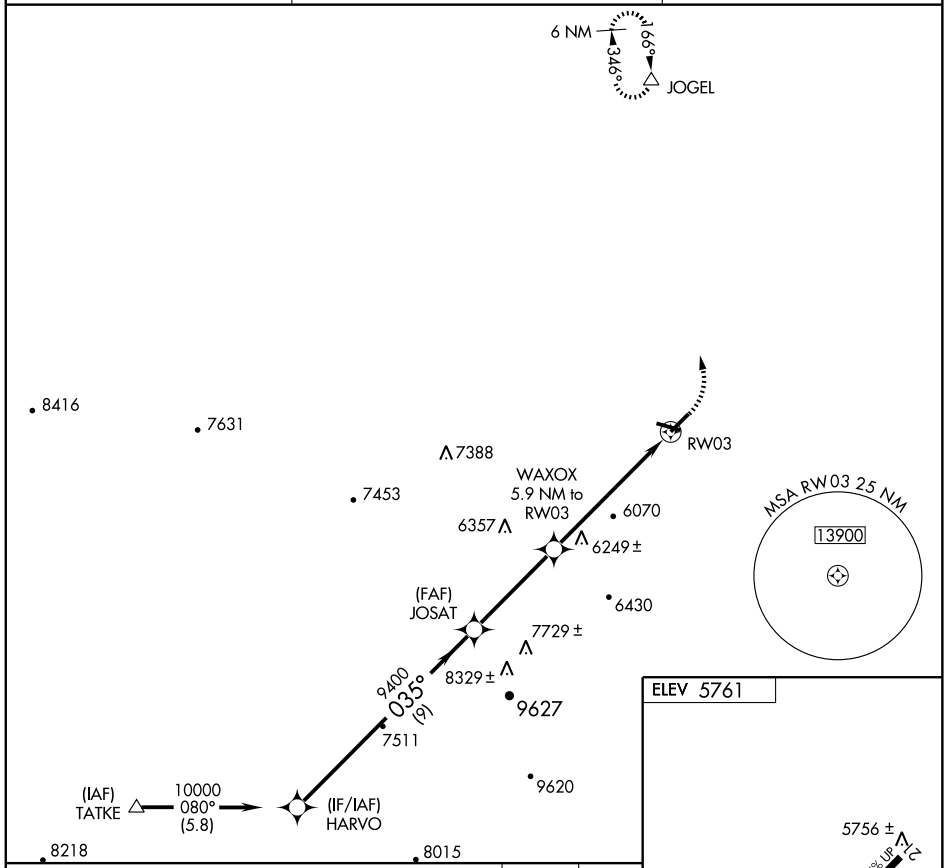
TRINIDAD/ PERRY STOKES (TAD)

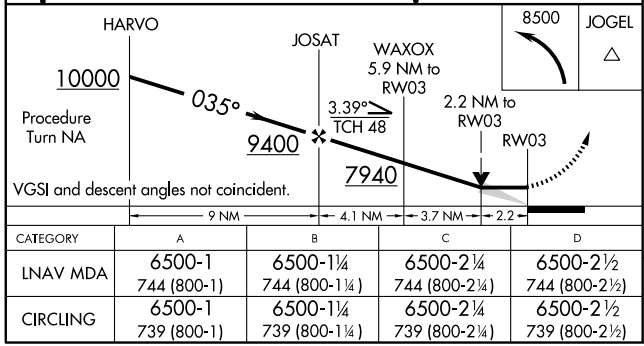
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

NA

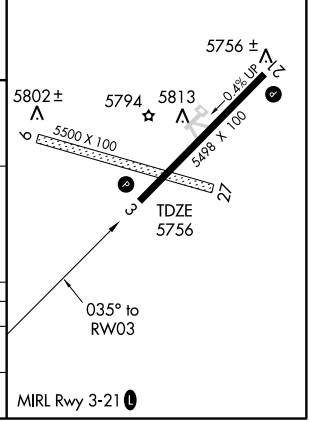
MISSED APPROACH: Climbing left turn to 8500 direct JOGEL WP and hold.

ASOS	DENVER CENTER	UNICOM
119.025	128.375 379.95	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	6500-1 744 (800-1)	6500-1¼ 744 (800-1¼)	6500-2¼ 744 (800-2¼)	6500-2½ 744 (800-2½)
CIRCLING	6500-1 739 (800-1)	6500-1¼ 739 (800-1¼)	6500-2¼ 739 (800-2¼)	6500-2½ 739 (800-2½)



SW-1, 22 OCT 2009 to 19 NOV 2009

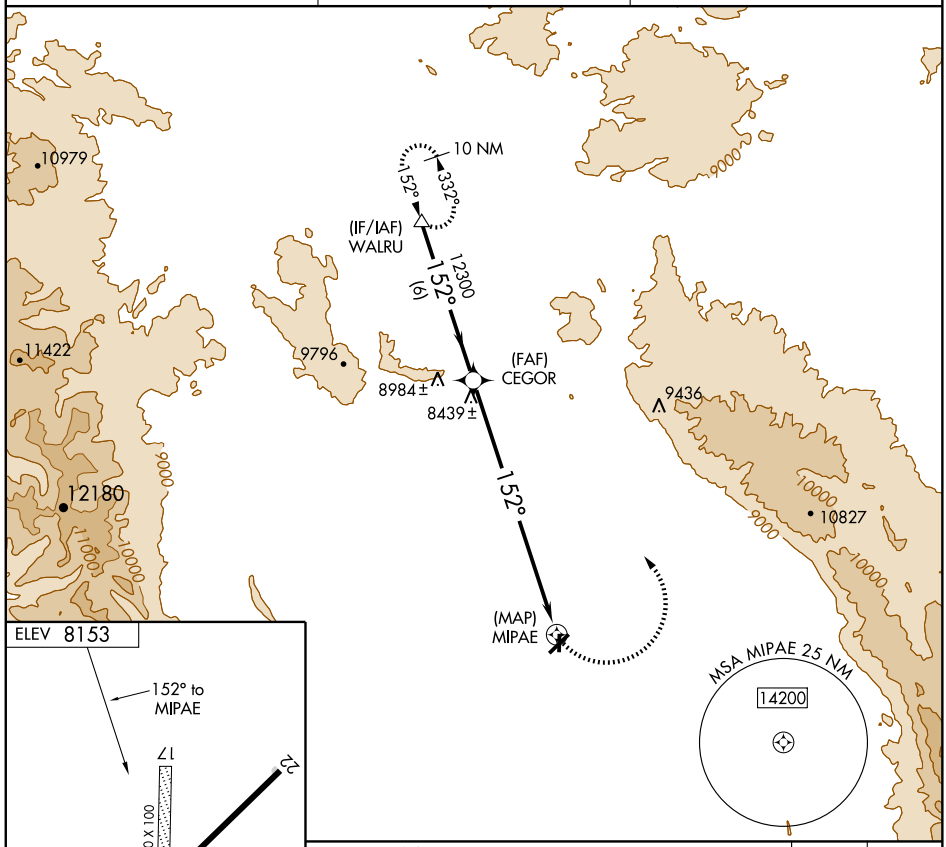
APP CRS	Rwy Idg	N/A
152°	TDZE	N/A
	Apt Elev	8153

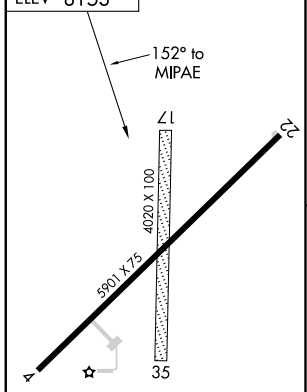
RNAV (GPS)-A
WALDEN-JACKSON COUNTY (33V)

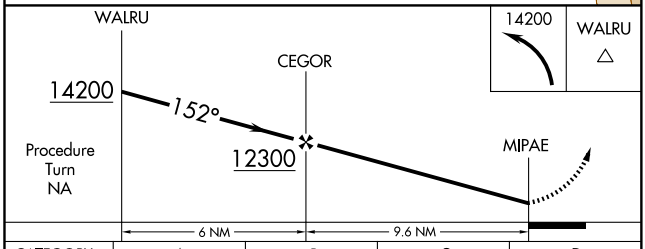
When local altimeter setting not received, procedure NA.
Circling NA southeast of Rwy 4-22.
Circling to Rwy 17 and 35 NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 14200 direct WALRU and hold, continue climb-in-hold to 14200.

AWOS-3	DENVER CENTER	CTAF
118.625	126.5 371.85	122.9 L







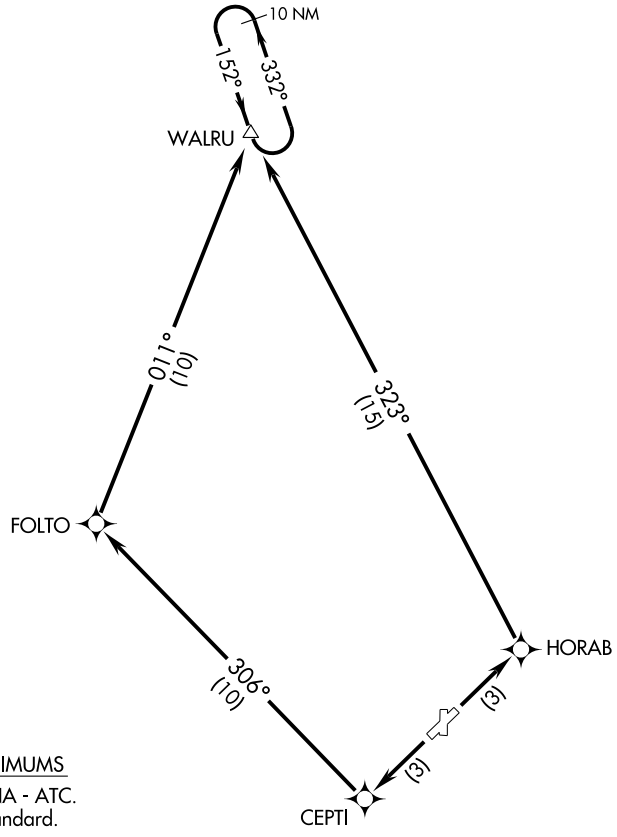
CATEGORY	A	B	C	D
CIRCLING	8880-1 727 (800-1)		8880-2 727 (800-2)	NA

MIRL Rwy 4-22 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WALRU ONE DEPARTURE (RNAV) (OBSTACLE)

WALDEN-JACKSON COUNTY (33V)
WALDEN, COLORADO



TAKE-OFF MINIMUMS

Rwy 17, 35: NA - ATC.
Rwy 4, 22: Standard.

NOTE: Rwy 22: Pole, 570' from DER, 339' right of centerline, 58' AGL/8174' MSL.

NOTE: GPS Required.

NOTE: RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 4: Climb to 14200 direct HORAB, then via 323° track to WALRU, thence....

TAKE-OFF RUNWAY 22: Climb to 14200 direct CEPTI, then via 306° track to FOLTO, then via 011° track to WALRU, thence....

....continue climb in WALRU holding pattern until at or above MEA before proceeding on course.

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS		
172°	Rwy Idg	5400
	TDZE	3677
	Apt Elev	3677

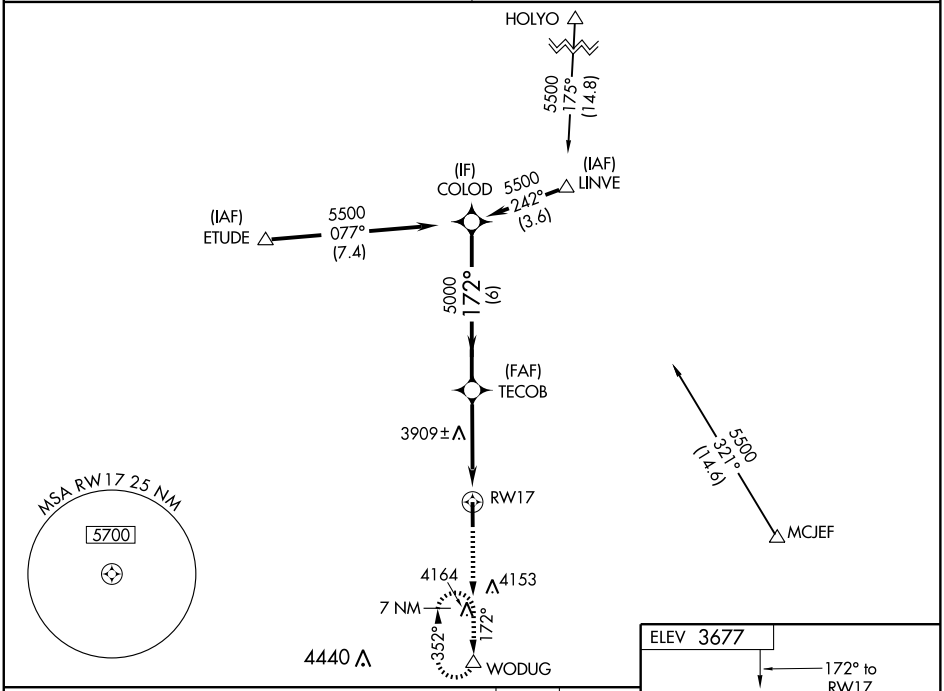
RNAV (GPS) RWY 17
WRAY MUNI (2V5)

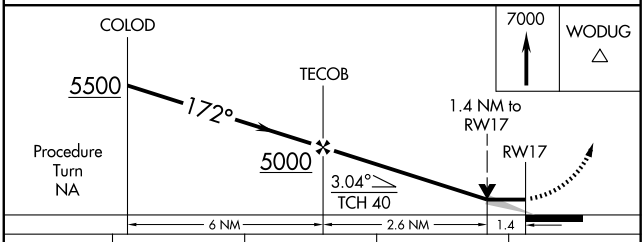
T
NA DME/DME RNP -0.3 NA.
Obtain local altimeter setting on CTAF, when not received use Imperial, NE altimeter setting.
VDP NA when using Imperial altimeter setting.

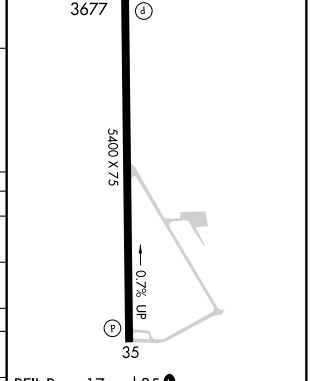
MISSED APPROACH: Climb to 7000 direct WODUG and hold, continue climb-in-hold to 7000.

DENVER CENTER
132.7 397.85

UNICOM
122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4160-1 483 (500-1)		4160-1¼ 483 (500-1¼)	4160-1½ 483 (500-1½)
CIRCLING	4160-1 483 (500-1)		4160-1½ 483 (500-1½)	4240-2 563 (600-2)
IMPERIAL ALTIMETER SETTING MINIMUMS				
LNAV MDA	4320-1 643 (700-1)		4320-1¾ 643 (700-1¾)	4320-2 643 (700-2)
CIRCLING	4320-1 643 (700-1)		4320-1¾ 643 (700-1¾)	4360-2¼ 683 (700-2¼)

REIL Rwys 17 and 35 L
MIRL Rwy 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5400
007°	TDZE	3653
	Apt Elev	3677

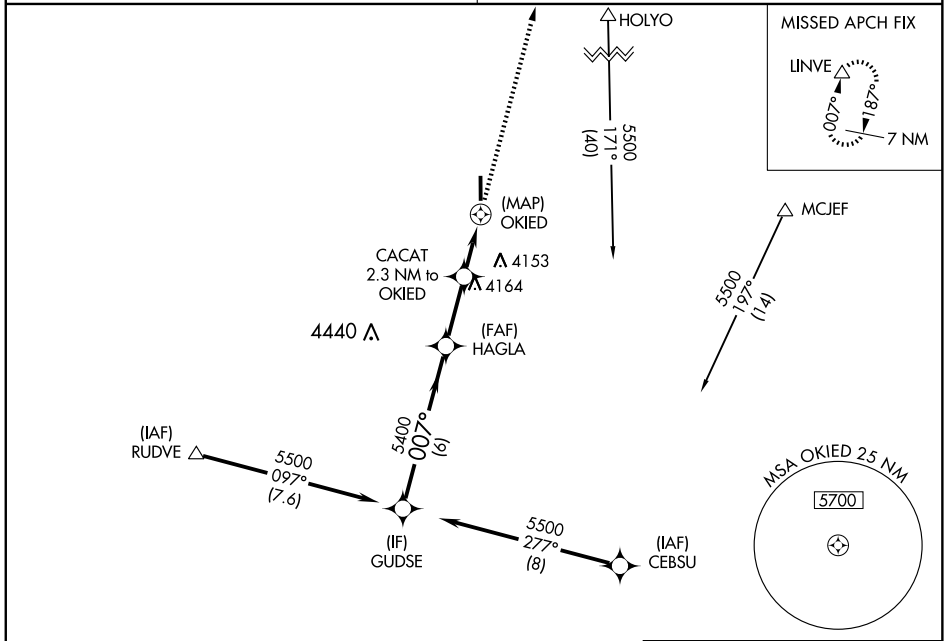
RNAV (GPS) RWY 35
WRAY MUNI (2V5)

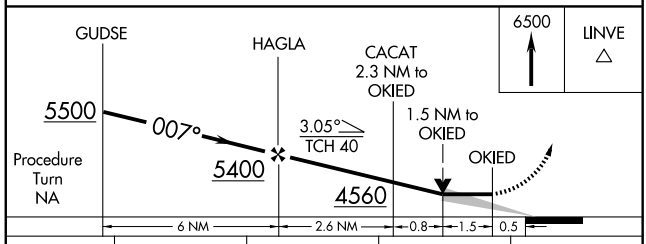
T
NA

DME/DME RNP -0.3 NA. Obtain local altimeter setting on CTAF, when not received use Imperial, NE altimeter setting. VDP NA when using Imperial altmeter setting.

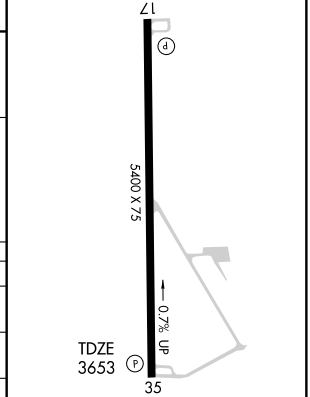
MISSED APPROACH: Climb to 6500 direct LINVE and hold.

DENVER CENTER	UNICOM
132.7 397.85	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	4320-1 667 (700-1)		4320-1¾ 667 (700-1¾)	4320-2 667 (700-2)
CIRCLING	4320-1 643 (700-1)		4320-1¾ 643 (700-1¾)	4320-2 643 (700-2)
IMPERIAL ALTIMETER SETTING MINIMUMS				
LNAV MDA	4460-1 807 (800-1)	4460-1¼ 807 (800-1¼)	4460-2¼ 807 (800-2¼)	4460-2½ 807 (800-2½)
CIRCLING	4460-1 783 (800-1)	4460-1¼ 783 (800-1¼)	4460-2¼ 783 (800-2¼)	4460-2½ 783 (800-2½)



REIL Rwys 17 and 35 L
MIRL Rwy 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

AKRON, CO
COLORADO PLAINS RGNL ..... **RNAV (GPS) Rwy 11**
NA when local weather not available.

ALAMOSA, CO
SAN LUIS VALLEY RGNL/ BERGMAN FIELD ..... **RNAV (GPS) Rwy 2**
RNAV (GPS) Rwy 20
NA when local weather not available.

ALBUQUERQUE, NM
ALBUQUERQUE INTL SUNPORT ..... **VOR or TACAN Rwy 8**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾; Category E, 900-3.

CLAYTON, NM
CLAYTON MUNI AIRPARK ..... **NDB Rwy 2**[1]
NDB Rwy 20[2]
RNAV (GPS) Rwy 2
RNAV (GPS) Rwy 20
NA when local weather not available.
[1]Categories A, B, 900-2; Category C, 900-2½, Category D, 900-2¾.
[2]Category D, 800-2¼.

CLOVIS, NM
CLOVIS MUNI ..... **VOR Rwy 22,**800-2¼

COLORADO SPRINGS, CO
CITY OF COLORADO SPRINGS MUNI ..... **ILS or LOC Rwy 17L**[1]
ILS or LOC Rwy 35L[2]
ILS or LOC Rwy 35R[23]
NDB Rwy 35L[4]
RNAV (GPS) Rwy 17R[35]
RNAV (GPS) Rwy 35R[3]
[1]ILS, 700-2.
[2]ILS, Category D, 700-2.
[3]NA when local weather not available.
[4]Category E, 1000-3.
[5]Category C, 800-2¼; Category D, 800-2½.

NAME — ALTERNATE MINIMUMS

CORTEZ, CO
CORTEZ MUNI ..... **RNAV (GPS) Y Rwy 21**[1]
RNAV (GPS) Z Rwy 21[2]
VOR Rwy 21[1]
[1]Category D, 900-3.
[2]Categories A, B, 1300-2; Categories C, D, 1300-3.

CRAIG, CO
CRAIG-MOFFAT ..... **VOR/DME Rwy 7**[1]
VOR Rwy 25[2]
[1]1300-3.
[2]1700-3.

DEMING, NM
DEMING MUNI ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 26
VOR Rwy 26
NA when local weather not available.

DENVER, CO
CENTENNIAL ..... **ILS or LOC Rwy 35R**[1]
NDB Rwy 35R[2]
RNAV (GPS) Rwy 28[34]
RNAV (GPS) Rwy 35R[14]
[1]Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.
[2]Categories A,B, 1000-2; Categories C,D, 1000-3.
[3]Category D, 800-2¼.
[4]NA when local weather not available.

DENVER, CO
DENVER INTL ..... **ILS or LOC Rwy 34L**
ILS, 700-2.

ROCKY MOUNTIAN METROPOLITAN ..... **ILS or LOC Rwy 29R**
VOR/DME Rwy 29L/R
NA when control tower closed.

NAME ALTERNATE MINIMUMS

DURANGO, CO
DURANGO-LA PLATA COUNTY ..... **VOR/DME Rwy 3**
NA when control zone not effective except for operators with approved weather reporting service.

EAGLE, CO
EAGLE COUNTY RGNL ..... **LDA/DME Rwy 25**
Categories A,B, 2100-2; Category C, 2100-3.
NA when control tower closed.
NA when local weather not available.

FARMINGTON, NM
FOUR CORNERS RGNL ..... **ILS or LOC Rwy 25[1][2]**
RNAV (GPS) Rwy 5[3]
RNAV (GPS) Rwy 7[3]
RNAV (GPS) Rwy 23[4]
[1]NA when control tower closed.
[2]ILS, Categories B,C,D, 700-2.
[3]NA when local weather not available.
[4]Category D, 800-2¼.

FORT COLLINS/LOVELAND, CO
FORT COLLINS-LOVELAND MUNI ..... **RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
VOR/DME-A
NA when local weather not available.

GALLUP, NM
GALLUP MUNI ..... **RNAV (GPS) Rwy 6[1][2]**
RNAV (GPS) Rwy 24[3]
VOR Rwy 6[1]
[1]Category C, 800-2¼; Category D, 900-3.
[2]NA when local weather not available.
[3]Category D, 900-3.

GRAND JUNCTION, CO
GRAND JUNCTION RGNL ..... **ILS or LOC Rwy 11[1]**
LDA/DME Rwy 29[2]
RNAV (GPS) Rwy 11[2]
[1]ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.

GREELEY, CO
GREELEY-WELD COUNTY ..... **ILS or LOC Rwy 34**
RNAV (GPS) Rwy 16
RNAV (GPS) Rwy 27
RNAV (GPS) Rwy 34
VOR or TACAN-A
NA when local weather not available.

NAME ALTERNATE MINIMUMS

GUNNISON, CO
GUNNISON-CRESTED BUTTE RGNL ..... **ILS or LOC Rwy 6[1]**
RNAV (RNP) Rwy 6, 800-2¼
VOR or GPS-A[2][3]
[1]ILS,LOC, Categories A, B, C, 1600-3.
[2]Categories A,B,C, 1700-3;Cat D, 2300-3.
[3]NA when local altimeter setting not available except for operators with approved weather reporting service.

HAYDEN, CO
YAMPA VALLEY ... **ILS or LOC/DME Y Rwy 10[1]**
RNAV (GPS) Y Rwy 10[1][2]
VOR/DME-B[2][3]
[1]Categories A, B, 1200-2; Categories C, D, 1200-3.
[2]NA when local weather not availalbe.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.

HOBBS, NM
LEA COUNTY RGNL ..... **ILS or LOC Rwy 3[1]**
LOC/DME BC Rwy 21[2]
RNAV (GPS) Rwy 3[3]
RNAV (GPS) Rwy 21[2]
RNAV (GPS) Rwy 30[2]
VOR/DME or TACAN Rwy 21[2]
VOR or TACAN Rwy 3[2]
[1]NA when control tower closed.
[2]NA when control tower closed, except standard for operators with approved weather reporting service.
[3]NA when local weather not available.

LA JUNTA, CO
LA JUNTA MUNI ..... **RNAV (GPS) Rwy 8**
RNAV (GPS) Rwy 26
NA when local weather not available.

LAMAR, CO
LAMAR MUNI ..... **RNAV (GPS) Rwy 18[1]**
RNAV (GPS) Rwy 36[2]
VOR Rwy 18[3]
[1]NA when local weather not available.
[2]Category D, 800-2¼.
[3]Category C, 900-2½, Category D, 900-2¾.

LAS VEGAS, NM
LAS VEGAS MUNI ..... **RNAV (GPS) Rwy 2**
RNAV (GPS) Rwy 20
RNAV (GPS) Rwy 32
VOR Rwy 2
VOR Rwy 20
NA when local weather not available.

NAME ALTERNATE MINIMUMS

MONTROSE, CO

MONTROSE
RGNL ..... **ILS or LOC/DME Rwy 17**
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 35
RNAV (GPS) Y Rwy 17
RNAV (GPS) Z Rwy 17
VOR/DME Rwy 13
Category C, 1000-2¾; Category D, 1000-3.

PAGOSA SPRINGS, CO

STEVENS FIELD ..... **RNAV (GPS)-A**
NA when local weather not available.

PORTALES, NM

PORTALES MUNI ..... **RNAV (GPS) Rwy 1**
Category D, 900-3.

PUEBLO, CO

PUEBLO MEMORIAL ..... **ILS or LOC Rwy 8L[13]**
ILS or LOC Rwy 26R[23]
RNAV (GPS) Rwy 8L[4]
RNAV (GPS) Rwy 26R[4]
VOR or TACAN Rwy 26R[3]
[1]ILS, Categories A,B,C,D, 700-2; Category E,1000-3. LOC, Category E, 1000-3.
[2]ILS, 700-2.
[3]NA when control tower closed.
[4]NA when local weather not available.

RATON, NM

RATON MUNICIPAL/
CREWS FIELD ..... **VOR/DME Rwy 2**
Categories A,B, 1400-2; Categories C,D, 1400-3.

RIFLE, CO

GARFIELD COUNTY
RGNL ..... **LOC/DME-A[123]**
ILS Rwy 26[234]
RNAV (GPS) Y Rwy 8[25]
RNAV (GPS) W Rwy 26[27]
RNAV (GPS) X Rwy 26[28]
RNAV (RNP) Y Rwy 26[26]
RNAV (RNP) Z Rwy 8[29]
RNAV (RNP) Z Rwy 26[2]
VOR/DME-C[5]
[1]Categories A,B, 2400-2; Category C,2400-3.
[2]NA when local weather not available.
[3]Not authorized 0200-1300Z.
[4]ILS, Categories A,B,C, 1300-4.
[5]Categories A,B, 1900-2; Category C, 1900-3.
[6]Categories A,B,C, 800-2¼.
[7]Categories A,B, 1700-2; Category C, 1700-3.
[8]Categories A,B,C, 900-2½.
[9]Categories A,B,C, 900-3.

NAME ALTERNATE MINIMUMS

ROSWELL, NM

ROSWELL
INTL AIR CENTER ..... **ILS Rwy 21[1]**
LOC BC Rwy 3[1]
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 21[2]
RNAV (GPS) Rwy 35[2]
[1]NA when control tower closed.
[2]NA when local weather not available.

SANTA FE, NM

SANTA FE MUNI ..... **ILS or LOC Rwy 2[12]**
VOR/DME-A[34]
VOR Rwy 33[34]
[1]NA when control tower closed.
[2]ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.
[4]NA when control tower closed except for operators with approved weather reporting service.

SILVER CITY, NM

GRANT COUNTY ..... **VOR-A**
VOR/DME-B
NA when Deming FSS closed.

TAOS, NM

TAOS REGIONAL ..... **VOR/DME-B**
Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

TRUTH OR CONSEQUENCES, NM

TRUTH OR CONSEQUENCES
MUNI ..... **VOR-A**
Category D, 800-2¼.

ALBUQUERQUE, NM

Amdt. 20C, MAY 17, 2002 (FAA) ELEV **5355**

ALBUQUERQUE INTL SUNPORT

RADAR - 123.9 354.1

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	8		ABC	**5700**/24	384	(400-½)	DE	**5700**/50	384	(400-1)
	35		ABC	**5700**-1	386	(400-1)	DE	**5700**-1¼	386	(400-1¼)
	3		ABC	**5700**-1	388	(400-1)	DE	**5700**-1¼	388	(400-1¼)
	17		AB	**5740**-1	419	(400-1)	CD	**5740**-1¼	419	(400-1¼)
			E	**5740**-1½	419	(400-1½)				
CIRCLING			AB	**5840**-1	488	(500-1)	C	**5900**-1½	545	(600-1½)
			D	**5940**-2	585	(600-2)	E	**6040**-2½	685	(700-1½)

Circling Category E not authorized E of Rwys 17/35. CAUTION: Steeply rising terrain in NE quadrant exceeding 8000' at 8 NM from airport and in SE quadrant exceeding 6300' at 4.6 NM from airport. Categories D and E S-8 visibility increased to RVR 6000 for inoperative MALSR.

CANNON AFB (KCVS), NM (Clovis) (07270 USAF) **ELEV 4295**

RADAR[1]- (E) 127.75x 295.7x 363.95x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR[2]	31[3]		AB	4720-½	450	(500-½)
			C	4720-¾	450	(500-¾)
			DE	4720-1	450	(500-1)
	4[4]		ABCD	4700/40	416	(500-¾)
			E	4700/50	416	(500-1)
	22[5]		AB	4820/24	525	(600-½)
			C	4820/50	525	(600-1)
			DE	4820/60	525	(600-1¼)
	13[6]		AB	4820-¾	526	(600-¾)
			C	4820-1	526	(600-1)
			DE	4820-1¼	526	(600-1¼)
CIR	All Rwy		AB	4840-1	545	(600-1)
			C	4840-1½	545	(600-1½)
			D	4860-2	565	(600-2)
			E	5020-2½	725	(800-2½)

[1]SIF gnd ck avbl fr RAPCON on 358.3 1400-0600Z++. [2]No-NOTAM MP 0700-1100Z++ Mon-Wed, 0600-1300Z++ Thu,Fri. [3]When ALS inop, increase CAT AB vis to 1 mile, CAT C vis to 1¼ miles, CAT DE vis to 1½ miles. [4]When ALS inop, increase CAT AB RVR to 50, vis to 1 mile, CAT CD RVR to 60, vis to 1¼ miles, CAT E to vis 1½ miles. [5]When ALS inop, increase CAT AB RVR to 50, vis to 1 mile, CAT C vis to 1½, CAT DE vis to 1¾ miles. [6]When ALS inop, increase CAT AB vis to 1 mile, CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.

ROSWELL, NM

Orig, MAY 13, 2004 (FAA)

ELEV **3669**

ROSWELL INTL AIR CENTER

RADAR[1] - **E** 119.6 239.0 ▽ ⚠ NA when control tower closed.

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	3		ABC	**4020**-1	355	(400-1)	DE	**4020**-1¼	355	(400-1¼)
	17		ABC	**4020**-1	356	(400-1)	DE	**4020**-1¼	356	(400-1¼)
	35		ABC	**4060**-1	391	(400-1)	D	**4060**-1¼	391	(400-1¼)
			E	**4060**-1½	391	(400-1½)				
	21		AB	**4040**-½	408	(400-½)	C	**4040**-¾	408	(400-¾)
			DE	**4040**-1	408	(400-1)				
CIRCLING			AB	**4140**-1	471	(500-1)	C	**4140**-1½	471	(500-1½)
			D	**4220**-2	551	(600-2)	E	**4380**-2½	711	(800-2½)

[1]Opr 1300-0400Z++. Procedure NA when control tower closed.

[2] When ALS inoperative, increase Category D visibility to 1¼, and Category E visibility to 1½.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

AKRON, CO

COLORADO PLAINS RGNL (AKO)

ORIG 09127 (FAA)

NOTE: **Rwy 11,** rod on obstruction light on anemometer 314' from DER, 525' left of centerline, 26' AGL/4695' MSL. Lights on hangers 412' from DER, 301' left of centerline, 18' AGL/4687' MSL. **Rwy 29,** vehicles on roadway beginning 971' from DER, 315' left of centerline, 15' AGL/4741' MSL. Trees beginning 1651' from DER, 528' left of centerline, up to 100' AGL/4839' MSL.

ALAMOGORDO, NM

ALAMOGORDO-WHITE SANDS RGNL

TAKE-OFF MINIMUMS: **Rwy 16,21,34,** NA

DEPARTURE PROCEDURE: Use CORONA ONE Departure.

ALAMOSA, CO

SAN LUIS VALLEY RGNL-BERGMAN FIELD

TAKE-OFF MINIMUMS: **Rwys 6, 24,** NA.

DEPARTURE PROCEDURE: **Rwy 2**, turn right. **Rwy 20,** turn left. Climb direct ALS VORTAC, continue climb in ALS VORTAC holding pattern (SE, right turns, 301° inbound) to depart ALS VORTAC at airway MEA/MCA, all others climb to 16000.

NAME — TAKE-OFF MINIMUMS

ALBUQUERQUE, NM

ALBUQUERQUE INTL SUNPORT (ABQ)

AMDT 5 08157

TAKE-OFF MINIMUMS: **Rwy 3**, 200 - 1 or std. w/ min. climb of 240' per NM to 5600, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1900' prior to departure end of rwy, **Rwy 8,** std. w/ min. climb of 515' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 3, 30, 35,** climbing left turn direct ABQ VORTAC. If required, continue cllmb in ABQ VORTAC holding pattern (hold west, left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight. **Rwy 8,** climbing right turn direct ABQ VORTAC. If required, continue climb in ABQ VORTAC holding pattern (hold west, left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight. (do not exceed 250 kts until ABQ VORTAC). **Rwys 12, 17, 21,** climbing right turn direct ABQ VORTAC. If required, continue climb in ABQ VORTAC holding pattern (hold west, left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight. **Rwy 26,** climb direct ABQ VORTAC. If required, continue climb in ABQ VORTAC holding pattern (hold west,left turn, 077° inbound) to cross ABQ VORTAC at or above MEA/MCA for route of flight.

ALBUQUERQUE INTL SUNPORT (CON'T)

NOTE: **Rwy 3,** light 549' from departure end of runway, 575' right of centerline, 29' AGL/5344' MSL. Light 2109' from departure end of runway, 1001' left of centerline, 67' AGL/5382' MSL. Multiple tanks beginning 4962' from departure end of runway, 1708' left of centerline, up to 154' AGL/5469' MSL. **Rwy 12,** electrical equipment 36' from departure end of runway, 214' right of centerline, 20' AGL/5315' MSL. **Rwy 17,** light 114' from departure end of runway, 360' right of centerline, 19' AGL/5328' MSL. Pole 248' from departure end of runway, 423' left of centerline, 32' AGL/5321' MSL. **Rwy 21,** terrain beginning 23' from departure end of runway, 277' left to 291' right of centerline, up to 5319' MSL. **Rwy 30,** tower 1057' from departure end of runway, 743' right of centerline, 93' AGL/5393' MSL. **Rwy 35,** light on fence 106' from departure end of runway, 11' right of centerline, 11' AGL/5326' MSL. Sign 165' from departure end of runway, 140' left of centerline, 13' AGL/5328' MSL. Vehicles on road 215' from departure end of runway, from left to right of centerline, up to 15' AGL/5335' MSL. Multiple trees beginning 314' from departure end of runway, 53' left of centerline, up to 50' AGL/5367' MSL. Multiple trees beginning 329' from departure end of runway, 172' right of centerline, up to 50' AGL/5362' MSL. Tower 3208' from departure end of runway, 860' right of centerline, 100' AGL/5410' MSL.

DOUBLE EAGLE II (AEG)

AMDT 1 08045 (FAA)

DEPARTURE PROCEDURE: **Rwy 4 ,** climb heading 035° to 11700 before turning right, all others turn left on course. **Rwy 17,** climb heading 169° to 9400 before turning left, all others turn right on course. **Rwy 22,** climb heading 215° to 9100 before turning left, all others turn right on course. **Rwy 35 ,** climb heading 349° to 11000 before turning right, all others turn left on course.

NOTE: **Rwy 17,** antenna 64' from departure end of runway, 395' left of centerline, 8' AGL/ 5807' MSL. Tree 3482' from departure end of runway, 1409' right of centerline, 100' AGL/ 5919' MSL. **Rwy 35,** antenna 53' from departure end of runway, 405' right of centerline, 9' AGL/ 5808' MSL.

ANGEL FIRE, NM

ANGEL FIRE (AXX)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 35,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 17,** use ANEKE RNAV DEPARTURE.

ASPEN, CO

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)

AMDT 8 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15,** NA-terrain.

DEPARTURE PROCEDURE: **Rwy 33,** use SARDD DEPARTURE.

BELEN, NM

ALEXANDER MUNI

TAKE-OFF MINIMUMS: **Rwys 3,21**, std. with min. climb of 326' per NM to 11700, or 2300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3, 21**, for climb in visual conditions: cross Alexander Municipal Airport at or above 7500.

BUCKLEY AFB (KBKF)

AURORA, CO

Rwy 14, 700-1*

* Or standard with minimum climb of 240/NM to 5700.

TAKE-OFF OBSTACLES: Rwy 14: Rising Terrain 5685' to 5700' MSL 975'-1355' from departure end of rwy, 210'-270' right of centerline.

BUENA VISTA, CO

CENTRAL COLORADO RGNL

TAKE-OFF MINIMUMS: **Rwy 15,** std. with a min. climb of 400' per NM to 8200 then 340' per NM to 15500.
Rwy 33, NA-due to terrain.

DEPARTURE PROCEDURE: **Rwy 15,** use PUEBLO RNAV DEPARTURE. **Rwy 33,** NA-due to terrain.

NOTE: **Rwy 15,** tree 4468' from departure end of runway, 659' right of centerline, 60' AGL/8159' MSL.

BUTTS AAF (KFCS)

FORT CARSON, CO

. . . . . .Rwy 31, 400-1*

* Or standard with a minimum climb of 210/NM to 6100'.

Rwy 13 climbing left turn heading 080° within 1 mile.
Rwy 3l climbing right turn heading 80° within 1 mile.
All aircraft continue climb via hdg 080° until joining V-81.

CANNON AFB (KCVS),

CLOVIS, NM. . . . . .(07354 USAF)

DIVERSE DEPARTURES AUTHORIZED ALL RWYS

TAKE-OFF OBSTACLES: **Rwy 04**: Terrain 4304' MSL, 0' from DER, 25' to 222' right of centerline. Terrain 4305' MSL, 16' to 268' from DER, 500' left of centerline. Terrain 4329' MSL, 1124' from DER, 800' left of centerline.

Rwy 13: Terrain 4284' MSL, 0' to 409' from DER, 41' to 500' left of centerline. Terrain 4280' MSL, 66' to 528' from DER, 500' to 585' right of centerline.

Rwy 22: Terrain 4295' MSL, 0' to 538' from DER, 61' to 636' left of centerline. Terrain 4281' MSL, 66' from DER, 258' right of centerline.

Rwy 31: Terrain 4294' MSL, 0' from DER, 500' left of centerline. Terrain 4304' MSL, 370' from DER, 588' left of centerline. Power Pole 25' AGL/4357' MSL, 2517' from DER, 98' left of centerline. Terrain 4314' MSL, 197' to 317' from DER, 500' to 585' right of centerline.

CANON CITY, CO

FREMONT COUNTY

TAKE-OFF MINIMUMS: **Rwy 29,** 4600-2 or std. with a min. climb of 450' per NM to 10400.

DEPARTURE PROCEDURE: **Rwy 11,** climb runway heading. **Rwy 29,** turn left heading 115°.
All aircraft intercept and climb via PUB VORTAC R-262 (V244) PUB VORTAC before proceeding on course.

CLAYTON, NM

CLAYTON MUNI

TAKE-OFF MINIMUMS: **Rwy 30,** 1300-1 or std. with a min. climb of 244' per NM until 6700.

COLORADO SPRINGS, CO

CITY OF COLORADO SPRINGS MUNI

TAKE-OFF MINIMUMS: **Rwy 30**, 600-2 or std. with a min. climb of 220' per NM to 6900.

DEPARTURE PROCEDURE: **Rwys 12,17L,17R**, turn left. **Rwys 30,35L**,**35R,** turn right. **All aircraft** climb direct BRK VORTAC. Aircraft departing on BRK R-325 CW R-153 climb on course. Aircraft departing BRK R-154 CW R-324 climb in BRK holding pattern (NW, left turns, 154° inbound) to cross BRK VORTAC at or above 14000.

CORTEZ, CO

CORTEZ MUNI

TAKE-OFF MINIMUMS: **Rwy 3,** 300-2 or std. w/ min. climb of 220' per NM to 6300. **Rwy 21**, 1000-2.

DEPARTURE PROCEDURE: **Rwy 3**, left turn.
Rwy 21, right turn, climbing direct to CEZ VOR. Aircraft northwestbound V391 continue climb on course to 9800 or above; southeastbound V391, V211, and direct HBU VOR/DME, continue climb on R-295 to 8000, left climbing turn to recross CEZ VOR at or above 9400. Aircraft enroute HBU VOR/DME and able to climb 230' per NM to 15000 may climb on course (CEZ R-034) to 16300 or above.

NOTE: **Rwy 3,** tree 1.7 NM from departure end of runway, 2964' left of centerline, 6096 AGL/6196 MSL.

CRAIG, CO

CRAIG-MOFFAT

TAKE-OFF MINIMUMS: **Rwys 7,25**, 800-1¼, or std. with a min. climb of 400' per NM to 7000.

DEPARTURE PROCEDURE: **Rwys 7,25**, climb direct CHE VOR/DME and hold (W, right turns, 108° inbound) climbing to: aircraft departing CHE R-213 CW R-296 depart on course; all others continue climbing to cross CHE at or above; CHE R-076 CW R-114 10500, R-115 CW R-212 11300, and R-297 CW R-076 11300.

DEMING, NM

DEMING MUNI

TAKE-OFF MINIMUMS: **Rwy 4,** NA.

DEPARTURE PROCEDURE: WESTBOUND: **Rwy 8,** climbing left turn heading 214°; **Rwy 22,** climbing right turn heading 302°; **Rwy 26,** climbing right turn heading 275°; intercept DMN VORTAC R-258 then via V94 on course. EASTBOUND: **Rwy 8,** climb direct DMN VORTAC; **Rwys 22, 26,** climbing right turn direct DMN VORTAC; then via V94 on course. NORTHBOUND: **Rwy 8,** climb direct DMN VORTAC; **Rwys 22, 26,** climbing right turn direct DMN VORTAC; then via V110 on course.

DENVER, CO

CENTENNIAL (APA)

AMDT 4 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17L,** std. w/ min. climb of 253' per NM to 6900.**Rwy 17R,** std. w/ min. climb of 370' per NM to 6900.

DEPARTURE PROCEDURE: **Rwy 10,** when departing on course between 159° CCW to 330° from departure end of runway climb heading 100° to 6300. All other courses: climbing left turn heading 326° to intercept DEN VOR/DME R-191 to DEN VOR/DME, thence ... **Rwys 17L, 17R,** climb on a heading between 346° CW to 159° from departure end of runway. All other courses: climbing left turn heading 331° to intercept DEN VOR/DME R-196 to DEN VOR/DME, thence ...**Rwy 28,** climb on a heading between 330° CW to 100° from departure end of runway. All other courses: climbing right turn heading 072° to intercept DEN VOR/DME R-207 to DEN VOR/DME, thence ... **Rwy 35L**, climb on a heading between 330° CW to 159° from departure end of runway. All other courses: climb heading 346° to intercept DEN VOR/DME R-208 to DEN VOR/DME, thence ...**Rwy 35R,** climb on a heading between 330° CW to 159° from departure end of runway. All other courses: climb heading 347° to intercept DEN VOR/DME R-208 to DEN VOR/DME, thence ...

... Climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 10,** terrain beginning 238' from departure end of runway, 30' right of centerline, up to 5859' MSL. Fences beginning 1211' from departure end of runway, 233' right of centerline, up to 8' AGL/5841' MSL. Multiple bushes beginning 1378' from departure end of runway,284' right of centerline, up to 6' AGL/5840' MSL. Multiple roads with vehicles beginning 198' from departure end of runway, 404' left of centerline, up to 15' AGL/5835' MSL. Terrain 1357' from departure end of runway, 253' left of centerline, 5829' MSL. **Rwy 17L,** multiple trees beginning 2968' from departure end of runway, 761' right of centerline, 100' AGL/5976' MSL. **Rwy 17R,** terrain 181' from departure end of runway, 496' right of centerline, 5887' MSL. Fence 538' from departure end of runway, 196' right of centerline, 8' AGL/5889' MSL. Multiple trees beginning 562' from departure end of runway, 61' right of centerline, up to 16' AGL/5976' MSL. Multiple light poles beginning 2362' from departure end of runway, 256' right of centerline, up to 30' AGL/5942' MSL. Vehicles on roads beginning 2812' from departure end of runway, on centerline, up to 17' AGL/5946' MSL. Obstruction light on building 3282' from departure end of runway, 842 feet right of centerline, 90' AGL/6021' MSL. **Rwy 28,** terrain beginning 89' from departure end of runway, from 513' left to 137' right of centerline, up to 5849' MSL. Windsock 100' from departure end of runway, 183'left of centerline, 15' AGL/5832' MSL. Multiple trees beginning 1640' from departure end of runway, 731' left of centerline, up to 100' AGL/5959' MSL. **Rwy 35L,** terrain beginning 54' from departure end of runway, 110' right of centerline, up to 5829' MSL.

DENVER, CO (CON'T)

DENVER INTL (DEN)

AMDT 2 08213 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb on a heading between 312° CW to 215° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 8,** climb on a heading between 307° CW to 218° from departure end of runway. All other courses: climbing right turn, thence ... **Rwys 16L, 16R,** climb on a heading between 210° CCW to 350° from departure end of runway. All other courses: climbing left turn, thence... **Rwys 17L, 17R,** climb on a heading between 219° CCW to 350° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 25,** climb on a heading between 314° CW to 080° or 203° CCW to 080° from departure end of runway. All other courses: climbing left turn, thence ... **Rwy 26,** climb on a heading between 310° CW to 080° or 216° CCW to 080° from departure end of runway. All other courses: climbing left turn, thence ... **Rwys 34L, 34R,** climb on a heading between 310° CW to 169° from departure end of runway. All other courses: climbing right turn, thence ... **Rwys 35L, 35R,** climb on a heading between 310° CW to 169° from departure end of runway. All other courses: climbing left turn, thence ...

. . .direct DEN VOR/DME, climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 8,** multiple trees beginning 115' from departure end of runway, 444' right of centerline, up to 100' AGL/5389' MSL. **Rwy 16L,** tower 4722' from departure end of runway, 1359' left of centerline, 153' AGL/5473' MSL. Antenna on obstruction light tower 4746' from departure end of runway, 1358' left of centerline, 153' AGL/5473' MSL. **Rwy 17L,** multiple trees beginning 247' from departure end of runway, 543' right of centerline, up to 100' AGL/5489' MSL. **Rwy 17R,** multiple trees beginning 1457' from departure end of runway, 759' right of centerline, up to 100' AGL/5529' MSL. **Rwy 25,** multiple trees beginning 303' from departure end of runway, 557' right of centerline, up to 100' AGL/5439' MSL. **Rwy 34L,** multiple trees beginning 273' from departure end of runway, 537' right of centerline, up to 100' AGL/5399' MSL. **Rwy 34R,** multiple trees beginning 471' from departure end of runway, 580' right of centerline, up to 100' AGL/5449' MSL. **Rwy 35L,** terrain beginning 149' from departure end of runway, 34' right of centerline, up to 5414' MSL.

DENVER, CO (CON'T)

FRONT RANGE (FTG)
AMDT 2 08213 (FAA)

DEPARTURE PROCEDURE: **Rwy 8,** climb on a heading between 310° CW to 225° from departure end of runway. All other courses: climbing left turn,thence ... **Rwy 17,** climb on a heading between 350° CW to 226° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 26,** climb on a heading between 311° CW to 080° or between 224° CCW to 080° from departure end of runway. All other courses: climbing right turn, thence ... **Rwy 35,** climb on a heading between 310° CW to 169° from departure end of runway. All other courses: climbing left turn, thence ...

... Direct DEN VOR/DME, climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 17,** multiple trees beginning 247' from departure end of runway, 534' left of centerline, up to 50' AGL/5629' MSL. Multiple trees beginning 293' from departure end of runway, 555' right of centerline, up to 50' AGL/5599' MSL. Pole 3618' from departure end of runway, 516' left of centerline, 92' AGL/5603' MSL. **Rwy 26,** multiple trees beginning 255' from departure end of runway, 317' left of centerline, up to 50'AGL/5499' MSL. Multiple trees beginning 272' from departure end of runway, 498' right of centerline, up to 50' AGL/5479' MSL.

ROCKY MOUNTAIN METROPOLITAN (BJC)
AMDT 4 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29L,** 200-1 or std. w/ min. climb of 402' per NM to 5900.

DEPARTURE PROCEDURE: **Rwy 2,** climb on a heading between 350° CW to 160° from departure end of runway. All other courses: climbing right turn heading 147° to intercept DEN VOR/DME R-282 to DEN VOR/DME, thence ... **Rwys 11L, 11R,** climb on a heading between 160° CCW to 350° from departure end of runway. All other courses: climb heading 113° to intercept DEN VOR/DME R-272 to DEN VOR/DME, thence ...**Rwy 20,** climb on a heading between 160° CCW to 024° from departure end of runway. All other courses: climbing left turn heading 044° to intercept DEN VOR/DME R-269 to DEN VOR/DME, thence ...**Rwy 29R,** climb on a heading between 350° CW to 113° from departure end of runway. All other courses: climbing right turn heading 142° to intercept DEN VOR/DME R-277 to DEN VOR/DME, thence ... **Rwy 29L,** climb on a heading between 350° CW to 113° from departure end of runway. All other courses: Climbing right turn heading 142° to intercept DEN VOR/DME R-276 to DEN VOR/DME, thence ...

... climb in DEN VOR/DME holding pattern (hold south, right turns, 340° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 2,** pole 432' from departure end of runway, 370' right of centerline, 49' AGL/5619' MSL. **Rwy 29L,** terrain beginning 45' from departure end of runway 292' left of centerline, up to 5839' MSL. Fence 1015' from departure end of runway 392' left of centerline, 15' AGL/5725' MSL. Fence 982' from departure end of runway 303' left of centerline, 14 ' AGL/5714' MSL. Multiple trees beginning 687' from departure end of runway 615' right of centerline up to 70' AGL/5839' MSL. Tree 3196' from departure end of runway 1337' left of centerline, 70' AGL/5839' MSL.

DURANGO, CO

DURANGO-LA PLATA COUNTY (DRO)
AMDT 6A 09015

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ a min. climb of 215' per NM to 7600, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn to 9000 heading 160° and DRO VOR/DME R-125 to RESER INT, or for climb in visual conditions: Cross Durango-La Plata County Airport Southeast bound at or above 8200 MSL, then proceed on DRO VOR/DME R-125 to RESER INT. **Rwy 21**, climbing right turn to 9500 heading 280° and DRO VOR/DME R-235 to MARKE INT.

NOTE: **Rwy 3,** trees beginning 1223' from departure end of runway, 794' left of centerline, up to 42' AGL/6741' MSL. Trees beginning 488' from departure end of runway, 431' right of centerline, up to 42' AGL/6698' MSL, vehicles on road beginning 8' from departure end of runway, right and left of centerline, up to 15' AGL/6706' MSL.

EAGLE, CO

EAGLE COUNTY RGNL (EGE)
AMDT 7 09239 (FAA)

DEPARTURE PROCEDURE: use GYPSUM DEPARTURE.

ERIE, CO

ERIE MUNI

TAKE-OFF MINIMUMS: **Rwy 15,** 500-2 or std. with a min. climb gradient of 270' per NM to 5700.

DEPARTURE PROCEDURE: **Rwys 9,15,** turn right; **Rwys 27,33,** turn left; climb direct BJC VOR/DME. Departures on BJC R-340 CW R-150 climb on course. All others climb in BJC holding pattern (NE, left turns 203° inbound) to cross BJC VOR/DME at or above 13300, or comply with RADAR vectors.

FARMINGTON, NM

FOUR CORNERS RGNL

TAKE-OFF MINIMUMS: **Rwys 11, 29,** NA.

DEPARTURE PROCEDURE: **Rwy 5,** climb runway heading to 6300 before turning left. **Rwy 23,** climb runway heading to 6500 before turning left.

FORT COLLINS, CO

FORT COLLINS-LOVELAND MUNI (FNL)
AMDT 5 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6,24,** NA-VFR runway.

DEPARTURE PROCEDURE: **Rwy 15,** climb on heading between 117° CCW to 329° from departure end of runway. All other courses: climbing left turn heading 017° to intercept GLL VORTAC R-242 to GLL VORTAC, thence...**Rwy 33,** climb on heading between 323° CW to 148° from departure end of runway. All other courses: climbing right turn heading 122° to intercept GLL VORTAC R-257 to GLL VORTAC, thence...

...climb in GLL VORTAC holding pattern (hold NE, right turns, 205° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 33,** multiple trees beginning 833' from departure end of runway, 516' right of centerline, up to 66' AGL/5025' MSL. Multiple poles beginning 567' from departure end of runway, 540' left of centerline, up to 26' AGL/4995' MSL.

GALLUP, NM

GALLUP MUNI

TAKE-OFF MINIMUMS: **Rwy 6,** CAT A,B 1300-2 or std. with a min. climb of 300' per NM until passing 8000. CAT C,D 1600-3 or std. with a min. climb of 320' per NM until passing 8500. **Rwy 24,** 700-2 or std. with a min. climb of 370' per NM until passing 8000.

DEPARTURE PROCEDURE: **Rwy 6**, turn left. **All aircraft** climb direct GUP VORTAC. Departures via GUP R-190 CW R-242 climb on course. Departures via GUP R-243 CW R-189 climb in GUP holding pattern (SW, right turns, 047° inbound) to cross GUP at or above9000.

GRAND JUNCTION, CO

GRAND JUNCTION RGNL (GJT)

AMDT 11 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** NA-obstacles. **Rwy 22,** NA-obstacles, facility reception (JNC VORTAC).

DEPARTURE PROCEDURE: **Rwys11, 29,** use MONUMENT DEPARTURE.

GRANTS, NM

GRANTS-MILAN MUNI

TAKE-OFF MINIMUMS: **Rwy 13,** 2400-2 or std. with a min. climb of 420' per NM to 11000. **Rwy 31,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb runway heading to join V12 at or above 11000 before proceeding on course.

GREELEY, CO

GREELEY-WELD COUNTY (GXY)

AMDT 3 08241 (FAA)

DEPARTURE PROCEDURE: **Rwy 9,** climb on a heading between 289° CW to 211° from departure end of runway. All other courses: climbing left turn, thence...**Rwy 16,** climb on a heading between 209° CCW to 347° from departure end of runway. All other courses: climbing left turn, thence...**Rwy 27,** climb on a heading between 291° CW to 094° or 206° CCW to 094° from departure end of runway. All other courses: climbing right turn, thence...**Rwy 34,** climb on a heading between 290° CW to 166° from departure end of runway. All other courses: climbing right turn, thence...

...direct GLL VORTAC, climb in GLL VORTAC holding pattern (hold NE, right turns, 205° inbound) to 16500 before proceeding on course.

NOTE: **Rwy 27,** tree 1634' from departure end of runway, 836' left of centerline, 56' AGL/4717' MSL, fence 237' from departure end of runway, 422' right of centerline, 9' AGL/4670' MSL, fence 99' from departure end of runway, 423' left of centerline, 4' AGL/4665' MSL. **Rwy 34,** multiple trees beginning 1860' from departure end of runway, 595' right of centerline, up to 67' AGL/4785' MSL, tree 2854' from departure end of runway, 524' left of centerline, 73' AGL/4770' MSL.

GUNNISON, CO

GUNNISON-CRESTED BUTTE RGNL

TAKE-OFF MINIMUMS: **Rwy 6**, 1600-3 or 600-2 with a min. climb of 550' per NM to 9500. **Rwy 24**, 1200-3 or 400-2 with a min. climb of 350' per NM to 9500. **Rwys 17, 35**, NA.

DEPARTURE PROCEDURE: **Rwy 6**, at departure end of runway, climb heading 072° to 9500 then climbing right turn direct HBU VOR/DME. Aircraft unable to maintain 550' per NM must maneuver visually to depart the 11 DME fix inbound to the HBU VOR/DME on the HBU R-062 at or above 9200. **Rwy 24**, climb runway heading to 8400 then climbing left turn direct HBU VOR/DME. Aircraft unable to maintain 350' per NM must maneuver visually to depart the 4 DME fix inbound to the HBU VOR/DME on the HBU R-010 at or above 8800. **All aircraft** continue climbing in HBU holding pattern (SW, left turns, 031° inbound) to depart HBU VOR/DME at or above: R-261 CW R-280, 10800; R-281 CW R-189 and R-191 CW R-260, 13000; R-190, 12500.

HAYDEN, CO

YAMPA VALLEY (HDN)

AMDT 3 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, std. w/ min. climb of 400' per NM to 12200, or 3200-3 for climb in visual conditions. **Rwy 28**, std. w/ min. climb of 245' per NM to 9500, or 3200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb on heading 147° to 12200 before proceeding on course. **Rwy 28,** climb on heading 238° to 9500 before proceeding on course. **Rwys 10, 28,** for climb in visual conditions: cross Yampa Valley airport at or above 9700 before proceeding on course.

NOTE: **Rwy 10,** tree 241' from DER, 420' right of centerline, 100' AGL/6699' MSL. Tree 644' from DER, 340' left of centerline, 100' AGL/6699' MSL. Multiple transmission towers, beginning 3606' from DER, left to right of centerline, up to 145' AGL/6745' MSL. Terrain beginning 1714' from DER, 707' right of centerline, up to 6676' MSL.

HOBBS, NM

LEA COUNTY RGNL

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ a min. climb of 218' per NM to 4300, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1600' prior to departure end of runway.

NOTE: **Rwy 3,** multiple trees beginning 546' from departure end of runway, 811' right of centerline, up to 40' AGL/3700' MSL. Sign 822' from departure end of runway, 694' left of centerline, 38' AGL/3676' MSL. **Rwy 8,** tower 3 NM from departure end of runway, 2587' right of centerline, 515' AGL/4120' MSL. **Rwy 12,** road at departure end of runway, 112' right of centerline, 15' AGL/3654' MSL. **Rwy 17,** obstruction light on glideslope, 1014' from departure end of runway, 486' right of centerline, 37' AGL/3687' MSL. **Rwy 21,** tree 1304' from departure end of runway, 726' right of centerline, 46' AGL/3690' MSL. **Rwy 26,** road 253' from departure end of runway, across centerline, 15' AGL/3669' MSL. **Rwy 30,** wind sock 103' from departure end of runway, 280' left of centerline, 16' AGL/3675' MSL, pole 1035' from departure end of runway, 540' right of centerline, 25' AGL/3689' MSL. **Rwy 35,** multiple fences, roads and poles beginning 103' from departure end of runway, across centerline, up to 37' AGL/3696' MSL, pole 299' from departure end of runway, 495' left of centerline, 25' AGL/ 3689' MSL, pole 293' from departure end of runway, 94' right of centerline, 25' AGL/ 3682' MSL.

HOLLOMAN AFB (KHMN),

ALAMOGORDO, NM . . . . . .ORIG, 08101

Rwy 7, NA
Rwy 16, 8000-3*
Rwy 22, 8000-3**
Rwy 25, 8000-3*
Rwy 34, 8000-3***
* Or standard with minimum climb of 510/NM to 14,100.
** Or standard with minimum climb of 470/NM to 14,100.
*** Or standard with minimum climb of 490/NM to 14,100.
Rwy 16, 22, 25, 34, RADAR REQUIRED (when R-5103C not under Holloman Approach or Cherokee control).

TAKE-OFF OBSTACLES: **Rwy 16,** Terrain 4052' MSL, 46' from DER, 512' left of centerline; Terrain 4052' MSL, 16' from DER, 500' left of centerline; Terrain 4052' MSL, 12' from DER, 503' left of centerline; Vehicle on road 15' AGL/4180' MSL, 589' from DER, 1170' right of centerline; Building 17' AGL/4070' MSL, 67' from DER, 283' right of centerline. **Rwy 22,** Terrain 4058' MSL, 4' from DER, 63' left of centerline; Terrain 4060' MSL, 127' from DER, 534' right of centerline; Terrain 4059' MSL, 0' from DER, 500' right of centerline; Vehicle on road 10' AGL/4190' MSL, 1963' from DER, 422' right of centerline; Vehicle on road 10' AGL/4190' MSL, 1977' from DER, 90' right of centerline. **Rwy 25,** Vehicle on road 10' AGL/4190' MSL, 4387' from DER, 14' left of centerline; Vehicle on road 10' AGL/4190' MSL, 4225' from DER, 303' left of centerline; Vehicle on road 15' AGL/4190' MSL, 1812' from DER, 1464' left of centerline.

HOLYOKE, CO

HOLYOKE

NOTE: **Rwy 14,** trees 2012' from departure end of runway, 29' left of centerline, 100' AGL/3829' MSL. **Rwy 32,** trees 1009' from departure end of runway, 697' left of centerline, 100' AGL/3839' MSL.

KREMMLING, CO

MC ELROY AIRFIELD

TAKE-OFF MINIMUMS: **Rwy 9,** 2600-2 or std. with a min. climb of 370' per NM to 12700. **Rwy 27,** 3200-2 or std. with a min. climb of 500' per NM to 12700.

DEPARTURE PROCEDURE: **Rwy 9,** climb runway heading to 10000, then climbing right turn. **Rwy 27,** climb runway heading to 10900, then climbing left turn. **All aircraft** proceed direct RLG VOR/DME. Continue climb to 13,000 in RLG holding pattern (hold SW, left turns, 051° inbound).

LA JUNTA, CO

LA JUNTA MUNI

DEPARTURE PROCEDURE: **Rwy 8,** climb via heading 080°. **Rwy 12,** climb via heading 120°. **Rwy 26,** turn left heading 160°. **Rwy 30,** turn left heading 140°. **All aircraft,** intercept LAA R-238 (V210) to LAA VORTAC. When at or above 8000 proceed on course.

LAMAR, CO

LAMAR MUNI

DEPARTURE PROCEDURE: **Rwys 8,36,** turn left. **Rwy 18,** turn left/right. **Rwy 26,** turn right. Direct LAA VORTAC. Aircraft departing LAA R-048 CW R-118 climb on course. All others continue climbing in LAA holding pattern (N, right turns, 169° inbound) to 6000 before proceeding on course.

LAS CRUCES, NM

LAS CRUCES INTL

DEPARTURE PROCEDURE: **Rwys 4, 8,** climbing right turn. **Rwy 12,** CAT A,B, climb runway heading CAT C,D, NA. **Rwys 22, 26,** climbing left turn. **Rwy 30,** climbing runway heading to 5100 then climbing left turn. **All aircraft** climb direct HAWKE LOM. Continue climb in HAWKE holding pattern (SE, left turns, 304° inbound) to cross HAWKE LOM at or above 10000 before proceeding on course.

LAS VEGAS, NM

LAS VEGAS MUNI

DEPARTURE PROCEDURE: **Rwys 2, 14** turn left/right. **Rwy 20,** turn left (except via FTI R-215). **Rwy 32,** turn right.

Departures via FTI VORTAC R-001 CW R-215 climb on course. Departures via FTI VORTAC R-216 CW R-360 proceed direct FTI VORTAC. Climb in FTI VORTAC holding pattern (hold north, left turn, 192° inbound) to cross FTI at airway MEA/MCA. (NOTE: climb in hold not authorized for turbojet aircraft)

LEADVILLE, CO

LAKE COUNTY (LXV)
AMDT 2 08101 (FAA)

DEPARTURE PROCEDURE: **Rwy 16,** use LOZUL (RNAV) DEPARTURE. **Rwy 34,** use DAVVY (RNAV) DEPARTURE.

LONGMONT, CO
VANCE BRAND
TAKE-OFF MINIMUMS: **Rwy 11,** 300-1 or std. with a min. climb of 250' per NM until passing 5400. **Rwy 29,** CAT A,B 1900-3 or std. with a min. climb of 380' per NM until passing 7000. CAT C,D NA.
DEPARTURE PROCEDURE: Comply with RADAR vectors, or: **Rwys 11, 29,** turn right climb direct BJC VOR/DME. Departures on BJC R-340 CW R-150 climb on course. All others climb in BJC holding pattern (NE, left turns, 203° inbound) to cross BJC VOR/DME at or above 13300.
NOTE: Climb in holding NA for turbojet aircraft.

LOS ALAMOS, NM
LOS ALAMOS
TAKE-OFF MINIMUMS: **Rwy 27,** NA-obstacles and airport restriction.
DEPARTURE PROCEDURE: **Rwy 9,** climb via heading 092° until intercepting SAF VORTAC R-354. Northbound proceed via V83 climbing to 11000. Southbound proceed via V83 at 9000.

LOVINGTON, NM
LEA COUNTY-ZIP FRANKLIN MEMORIAL
DEPARTURE PROCEDURE: **Rwy 3,** climb runway heading to 4700 before turning on course. **Rwy 12,** 35' AGL powerline 1250' from departure end of runway 150' right of centerline. **Rwy 21,** 40' AGL tower 936' from departure end of runway 273' right of centerline. **Rwy 30,** 50' AGL windmill 1800' from departure end of runway 50' right of centerline.

MEEKER, CO
MEEKER (EEO)
AMDT 1 08157
TAKE-OFF MINIMUMS: **Rwys 3, 21,** 4100-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwys 3, 21,** for climb in visual conditions: cross Meeker Airport at or above 10500 before proceeding on course.
NOTE: **Rwy 21,** multiple trees beginning 843' from departure end of runway, 20' left of centerline, up to 100' AGL/7190' MSL. Multiple trees beginning 227' from departure end of runway, 187' right of centerline, up to 100' AGL/6862' MSL.

MONTE VISTA, CO
MONTE VISTA MUNI
DEPARTURE PROCEDURE: **Rwy 2,** climbing right turn. **Rwy 20,** climbing left turn. **All aircraft,** climb direct ALS VORTAC, continue climb in ALS holding pattern (SE, right turns, 301° inbound) to cross ALS VORTAC at or above 11,000, except V210 westbound 11,200 and J102 northeastbound 13,700, before proceeding enroute.

MONTROSE, CO
MONTROSE RGNL (MTJ)
AMDT 4 09127 (FAA)
DEPARTURE PROCEDURE: Use MONTROSE DEPARTURE.

NUCLA, CO
HOPKINS FIELD
TAKE-OFF MINIMUMS: **Rwys 11, 29,** NA-environmental
DEPARTURE PROCEDURE: **Rwys 5, 23,** use NUCLA (RNAV) DEPARTURE.

PAGOSA SPRINGS , CO
STEVENS FIELD (PSO)
ORIG 08045 (FAA)
TAKE-OFF MINIMUMS: **Rwy 1,** std. w/ min. climb of 437' per NM to 9600, or 1900-3 for climb in visual conditions. **Rwy 19,** std. w/ min. climb of 296' per NM to 9300, or 1900-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 216° to intercept DRO VOR/DME R-066 to DRO VOR/DME .... for climb in visual conditions cross Stevens Field airport south bound at or above 9400 MSL, then via DRO VOR/DME R-066 to DRO VOR/DME ....
Rwy 19, climb via heading 194° to intercept DRO VOR/DME R-075 to DRO VOR/DME .... for climb in visual conditions cross Stevens Field airport south bound at or above 9400 MSL, then via DRO VOR/DME R-066 to DRO VOR/DME .... .
... thence cross DRO VOR/DME at MEA/MCA for direction of flight before proceeding on course.
NOTE: **Rwy 1,** terrain beginning 30' from departure end of runway, 53' left of centerline, up to 7697' MSL. Terrain beginning 127' from departure end of runway, 69' right of centerline, up to 7681' MSL. Multiple trees beginning 940' from departure end of runway, left and right of centerline, up to 100' AGL/7739' MSL. **Rwy 19,** multiple trees beginning 664' from departure end of runway, 156' left of centerline, up to 100' AGL/7693' MSL. Multiple trees beginning 1625' from departure end of runway, 5' right of centerline, up to 100' AGL/7698' MSL.

PUEBLO, CO

PUEBLO MEMORIAL (PUB)
AMDT 4 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 35,** 300-1¾ or standard w/ a min. climb of 254' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 8L,** climb heading 077° to 5500, then climbing left turn via heading 210° and PUB R-040 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 8R,** climb heading 077° to 5400, then climbing left turn via heading 210° and PUB R-040 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 17,** climb heading 167° to 5800, then climbing left turn via heading 050 and PUB R-180 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 26L**, climb heading 257° to 5700, then climbing left turn via heading 070° and PUB R-220 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 26R,** climb heading 257° to 5700, then climbing left turn via heading 070° and PUB R-220 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight. **Rwy 35,** climb heading 347° to 5200, then climbing right turn via heading 150° and PUB R-360 to PUB VORTAC, continue climb in PUB VORTAC holding pattern (hold NE, right turns, 244° inbound) to cross PUB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 8L**, rising terrain 57' from DER, 123' left of centerline, up to 4649' MSL. **Rwy 8R,** rising terrain 180' from DER, 58' left of centerline, up to 4659' MSL. **Rwy 26L,** rising terrain 110' from DER, 182' right of centerline, up to 4659' MSL, rising terrain 128' from DER, 122' left of centerline, up to 4659' MSL. **Rwy 26R,** rising terrain 208' from DER, 446' right of centerline, up to 4679' MSL. **Rwy 35,** rising terrain 2' from DER, 7' left of centerline, up to 4749' MSL, rising terrain 196' from DER, 11' right of centerline, up to 4793' MSL, transmission poles 1.1 NM from DER, 703' right of centerline, 46' AGL/4925' MSL, radar reflector 996' from DER, on centerline, 4' AGL/4757' MSL.

RATON, NM

RATON MUNI/CREWS FIELD

DEPARTURE PROCEDURE: When weather below 1500-2: **Rwys 2,7**, climb on CIM R-040 northeastbound to 8000, then on course to assigned altitude. **Rwys 20,25**, climb on CIM R-040 southwestbound to 8000, then on course to assigned altitude.

RIFLE, CO

GARFIELD COUNTY RGNL (RIL)
AMDT 8 08157

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ a min. climb of 369' per NM to 12400 or 5400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** DME required. Climb via RIL R-081 to ZOBAK/10 DME, then climbing left turn direct RIL VOR/DME. Climb in RIL VOR/DME holding pattern (Hold E, right turn, 263° inbound) to cross RIL VOR/DME at or above MEA/MCA before proceeding enroute, or for climb in visual conditions cross Garfield County Rgnl Airport at or above 10800 before proceeding on course. **Rwy 26,** use SQUAT RNAV DEPARTURE.

NOTE: **Rwy 8,** transmission line towers beginning 1.2 NM from departure end of runway, 437' right of centerline, up to 150' AGL/6069' MSL. Trees beginning 1.9 NM from departure end of runway, 647' right of centerline, up to 100' AGL/5983' MSL. Terrain beginning 124' from departure end of runway, 287' right of centerline, up to 5863' MSL. Pole 1083' from departure end of runway, 656' right of centerline, 28' AGL/5588' MSL.

ROSWELL, NM

ROSWELL INTL AIR CENTER

DEPARTURE PROCEDURE: **Rwy 30,** climb to 6000 via runway heading to intercept CME R-323, upon reaching 6000 proceed on course. **Rwy 35,** climbing left turn to 6000 via heading 277° to intercept CME R-323, upon reaching 6000 proceed on course.

RUIDOSO, NM

SIERRA BLANCA RGNL

TAKE-OFF MINIMUMS: **Rwys 6,24**, 5200-3 or std. with a min. climb of 420' per NM to 12,100'.

DEPARTURE PROCEDURE: **Rwy 6**, climb at 385' per NM to 9100' direct CEP NDB, continue climb in holding pattern (*hold E, left turns, 273° inbound) to cross CEP NDB at or above the MEA for direction of flight. *Do not exceed 230 kts in holding pattern. **Rwy 24**, immediate climbing left turn to 9100' direct CEP NDB, continue climb in holding pattern (*hold E, left turns, 273° inbound) to cross CEP NDB at or above the MEA for direction of flight . *Do not exceed 230 kts in holding pattern.

SALIDA, CO

HARRIET ALEXANDER FIELD (ANK)
ORIG 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 24,** 6800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 6, 24,** For climb in visual conditions: Cross Harriet Alexander Field at or above 14200 MSL before proceeding on course.

NOTE: **Rwy 24,** Multiple transmission towers beginning 666' from departure end of runway, 440' right of centerline, up to 73' AGL/7651' MSL. Multiple trees beginning 5455' from departure end of runway, 663' right of centerline, up to 100' AGL/7908' MSL.

SANTA FE, NM

SANTA FE MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 1000-3 or std. with a min. climb of 240' per NM until passing 7300 MSL. **Rwys 2, 33,** Cats. C and D, 2900-3 or std. with a min. climb of 330' per NM until 9000 MSL.

DEPARTURE PROCEDURE: **Rwys 2, 10, 33**, turn right; **Rwys 20, 28,** turn left; **Rwy 15,** climb runway heading. **All aircraft** climb direct to SAF VORTAC. Continue climbing in SAF VORTAC holding pattern (hold SE, right turns, 332° inbound) to cross SAF VORTAC at or above airway MEA/MCA for direction of flight.

SANTA TERESA, NM

DONA ANA COUNTY AT SANTA TERESA

TAKE-OFF MINIMUMS: **Rwy 10,** std. with a min. climb of 419' per NM to 8400, or 2800-3 for climb in visual conditions. **Rwy 28,** std. with a min. climb of 358' per NM to 8400, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 10, 28,** for climb in visual conditions: cross Dona Ana County at Santa Teresa Airport at or above 6800 before proceeding on course.

SILVER CITY, NM

GRANT COUNTY

TAKE-OFF MINIMUMS: **Rwys 3,8,12,17,21,26,30,35,** std. with a min. climb of 354' per NM to 9200, or 3800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3,8,12,17,21,26,30, 35,** for climb in visual conditions: cross Grant County Airport at or above 9200.

NOTE: **Rwy 3,** crane 5007' from departure end of runway, 1056' right of centerline, 200' AGL/5610' MSL. **Rwy 8,** pole 1.12 NM from departure end of runway, 381' right of centerline, 30' AGL/5383' MSL. Power line 2.18 NM from departure end of runway, 139' right of centerline, 200' AGL/5520' MSL. **Rwy 12,** pole 5265' from departure end of runway, 490' right of centerline, 72' AGL/5417' MSL. **Rwy 17,** pole 1.02 NM from departure end of runway, 469' left of centerline, 50' AGL/5408' MSL. **Rwy 21,** multiple bushes beginning from 4556' from departure end of runway, 79' right of centerline, up to 40' AGL/5403' MSL.

SOCORRO, NM

SOCORRO MUNI (ONM)

AMDT 3 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6,15,24,** NA-terrain. **Rwy 33,** 200-1¼ or std. w/ min. climb of 216' per NM to 5100, or alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1500' prior to DER.

DEPARTURE PROCEDURE: **Rwy 33**, climbing right turn via heading 030° and ONM VORTAC R-179 to ONM VORTAC, continue climb-in-hold (hold North, right turns, 182° inbound) to cross ONM VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 33,** trees beginning 67' from DER, 66' left of centerline, up to 15' AGL/4814' MSL. Trees beginning 436' from DER, 438' right of centerline, up to 15' AGL/4814' MSL. Tower 4996' from DER, 1161' left of centerline, 147' AGL/4947' MSL. Tower 5851' from DER, 584' right of centerline, 200' AGL/4956' MSL.

SPRINGFIELD, CO

SPRINGFIELD MUNI (8V7)

ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17,** 4900-3 or std. w/ a min. climb of 225' per NM to 5000.

NOTE: **Rwy 17,** tower 15212' from departure end of runway, 2936' right of centerline, 425' AGL/4817' MSL.

STEAMBOAT SPRINGS, CO

STEAMBOAT SPRINGS/BOB ADAMS FIELD

TAKE-OFF MINIMUMS: **Rwys 14,** 1500-3 or std. with a min. climb of 610' per NM to 9000. **Rwy 32,** 1900-3 or std. with a min. climb of 500' per NM to 9000.

DEPARTURE PROCEDURE: **Rwy 14,** turn right heading 220°, intercept BQZ R-172. **Rwy 32,** turn left direct BQZ VOR/DME. **All aircraft** climb to 12100 via BQZ R-172 to SBURG Int and hold (S, right turns, 352° inbound).

STERLING, CO

STERLING MUNI

DEPARTURE PROCEDURE: **Rwys 3,30,33**, turn left. **Rwys 12,15,21**, turn right climb to 6000 direct toward SNY or AKO VOR/DME before proceeding on course.

TAOS, NM

TAOS RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 300-1.

DEPARTURE PROCEDURE: **Rwy 4**, climbing left turn. **Rwy 22**, climbing right turn. Intercept TAS R-100. Climbing direct to the TAS VORTAC, continue climb in holding pattern to cross TAS VORTAC at or above the MEA for direction of flight.

TELLURIDE, CO

TELLURIDE RGNL (TEX)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, NA-obstacles. **Rwy 27**, std. w/ min. climb of 457' per NM to 10500, or 5300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 27**, climb to 12000 via heading 273° to intercept the ETL R-096 to ETL VOR/DME, or for climb in visual conditions: cross Telluride Airport westbound at or above 14200 via ETL R-095 to ETL VOR/DME. NOTE: All aircraft cross ETL VOR/DME at or above airway MEA/MCA for direction of flight.

NOTE: **Rwy 27,** trees beginning 203' from departure end of runway, 186' left of centerline, up to 100' AGL/9124' MSL. Trees beginning 281' from departure end of runway, 45' right of centerline, up to 100' AGL/9219' MSL. Obstruction light on post 2' from departure end of runway, 308' left of centerline, 17' AGL/9095' MSL. Terrain beginning at departure end of runway, left and right of centerline, up to 9075' MSL.

TRINIDAD, CO

PERRY STOKES

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA

DEPARTURE PROCEDURE: **Rwy 3,** turn left. **Rwy 21,** turn right, direct TAD NDB. Climb in holding to 7600 (N, left turns, 165° inbound). Aircraft departing TAD NDB bearing 330° CW 140° from TAD NDB: climb on course. Aircraft departing TAD NDB bearing 141° CW 329° from TAD NDB: depart at or above 12,500'.

NOTE: **Rwy 3,** tree 180' from departure end of runway, on centerline, 30' AGL/5765' MSL.

TRUTH OR CONSEQUENCES, NM

TRUTH OR CONSEQUENCES MUNI

TAKE-OFF MINIMUMS: 1500-3 or std. with a min. climb of 500' per NM to 8000.

DEPARTURE PROCEDURE: **Rwys 19,25,29,31,** turn right; **Rwys 1,7,11,13,15,33**, turn left, climb direct TCS VORTAC, continue climb in holding pattern (N, left turns, 180° inbound) to cross TCS VORTAC at above the MEA for direction of flight.

TUCUMCARI, NM

TUCUMCARI MUNI

DEPARTURE PROCEDURE: All Rwys for SW-bound V-264 climb TCC R-255 within 10 NM to 5500 before departing on course. **Rwy 21,** climb heading 213° to 5500 before proceeding on course. **Rwy 26,** climb heading 258° to 5500 before proceeding on course.

WALDEN, CO

WALDEN-JACKSON COUNTY (33V)

ORIG 08157

TAKE-OFF MINIMUMS: **Rwys 17, 35,** NA-ATC.

DEPARTURE PROCEDURE: **Rwys 4, 22,** Use WALRU RNAV DEPARTURE.

WRAY, CO

WRAY MUNI

TAKE-OFF MINIMUMS: **Rwy 17,** 500-2 or std. with a min. climb of 280' per NM to 4400.

DEPARTURE PROCEDURE: **Rwy 17,** climbing right turn via AKO VOR/DME R-084 to 7000 before proceeding on course. **Rwy 35,** climbing left turn via AKO VOR/DME R-077 to 7000 before proceeding on course.

NOTE: **Rwy 35,** trees 2175' left of departure end of runway, 100' AGL/3778' MSL.

ZUNI PUEBLO, NM

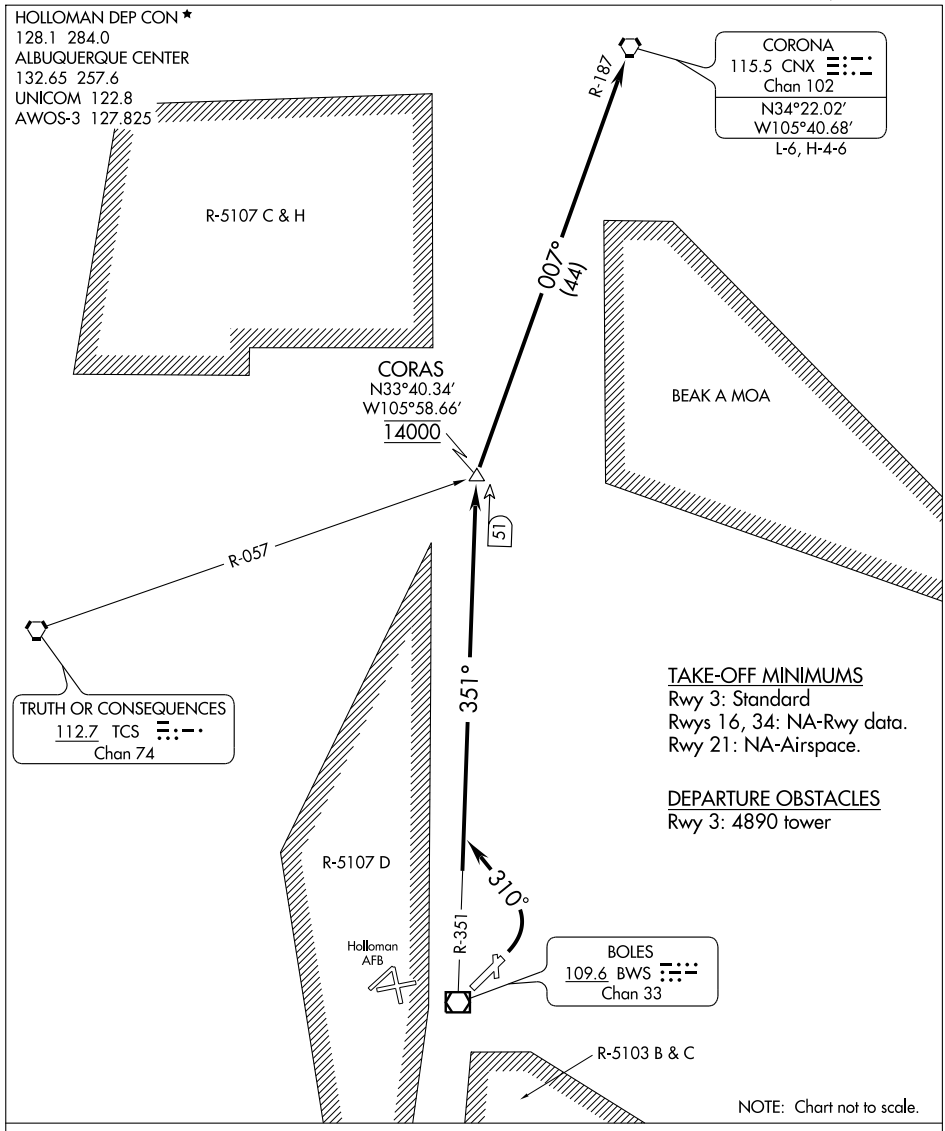
BLACK ROCK

TAKE-OFF MINIMUMS: **Rwy 7**, 1200-2 or std. with a min. climb of 360 feet per NM to 7600.

DEPARTURE PROCEDURE: **Rwy 7**, climbing left turn direct ZUN VORTAC. **Rwy 25**, climb direct ZUN VORTAC.

CORONA ONE DEPARTURE (OBSTACLE)

ALAMOGORDO-WHITE SANDS RGNL (ALM)
SL-5130 (FAA)
ALAMOGORDO, NEW MEXICO



SW-1, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climbing left turn to 14,000 via 310° heading to intercept BWS VOR/DME R-351 to CORAS INT/BWS 51 DME. Cross CORAS at 14,000. Then turn right via CNX VORTAC R-187 to CNX VORTAC.

TAKE-OFF RUNWAYS 16, 21, and 34: Not Authorized.

APP CRS	Rwy Idg	7006
035°	TDZE	4167
	Apt Elev	4200

RNAV (GPS) RWY 3

ALAMOGORDO-WHITE SANDS RGNL (ALM)

All civil aircraft require ATC clearance prior to entering Restricted Area 5107D.
NA Circling NA southeast of Rwy 3-21.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
Not authorized when Holloman Approach Control closed.

MISSED APPROACH: Climbing left turn to 6000 direct TORRI WP and hold.

AWOS-3	HOLLOMAN APP CON ★	UNICOM
127.825	120.6 269.225	122.8 (CTAF) L

RADAR REQUIRED

6 NM 150° 330° TORRI

Holloman AFB

4726±
6928±
4570
4497
4890
4260
RW03
7891
8114
9778
9379±
9720

R-5107D

035°

(FAF) PAYNE

5800 034° (5)

HONER

R-5103 B and C

MSA RW03 25 NM 11000

5000 6000 7000 8000 9000

ELEV 4200 D

9L 27R

4215

351 X 200

7006 X 150

0.6% UP

0.8% UP

34

TDZE 4167

035° to RW03

REIL Rwys 3 and 21
MIRL Rwy 3-21 L

HONER 6000 034° 5800 035° PAYNE 6000 TORRI

Procedure Turn NA

0.8 NM to RW03 RW03

3.00° TCH 60

5 NM 4.2 NM 0.8

CATEGORY	A	B	C	D
LNAV MDA	4460-1 293 (300-1)			
CIRCLING	4660-1 460 (500-1)	4720-1 520 (600-1)	4720-1½ 520 (600-1½)	4760-2 560 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME BWS	APP CRS	Rwy Idg	7006
109.6	035°	TDZE	4167
Chan 33		Apt Elev	4200

VOR/DME RWY 3

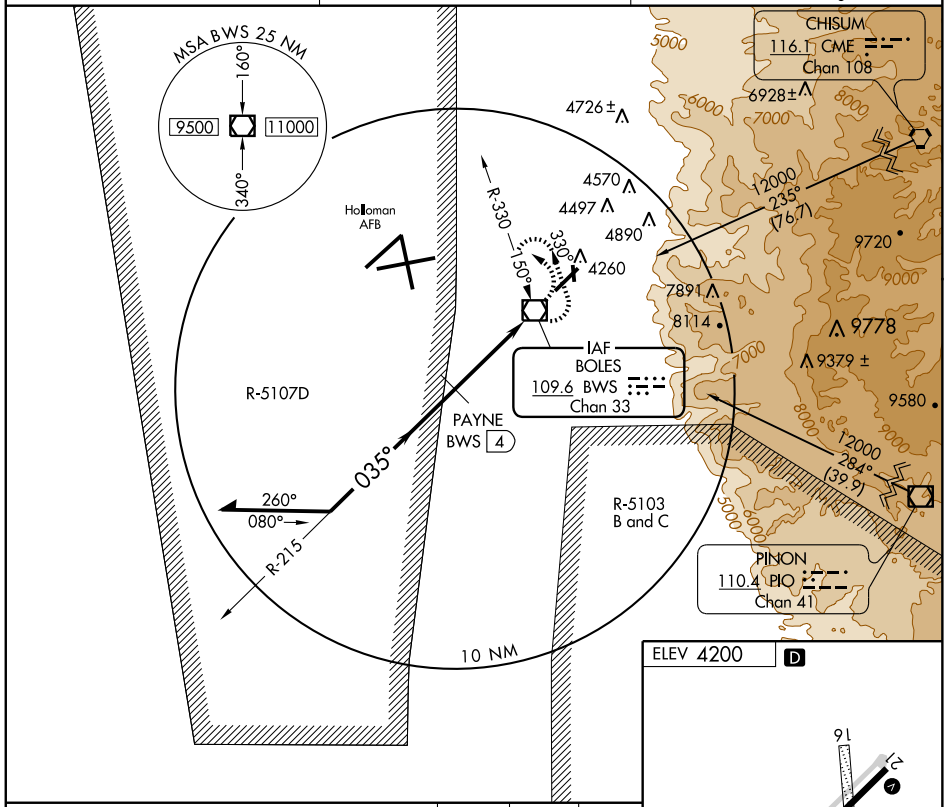
ALAMOGORDO-WHITE SANDS RGNL (ALM)

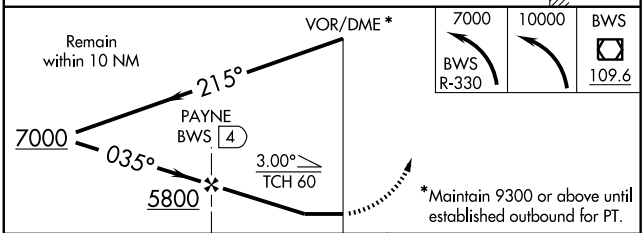
T NA

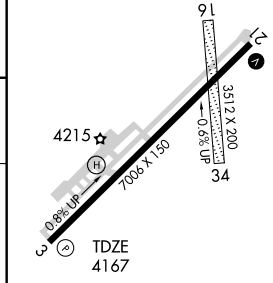
All civil aircraft require ATC clearance prior to entering Restricted Area 5107D.
Circling NA southeast of Rwy 3-21.
Arrivals over BOLES VOR/DME above 12000 descend in the holding pattern to 12000 before commencing approach.
Not authorized when Holloman Approach Control closed.

MISSED APPROACH: Climbing left turn to 7000 via BWS R-330 then climbing left turn to 10000 direct BWS VOR/DME and hold.

AWOS-3	HOLLOMAN APP CON ★	UNICOM
127.825	120.6 269.225	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-3	4460-1¼ 293 (300-1¼)			
CIRCLING	4660-1¼ 460 (500-1¼)	4720-1¼ 520 (600-1¼)	4720-1½ 520 (600-1½)	4760-2 560 (600-2)

REIL Rwys 3 and 21
MIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009

VOR/DME BWS	APP CRS	Rwy Idg	7006
109.6	035°	TDZE	4167
Chan 33		Apt Elev	4200

VOR RWY 3

ALAMOGORDO-WHITE SANDS RGNL (ALM)

T NA — All civil aircraft require ATC clearance prior to entering Restricted Area 5107D. Circling NA southeast of Rwy 3-21. RADAR or DME required. Not authorized when Holloman Approach Control closed.

MISSED APPROACH: Climbing left turn to 6000 via BWS R-330 to TORRI Int/BWS 5.6 DME and hold.

AWOS-3	HOLLOMAN APP CON *	UNICOM
127.825	120.6 269.225	122.8 (CTAF) L

RADAR REQUIRED

TORRI INT BWS 5.6

4726±

150°

330°

R-330

Holloman AFB

R-5107D

4570

4497

4890

4260

7891

8114

6928±

9720

9778

9379±

LOCALIZER 111.7 I-HMN

BOLES 109.6 BWS Chan 33

HONER BWS 9 RADAR

PAYNE BWS 4 RADAR

5800

035° (5)

R-215

R-5103 B and C

10 NM

MSA BWS 25 NM

160°

340°

9500

11000

ELEV 4200 D

HONER BWS 9 RADAR

PAYNE BWS 4 RADAR

6000

035°

5800

3.00°

TCH 60

VOR/DME

6000 BWS R-330 TORRI BWS 5.6

5 NM 4 NM 1 NM

CATEGORY	A	B	C	D
S-3	4460-1¼ 293 (300-1¼)			
CIRCLING	4660-1¼ 460 (500-1¼)	4720-1¼ 520 (600-1¼)	4720-1½ 520 (600-1½)	4760-2 560 (600-2)

9 L

3512 X 200

0.6% UP

34

4215

7006 X 150

0.8% UP

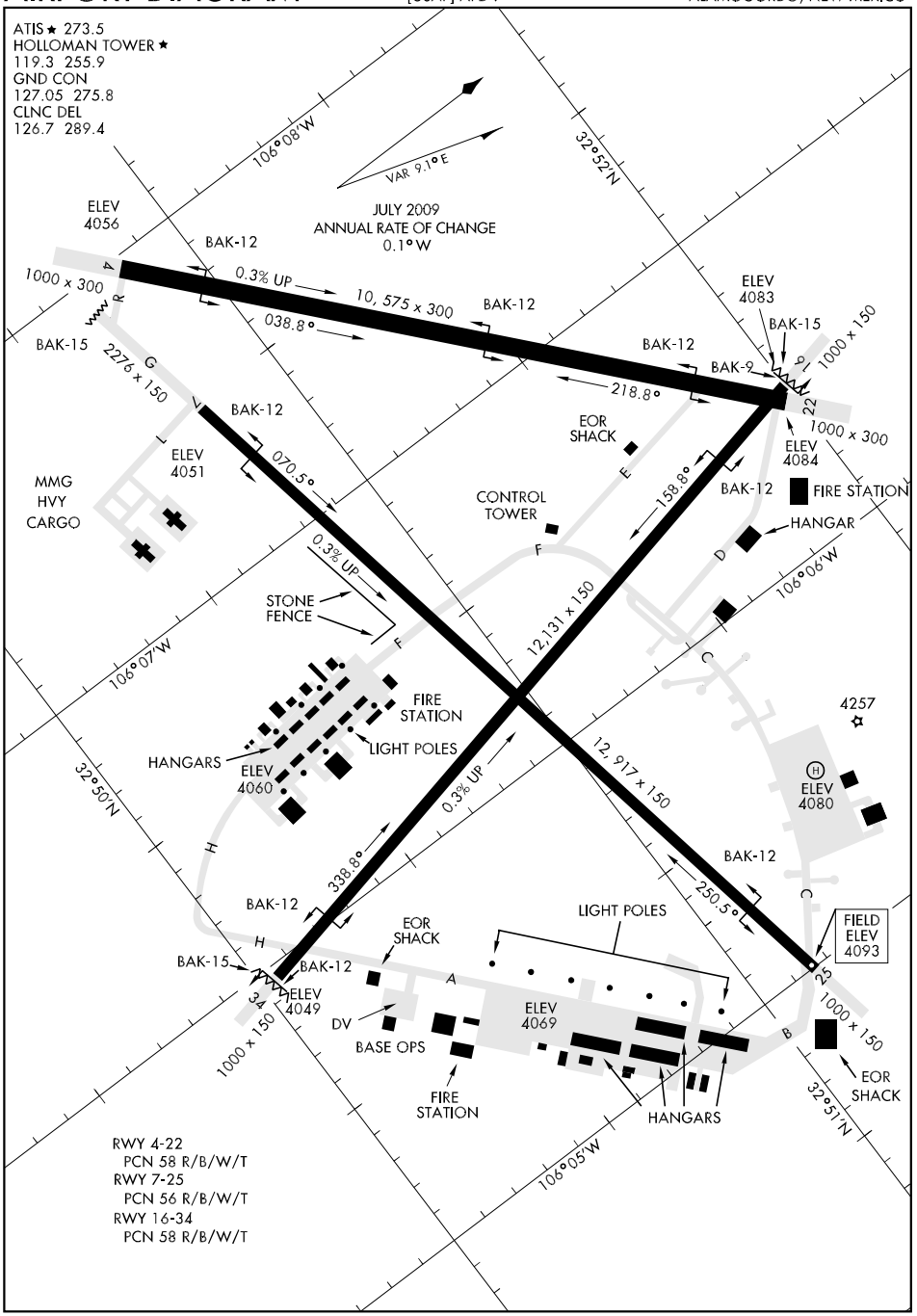
3

TDZE 4167

REIL Rwys 3 and 21

MIRL Rwy 3-21 L

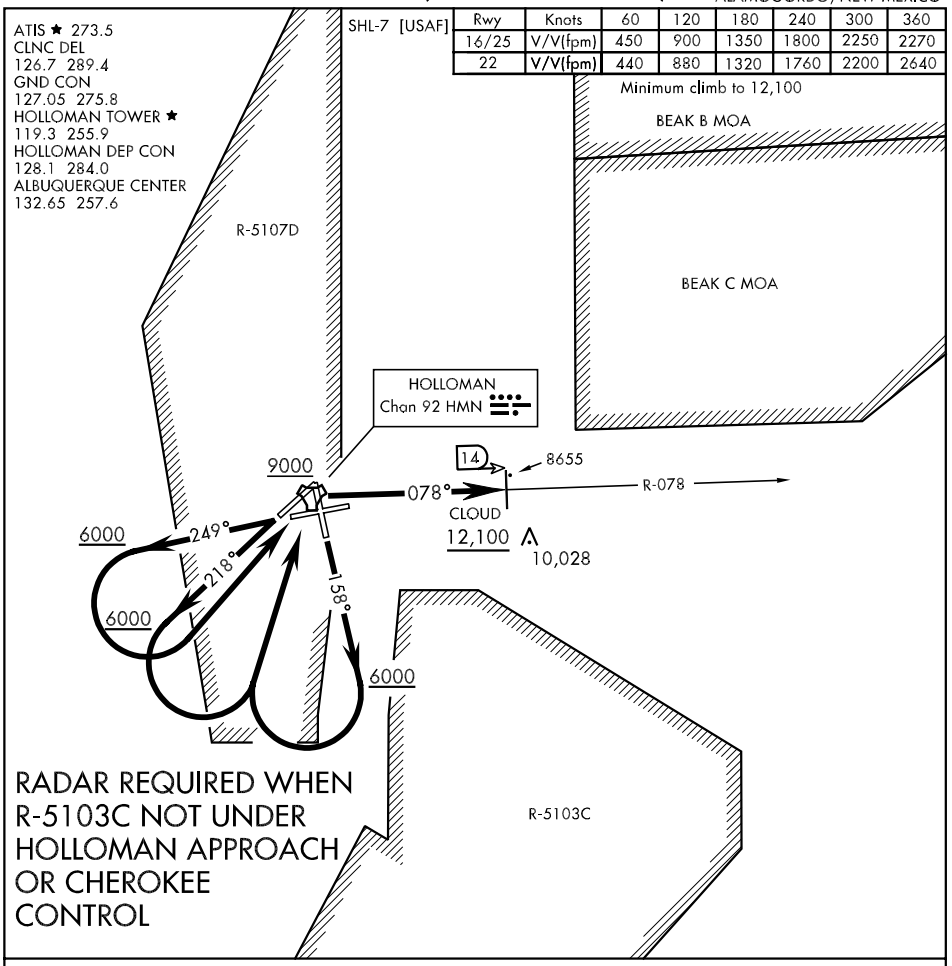
SW-1, 22 OCT 2009 to 19 NOV 2009



SW-1, 22 OCT 2009 to 19 NOV 2009

CLOUD-THREE ALPHA DEPARTURE (CLOUD3A•CLOUD)

ALAMOGORDO, NEW MEXICO



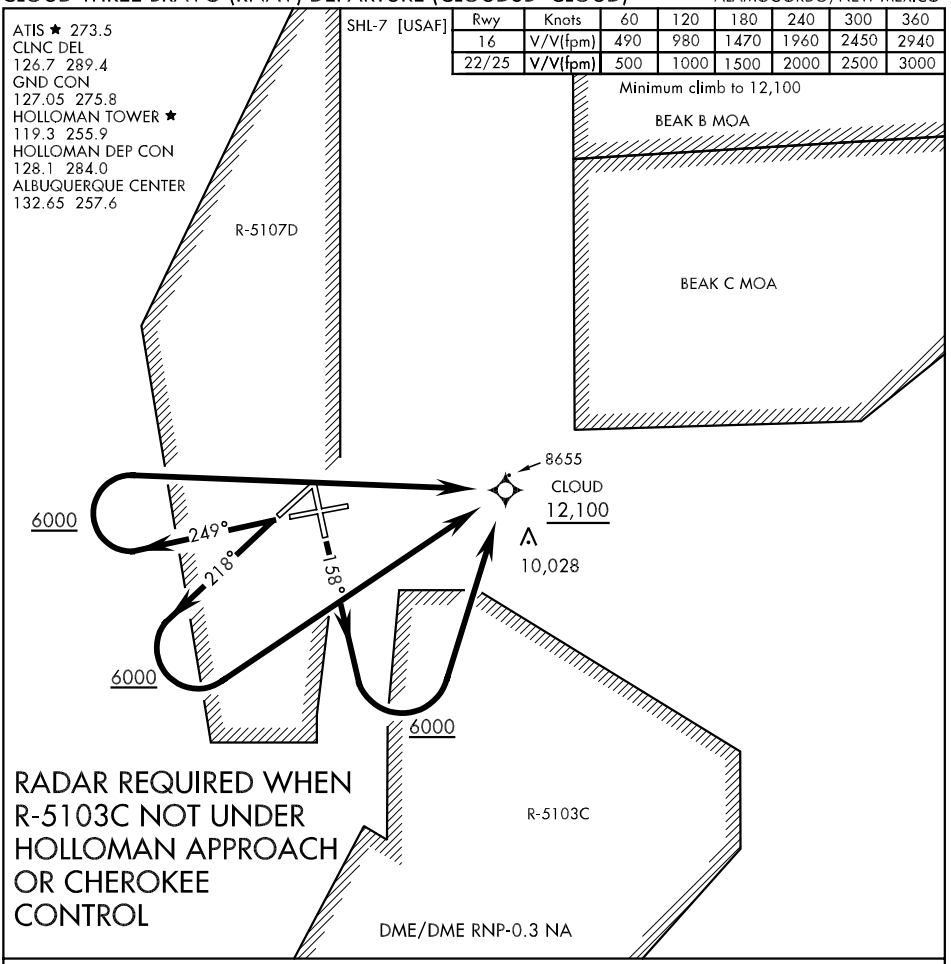
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on track 158°. When leaving 6000 turn right direct HMN TACAN, then proceed via HMN R-078 to CLOUD (HMN R-078/14), then via assigned routing. Cross HMN at or above 9000. Cross CLOUD at or above 12,100.

TAKE-OFF RWY 22: Climb on track 218°. When leaving 6000 turn left direct HMN TACAN, then proceed via HMN R-078 to CLOUD (HMN R-078/14), then via assigned routing. Cross HMN at or above 9000. Cross CLOUD at or above 12,100.

TAKE-OFF RWY 25: Climb on track 249°. When leaving 6000 turn left direct HMN TACAN, then proceed via HMN R-078 to CLOUD (HMN R-078/14), then via assigned routing. Cross HMN at or above 9000. Cross CLOUD at or above 12,100.

CLOUD-THREE ALPHA DEPARTURE (CLOUD3A•CLOUD)
ALAMOGORDO, NEW MEXICO



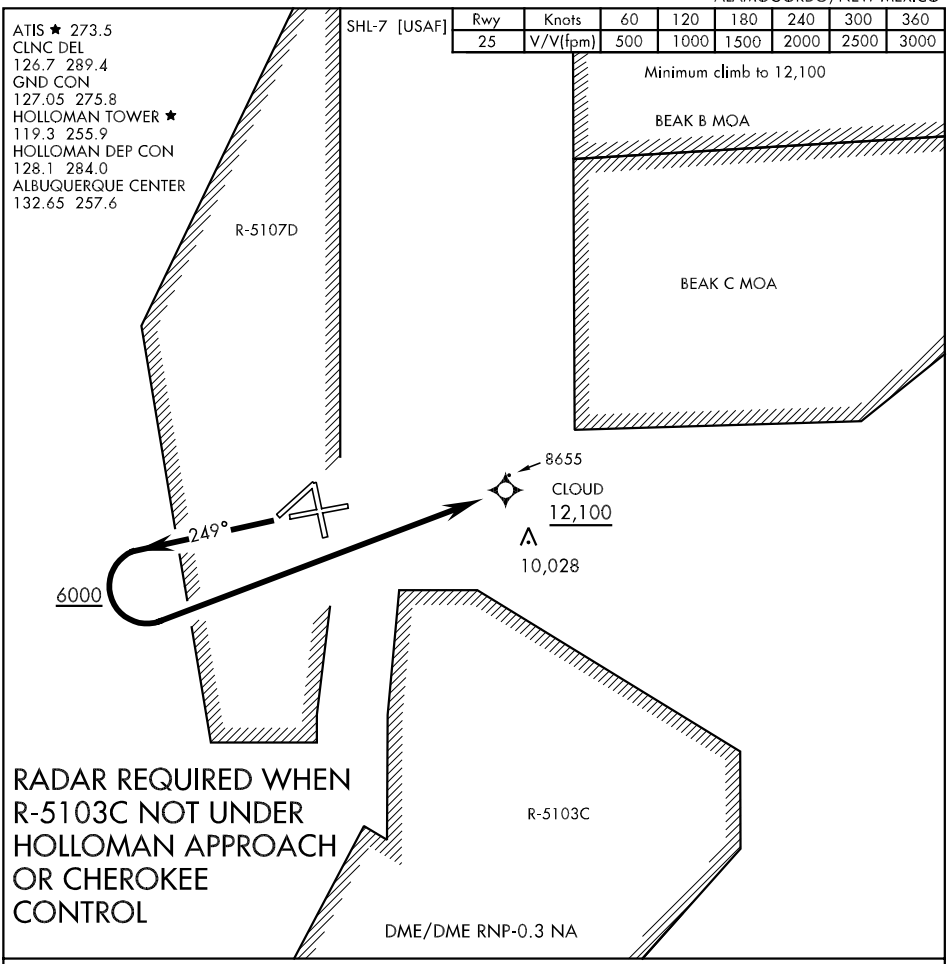
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on track 158°. When leaving 6000 turn left direct CLOUD then via assigned routing. Cross CLOUD at or above 12,100.

TAKE-OFF RWY 22: Climb on track 218°. When leaving 6000 turn left direct CLOUD then via assigned routing. Cross CLOUD at or above 12,100.

TAKE-OFF RWY 25: Climb on track 249°. When leaving 6000 turn right direct CLOUD then via assigned routing. Cross CLOUD at or above 12,100.

SW-1, 22 OCT 2009 to 19 NOV 2009



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 25: Climb on track 249°. When leaving 6000 turn left direct CLOUD then via assigned routing. Cross CLOUD at or above 12,100.

ALAMOGORDO, NEW MEXICO

HI-ILS X RWY 22

LOC I-HMN	APCH CRS	Rwy ldg 10,575 TDZE 4084 Arpt Elev 4093
111.7	217°	

JAL-7 [USAF]

HOLLOMAN AFB (KHMN)

▼ * When ALS inop, increase CAT CDE vis to ¾ mile.
** When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.

ALSF-1 (A1)

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn left and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

MSA HMN 25 NM
11,100

*** Circling not authorized West of Rwy 16-34.

RADAR or DME REQUIRED

CAUTION: Max holding 265 KIAS.

CAUTION: High terrain to East within 1.5 NM.

HOLLOMAN Chan 92 HMN

LOCALIZER 111.7 I-HMN

INBOUND WEST Airspace West Restricted. Expect routing via CORONA.

HMN 19

HEDLU HMN 12

CIDMA/HMN 17
ODOXE/HMN 15
CIGID/HMN 12
HUXOG/HMN 10
JIPVI/HMN 8
CIMVU/HMN 5.1

4395 4533 6286 7638 7293 9364 9778

OGEPE HMN 17 11,200

FEPUN HMN 17 13,000

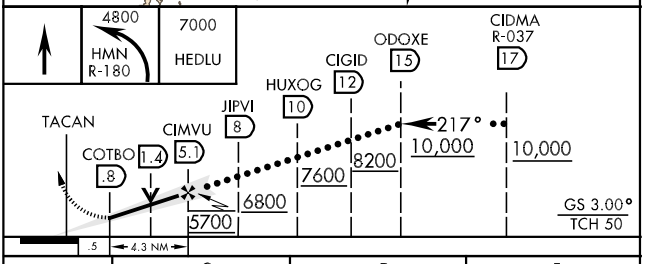
FIBOD HMN 17

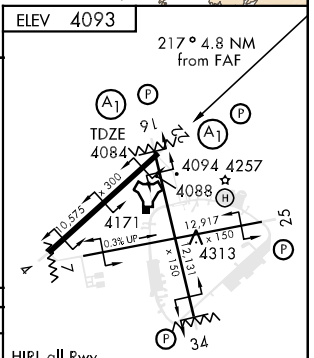
FITZZ HMN 20 13,000 (IAF)

037° R-037 R-045 R-090 R-070 R-093 217° 273° 180° 360° R-180 20 NM

2,299 6000 8000 8848 7300

EMERG SAFE ALT 100 NM 14,200





CATEGORY	C	D	E
S-ILS 22 *	4284-½	200 (200-½)	
S-LOC 22 **	4660-1 576 (600-1)	4660-1¼ 576 (600-1¼)	4660-1½ 576 (600-1½)
CIRCLING ***	4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

FAF to MAP 4.3 NM

Knots	120	140	160	180	200
Min:Sec	2:09	1:51	1:37	1:26	1:17

SW-1, 22 OCT 2009 to 19 NOV 2009

ALAMOGORDO, NEW MEXICO 32°51'N-106°06'W HOLLOMAN AFB (KHMN)

Orig 09183

HI-ILS X RWY 22

ALAMOGORDO, NEW MEXICO

HI-ILS Y RWY 16

LOC I-MUK	APCH CRS	Rwy ldg 12,131 TDZE 4083 Arpt Elev 4093
108.9	158°	

JAL-7 [USAF]

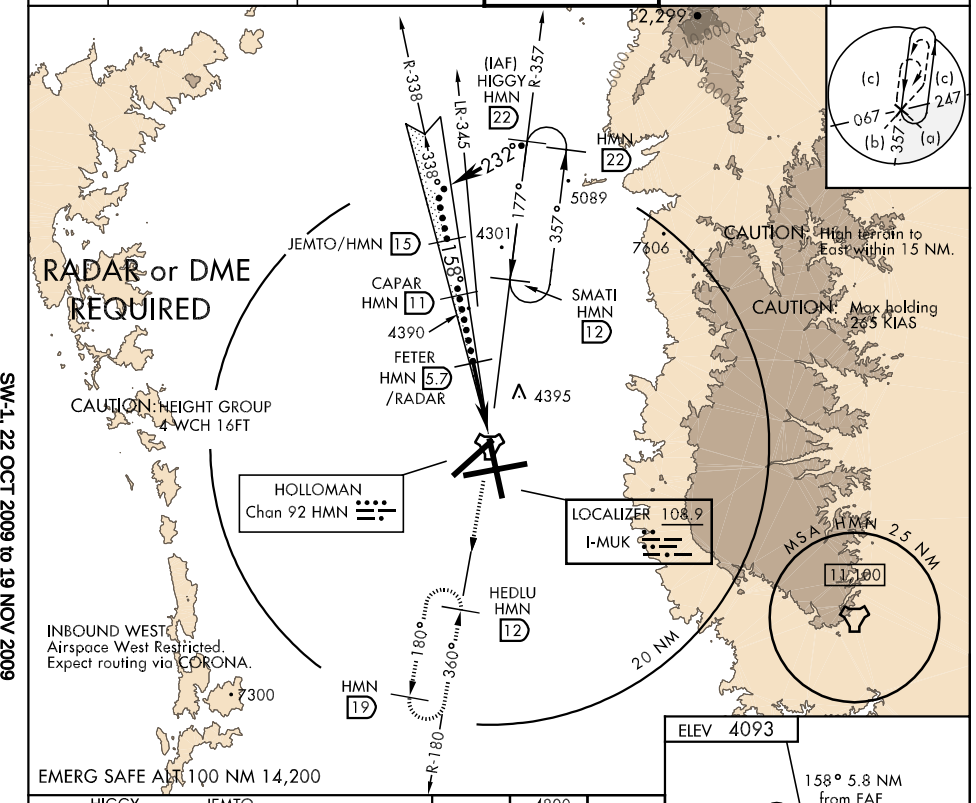
HOLLOMAN AFB (KHMN)

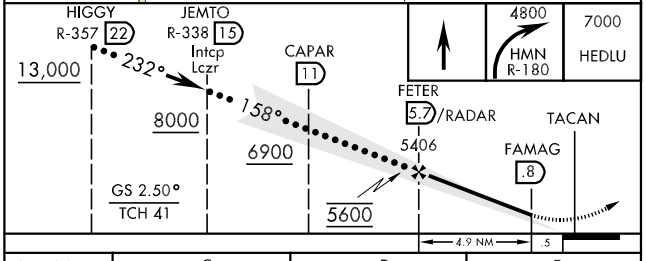
▼ * When ALS inop, increase CAT CDE vis to ¾ mile.
** When ALS inop, increase CAT C vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
*** Circling not authorized West of Rwy 16-34.

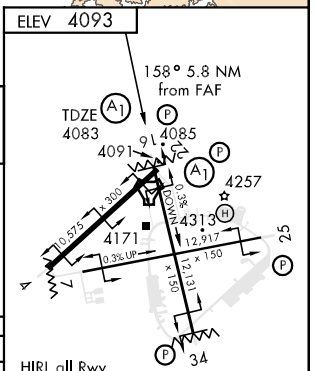
ALSF-1 (A1)

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn right and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4







CATEGORY	C	D	E
S-ILS 16 *	4283-½	200 (200-½)	
S-LOC 16 **	4580-¾ 497 (500-¾)	4580-1 497 (500-1)	4580-1¼ 497 (500-1¼)
CIRCLING ***	4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

FAF to MAP 4.9 NM

Knots	120	140	160	180	200
Min:Sec	2:27	2:06	1:50	1:38	1:28

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-ILS Y RWY 22

LOC I-HMN	APCH CRS	Rwy ldg 10,575 / TDZE 4084 / Arpt Elev 4093
111.7	217°	JAL-7 [USAF]

HOLLOMAN AFB (KHMN)

▼ * When ALS inop, increase CAT CDE vis to ¾ mile.
** When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.

ALSF-1 (A1)

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn left and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

*** Circling not authorized West of Rwy 16-34.

MSA HMN 25 NM 11,100

(IAF) HIGGY HMN 22

FAVAT HMN 17

SMATI HMN 12

HOLLOMAN Chan 92 HMN

RADAR or DME REQUIRED

LOCALIZER 111.7 I-HMN

CIDMA/HMN 17 8497

ODOXE/HMN 15

CIGID/HMN 12 7638

HUXOG/HMN 10

JIPVI/HMN 8 7293

CIMVU/HMN 5.1 6286

4533 4395

2,299

CAUTION: High terrain to East within 15 NM.

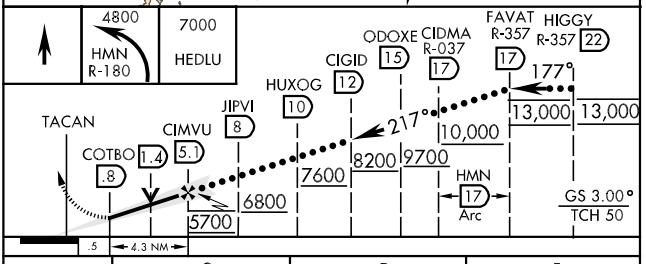
CAUTION: Max holding 265 KIAS

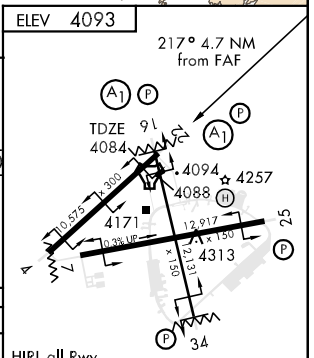
HEDLU HMN 12

INBOUND WEST Airspace West Restricted. Expect routing via CORONA.

HMN 19 7300

EMERG SAFE ALT 100 NM 14,200





CATEGORY	C	D	E
S-ILS 22 *	4284-½	200 (200-½)	
S-LOC 22 **	4660-1 576 (600-1)	4660-1¼ 576 (600-1¼)	4660-1½ 576 (600-1½)
CIRCLING ***	4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

FAF to MAP 4.3 NM					
Knots	120	140	160	180	200
Min:Sec	2:09	1:51	1:37	1:26	1:17

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-ILS Z RWY 16

LOC I-MUK	APCH CRS	Rwy ldg 12,131 TDZE 4083 Arpt Elev 4093
108.9	158°	

JAL-7 [USAF]

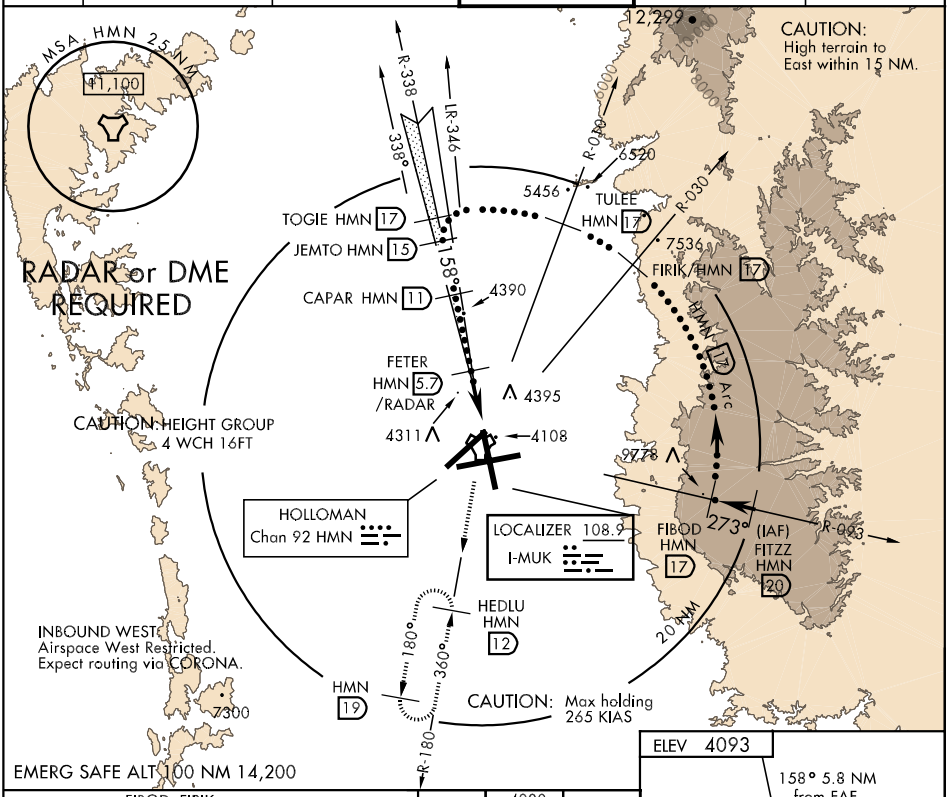
HOLLOMAN AFB (KHMN)

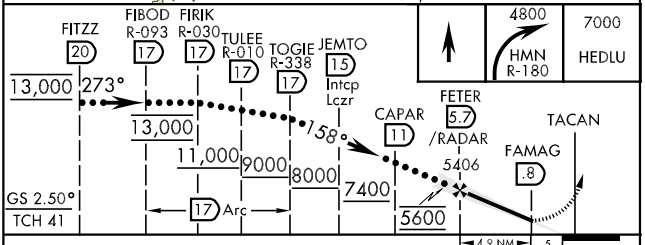
* When ALS inop, increase CAT CDE vis to ¾ mile.
** When ALS inop, increase CAT C vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
*** Circling not authorized West of Rwy 16-34.

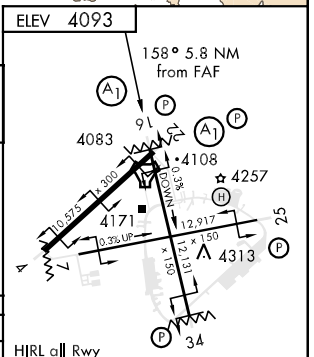
ALSF-1 (A1)

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn right and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4







CATEGORY	C	D	E
S-ILS 16 *	4283-½ 200 (200-½)		
S-LOC 16 **	4580-¾ 497 (500-¾)	4580-1 497 (500-1)	4580-1¼ 497 (500-1¼)
CIRCLING ***	4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

FAF to MAP 4.9 NM

Knots	120	140	160	180	200
Min:Sec	2:27	2:06	1:50	1:38	1:28

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-ILS Z RWY 22

LOC I-HMN	APCH CRS	Rwy ldg 10,575 / TDZE 4084 / Arpt Elev 4093
111.7	217°	JAL-7 [USAF]

HOLLOMAN AFB (KHMN)

▼ * When ALS inop, increase CAT CDE vis to ¾ mile.
** When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.

ALSF-1 (A1)

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn left and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

*** Circling not authorized West of Rwy 16-34.

(c) 107 (b) 037 (c) 287 (a)

12,299

(IAF) SUMBE HMN 20

037° 217° 217° 037°

HMN 30

RADAR or DME REQUIRED

CIGID/HMN 12
HUXOG/HMN 10
JIPVI/HMN 8
CIMVU/HMN 5.1
4395

CIDMA/HMN 17
ODOXE/HMN 15

4533 6286 7638 7293

CAUTION: High terrain to East within 15 NM.

HOLLOMAN Chan 92 HMN

LOCALIZER 111.7 I-HMN

CAUTION: Max holding 265 KIAS

MSA HMN 25 NM
11,100
20 NM

HEDLU HMN 12

180° 360° R-180

HMN 19

7300

INBOUND WEST Airspace West Restricted. Expect routing via CORONA.

EMERG SAFE ALT 100 NM 14,200

5002

4800 HMN R-180 | 7000 HEDLU

TACAN COTBO 1.4 .8 CIMVU 5.1 JIPVI 8 HUXOG 10 CIGID 12 ODOXE 15 CIDMA 17 SUMBE R-037 20

217°

6800 7600 8200 9800 10,000 13,000

5700

GS 3.00° TCH 50

.5 4.3 NM

ELEV 4093

217° 4.8 NM from FAF

TDZE 4084

4094 4257 4088 4171 4313

10,575 x 300 12,917 x 150 2,131 x 150 0.3% UP

91 22 4 25 34

HIRL all Rwy

CATEGORY	C	D	E
S-ILS 22 *	4284-½ 200 (200-½)		
S-LOC 22 **	4660-1 576 (600-1)	4660-1¼ 576 (600-1¼)	4660-1½ 576 (600-1½)
CIRCLING***	4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

FAF to MAP 4.3 NM

Knots	120	140	160	180	200
Min:Sec	2:09	1:51	1:37	1:26	1:17

ALAMOGORDO, NEW MEXICO

HI-TACAN Y RWY 16

TACAN	APCH CRS	Rwy ldg	12,131
HMN	162°	TDZE	4083
Chan 92		Arpt Elev	4093

JAL-7 [USAF]

HOLLOMAN AFB (KHMN)

▼ *When ALS inop, increase CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.
** Circling not authorized West of Rwy 16-34.

ALSF-1

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn right and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

CAUTION: VGSI and descent angles not coincident.

(IAF) HIGGY HMN 22

R-342 R-357 213° 177° 162° 357°

FODSU HMN 17

FORUR HMN 11

SMATI HMN 12

HANUL HMN 5

HMN 22

HOLLOMAN Chan 92 HMN

HEDLU HMN 12

HMN 19

2,299 6247 7606 4390 4395 4108 4311 7300 5002

CAUTION: High terrain to East within 15 NM.

CAUTION: Max holding 265 KIAS

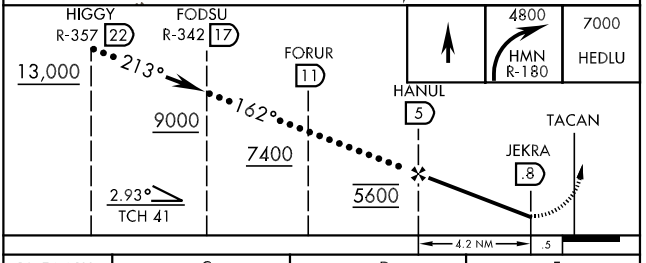
MSA HMN 2.5 NM 17,100

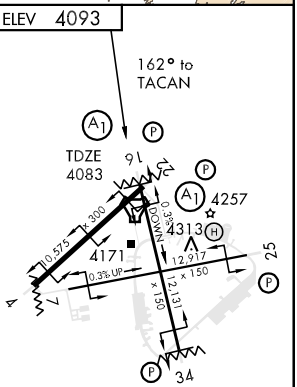
20 NM

R-180 180° 360°

INBOUND WEST Airspace West Restricted. Expect routing via CORONA.

EMERG SAFE ALT 100 NM 14,200





CATEGORY	C	D	E
S-16 *	4700-1¼ 617 (700-1¼)	4700-1½ 617 (700-1½)	4700-1¾ 617 (700-1¾)
CIRCLING **	4700-1¾ 607 (700-1¾)	4700-2 607 (700-2)	4760-2¼ 667 (700-2¼)

ALAMOGORDO, NEW MEXICO 32°51'N-106°06'W HOLLOMAN AFB (KHMN)

Orig 09183

HI-TACAN Y RWY 16

SW-1, 22 OCT 2009 to 19 NOV 2009

ALAMOGORDO, NEW MEXICO

HI-TACAN Y RWY 34

TACAN	APCH CRS	Rwy ldg / TDZE / Arpt Elev	JAL-7 [USAF]	HOLLOMAN AFB (KHMN)
HMN Chan 92	334°	12,131 / 4058 / 4093		

* Circling not authorized West of Rwy 16-34.

MISSED APPROACH: Climbing to 7000 fly straight ahead. Upon reaching 5000 turn left to intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

CAUTION: VGSI and descent angles not coincident.

(IAF) HIGGY HMN 22 R-357 5745 HMN 22 6131 357° 177°

SMATI HMN 12 4251

HOLLOMAN Chan 92 HMN 4460

4395

CAUTION: Max holding 265 KIAS

4138

HIBSI HMN 7

HEDLU HMN 12 180° 334° 4599 4337

HEVTU HMN 14 Arc R-154 14

HEGDI HMN 14 4851

HMN 19 180° 360° R-180 5002

7300

INBOUND WEST: Airspace West Restricted. Expect routing via CORONA.

EMERG SAFE ALT 100 NM 14,200

7891

9824

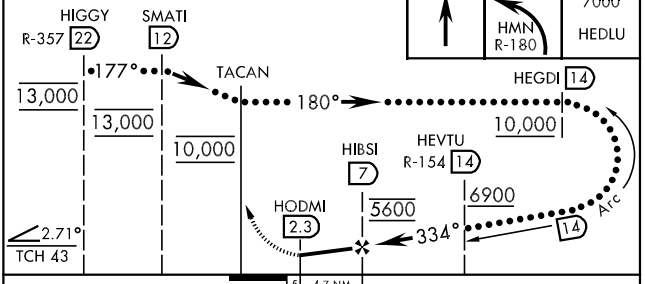
CAUTION: High terrain to East within 15 NM.

20 NM

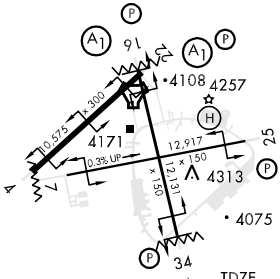
MSA HMN 25 NM 11,100

(a) (b) (c) 067 357 247

5000 HMN R-180 7000 HEDLU



ELEV 4093



CATEGORY	C	D	E
S-34	4520-1¼ 462 (500-1¼)	4520-1½ 462 (500-1½)	4520-1¾ 462 (500-1¾)
CIRCLING *	4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-TACAN Z RWY 16

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
HMN Chan 92	162°	12,131	4083	4093

JAL-7 [USAF]

HOLLOMAN AFB (KHMN)

* When ALS inop, increase CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.
** Circling not authorized West of Rwy 16-34.

ALSF-1

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn right and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

CAUTION: VGSI and descent angles not coincident.

CAUTION: High terrain to East within 15 NM.

INBOUND WEST Airspace West Restricted. Expect routing via CORONA.

CAUTION: Max holding 265 KIAS

EMERG SAFE ALT 100 NM 14,200

CATEGORY	C	D	E
S-16 *	4700-1¼ 617 (700-1¼)	4700-1½ 617 (700-1½)	4700-1¾ 617 (700-1¾)
CIRCLING **	4700-1¾ 607 (700-1¾)	4700-2 607 (700-2)	4760-2¼ 667 (700-2¼)

ELEV 4093

HIRL all Rwy

HI-TACAN Z RWY 22

TACAN HMN Chan 92	APCH CRS 214°	Rwy ldg 10,575 TDZE 4084 Arpt Elev 4093

JAL-7 [USAF]

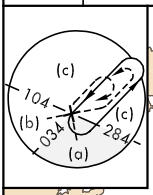
HOLLOMAN AFB (KHMN)

▼ * When ALS inop, increase CAT C vis to 1¾ mile, CAT D vis to 2 miles, CAT E vis to 2¼ miles.
** Circling not authorized West of Rwy 16-34.

ALSF-1

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn left and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4



CAUTION: VGSI and descent angles not coincident.

12,299

(IAF)
MONGO/HMN 20
FAPNI/HMN 17
WUSBO/HMN 15
WOKEB/HMN 14
FAMLO/HMN 11
JEREV/HMN 8
CUVMA/HMN 5
4395

R-034
214°
034°
HMN 30

8497
8044
6366
6800
6024
6024

CAUTION: High terrain to East within 15 NM.

HOLLOMAN
Chan 92 HMN

CAUTION: Max holding 265 KIAS

HEDLU
HMN 12

20 NM

MSA HMN 25 NM
11,100

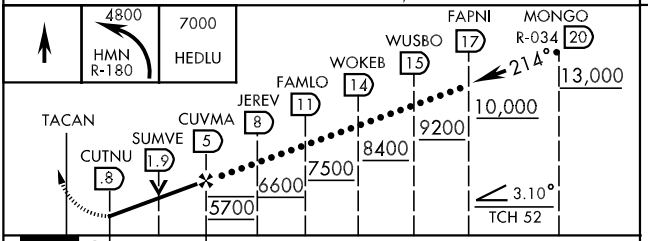
INBOUND WEST
Airspace West Restricted.
Expect routing via CORONA.

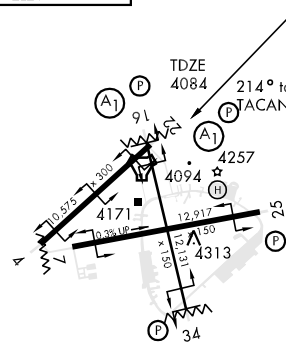
HMN 19
7300
180°
360°
R-180

EMERG SAFE ALT 100 NM 14,200

5002

ELEV 4093





CATEGORY	C	D	E
S-22 *	4700-1¼ 616 (700-1¼)	4700-1½ 616 (700-1½)	4700-1¾ 616 (700-1¾)
CIRCLING **	4700-1¾ 607 (700-1¾)	4700-2 607 (700-2)	4760-2¼ 667 (700-2¼)

HI-TACAN Z RWY 34

TACAN	APCH CRS	Rwy ldg	12,131
Chan 92	334°	TDZE	4058
		Arpt Elev	4093

JAL-7 [USAF]

HOLLOMAN AFB (KHMN)

▼ * Circling not authorized West of Rwy 16-34.

MISSED APPROACH: Climbing to 7000 fly straight ahead. Upon reaching 5000 turn left to intercept HMN R-180 to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

CAUTION: VGSI and descent angles not coincident.

MSA HMN 25 NM 11,100

HOLLOMAN Chan 92 HMN

CAUTION: Max holding 265 KIAS

INBOUND WEST: Airspace West Restricted. Expect routing via CORONA.

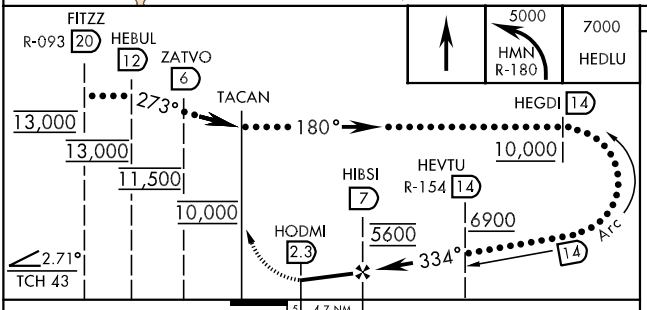
CAUTION: High terrain to East within 15 NM.

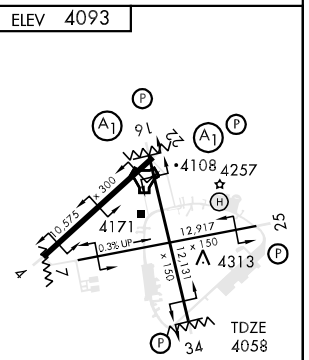
ZATVO HMN 6 — 4395 — 8098 — 7891 — 9778 — 4065 — 4138 — 4460 — 6131 — 8000 — 6000

HIBSI HMN 7 — HEDLU HMN 12 — HEBUL HMN 12 — (IAF) FITZZ HMN 20 — 9824 — 273° — R-093 — 180° — 334° — 4495 — 4337 — HEVTU HMN 14 — 14 Arc R-154 — 20 NM — 180° — 360° — HMN 19 — HEGDI HMN 14 — R-180 — 7300 — 4851

EMERG SAFE ALT 100 NM 14,200

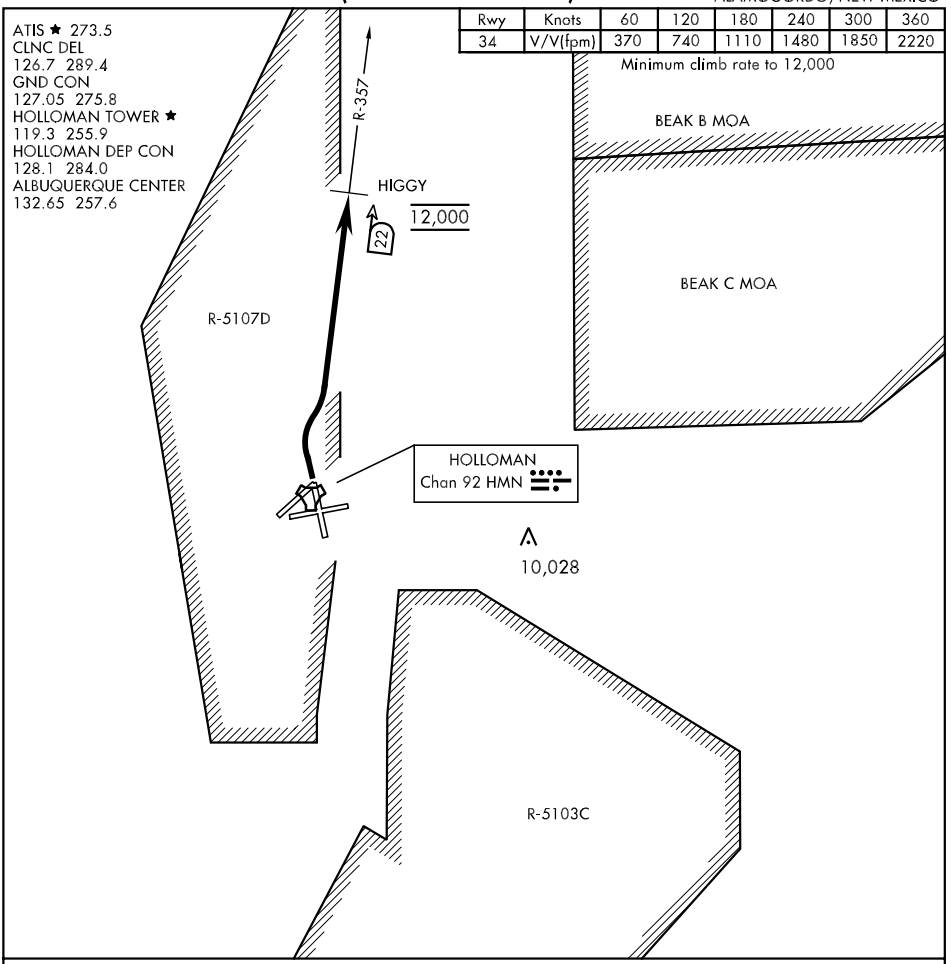
SW-1, 22 OCT 2009 to 19 NOV 2009





CATEGORY	C	D	E
S-34	4520-1¼ 462 (500-1¼)	4520-1½ 462 (500-1½)	4520-1¾ 462 (500-1¾)
CIRCLING *	4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

HIGGY ONE DEPARTURE (HIGGY1 • HIGGY) SHL-7 [USAF]



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 34: Climbing to 12,000 turn right and intercept HMN TACAN R-357 direct HIGGY (HMN R-357/22 DME), then via assigned routing. Cross HIGGY at 12,000.

HIGGY ONE DEPARTURE (HIGGY1 • HIGGY)

ALAMOGORDO, NEW MEXICO

ILS Y RWY 16

LOC I-MUK	APCH CRS	Rwy ldg 12,131 TDZE 4083 Arpt Elev 4093	AL-7 [USAF]	HOLLOMAN AFB (KHMN)
108.9	158°			

* When ALS inop, increase CAT ABCDE vis to ¾ mile.
** When ALS inop, increase CAT AB vis to 1 mile, CAT C vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

MISSED APPROACH: Climb straight ahead to 7000, passing 4800 turn right and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

*** Circling not authorized West of Rwy 16-34.

RADAR or DME REQUIRED

CAUTION: HEIGHT GROUP 4 WCH 16FT

CAUTION: High terrain to East within 15 NM.

CAUTION: Max holding 265 KIAS

INBOUND WEST
Airspace West Restricted.
Expect routing via CORONA.

EMERG SAFE ALT 100 NM 14,200

(IAF) HIGGY HMN 22

JEMTO HMN 15

CAPAR HMN 11

FETER HMN 5.7 /RADAR

SMATI HMN 12

HMN 22

HMN 19

HEDLU HMN 12

HOLLOMAN Chan 92 HMN

LOCALIZER 108.9 I-MUK

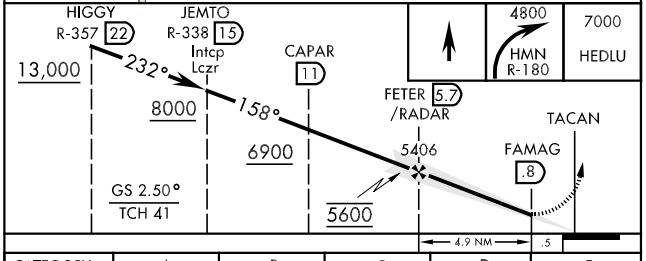
MSA HMN 25 NM 11,100

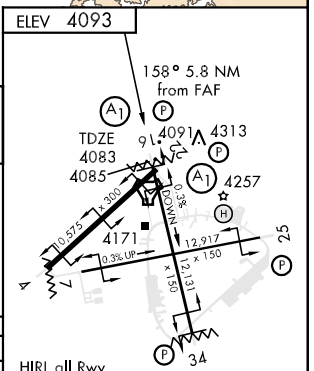
20 NM

R-338 R-357 R-345 R-180

232° 177° 357° 158° 338° 180° 360°

12,299 7306 5089 4623 4301 4931 4390 4395 4309 7300 4851





CATEGORY	A	B	C	D	E
S-ILS 16 *	4283- ½ 200 (200-½)				
S-LOC 16 **	4580- ½ 497 (500-½)		4580-¾ 497 (500-¾)	4580-1 497 (500-1)	4580-1¼ 497 (500-1¼)
CIRCLING ***	4660-1 567 (600-1)		4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

SW-1, 22 OCT 2009 to 19 NOV 2009

ALAMOGORDO, NEW MEXICO

TACAN Y RWY 34

TACAN	HMN	APCH CRS	Rwy ldg	12,131
Chan	92	334°	TDZE	4058
			Arpt Elev	4093

AL-7 [USAF]

HOLLOMAN AFB (KHMN)

* Circling not authorized West of Rwy 16-34.

MISSED APPROACH: Climb straight ahead to 7000, passing 5000 turn left and intercept HMN R-180 outbound to HEDLU and hold.

ATIS ★	ALBUQUERQUE CENTER	HOLLOMAN APP CON	HOLLOMAN TOWER ★	GND CON	CLNC DEL
273.5	132.65 257.6	120.6 269.225	119.3 255.9	127.05 275.8	126.7 289.4

(IAF) HMN
R-357
HIGGY 22
5745
HMN 22
177°
357°
SMATI HMN 12
4521
HOLLOMAN
Chan 92 HMN
4395
180°
HIBSI HMN 7
HEDLU HMN 12
4599
334°
4337
HEVTU HMN 14
14 Arc
R-154
180°
360°
HMN 19
HEGDI HMN 14
R-180
7300
5002
EMERG SAFE ALT 100 NM 14,200
INBOUND WEST:
Airspace West Restricted.
Expect routing via CORONA.
CAUTION:
High terrain to East within 15 NM.
CAUTION:
Max holding 265 KIAS
9824
8000
6000
20 NM
MSA HMN 25 NM
11,100

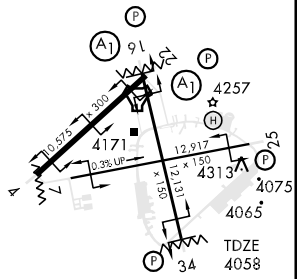
SW-1, 22 OCT 2009 to 19 NOV 2009

5000
HMN R-180
7000
HEDLU

VGSI and descent angles not coincident.

HIGGY R-357 22
SMATI 12
TACAN
HEGDI R-180 14
177°
180°
13,000
13,000
10,000
10,000
HODMI 2.3
HIBSI 7
HEVTU R-154 14
14 Arc
334°
5600
6900
2.71°
TCH 43
.5
4.7 NM

ELEV 4093



CATEGORY	A	B	C	D	E
S-34	4520-1 462 (500-1)		4520-1¼ 462 (500-1¼)	4520-1½ 462 (500-1½)	4520-1¾ 462 (500-1¾)
CIRCLING *	4660-1 567 (600-1)		4660-1½ 567 (600-1½)	4660-2 567 (600-2)	4760-2¼ 667 (700-2¼)

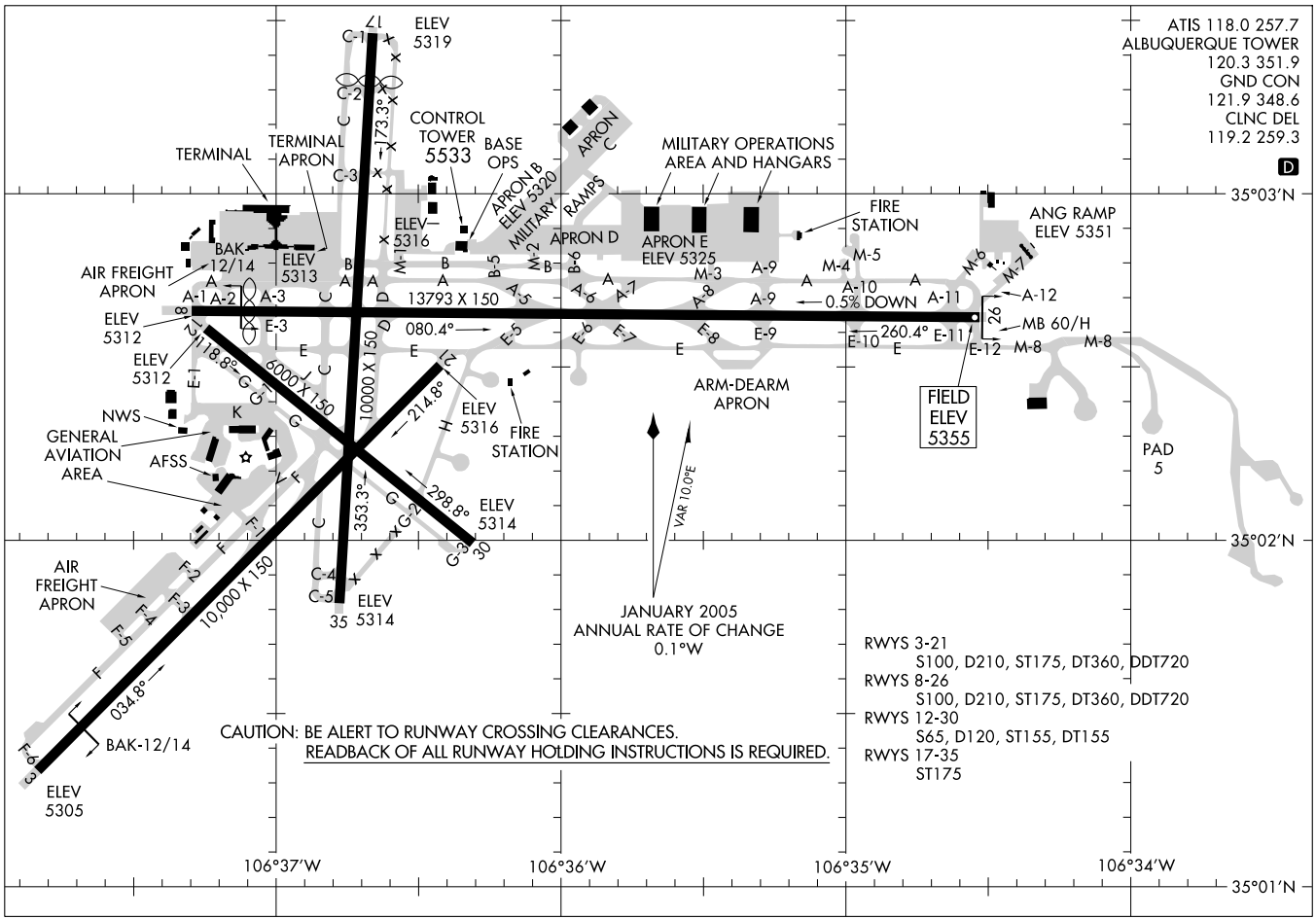
ALAMOGORDO, NEW MEXICO

32°51'N-106°06'W

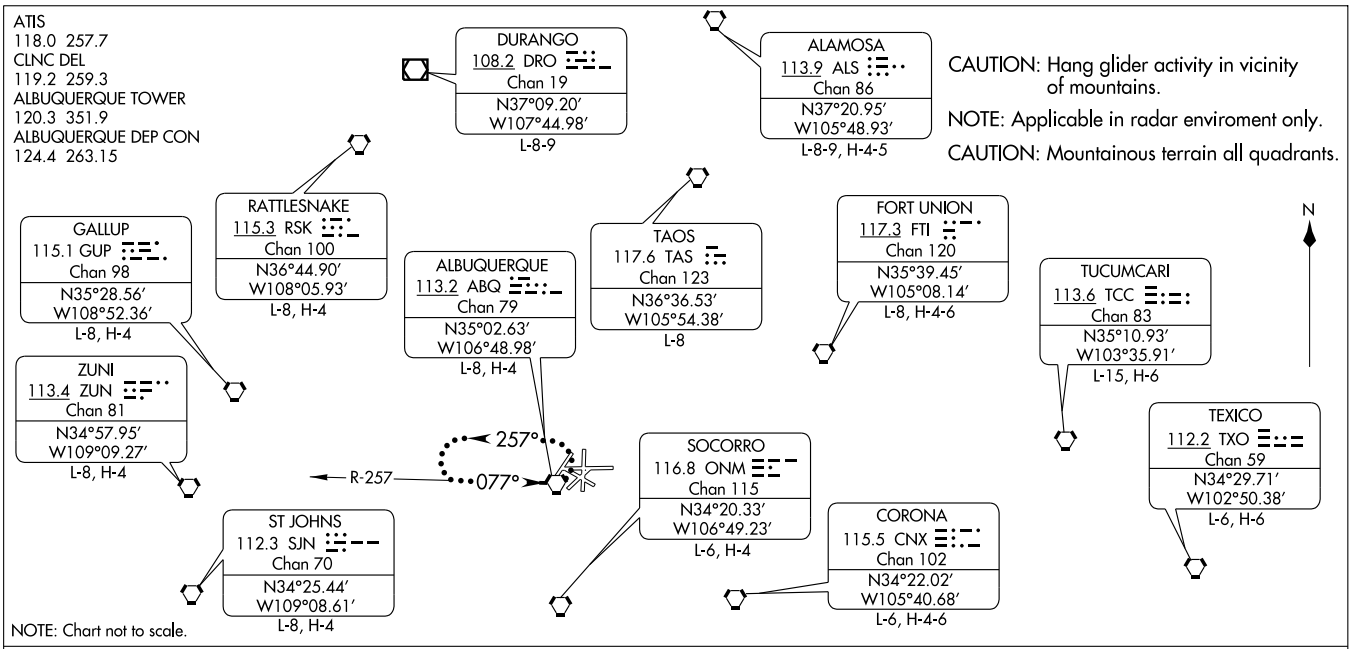
HOLLOMAN AFB (KHMN)

Orig 09183

TACAN Y RWY 34


AIRPORT DIAGRAM
ATIS 118.0 257.7
ALBUQUERQUE TOWER
120.3 351.9
GND CON
121.9 348.6
CLNC DEL
119.2 259.3
D
ALBUQUERQUE INTL SUNPORT (ABQ)
ALBUQUERQUE, NEW MEXICO
AL-12 (FAA)
35°03'N
35°02'N
35°01'N
106°37'W
106°36'W
106°35'W
106°34'W
ELEV 5319
CONTROL TOWER 5533
BASE OPS
TERMINAL
TERMINAL APRON
APRON B ELEV 5320
APRON C
MILITARY RAMPS
MILITARY OPERATIONS AREA AND HANGARS
FIRE STATION
ANG RAMP ELEV 5351
APRON D
APRON E ELEV 5325
ELEV 5316
BAK 12/14
ELEV 5313
AIR FREIGHT APRON
13793 X 150
0.5% DOWN
MB 60/H
FIELD ELEV 5355
PAD 5
ELEV 5312
ELEV 5312
080.4°
260.4°
118.8°
6000 X 150
10000 X 150
214.8°
ELEV 5316
FIRE STATION
ARM-DEARM APPRON
NWS
GENERAL AVIATION AREA
AFSS
353.3°
298.8°
ELEV 5314
AIR FREIGHT APRON
10,000 X 150
034.8°
C-4
C-5
35
ELEV 5314
VAR 10.0°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
BAK-12/14
ELEV 5305
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RWYS 3-21
S100, D210, ST175, DT360, DDT720
RWYS 8-26
S100, D210, ST175, DT360, DDT720
RWYS 12-30
S65, D120, ST155, DT155
RWYS 17-35
ST175

ALBUQUERQUE TWO DEPARTURE



DEPARTURE ROUTE DESCIPTION

All aircraft fly assigned heading for vectors to filed/assigned route. When weather conditions are 5,000′ ceiling and 7 miles visibility or greater, for informal noise abatement, request turboprop and turbojet aircraft, except STOL aircraft, making a left turn from Runway 8, to delay their turn until 13.5 DME from the ABQ VORTAC. Expect clearance to filed altitude/flight level 5 minutes after departure.

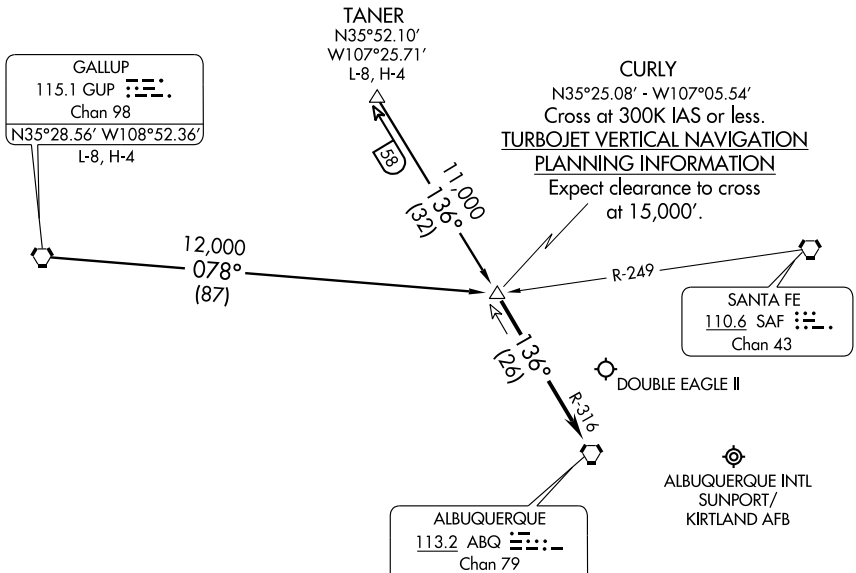
LOST COMMUNICATIONS: If no transmissions are received for 1 minute after departure and a climb to 14,000 feet or higher has not been issued, proceed direct to ABQ VORTAC, climb in holding pattern to 14,000 feet, then proceed via assigned fix/route. If cleared above 14,000 feet, climb on assigned heading to 14,000 feet, then proceed via assigned fix/route.

CURLY TWO ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
127.4 253.5
ATIS 118.0 257.7



NOTE: This procedure applicable only to turboprop and turbojet aircraft operating at or above 15,000′.

NOTE: Chart not to scale.

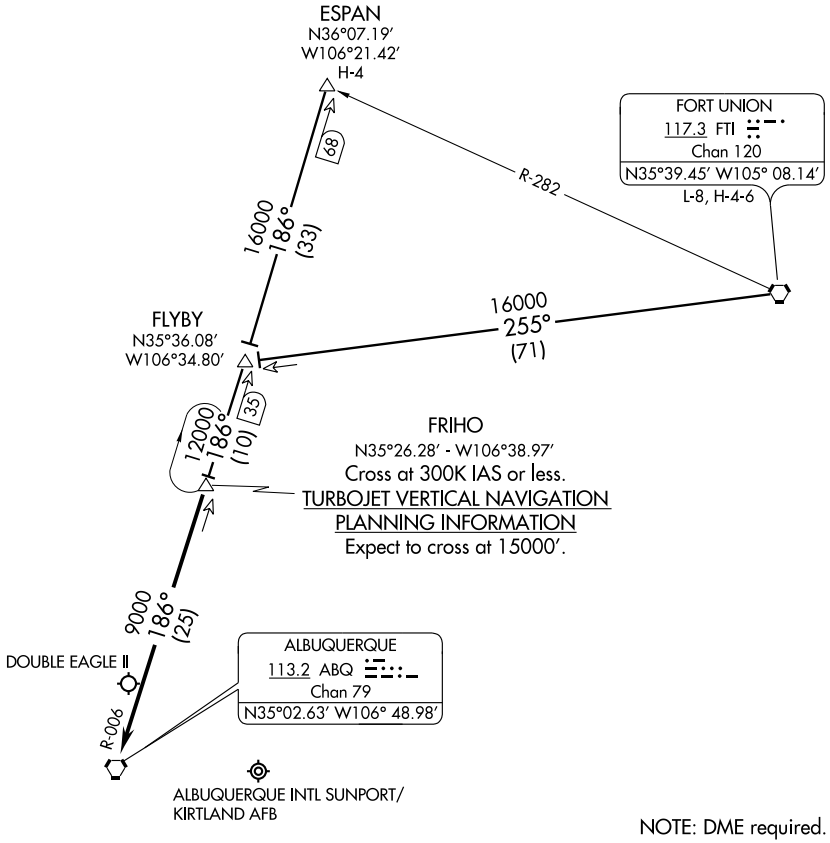
GALLUP TRANSITION (GUP.CURLY2): From over GUP VORTAC via GUP R-078 to CURLY DME fix. Thence....

TANER TRANSITION (TANER.CURLY2): From over TANER INT via ABQ R-316 to CURLY DME fix. Thence....

....From over CURLY DME fix via ABQ R-316 to ABQ VORTAC. Expect vectors to final approach course after passing CURLY DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

FRIHO FOUR ARRIVAL



NOTE: DME required.

NOTE: Chart not to scale.

ESPAN TRANSITION (ESPAN.FRIHO4): From over ESPAN DME fix via ABQ R-006 to FRIHO DME fix, thence....

FORT UNION TRANSITION (FTI.FRIHO4): From over FTI VORTAC via FTI R-255 and ABQ R-006 to FRIHO DME fix, thence....

.... From over FRIHO DME fix via ABQ R-006 to ABQ VORTAC. Expect vectors to final approach course after passing FRIHO DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-ILS RWY 8

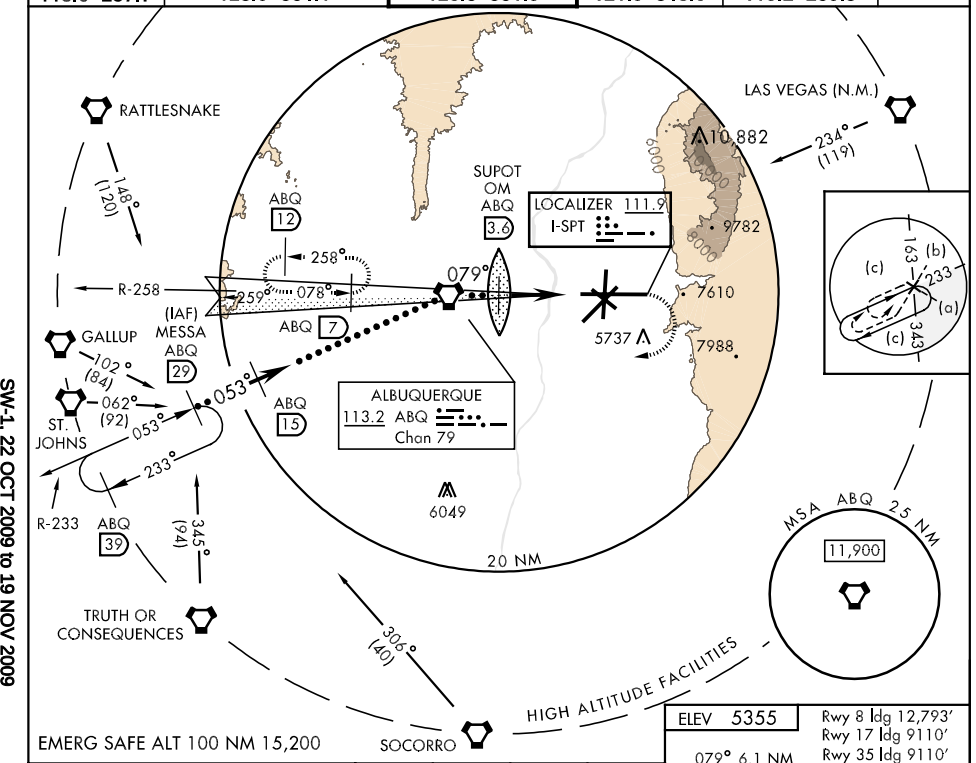
LOC I-SPT	APCH CRS	Rwy ldg / TDZE / Arpt Elev	JAL-12 [USAF]	ALBUQUERQUE INTL SUNPORT (KIKR/KABQ)
111.9	079°	12,793 / 5317 / 5355		

CAUTION: 5389' obst 750' left of rwy centerline abeam Rwy 8 thld.
CAUTION: Mountains rising to 10,000' 7 NM E of field.
Use ABQ VORTAC DME when on LOC course.
* Not authorized E of Rwy 17-35.

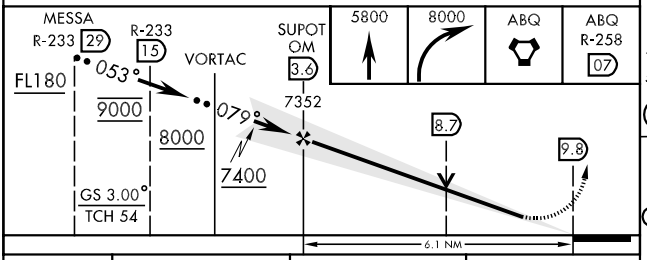
MALSR (A5)

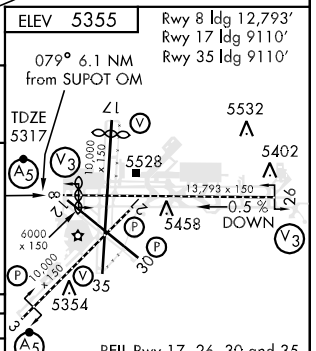
MISSED APPROACH: Climb to 5800 then climbing right turn to 8000 direct ABQ VORTAC and ABQ R-258 to 7 DME and hold.

ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL	ASR
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3	



EMERG SAFE ALT 100 NM 15,200





CATEGORY	C	D	E
S-ILS 8	5517/24 200 (200-½)		
S-LOC 8	5640/40 323 (300-¾)		5740/50 423 (400-1)
CIRCLING	5900-1½ 545 (600-1½)	5940-2 585 (600-2)	*6040-2½ 685 (700-2½)
S-ASR 8	5700/24 383 (400-½)	5700/50 383 (400-1)	

REIL Rwy 17, 26, 30 and 35
HIRL Rwy 3-21 and 8-26
MIRL Rwy 12-30 and 17-35
TDZL/CL Rwy 3 and 8

LOC FAF to MAP 6.1 NM					
Knots	120	140	160	180	200
Min:Sec	3:03	2:37	2:17	2:02	1:50

HI-TACAN RWY 8

TACAN	APCH CRS	Rwy ldg / TDZE / Arpt Elev
ABQ Chan 79	077°	12,793 / 5317 / 5355

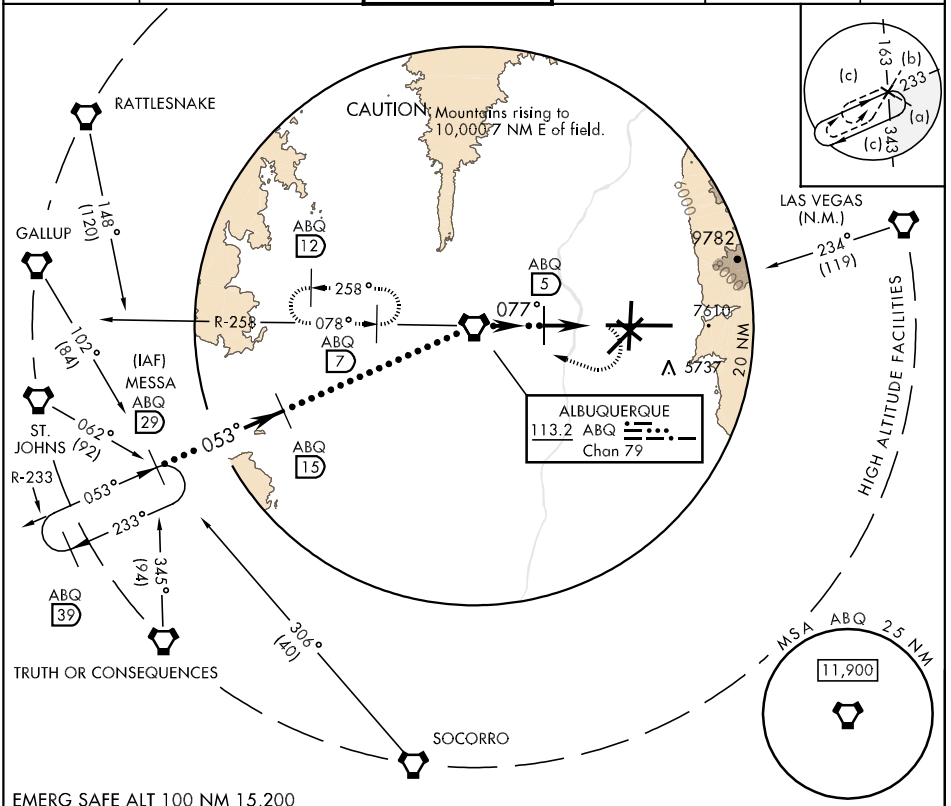
JAL-12 [USAF] ALBUQUERQUE INTL SUNPORT (KIKR/KABQ)

▼* Not authorized E of Rwy 17-35.

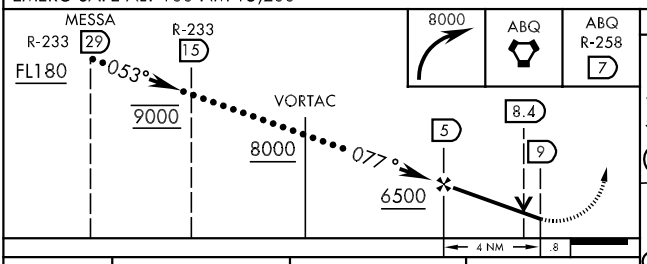
MALSR (A5)

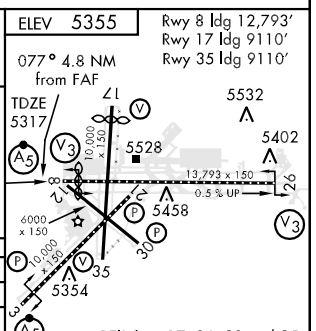
MISSED APPROACH: Climbing right turn to 8000 direct ABQ VORTAC and ABQ R-258 to 7 DME and hold.

ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL	ASR
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3	



EMERG SAFE ALT 100 NM 15,200





CATEGORY	C	D	E
S-8	5700/40 383 (400-¾)		
CIRCLING	5900-1½ 545 (600-1½)	5940-2 585 (600-2)	*6040-2½ 685 (700-2½)
S-ASR 8	5700/24 383 (400-½)	5700/50 383 (400-1)	

REIL Rwy 17, 26, 30 and 35
HIRL Rwy 3-21 and 8-26
MIRL Rwy 12-30 and 17-35
TDZL/CL Rwy 3 and 8

LOC I-BZY	APP CRS	Rwy Idg	10000
111.5	034°	TDZE	5312
		Apt Elev	5355

ILS or LOC RWY 3

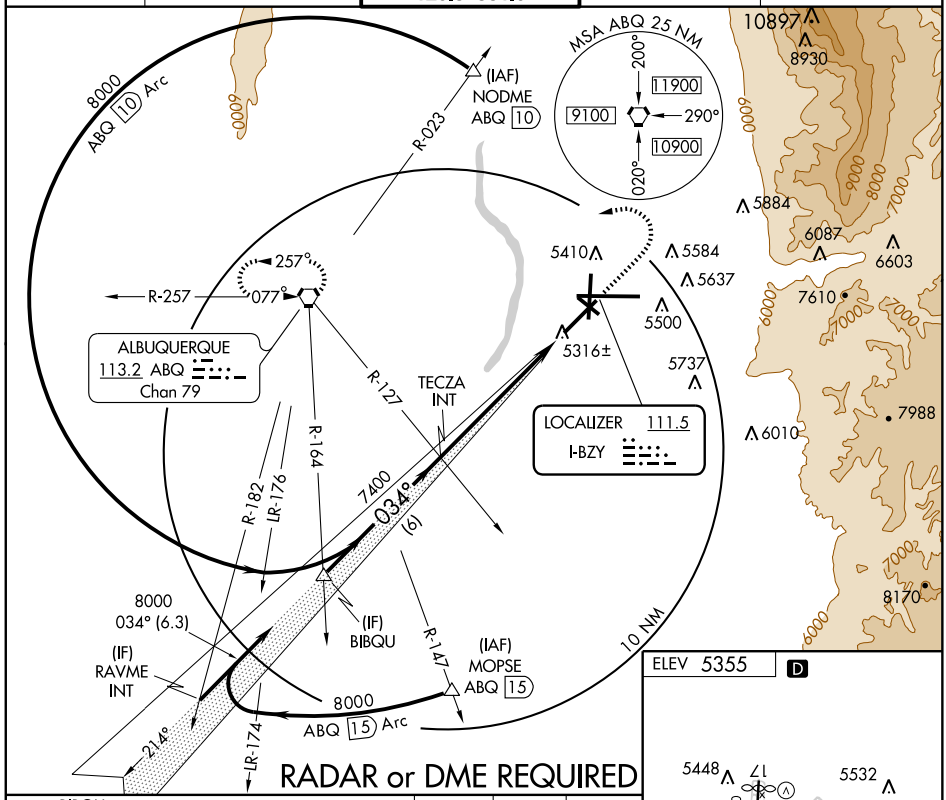
ALBUQUERQUE INTL SUNPORT (ABQ)

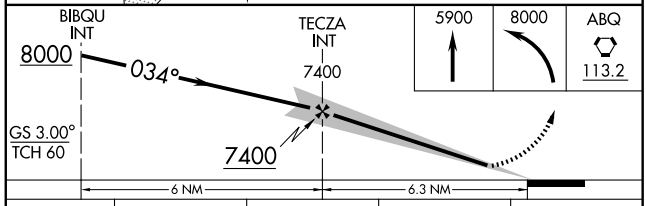
T ASR — For inoperative MALSR, increase S-LOC 3 Cat D visibility to RVR 5000. Use of flight director or autopilot or heads up display guidance system (HGS) required.

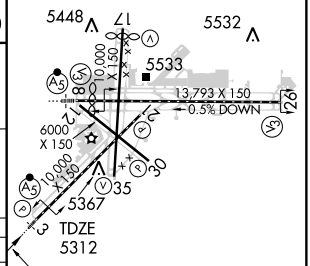
MALSR

MISSED APPROACH: Climb to 5900 then climbing left turn to 8000 direct ABQ VORTAC and hold, continue climb in hold to 8000.

ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3







CATEGORY	A	B	C	D
S-ILS 3	5512/24 200 (200-½)			
S-LOC 3	5600/24 288 (300-½)			5600/40 288 (300-¾)
CIRCLING	5840-1 485 (500-1)		5900-1½ 545 (600-1½)	5920-2 565 (600-2)
SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED				
S-ILS 3	5512/18 200 (200-½)			

TDZ/CL Rwys 3 and 8
HIRL Rwys 3-21 and 8-26
REIL Rwys 17, 26, 30 and 35
MIRL Rwys 12-30 and 17-35

FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SPT	APP CRS	Rwy Idg	12793
111.9	079°	TDZE	5317
Chan 56		Apt Elev	5355

ILS or LOC RWY 8

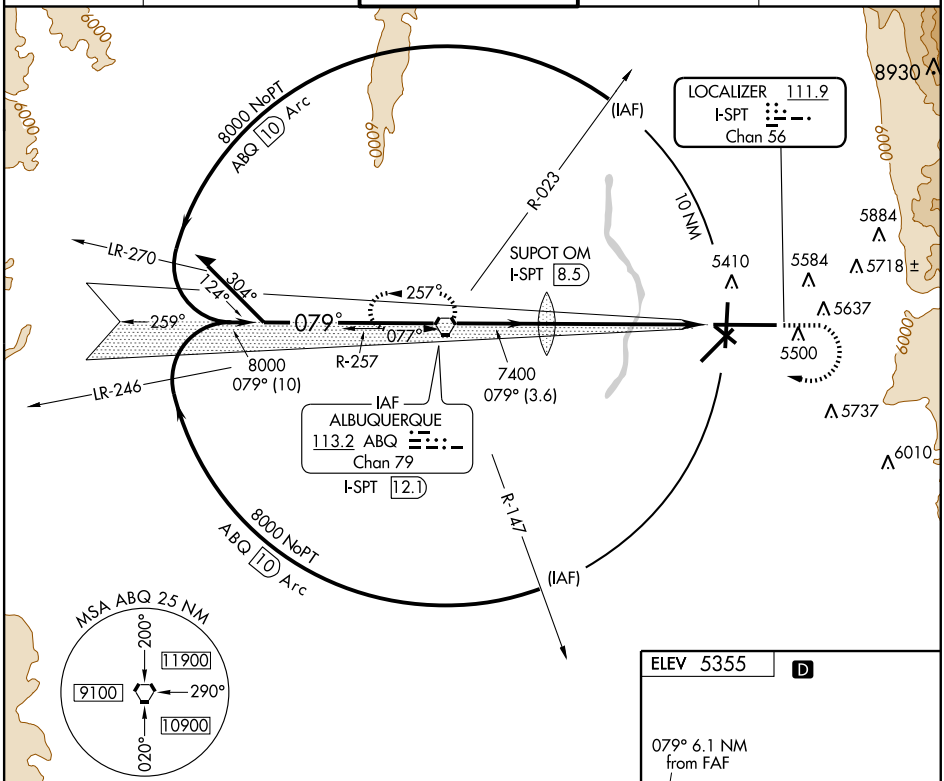
ALBUQUERQUE INTL SUNPORT (ABQ)

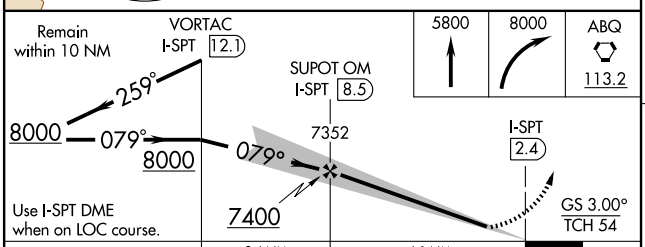
T ASR — For inoperative MALSR, increase Cat D S-LOC 8 visibility to RVR 5000.

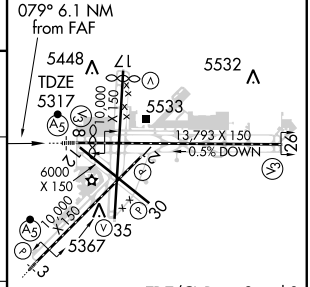
MALSR

MISSED APPROACH: Climb to 5800 then climbing right turn to 8000 direct ABQ VORTAC and hold.

ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3







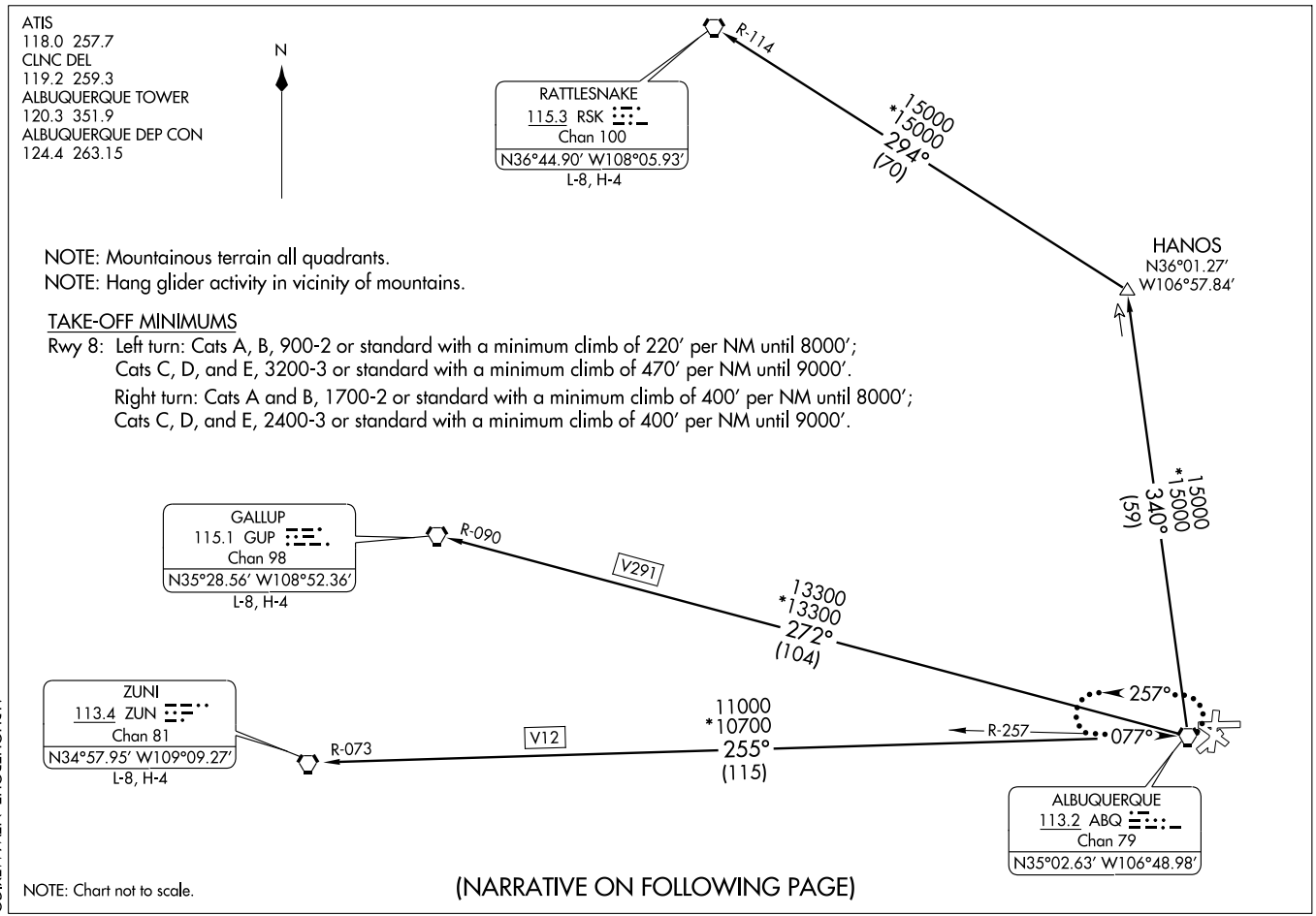
CATEGORY	A	B	C	D
S-ILS 8	5517/18 200 (200-½)			
S-LOC 8	5640/24 323 (300-½)			5640/40 323 (300-¾)
CIRCLING	5840-1 485 (500-1)		5900-1½ 545 (600-1½)	5940-2 585 (600-2)

TDZ/CL Rwys 3 and 8
HIRL Rwys 3-21 and 8-26
REIL Rwys 17, 26, 30 and 35
MIRL Rwys 12-30 and 17-35

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

SW-1, 22 OCT 2009 to 19 NOV 2009


ATIS
118.0 257.7
CLNC DEL
119.2 259.3
ALBUQUERQUE TOWER
120.3 351.9
ALBUQUERQUE DEP CON
124.4 263.15
N
RATTLESNAKE
115.3 RSK
Chan 100
N36°44.90' W108°05.93'
L-8, H-4
R-114
15000
*15000
294°
(70)
HANOS
N36°01.27'
W106°57.84'
15000
*15000
340°
(59)
NOTE: Mountainous terrain all quadrants.
NOTE: Hang glider activity in vicinity of mountains.
TAKE-OFF MINIMUMS
Rwy 8: Left turn: Cats A, B, 900-2 or standard with a minimum climb of 220' per NM until 8000';
Cats C, D, and E, 3200-3 or standard with a minimum climb of 470' per NM until 9000'.
Right turn: Cats A and B, 1700-2 or standard with a minimum climb of 400' per NM until 8000';
Cats C, D, and E, 2400-3 or standard with a minimum climb of 400' per NM until 9000'.
GALLUP
115.1 GUP
Chan 98
N35°28.56' W108°52.36'
L-8, H-4
R-090
V291
13300
*13300
272°
(104)
257°
077°
R-257
ZUNI
113.4 ZUN
Chan 81
N34°57.95' W109°09.27'
L-8, H-4
R-073
V12
11000
*10700
255°
(115)
ALBUQUERQUE
113.2 ABQ
Chan 79
N35°02.63' W106°48.98'
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

All aircraft fly assigned heading for vectors to filed/assigned route.
Rwy 8 departures: Upon passing 5750' MSL, turn left/right to assigned heading. When weather conditions are 5000' ceiling and 7 miles visibility or greater, FOR INFORMAL NOISE ABATEMENT, request turboprop and turbojet aircraft, except STOL aircraft, making a left turn from runway 8, to delay their turn until 13.5 DME from the ABQ VORTAC. Expect clearance to filed altitude/flight level 5 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received for one minute after departure and a climb to 14,000 feet or higher has not been issued, proceed direct to ABQ VORTAC, climb in the holding pattern to 14000, then proceed via assigned fix/route. If cleared above 14000 feet, climb on assigned heading to 14000 feet, then proceed via assigned fix/route.

GALLUP TRANSITION (LARGO2.GUP): From over ABQ VORTAC via ABQ R-272 and GUP R-090 to GUP VORTAC.
RATTLESNAKE TRANSITION (LARGO2.RSK): From over ABQ VORTAC via ABQ R-340 and RSK R-114 to RSK VORTAC.
ZUNI TRANSITION (LARGO2.ZUN): From over ABQ VORTAC via ABQ R-255 and ZUN R-073 to ZUN VORTAC.

SW-1, 22 OCT 2009 to 19 NOV 2009

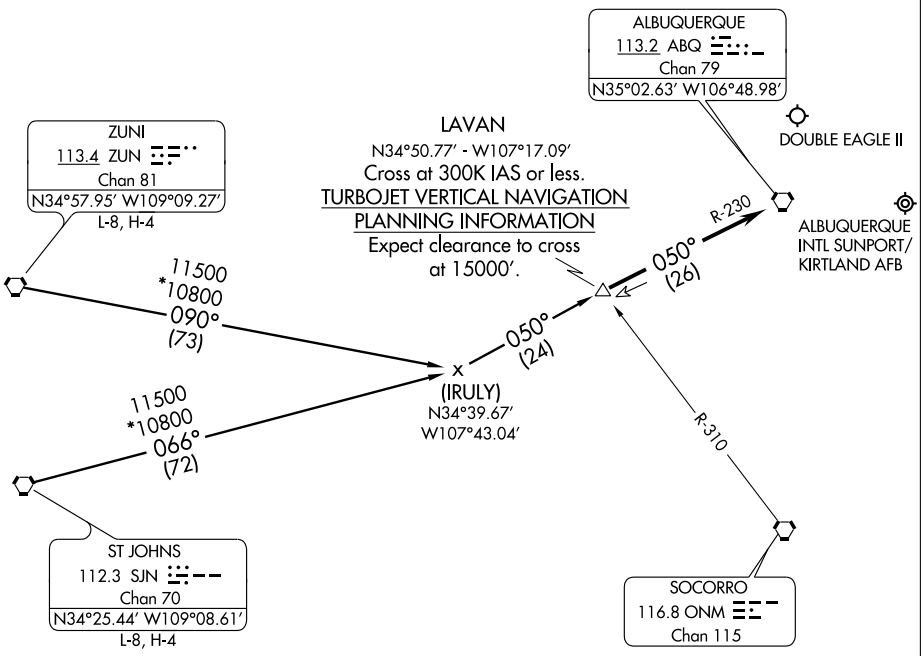
(LAVAN.LAVAN3) 07354

LAVAN THREE ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
123.9 354.1
ALBUQUERQUE TOWER
120.3 351.9
GND CON
121.9 348.6
ATIS
118.0 257.7



NOTE: Chart not to scale.

ST. JOHNS TRANSITION (SJN.LAVAN3): From over SJN VORTAC via SJN R-066 and ABQ R-230 to LAVAN DME/INT. Thence....

ZUNI TRANSITION (ZUN.LAVAN3): From over ZUN VORTAC via ZUN R-090 and ABQ R-230 to LAVAN DME/INT. Thence....

....From over LAVAN fix/INT via ABQ R-230 to ABQ VORTAC. Expect vectors to final approach course after passing LAVAN.

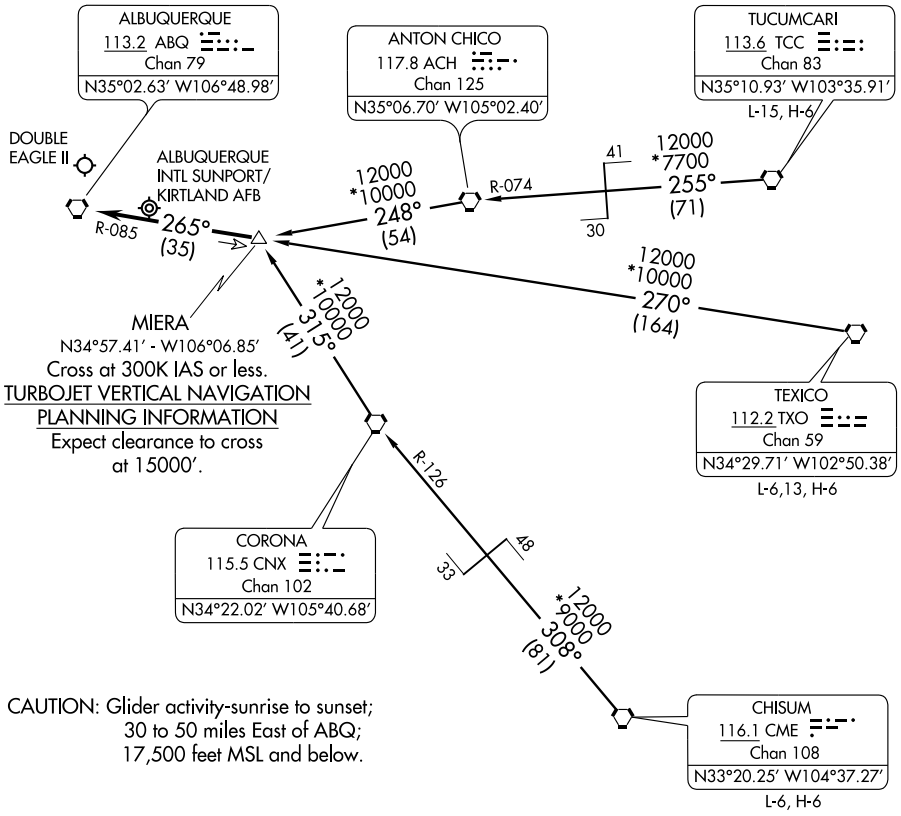
SW-1, 22 OCT 2009 to 19 NOV 2009

MIERA TWO ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
123.9 354.1
ATIS
118.0 257.7



NOTE: Chart not to scale.

CHISUM TRANSITION (CME.MIERA2): From over CME VORTAC via CME R-308 and CNX R-126 to CNX VORTAC, then via CNX R-315 to MIERA DME fix. Thence....

TEXICO TRANSITION (TXO.MIERA2): From over TXO VORTAC via TXO R-270 and ABQ R-085 to MIERA DME fix. Thence....

TUCUMCARI TRANSITION (TCC.MIERA2): From over TCC VORTAC via TCC R-255 and ACH R-074 to ACH VORTAC, then via ACH R-248 to MIERA DME fix. Thence....

....From over MIERA DME fix via ABQ R-085 to ABQ VORTAC. Expect vectors to final approach course after passing MIERA DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10000
034°	TDZE	5312
	Apt Elev	5355

RNAV (GPS) RWY 3

ALBUQUERQUE INTL SUNPORT (ABQ)

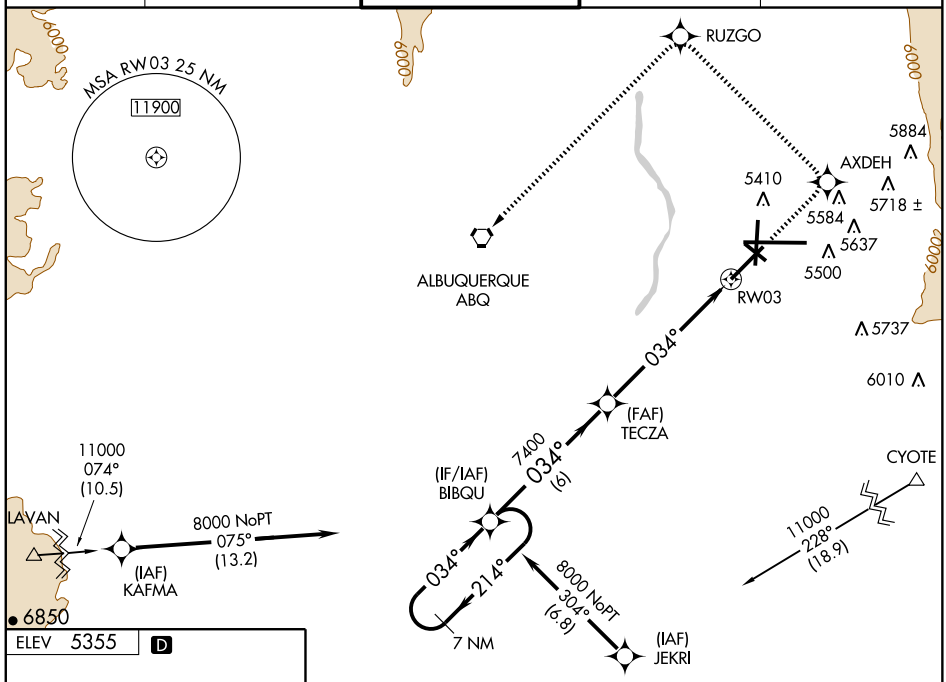
T NA
ASR

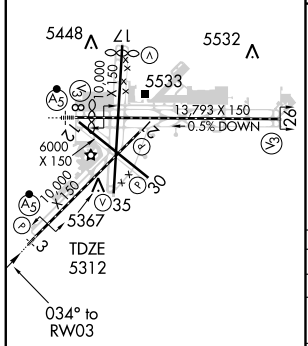
Inoperative table does not apply to LNAV Cat D.
Baro-VNAV NA below -25°C (-13°F)
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
For inoperative MALSR, increase LNAV/VNAV Cat D visibility to 1 mile.

MALSR

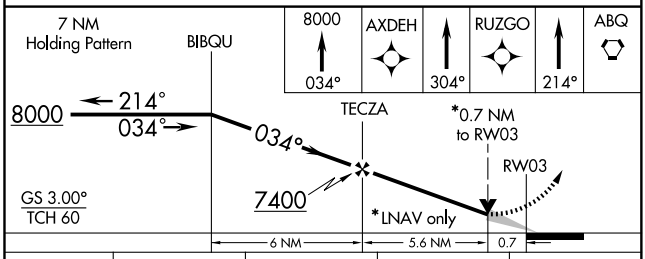
MISSED APPROACH: Climb to 8000 via 034° course to AXDEH WP then via 304° course to RUZGO WP then via 214° course to ABQ VORTAC.

ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3





TDZ/CL Rwys 3 and 8
HIRL Rwys 3-21 and 8-26
REIL Rwys 17, 26, 30 and 35
MIRL Rwys 12-30 and 17-35



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	5580-½ 268 (300-½)			5580-¾ 268 (300-¾)
LNAV MDA	5600-½ 288 (300-½)			5600-1 288 (300-1)
CIRCLING	5840-1 485 (500-1)		5900-1½ 545 (600-1½)	5940-2 585 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	12793
079°	TDZE	5320
	Apt Elev	5355

RNAV (GPS) RWY 8
ALBUQUERQUE INTL SUNPORT (ABQ)

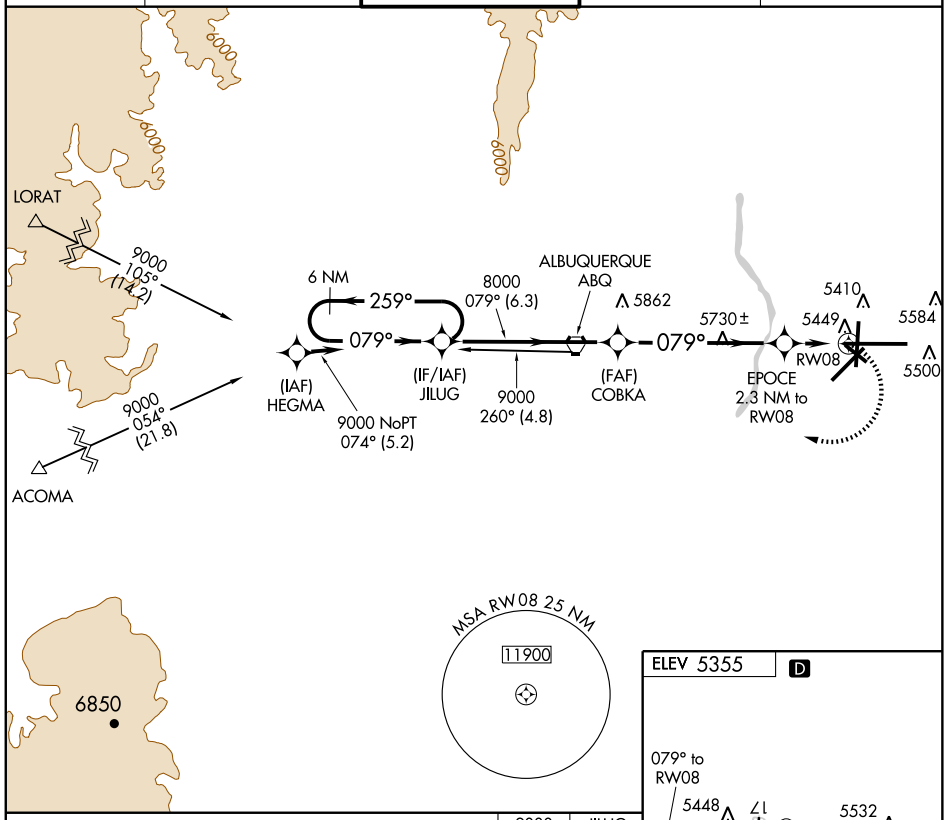
ASR

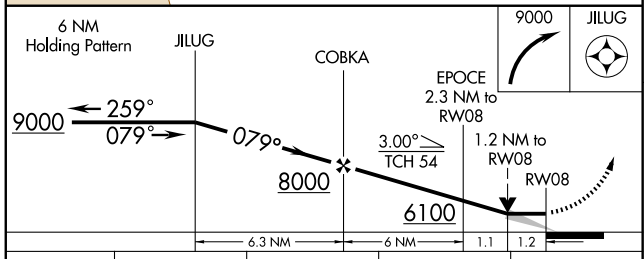
DME/DME RNP- 0.3 NA.
For inoperative MALSR increase LNAV Cat D visibility to 1¼ .

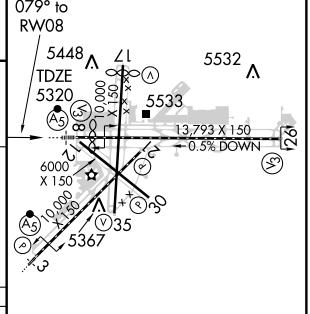
MALSR

MISSED APPROACH: Climbing right turn to 9000 direct JILUG and hold.

ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3







CATEGORY	A	B	C	D
LNAV MDA	5740/24	420 (400-½)	5740/40 420 (400-¾)	5740/50 420 (400-1)
CIRCLING	5840-1	485 (500-1)	5900-1½ 545 (600-1½)	5920-2 565 (600-2)

TDZ/CL Rwys 3 and 8
HIRL Rwys 3-21 and 8-26
REIL Rwys 17, 26, 30, and 35
MIRL Rwys 12-30 and 17-35

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9110
172°	TDZE	5321
	Apt Elev	5355

RNAV (GPS) RWY 17

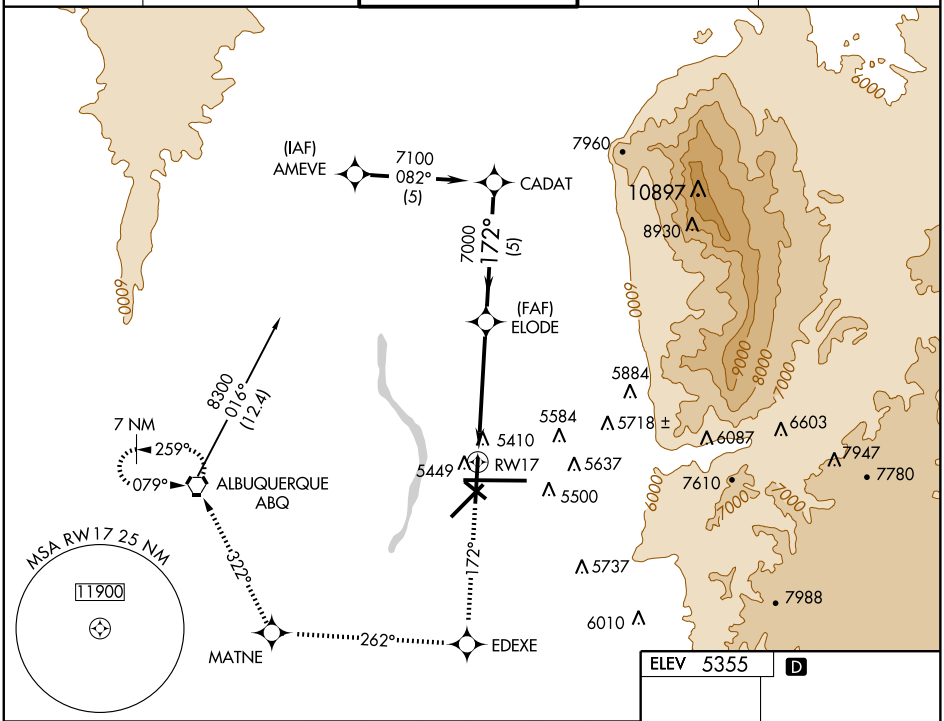
ALBUQUERQUE INTL SUNPORT (ABQ)

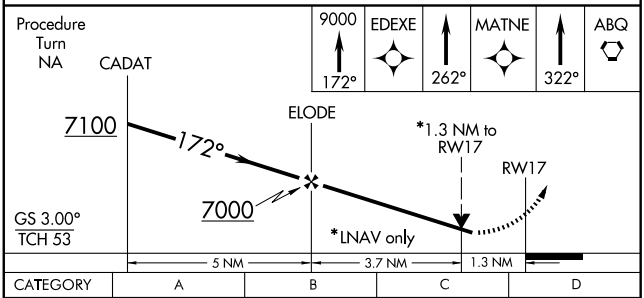
T
NA
ASR

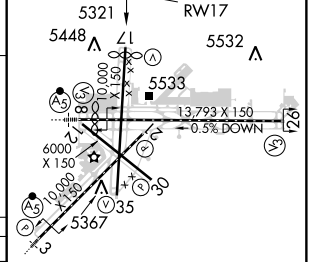
Baro-VNAV NA below -25° C (-13° F)
GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 9000 via 172° course to EDEXE then via 262° course to MATNE then via 322° course to ABQ VORTAC and hold.

ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3







CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	5700-1¼ 379 (400-1¼)			
LNAV MDA	5780-1 459 (500-1)		5780-1¼ 459 (500-1¼)	5780-1½ 459 (500-1½)
CIRCLING	5840-1¼ 485 (500-1¼)		5900-1½ 545 (600-1½)	5940-2 585 (600-2)

TDZ/CL Rwys 3 and 8
HIRL Rwys 3-21 and 8-26
REIL Rwys 17, 26, 30 and 35
MIRL Rwys 12-30 and 17-35

SW-1, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 35

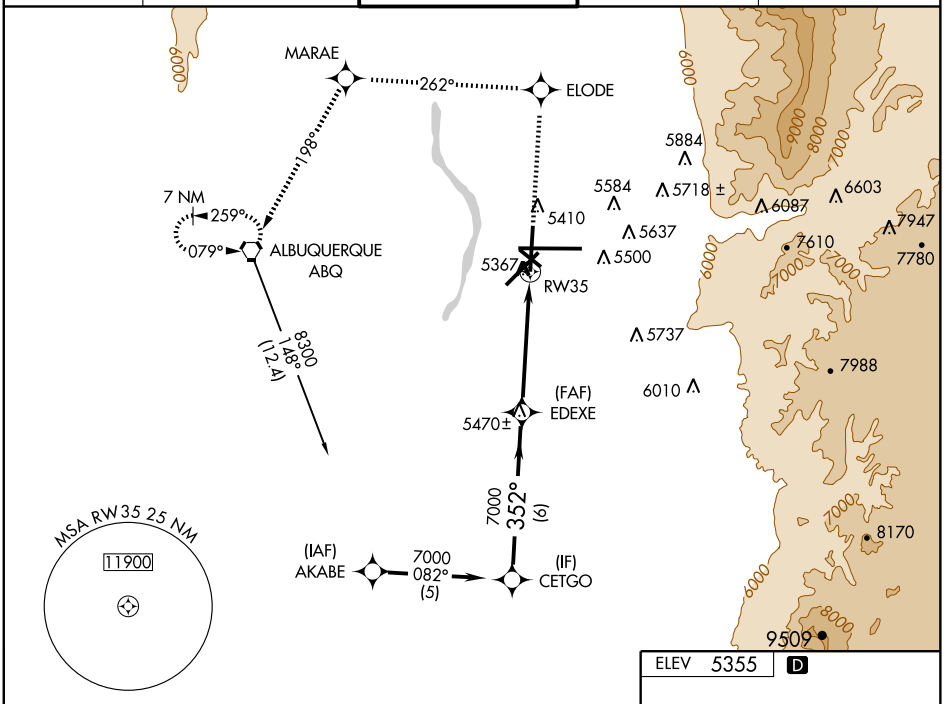
ALBUQUERQUE INTL SUNPORT (ABQ)

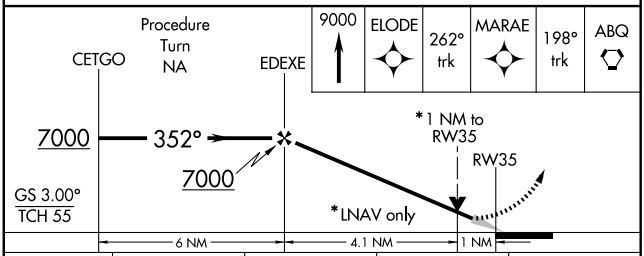
WAAS	APP CRS	Rwy Idg	9110
Chan 40011	352°	TDZE	5316
W35A		Apt Elev	5355

DME/DME RNP-0.3 NA
Baro-VNAV NA below -25° C (-13° F).
ASR

MISSED APPROACH: Climb to 9000 direct ELODE and via 262° track to MARAE and via 198° track to ABQ VORTAC and hold.

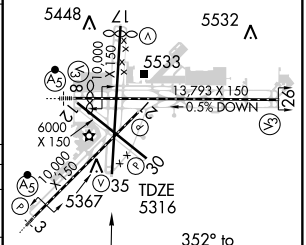
ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3





CATEGORY	A	B	C	D
LPV DA	5570- ¾ 254 (300-¾)			
LNAV/VNAV DA	5620-1 304 (300-1)			
LNAV MDA	5680-1 364 (400-1)			5680-1¼ 364 (400-1¼)
CIRCLING	5840-1 485 (500-1)		5900-1½ 545 (600-1½)	5940-2 585 (600-2)

ELEV 5355 D



TDZ/CL Rwys 3 and 8
HIRL Rwys 3-21 and 8-26
REIL Rwys 17, 26, 30 and 35
MIRL Rwys 12-30 and 17-35

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC ABQ	APP CRS	Rwy Idg	12793
113.2	077°	TDZE	5320
Chan 79		Apt Elev	5355

VOR or TACAN RWY 8

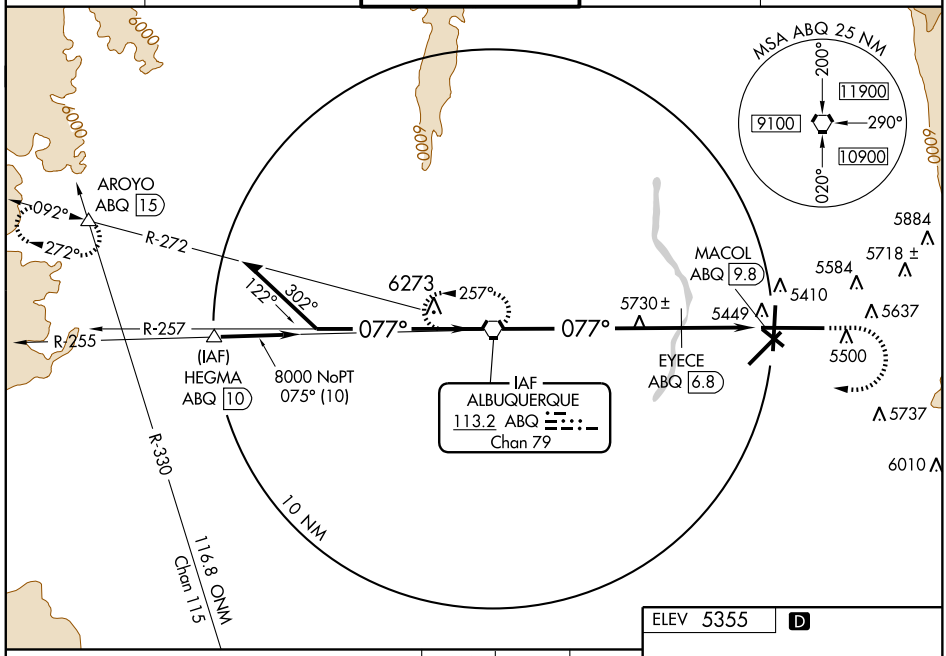
ALBUQUERQUE INTL SUNPORT (ABQ)

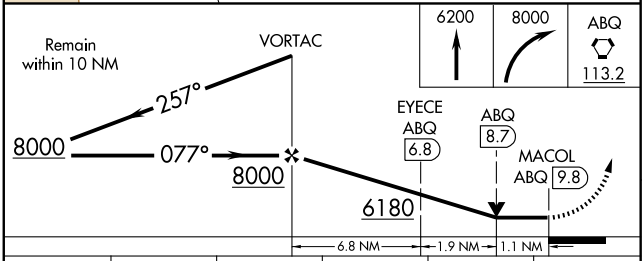
T ASR — For inoperative MALSR, increase S-8 Cat. A visibility to RVR 5000, and Cat. E visibility to 3 miles. Circling NA for Cat. E east of Rwy 17/35. EYECE FIX MINIMUMS: For inoperative MALSR, increase S-8 Cat. D visibility to RVR 6000, and Cat. E visibility to 3 miles.

MALSR

MISSED APPROACH: Climb to 6200 then climbing right turn to 8000 direct ALBUQUERQUE VORTAC and hold (TACAN aircraft continue via ABQ R-272 to AROYO INT/ABQ 15 DME and hold W, RT, 092 inbound).

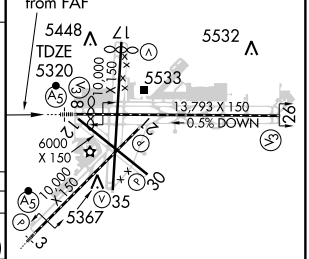
ATIS	ALBUQUERQUE APP CON	ALBUQUERQUE TOWER	GND CON	CLNC DEL
118.0 257.7	123.9 354.1	120.3 351.9	121.9 348.6	119.2 259.3





CATEGORY	A	B	C	D	E
S-8	6180/40	860 (900-¾)	6180-2 860 (900-2)	6180-2¼ 860 (900-2¼)	6180-2½ 860 (900-2½)
CIRCLING	6180-1 825 (900-1)	6180-1¼ 825 (900-1¼)	6180-2½ 825 (900-2½)	6180-2¾ 825 (900-2¾)	6180-3 825 (900-3)
EYECE FIX MINIMUMS					
S-8	5700/24 380 (400-½)			5700/50 380 (400-1)	6180-2½ 860 (900-2½)
CIRCLING	5840-1 485 (500-1)		5900-1½ 545 (600-1½)	5920-2 565 (600-2)	6180-3 825 (900-3)

ELEV 5355 D



TDZ/CL Rwys 3 and 8
HIRL Rwys 3-21 and 8-26
REIL Rwys 17, 26, 30 and 35
MIRL Rwys 12-30 and 17-35

FAF to MAP 9.8 NM					
Knots	60	90	120	150	180
Min:Sec	9:48	6:32	4:54	3:55	3:16

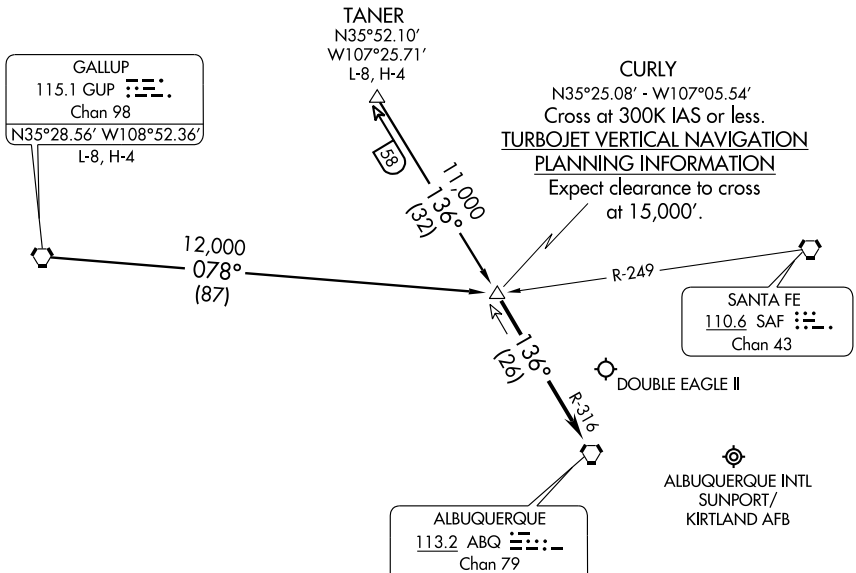
SW-1, 22 OCT 2009 to 19 NOV 2009

CURLY TWO ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
127.4 253.5
ATIS 118.0 257.7



NOTE: This procedure applicable only to turboprop and turbojet aircraft operating at or above 15,000′.

NOTE: Chart not to scale.

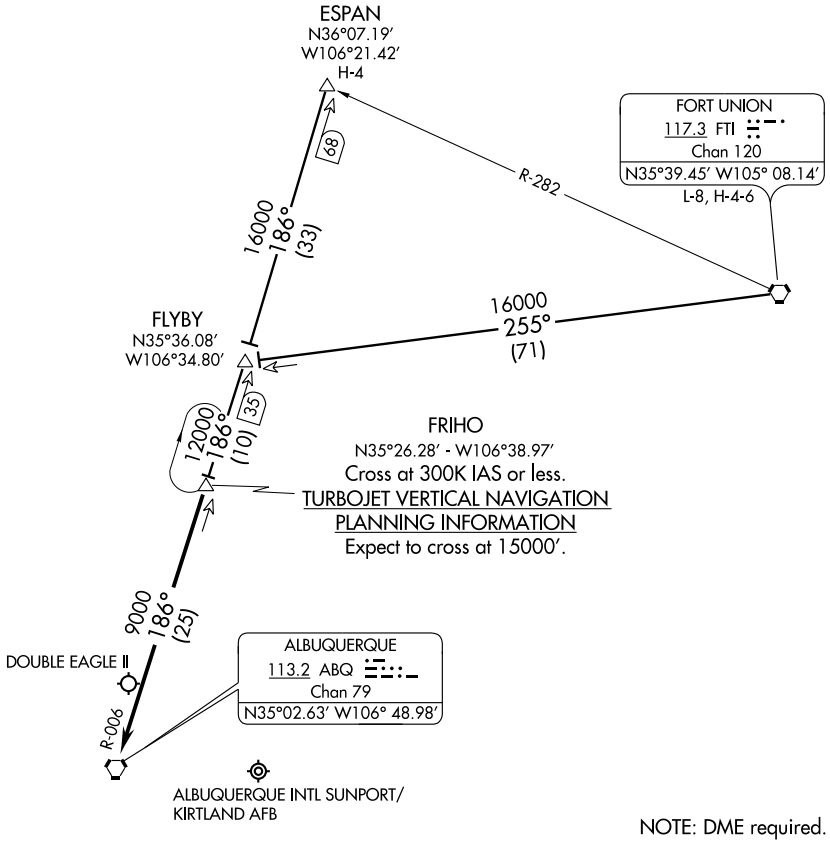
GALLUP TRANSITION (GUP.CURLY2): From over GUP VORTAC via GUP R-078 to CURLY DME fix. Thence....

TANER TRANSITION (TANER.CURLY2): From over TANER INT via ABQ R-316 to CURLY DME fix. Thence....

....From over CURLY DME fix via ABQ R-316 to ABQ VORTAC. Expect vectors to final approach course after passing CURLY DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

FRIHO FOUR ARRIVAL



NOTE: DME required.

NOTE: Chart not to scale.

ESPAN TRANSITION (ESPAN.FRIHO4): From over ESPAN DME fix via ABQ R-006 to FRIHO DME fix, thence....

FORT UNION TRANSITION (FTI.FRIHO4): From over FTI VORTAC via FTI R-255 and ABQ R-006 to FRIHO DME fix, thence....

.... From over FRIHO DME fix via ABQ R-006 to ABQ VORTAC. Expect vectors to final approach course after passing FRIHO DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-AEG	APP CRS	Rwy Idg	7398
110.1	215°	TDZE	5817
		Apt Elev	5837

ILS RWY 22

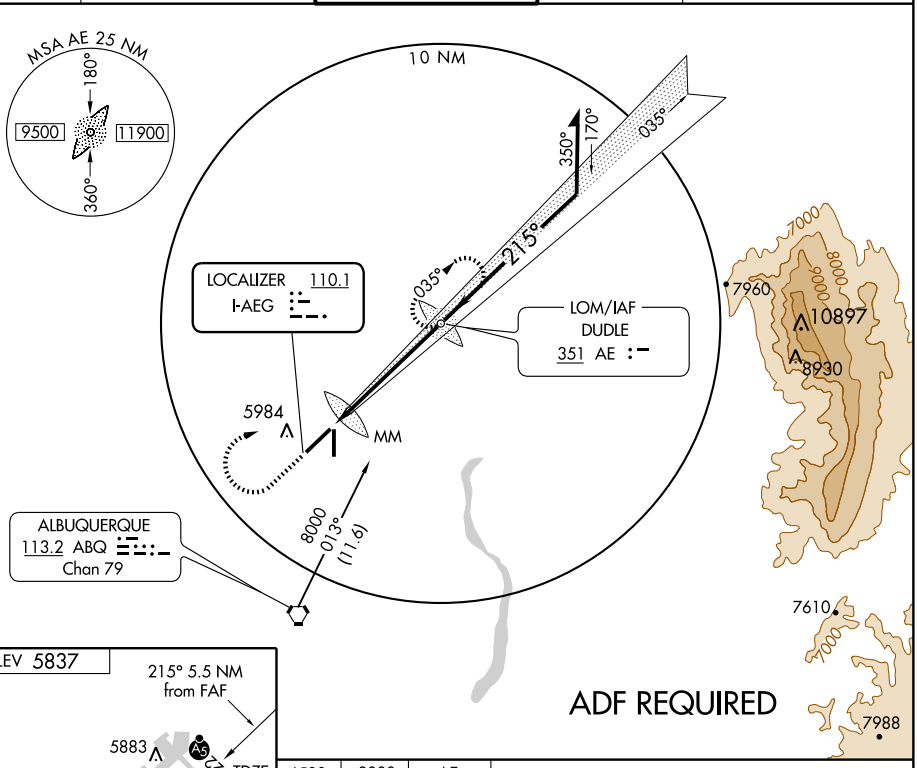
ALBUQUERQUE/ DOUBLE EAGLE II (AEG)

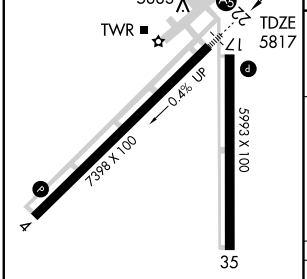
Autopilot coupled approaches not authorized. For inoperative MALSR, increase S-LOC 22 Cat D visibility to 1.

MALSR

MISSED APPROACH: Climb to 6500 then climbing right turn to 8000 direct Dudle LOM and hold.

AWOS-3	ALBUQUERQUE APP CON	DOUBLE EAGLE II TOWER ★	GND CON	ALBUQUERQUE CLNC DEL
119.025	127.4 253.5	120.15 (CTAF) L	121.625	124.8

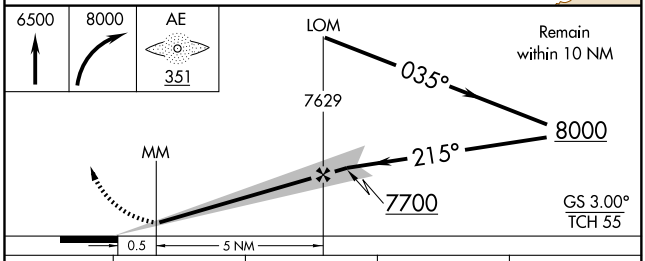




REIL Rwys 17 and 35 L

MIRL Rwys 4-22 and 17-35 L

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-ILS 22	6017-½ 200 (200-½)			
S-LOC 22	6140-½ 323 (400-½)			6140-¾ 323 (400-¾)
CIRCLING	6400-1 563 (600-1)		6400-1½ 563 (600-1½)	6400-2 563 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

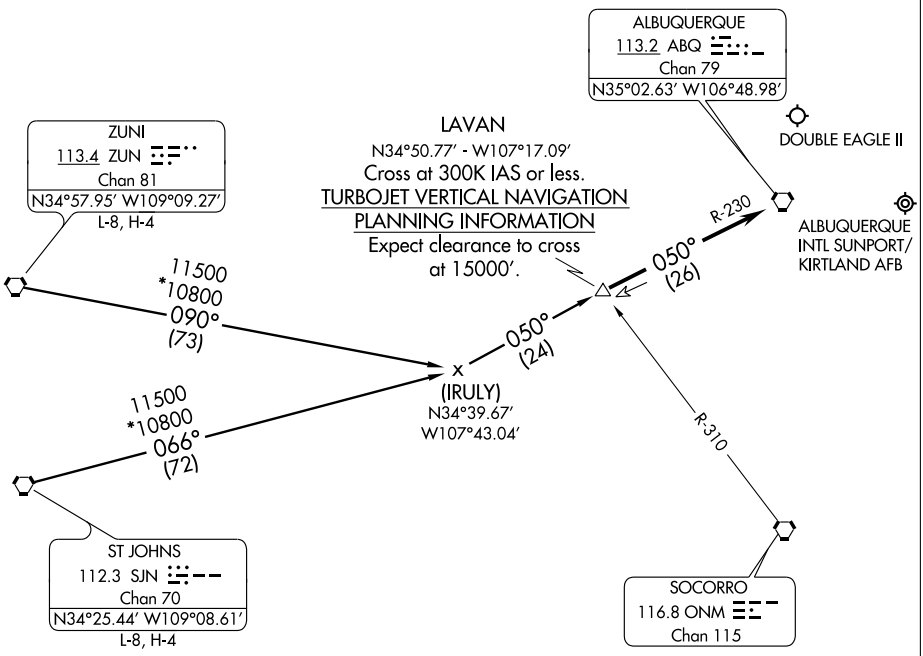
(LAVAN.LAVAN3) 07354

LAVAN THREE ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
123.9 354.1
ALBUQUERQUE TOWER
120.3 351.9
GND CON
121.9 348.6
ATIS
118.0 257.7



NOTE: Chart not to scale.

ST. JOHNS TRANSITION (SJN.LAVAN3): From over SJN VORTAC via SJN R-066 and ABQ R-230 to LAVAN DME/INT. Thence....

ZUNI TRANSITION (ZUN.LAVAN3): From over ZUN VORTAC via ZUN R-090 and ABQ R-230 to LAVAN DME/INT. Thence....

....From over LAVAN fix/INT via ABQ R-230 to ABQ VORTAC. Expect vectors to final approach course after passing LAVAN.

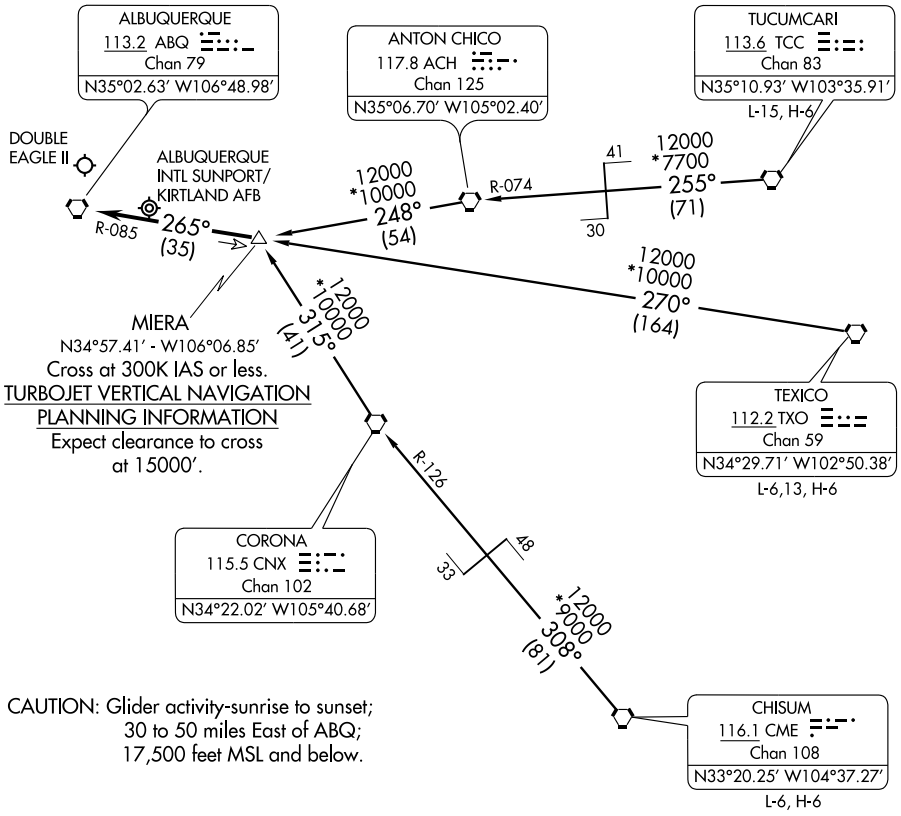
SW-1, 22 OCT 2009 to 19 NOV 2009

MIERA TWO ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
123.9 354.1
ATIS
118.0 257.7



NOTE: Chart not to scale.

CHISUM TRANSITION (CME.MIERA2): From over CME VORTAC via CME R-308 and CNX R-126 to CNX VORTAC, then via CNX R-315 to MIERA DME fix. Thence....

TEXICO TRANSITION (TXO.MIERA2): From over TXO VORTAC via TXO R-270 and ABQ R-085 to MIERA DME fix. Thence....

TUCUMCARI TRANSITION (TCC.MIERA2): From over TCC VORTAC via TCC R-255 and ACH R-074 to ACH VORTAC, then via ACH R-248 to MIERA DME fix. Thence....

....From over MIERA DME fix via ABQ R-085 to ABQ VORTAC. Expect vectors to final approach course after passing MIERA DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7398
215°	TDZE	5817
	Apt Elev	5837

RNAV (GPS) RWY 22

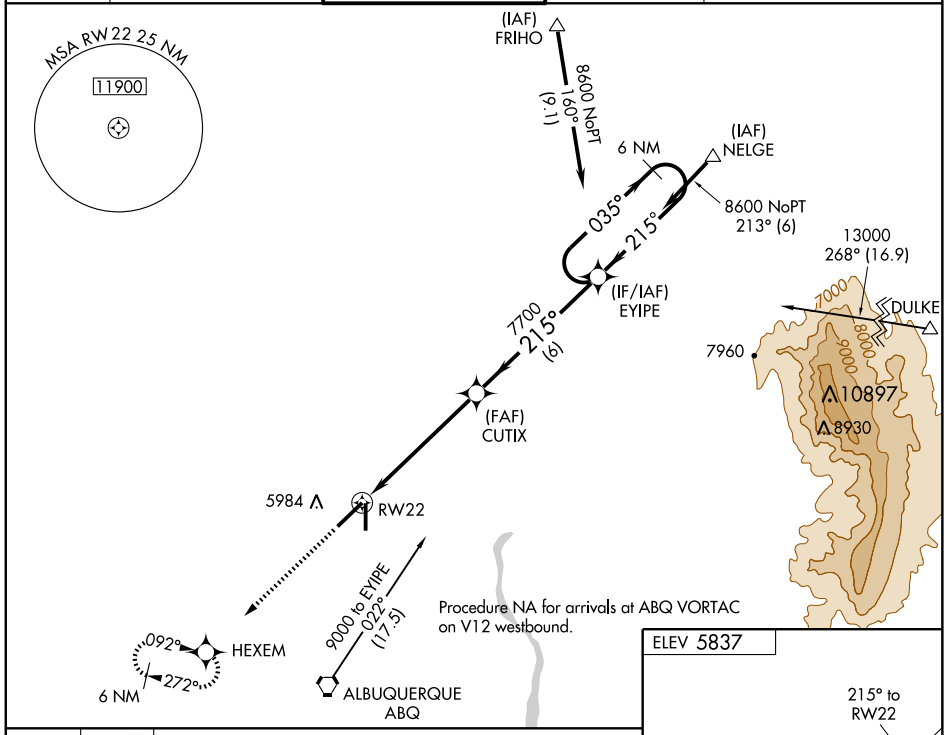
ALBUQUERQUE/DOUBLE EAGLE II (AEG)

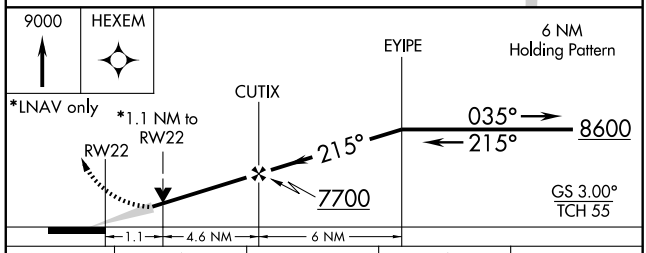
T NA W — Baro-VNAV NA below -26°C (-15°F). DME/DME RNP-0.3 NA. For inoperative MALSR, increase LNAV Cat. D visibility to 1¼ and LNAV/VNAV Cat D to 1.

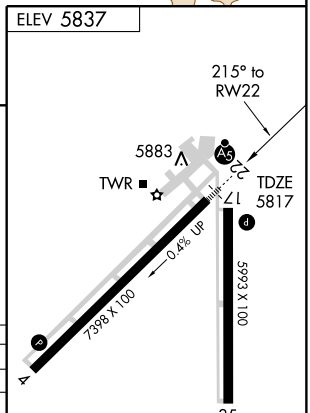
MALSR

MISSED APPROACH: Climb to 9000 direct HEXEM WP and hold.

AWOS-3	ALBUQUERQUE APP CON	DOUBLE EAGLE II TOWER *	GND CON	ALBUQUERQUE CLNC DEL
119.025	127.4 253.5	120.15 (CTAF) L	121.625	124.8







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	6140-½ 323 (400-½)			6140-¾ 323 (400-¾)
LNAV MDA	6200-½ 383 (400-½)			6200-1 383 (400-1)
CIRCLING	6400-1 563 (600-1)		6400-1½ 563 (600-1½)	6400-2 563 (600-2)

REIL Rwys 17 and 35 L
MIRL Rwys 4-22 and 17-35 L

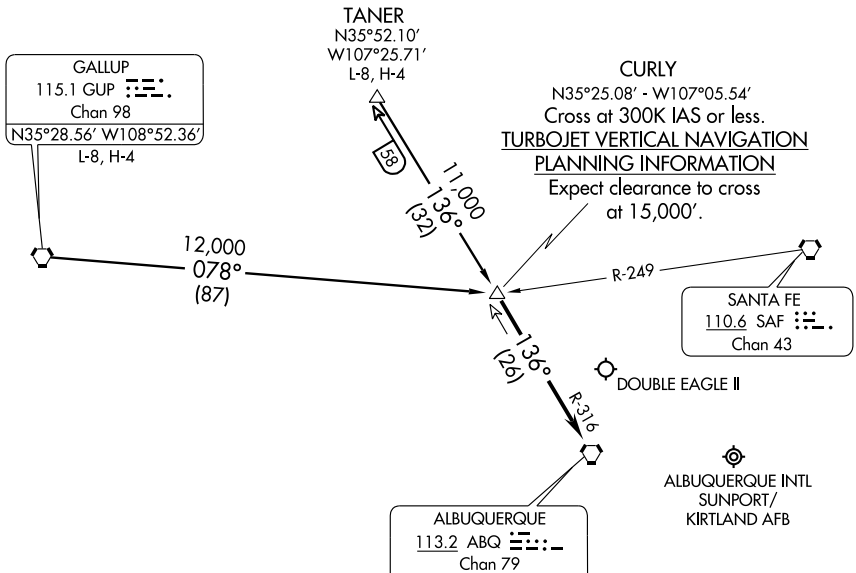
SW-1, 22 OCT 2009 to 19 NOV 2009

CURLY TWO ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
127.4 253.5
ATIS 118.0 257.7



NOTE: This procedure applicable only to turboprop and turbojet aircraft operating at or above 15,000′.

NOTE: Chart not to scale.

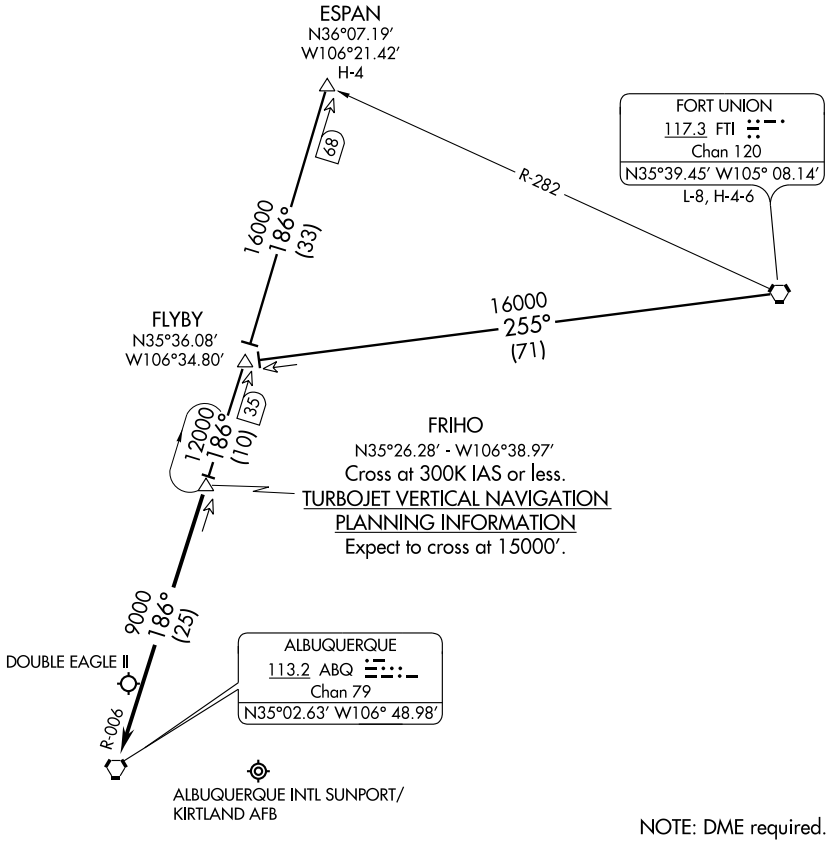
GALLUP TRANSITION (GUP.CURLY2): From over GUP VORTAC via GUP R-078 to CURLY DME fix. Thence....

TANER TRANSITION (TANER.CURLY2): From over TANER INT via ABQ R-316 to CURLY DME fix. Thence....

....From over CURLY DME fix via ABQ R-316 to ABQ VORTAC. Expect vectors to final approach course after passing CURLY DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

FRIHO FOUR ARRIVAL



NOTE: DME required.

NOTE: Chart not to scale.

ESPAN TRANSITION (ESPAN.FRIHO4): From over ESPAN DME fix via ABQ R-006 to FRIHO DME fix, thence....

FORT UNION TRANSITION (FTI.FRIHO4): From over FTI VORTAC via FTI R-255 and ABQ R-006 to FRIHO DME fix, thence....

.... From over FRIHO DME fix via ABQ R-006 to ABQ VORTAC. Expect vectors to final approach course after passing FRIHO DME fix.

SW-1, 22 OCT 2009 to 19 NOV 2009

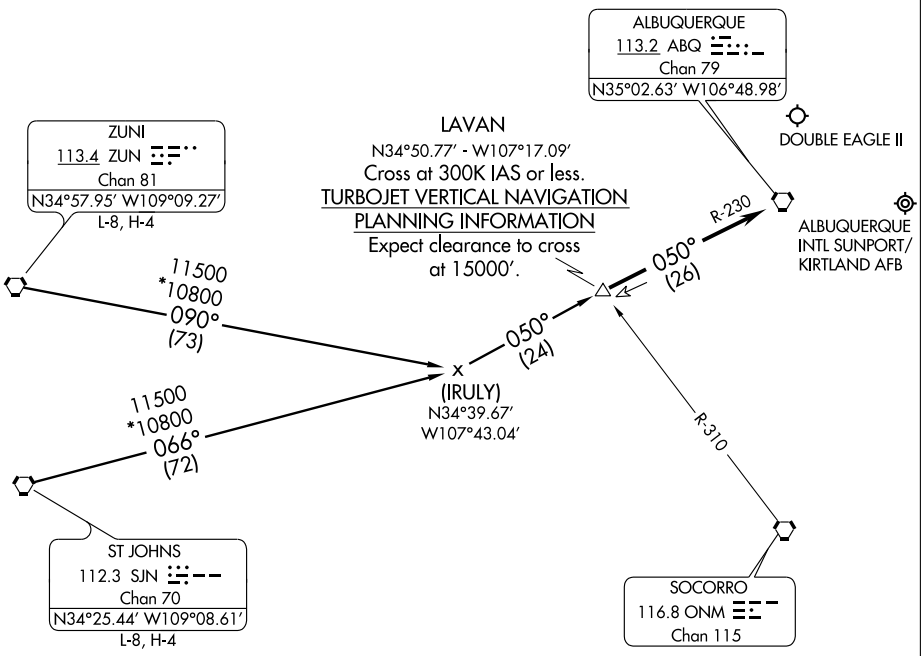
(LAVAN.LAVAN3) 07354

LAVAN THREE ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
123.9 354.1
ALBUQUERQUE TOWER
120.3 351.9
GND CON
121.9 348.6
ATIS
118.0 257.7



NOTE: Chart not to scale.

ST. JOHNS TRANSITION (SJN.LAVAN3): From over SJN VORTAC via SJN R-066 and ABQ R-230 to LAVAN DME/INT. Thence....

ZUNI TRANSITION (ZUN.LAVAN3): From over ZUN VORTAC via ZUN R-090 and ABQ R-230 to LAVAN DME/INT. Thence....

....From over LAVAN fix/INT via ABQ R-230 to ABQ VORTAC. Expect vectors to final approach course after passing LAVAN.

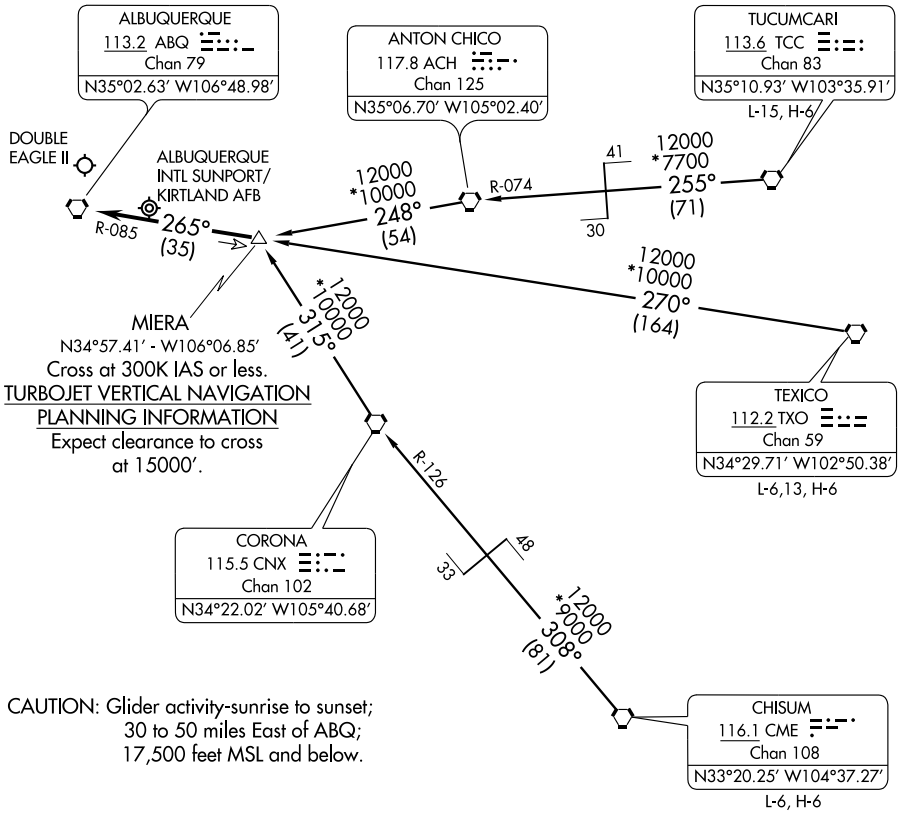
SW-1, 22 OCT 2009 to 19 NOV 2009

MIERA TWO ARRIVAL

ST-12 (FAA)

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE APP CON
123.9 354.1
ATIS
118.0 257.7



NOTE: Chart not to scale.

CHISUM TRANSITION (CME.MIERA2): From over CME VORTAC via CME R-308 and CNX R-126 to CNX VORTAC, then via CNX R-315 to MIERA DME fix. Thence....

TEXICO TRANSITION (TXO.MIERA2): From over TXO VORTAC via TXO R-270 and ABQ R-085 to MIERA DME fix. Thence....

TUCUMCARI TRANSITION (TCC.MIERA2): From over TCC VORTAC via TCC R-255 and ACH R-074 to ACH VORTAC, then via ACH R-248 to MIERA DME fix. Thence....

....From over MIERA DME fix via ABQ R-085 to ABQ VORTAC. Expect vectors to final approach course after passing MIERA DME fix.

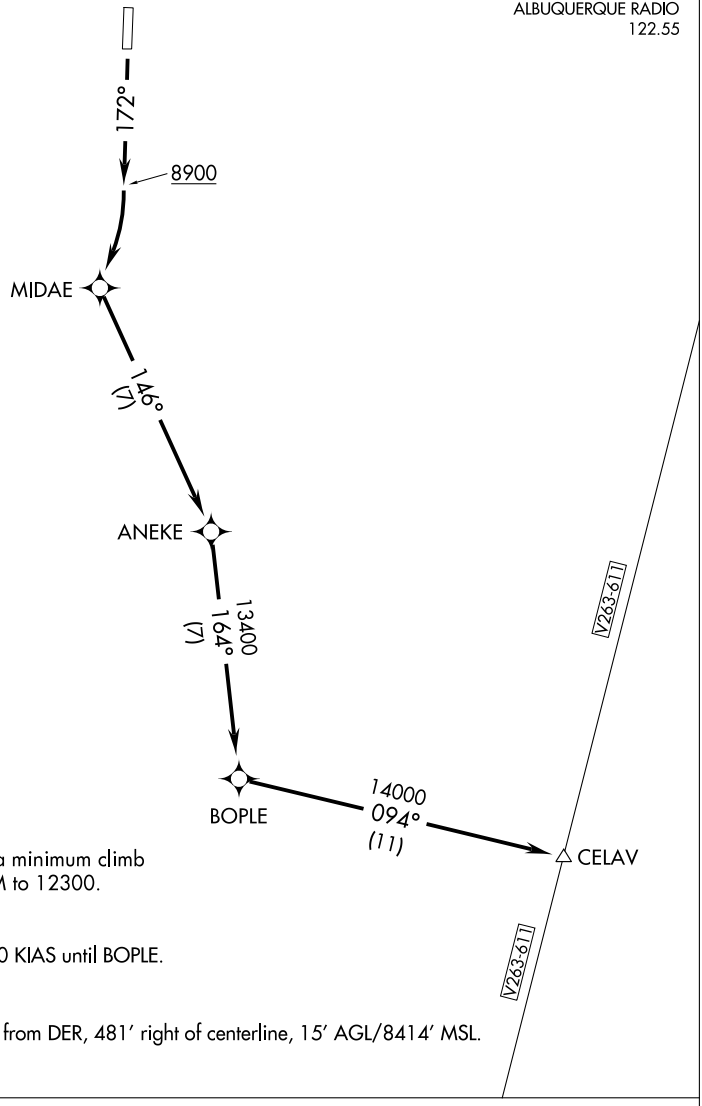
SW-1, 22 OCT 2009 to 19 NOV 2009

(ANEKE2.CELAV) 08213 SL-9482 (FAA)

ANEKE TWO DEPARTURE (RNAV) (OBSTACLE)

ANGEL FIRE (AXX)
ANGEL FIRE, NEW MEXICO

AWOS-3 118.025
ALBUQUERQUE CENTER
132.8 346.35
ALBUQUERQUE RADIO
122.55



SW-1, 22 OCT 2009 to 19 NOV 2009

TAKE-OFF MINIMUMS
Rwy 17: Standard with a minimum climb of 526′ per NM to 12300.
Rwy 35: NA- obstacles.

NOTE: Do not exceed 250 KIAS until BOPLE.
NOTE: GPS required.
NOTE: RNAV 1
NOTE: Rwy 17, road 74′ from DER, 481′ right of centerline, 15′ AGL/8414′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Climb heading 172° to 8900, then climbing right turn to 14000 direct MIDAE, then via 146° track to ANEKE, then via 164° track to BOPLE, then via 094° track to CELAV.

ANGEL FIRE, NEW MEXICO

AL-9482 (FAA)

APP CRS		
174°	Rwy Idg	8900
	TDZE	8336
	Apt Elev	8380

RNAV (GPS) RWY 17

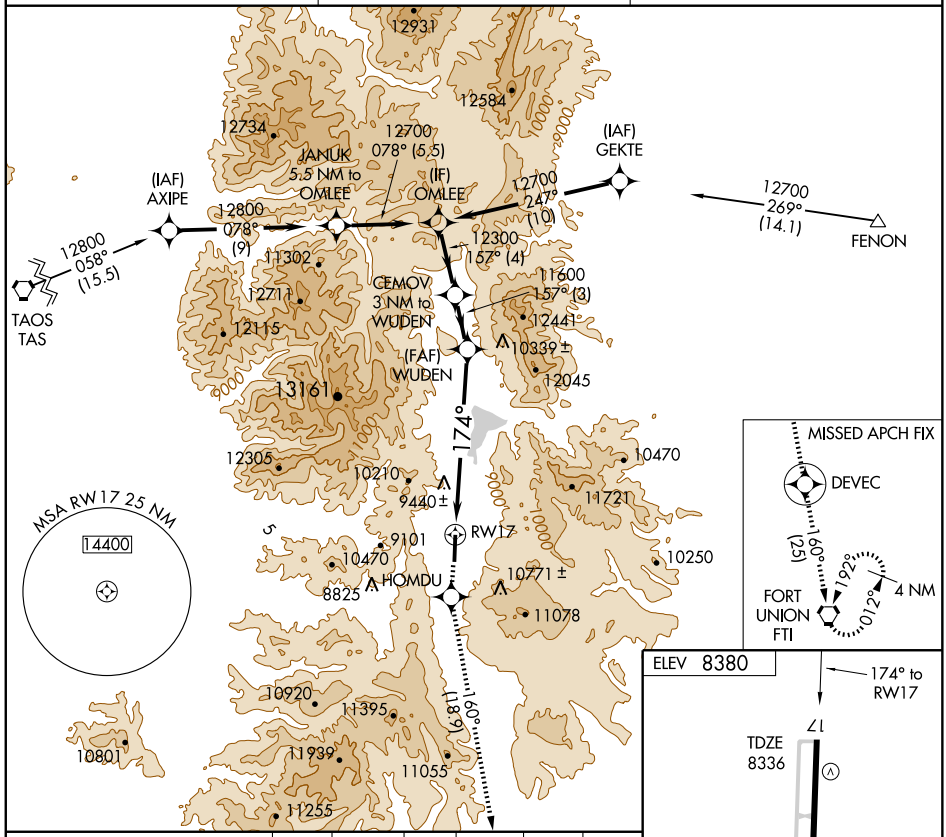
ANGEL FIRE (AXX)

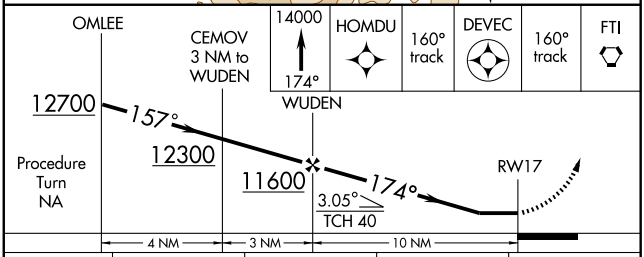
T
NA

If local altimeter setting not received, procedure NA.
DME/DME RNP-0.3 NA.
Procedure NA at night.

MISSED APPROACH: Climb to 14000 via 174° course to HOMDU and via 160° track to DEVEC and 160° track to FTI VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
118.025	132.8 346.35	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	9960-1¼ 1624 (1600-1¼)	9960-1½ 1624 (1600-1½)	9960-3 1624 (1600-3)	NA
CIRCLING	NA			

MIRL Rwy 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

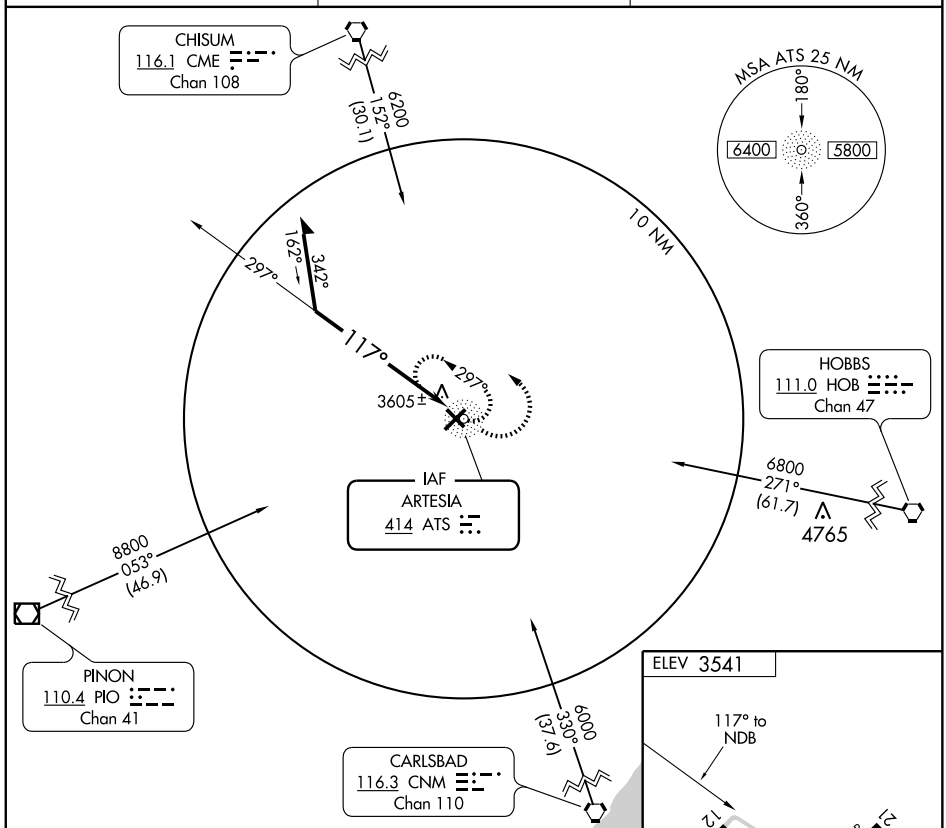
NDB ATS	APP CRS		
414	117°	Rwy Idg	5390
		TDZE	3534
		Apt Elev	3541

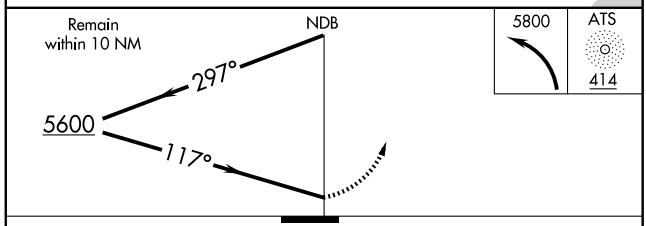
NDB RWY 12
ARTESIA MUNI (ATS)

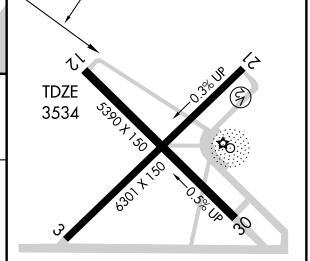
NA

MISSED APPROACH: Climbing left turn to 5800 in ATS NDB holding pattern.

AWOS-3	ROSWELL APP CON★	UNICOM
126.725	119.6 239.0	123.075 (CTAF) L







CATEGORY	A	B	C	D
S-12	4180-1	646 (700-1)	4180-1¾ 646 (700-1¾)	4180-2 646 (700-2)
CIRCLING	4180-1	639 (700-1)	4180-1¾ 639 (700-1¾)	4180-2 639 (700-2)

MIRL Rwys 3-21 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

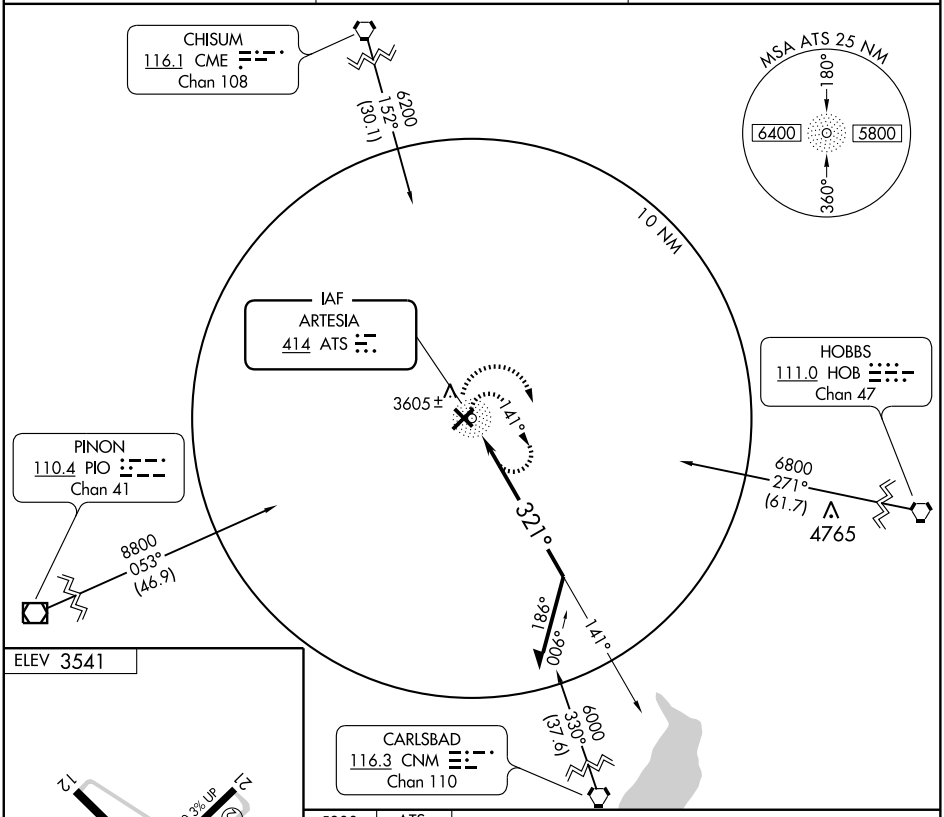
NDB ATS	APP CRS		
414	321°	Rwy Idg	5390
		TDZE	3525
		Apt Elev	3541

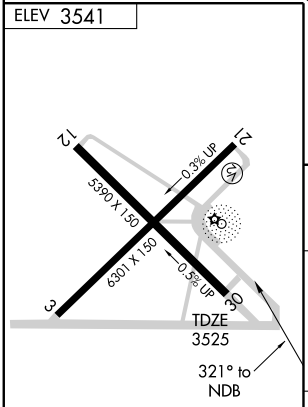
NDB RWY 30
ARTESIA MUNI (ATS)

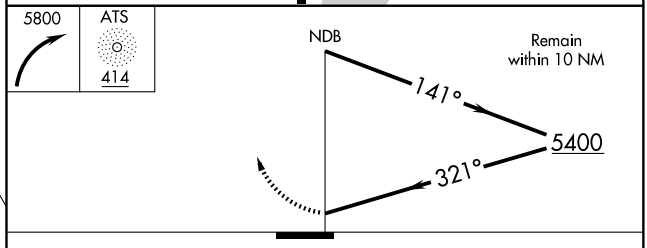
⚠ NA

MISSED APPROACH: Climbing right turn to 5800 in ATS NDB holding pattern.

AWOS-3	ROSWELL APP CON ★	UNICOM
126.725	119.6 239.0	123.075 (CTAF) L







CATEGORY	A	B	C	D
S-30	4000-1 475 (500-1)		4000-1¼ 475 (500-1¼)	4000-1½ 475 (500-1½)
CIRCLING	4000-1 459 (500-1)		4000-1½ 459 (500-1½)	4100-2 559 (600-2)

MIRL Rwys 3-21 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

ARTESIA, NEW MEXICO

AL-5864 (FAA)

APP CRS	Rwy Idg	5390
126°	TDZE	3534
	Apt Elev	3541

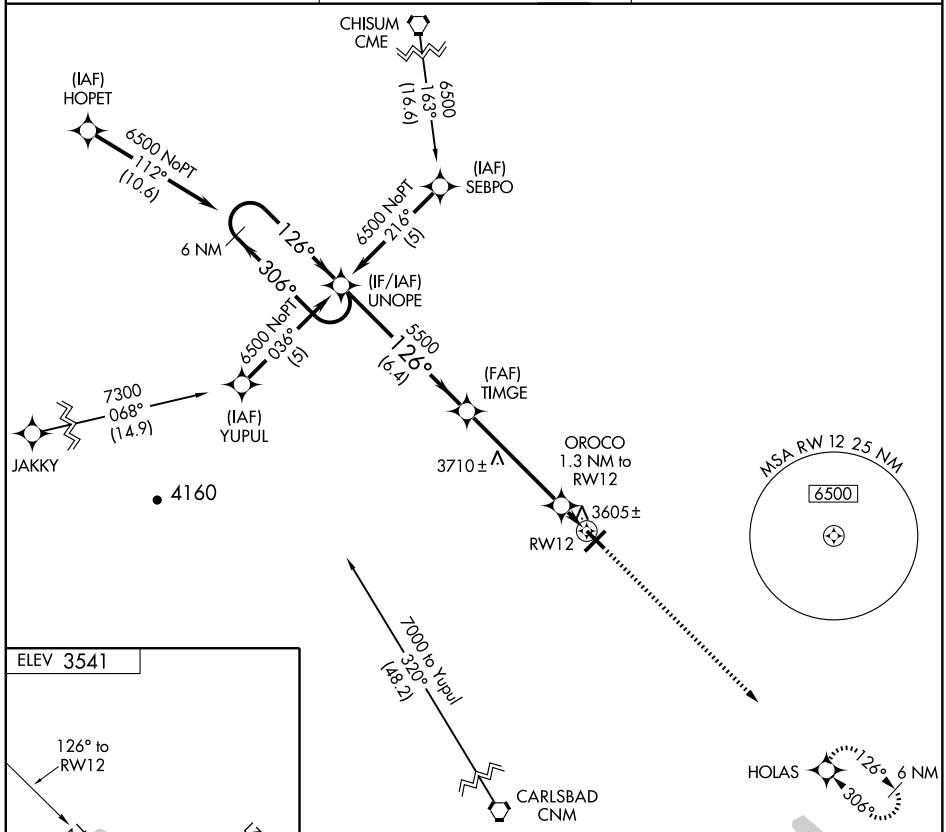
RNAV (GPS) RWY 12

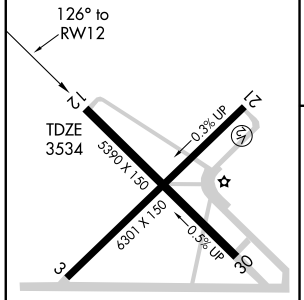
ARTESIA MUNI (ATS)

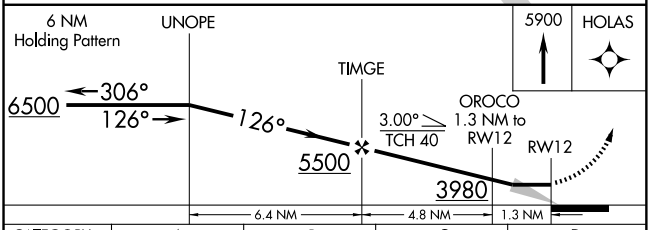
DME/DME RNP- 0.3 NA
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 5900 direct HOLAS and hold.

AWOS-3	ROSWELL APP CON*	UNICOM
126.725	119.6 239.0	123.075 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3900-1 366 (400-1)			3900-1¼ 366 (400-1¼)
CIRCLING	3940-1 399 (400-1)	4000-1 459 (500-1)	4000-1½ 459 (500-1½)	4100-2 559 (600-2)

MIRL Rwys 3-21 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

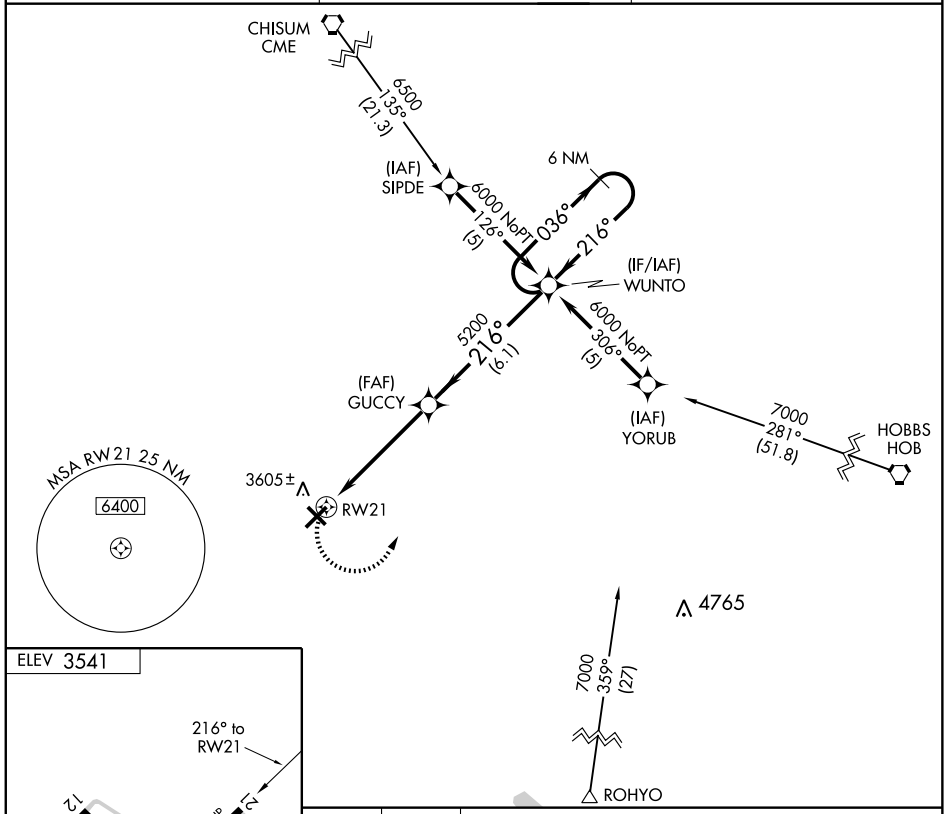
APP CRS	Rwy Idg	6301
216°	TDZE	3522
	Apt Elev	3541

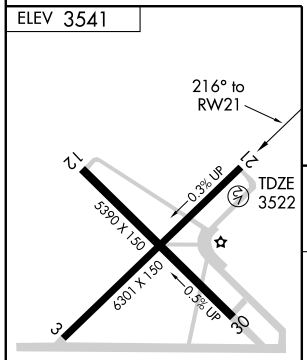
RNAV (GPS) RWY 21
ARTESIA MUNI (ATS)

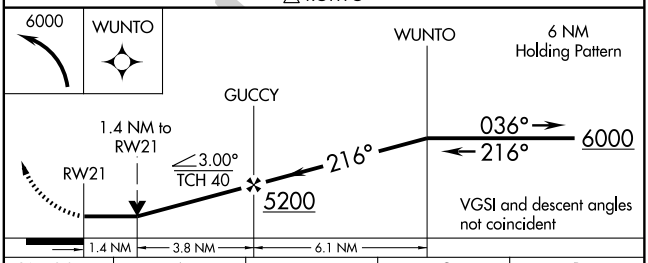
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing left turn to 6000 direct WUNTO and hold.

AWOS-3	ROSWELL APP CON★	UNICOM
126.725	119.6 239.0	123.075 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4000-1 478 (500-1)		4000-1¼ 478 (500-1¼)	4000-1½ 478 (500-1½)
CIRCLING	4000-1 459 (500-1)		4000-1½ 459 (500-1½)	4100-2 559 (600-2)

MIRL Rwys 3-21 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

ARTESIA, NEW MEXICO

AL-5864 (FAA)

APP CRS	Rwy Idg	5390
306°	TDZE	3525
	Apt Elev	3541

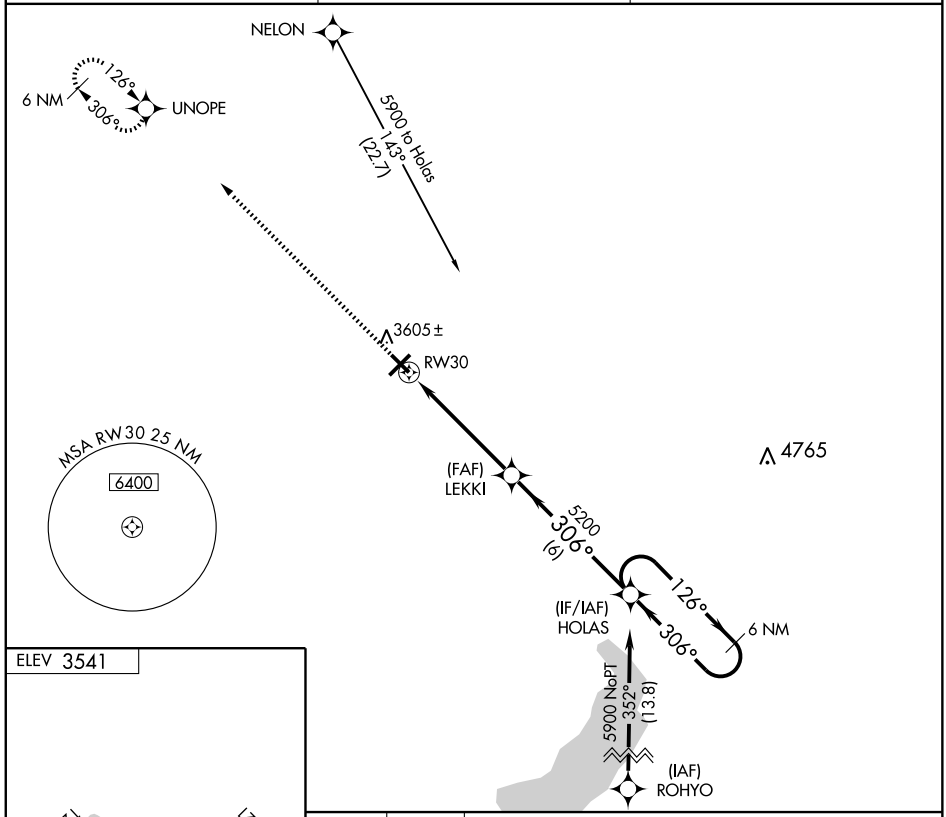
RNAV (GPS) RWY 30

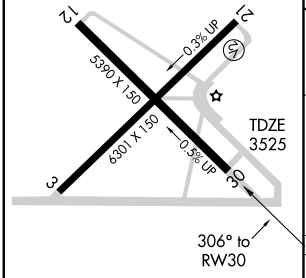
ARTESIA MUNI (ATS)

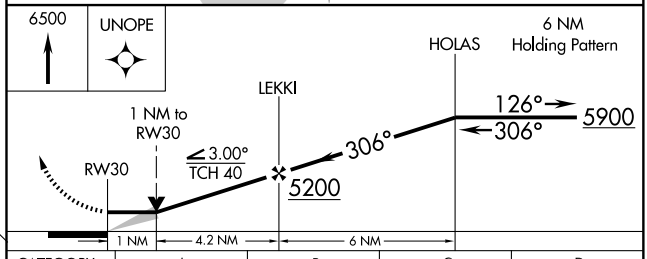
DME/DME RNP- 0.3 NA
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6500 direct UNOPE and hold.

AWOS-3	ROSWELL APP CON★	UNICOM
126.725	119.6 239.0	123.075 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3880-1 355 (400-1)			3880-1¼ 355 (400-1¼)
CIRCLING	3940-1 399 (400-1)	4000-1 459 (500-1)	4000-1½ 459 (500-1½)	4100-2 559 (600-2)

MIRL Rwys 3-21 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6601
214°	TDZE	5180
	Apt Elev	5194

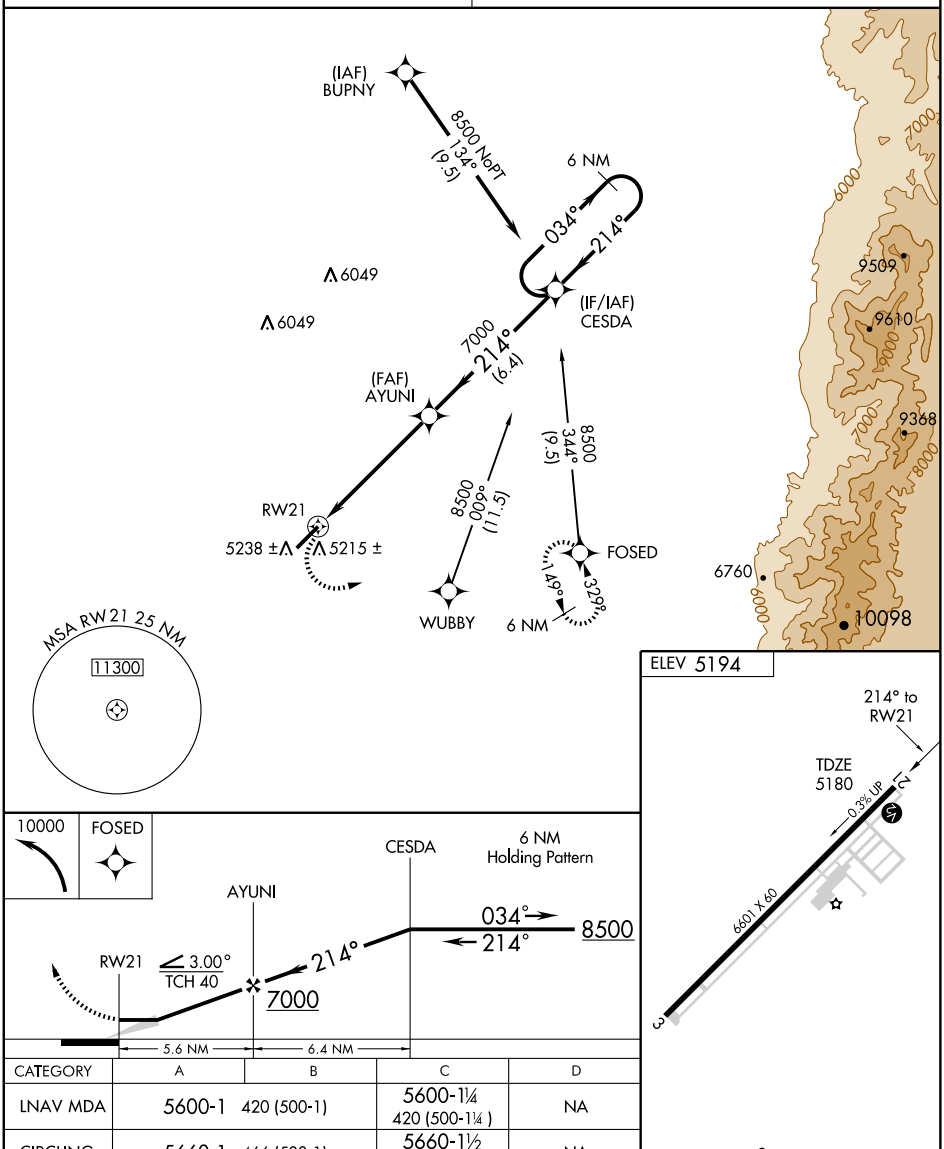
RNAV (GPS) RWY 21

BELEN/ALEXANDER MUNI (E80)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Use Albuquerque, NM altimeter setting.

MISSED APPROACH: Climbing left turn to 10000 direct FOSED WP and hold.

ALBUQUERQUE APP CON	CTAF
123.9 354.1	122.9 L



CATEGORY	A	B	C	D
LNAV MDA	5600-1	420 (500-1)	5600-1¼ 420 (500-1¼)	NA
CIRCLING	5660-1	466 (500-1)	5660-1½ 466 (500-1½)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC ONM	APP CRS	Rwy Idg	N/A
116.8	345°	TDZE	N/A
Chan 115		Apt Elev	5194

VOR/DME-A

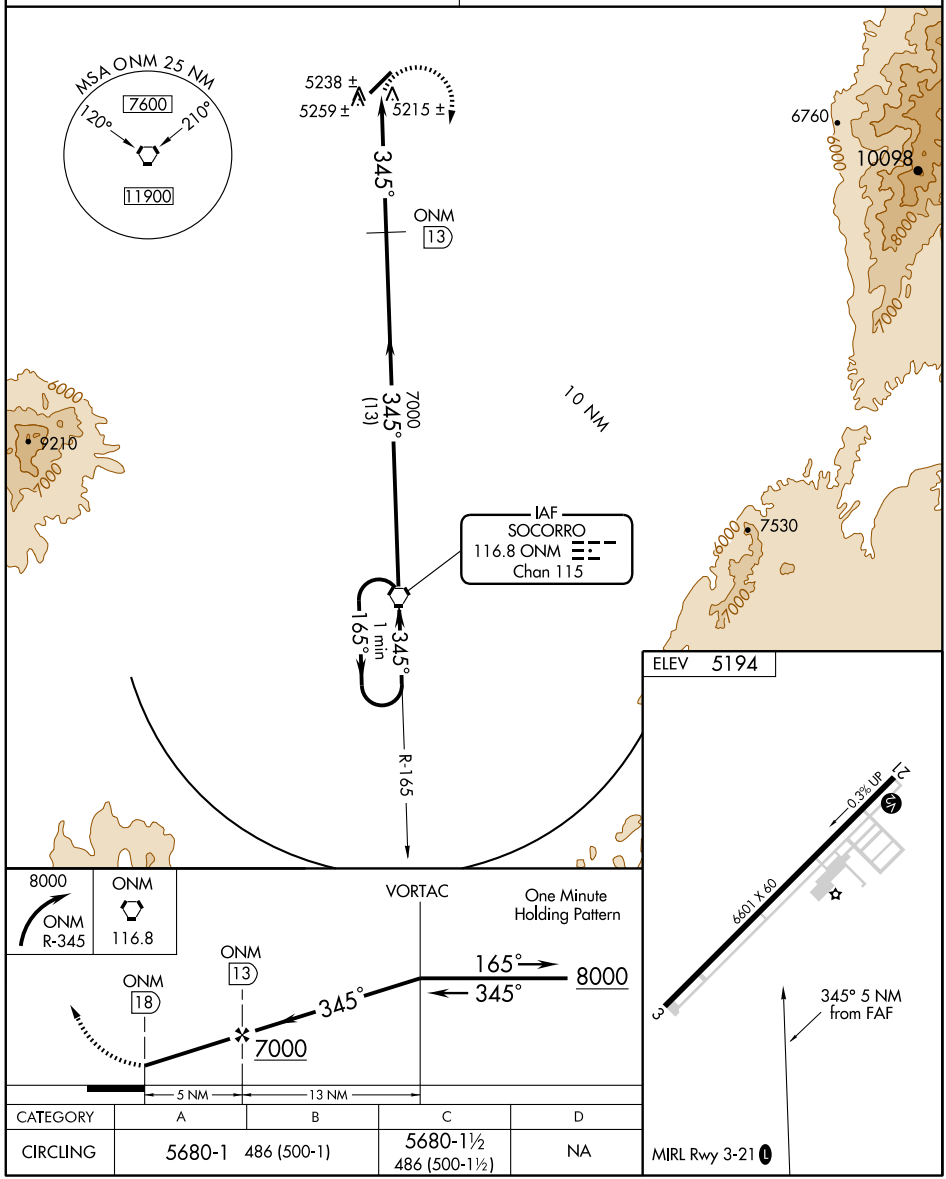
BELEN/ALEXANDER MUNI (E80)

NA

Use Albuquerque, NM altimeter setting.

MISSED APPROACH: Climbing right turn to 8000 via ONM R-345 to ONM VORTAC and hold.

ALBUQUERQUE APP CON	CTAF
123.9 354.1	122.9 L



CATEGORY	A	B	C	D
CIRCLING	5680-1	486 (500-1)	5680-1½ 486 (500-1½)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-CVD	APP CRS	Rwy Idg	7854
111.9	034°	TDZE	3295
		Apt Elev	3295

ILS RWY 3

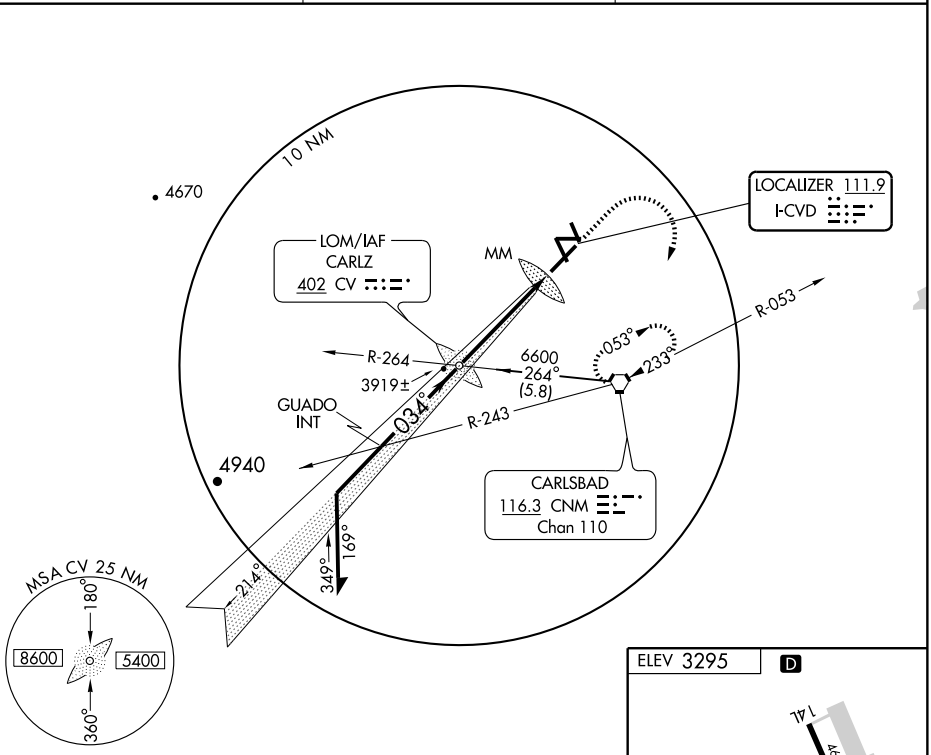
CARLSBAD/CAVERN CITY AIR TERMINAL (CNM)

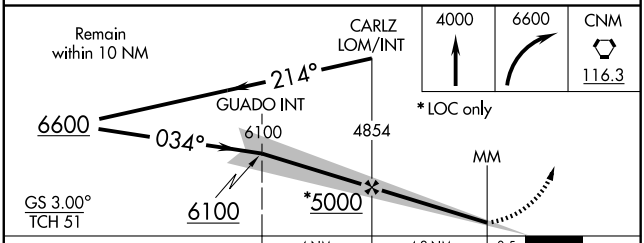
NA

MALSR

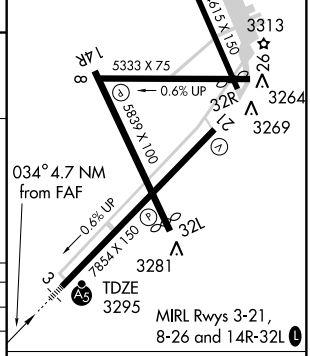
MISSED APPROACH: Climb to 4000 then climbing right turn to 6600 direct CNM VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	135.875 292.15	122.95 (CTAF) L





CATEGORY	A	B	C	D
S-ILS 3	3495-½	200 (200-½)		
S-LOC 3	3940-½	645 (700-½)	3940-1¼ 645 (700-1¼)	3940-1½ 645 (700-1½)
CIRCLING	3940-1	645 (700-1)	3940-1¾ 645 (700-1¾)	3940-2 645 (700-2)



FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5839
144°	TDZE	3270
	Apt Elev	3295

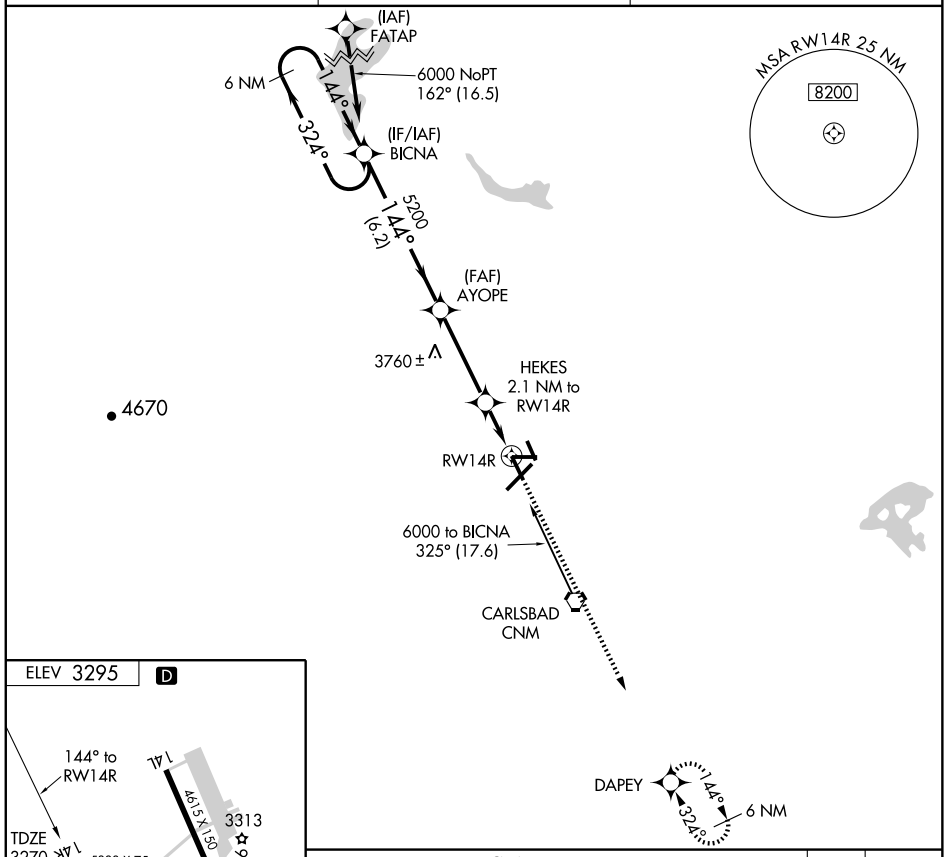
RNAV (GPS) RWY 14R

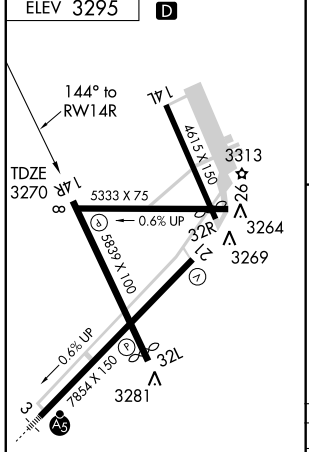
CARLSBAD/ CAVERN CITY AIR TERMINAL (CNM)

NA — GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

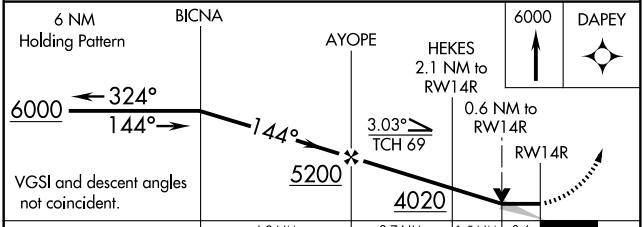
MISSED APPROACH: Climb to 6000 direct DAPEY WP and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	135.875 292.15	122.95 (CTAF) L





MIRL Rwys 3-21, 8-26 and 14R-32L L



CATEGORY	A	B	C	D
LNAV MDA	3580-1 310 (300-1)			
CIRCLING	3680-1 385 (400-1)	3760-1 465 (500-1)	3760-1½ 465 (500-1½)	3860-2 565 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

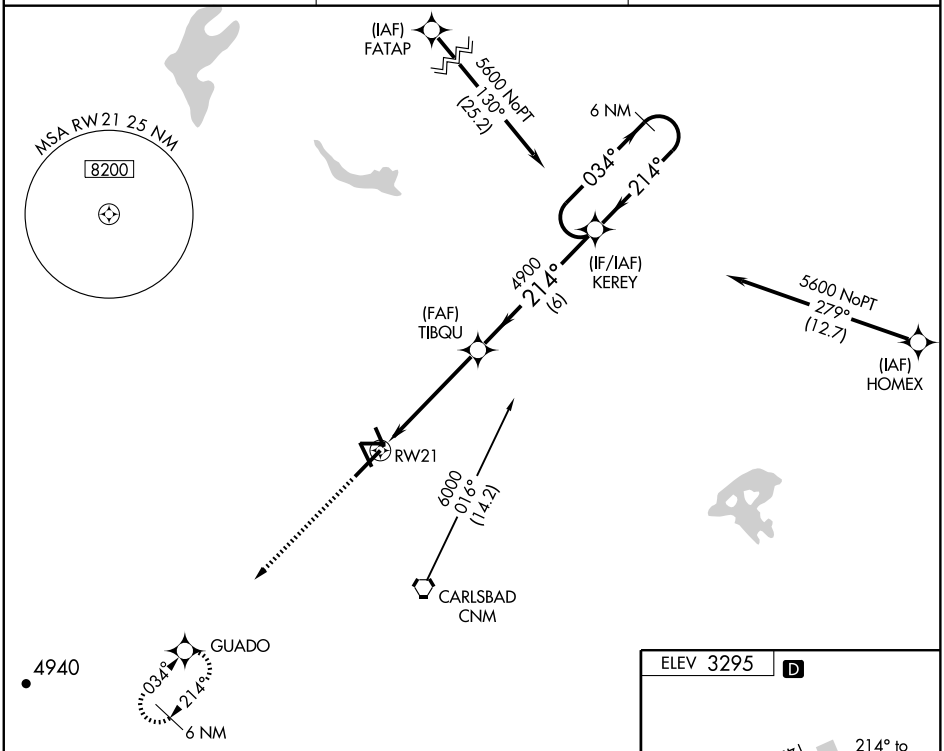
APP CRS	Rwy Idg	7854
214°	TDZE	3264
	Apt Elev	3295

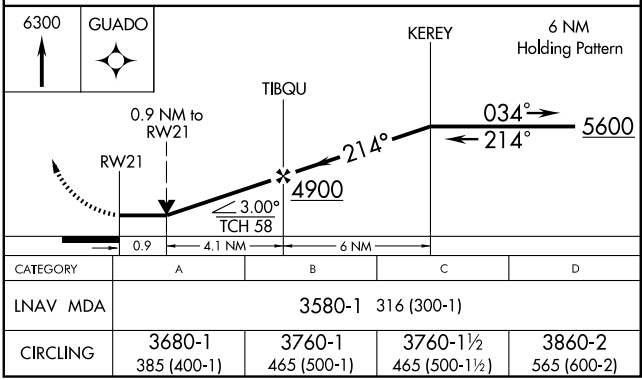
RNAV (GPS) RWY 21

CARLSBAD/ CAVERN CITY AIR TERMINAL (CNM)

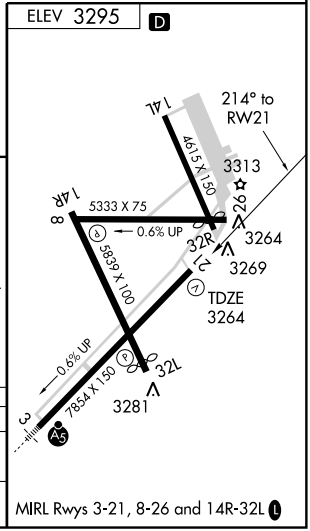
NA	MISSED APPROACH: Climb to 6300 direct GUADO WP and hold.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.	

ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	135.875 292.15	122.95 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	3580-1 316 (300-1)			
CIRCLING	3680-1 385 (400-1)	3760-1 465 (500-1)	3760-1½ 465 (500-1½)	3860-2 565 (600-2)



MIRL Rwys 3-21, 8-26 and 14R-32L L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5454
324°	TDZE	3268
	Apt Elev	3295

RNAV (GPS) RWY 32L

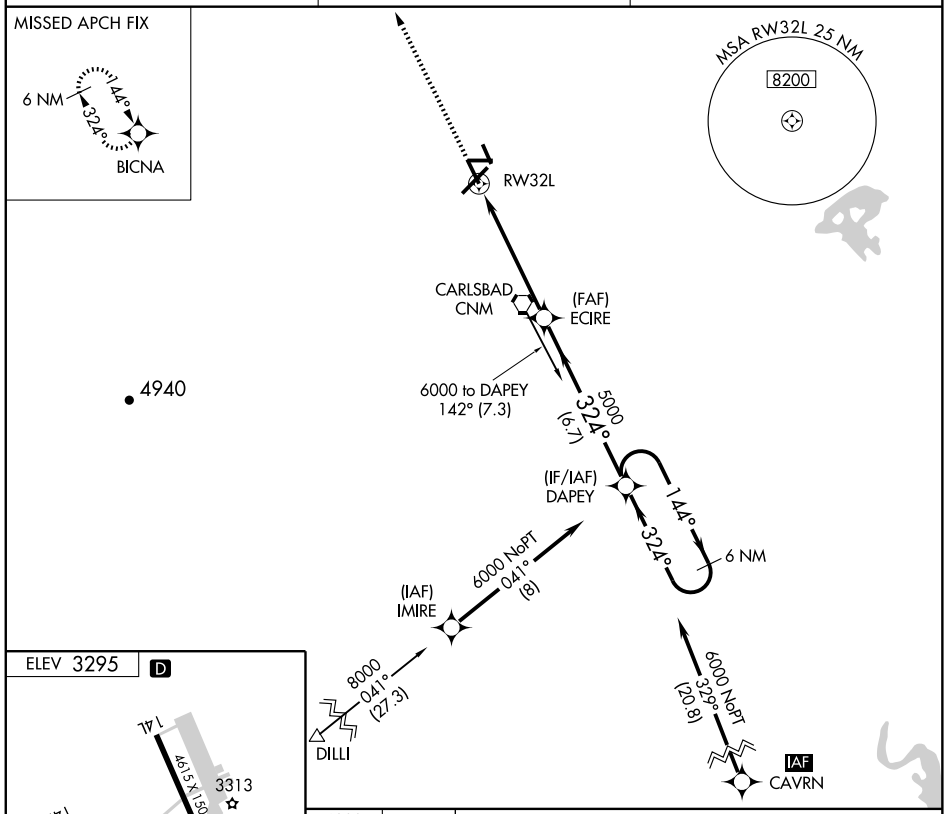
CARLSBAD/ CAVERN CITY AIR TERMINAL (CNM)

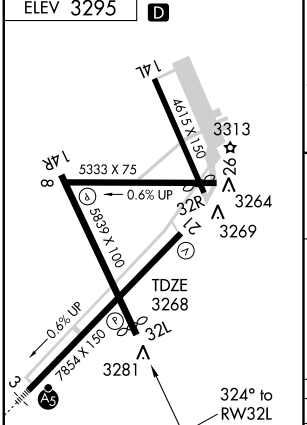
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
IAF ARM APPROACH MODE PRIOR TO IAF.

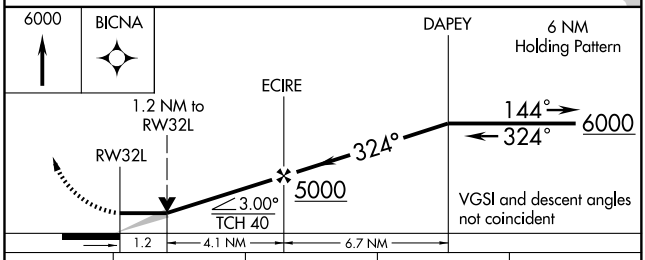
MISSED APPROACH: Climb to 6000 direct BICNA WP and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	135.875 292.15	122.95 (CTAF) L

MISSED APCH FIX







CATEGORY	A	B	C	D
LNAV MDA	3680-1 412 (400-1)		3680-1¼ 412 (400-1¼)	
CIRCLING	3680-1 385 (400-1)	3760-1 465 (500-1)	3760-1½ 465 (500-1½)	3860-2 565 (600-2)

MIRL Rwys 3-21, 8-26 and 14R-32L L

SW-1, 22 OCT 2009 to 19 NOV 2009

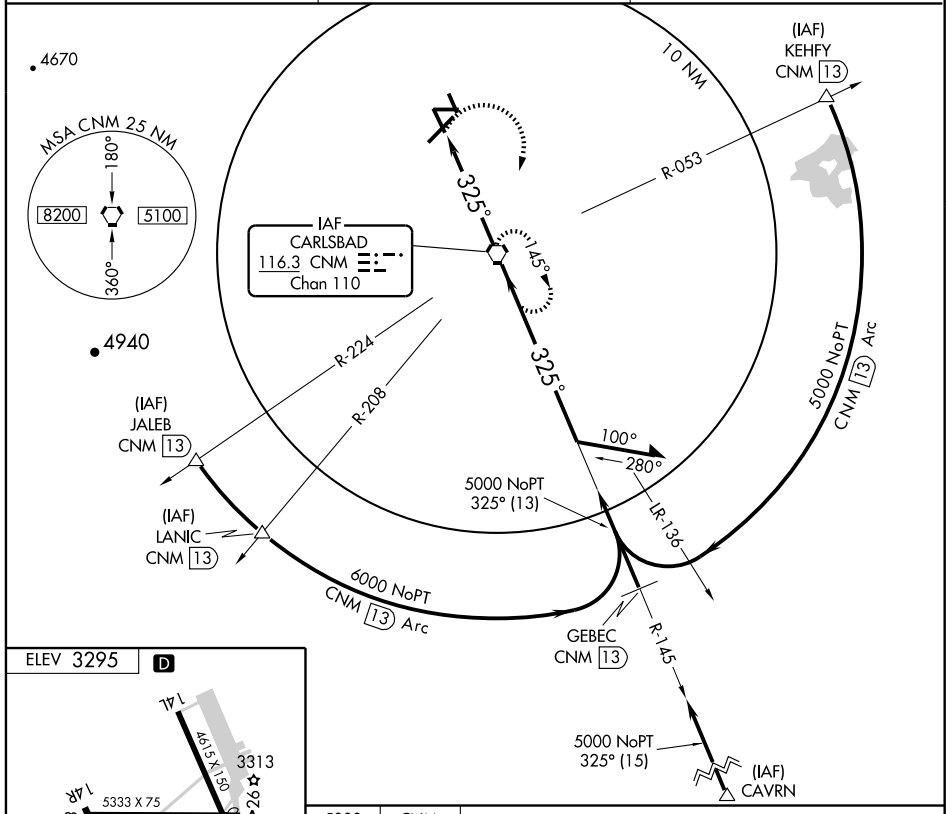
VORTAC CNM	APP CRS	Rwy Idg	5454
116.3	325°	TDZE	3268
Chan 110		Apt Elev	3295

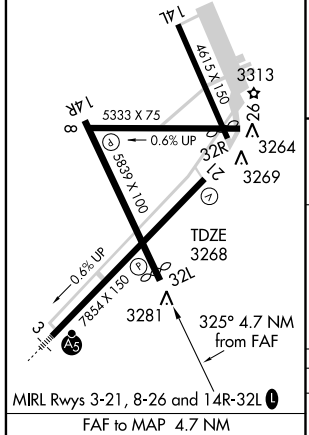
VOR RWY 32L

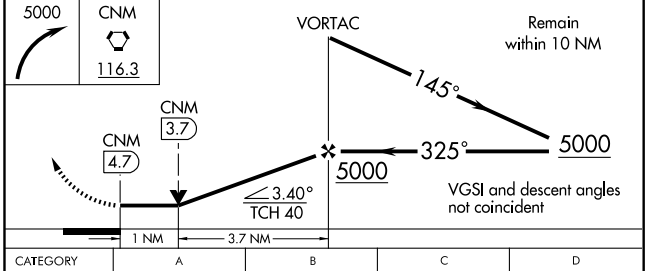
CARLSBAD/ CAVERN CITY AIR TERMINAL (CNM)

MISSED APPROACH: Climbing right turn to 5000 direct CNM VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	135.875 292.15	122.95 (CTAF) L







FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

CATEGORY	A	B	C	D
S-32L	3680-1 412 (400-1)		3680-1¼ 412 (400-1¼)	
CIRCLING	3680-1 385 (400-1)	3760-1 465 (500-1)	3760-1½ 465 (500-1½)	3860-2 565 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

NDB CAO	APP CRS		
332	034°	Rwy Idg	5920
		TDZE	4965
		Apt Elev	4965

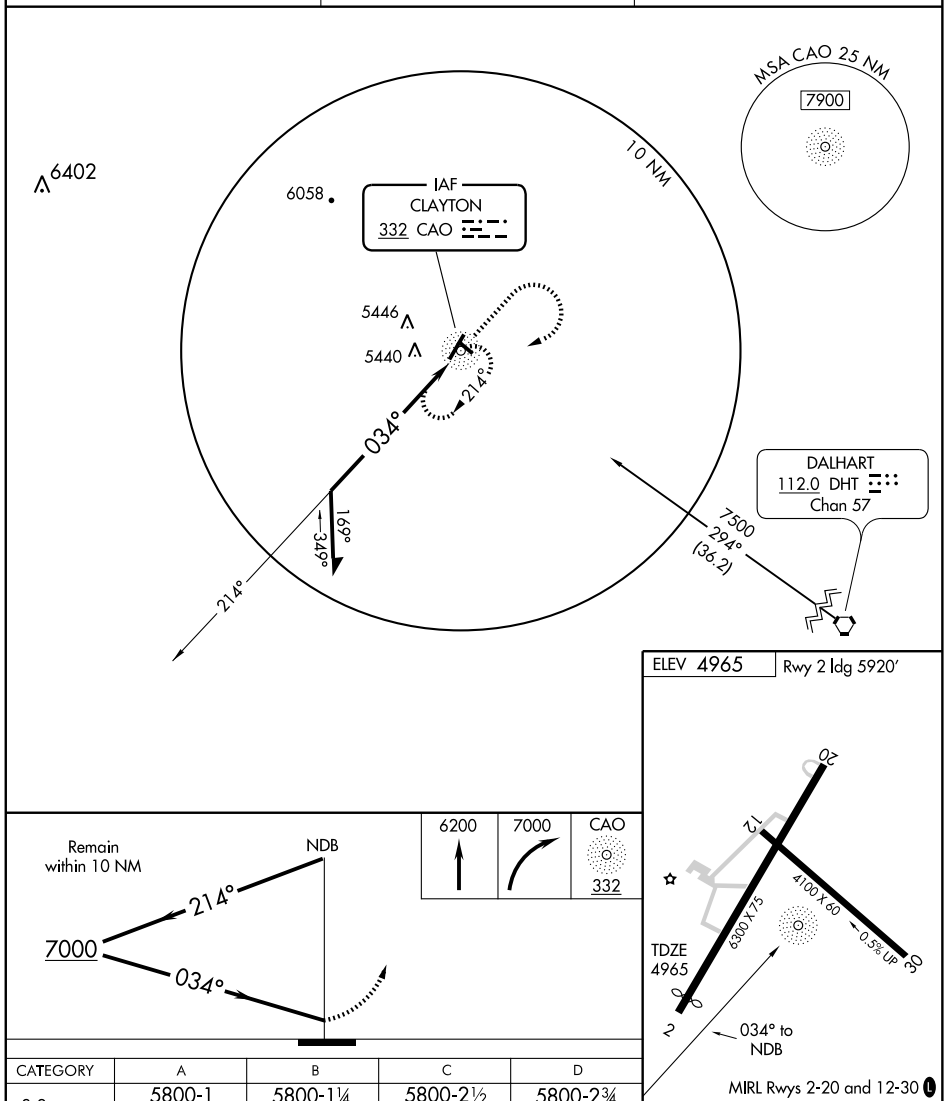
NDB RWY 2

CLAYTON MUNI AIRPARK (CAO)

Circling not authorized west of Rwys 2 and 12.
If local altimeter setting not received, use Dalhart Muni, TX altimeter setting and increase all MDAs 240 feet.

MISSED APPROACH: Climb to 6200, then climbing right turn to 7000 direct CAO NDB and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
120.625	127.85 285.475	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-2	5800-1 835 (900-1)	5800-1¼ 835 (900-1¼)	5800-2½ 835 (900-2½)	5800-2¾ 835 (900-2¾)
CIRCLING	5800-1 835 (900-1)	5800-1¼ 835 (900-1¼)	5800-2½ 835 (900-2½)	5800-2¾ 835 (900-2¾)

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

NDB CAO	APP CRS	Rwy Idg	6300
332	194°	TDZE	4965
		Apt Elev	4965

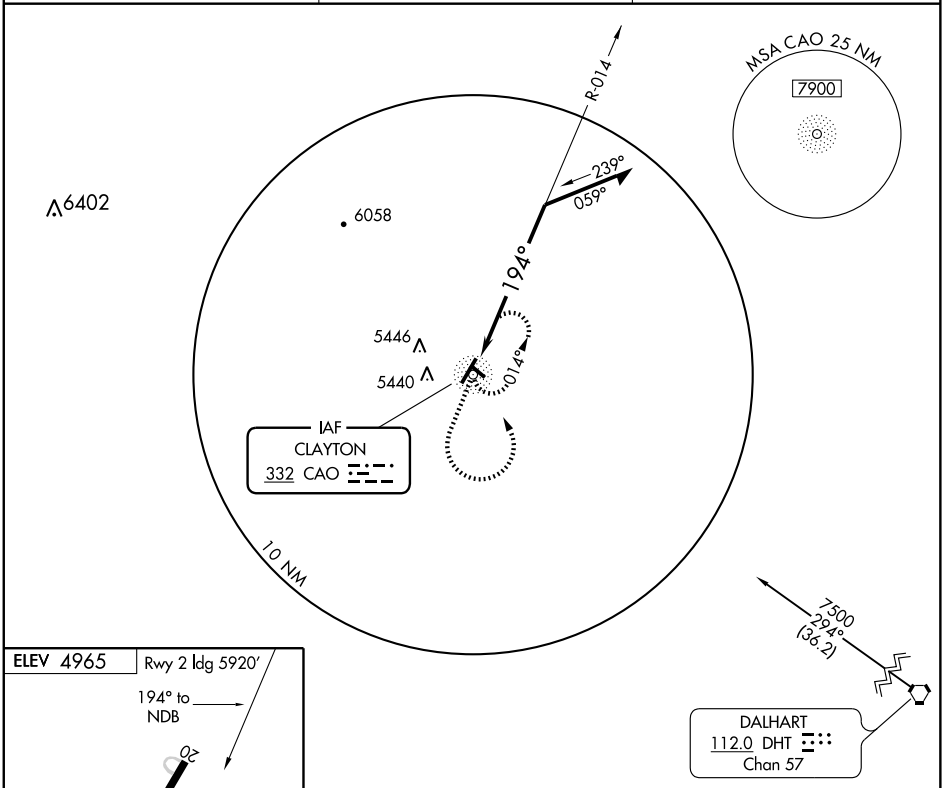
NDB RWY 20

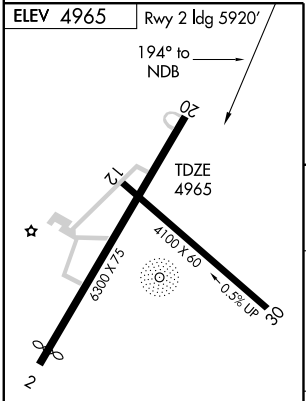
CLAYTON MUNI AIRPARK (CAO)

Circling not authorized west of Rwys 2 and 12.
If local altimeter setting not received, use Dalhart Muni, TX altimeter setting and increase all MDAs 240 feet.

MISSED APPROACH: Climb to 6200, then climbing left turn to 7000 direct CAO NDB and hold.

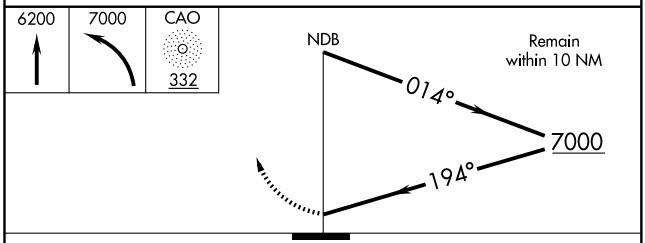
ASOS	ALBUQUERQUE CENTER	UNICOM
120.625	127.85 285.475	122.8 (CTAF) L





MIRL Rwys 2-20 and 12-30 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-20	5680-1	715 (800-1)	5680-2 715 (800-2)	5680-2¼ 715 (800-2¼)
CIRCLING	5680-1	715 (800-1)	5680-2 715 (800-2)	5680-2¼ 715 (800-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS		
021°	Rwy Idg	5920
	TDZE	4965
	Apt Elev	4965

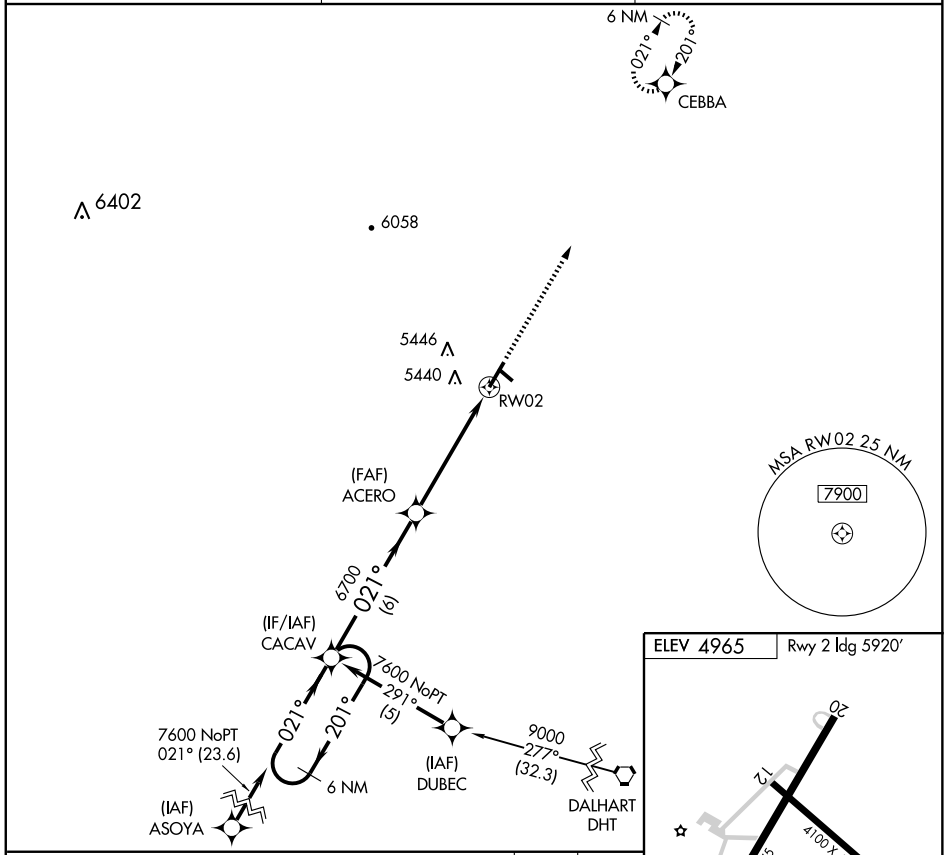
RNAV (GPS) RWY 2

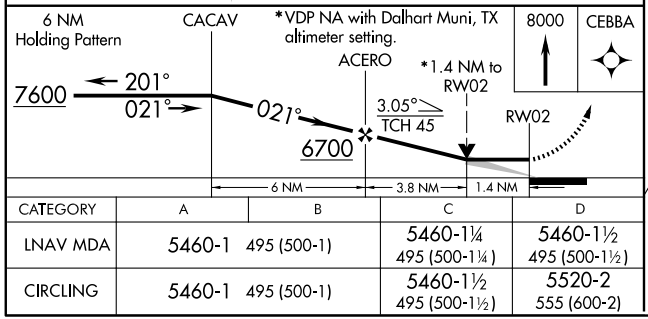
CLAYTON MUNI AIRPARK (CAO)

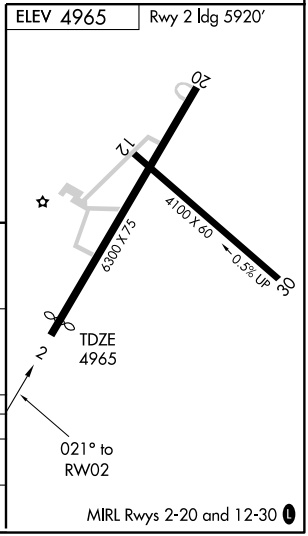
If local altimeter setting not received, use Dalhart Muni, TX altimeter setting and increase all MDAs 240 feet.
Circling NA west of Runways 2 and 12.
DME/DME RNP- 0.3 NA. Procedure NA at night.

MISSED APPROACH: Climb to 8000 direct CEBBA and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
120.625	127.85 285.475	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	5460-1	495 (500-1)	5460-1¼ 495 (500-1¼)	5460-1½ 495 (500-1½)
CIRCLING	5460-1	495 (500-1)	5460-1½ 495 (500-1½)	5520-2 555 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

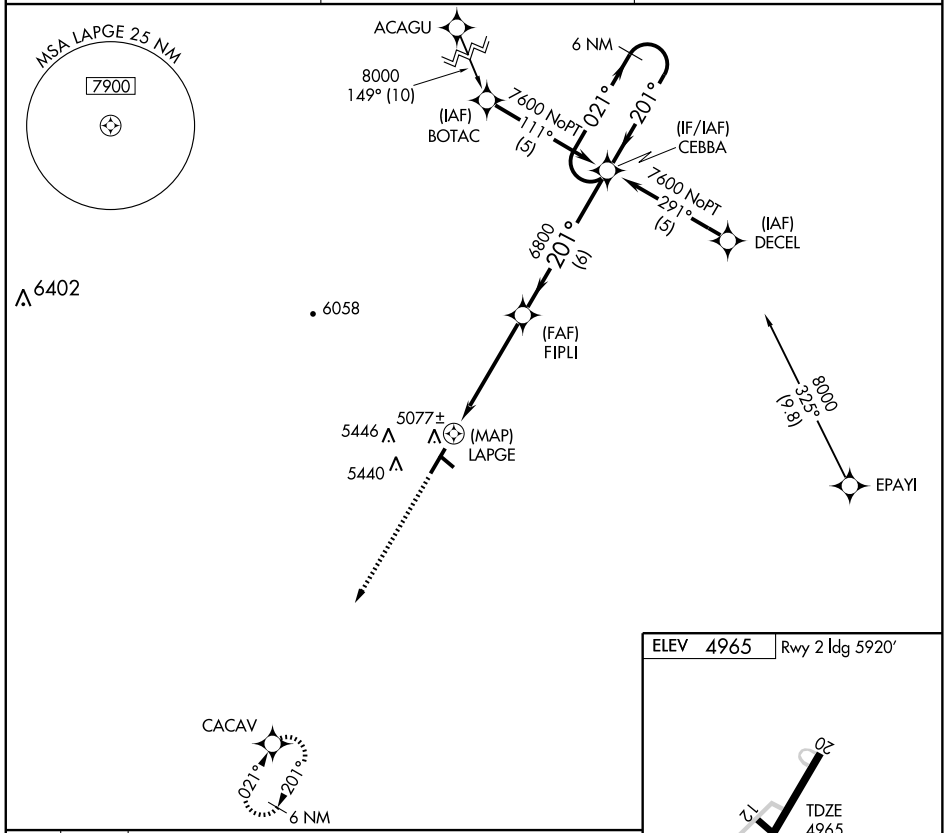
APP CRS	Rwy Idg	6300
201°	TDZE	4965
	Apt Elev	4965

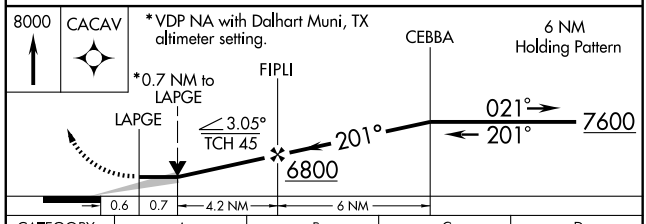
RNAV (GPS) RWY 20
CLAYTON MUNI AIRPARK (CAO)

DME/DME RNP- 0.3 NA.
Circling NA west of Rwys 2 and 12. Procedure NA at night. If local altimeter setting not received, use Dalhart Muni, TX altimeter setting and increase all MDAs 240 feet.

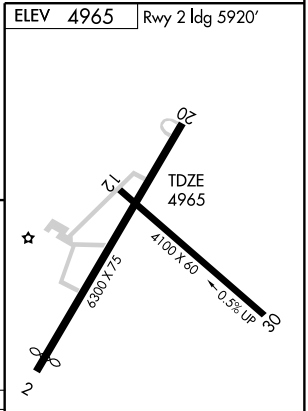
MISSED APPROACH: Climb to 8000 direct CACAV and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
120.625	127.85 285.475	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	5420-1 455 (500-1)		5420-1¼ 455 (500-1¼)	5420-1½ 455 (500-1½)
CIRCLING	5420-1 455 (500-1)		5420-1½ 455 (500-1½)	5520-2 555 (600-2)



MIRL Rwys 2-20 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC I-CVN	APP CRS	Rwy Idg	5401
108.9	037°	TDZE	4205
		Apt Elev	4216

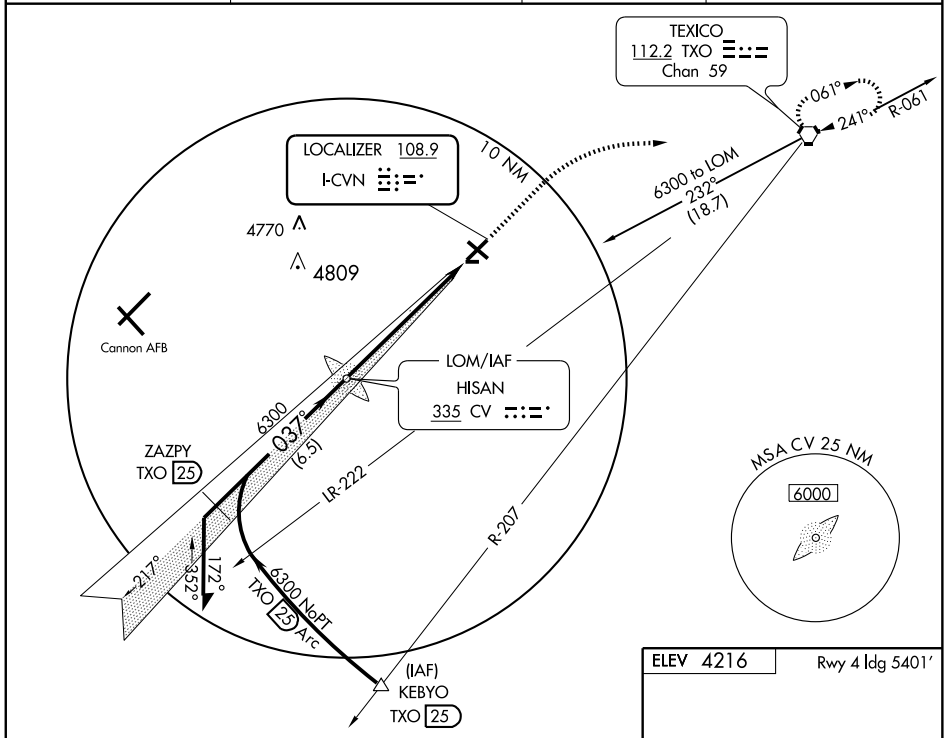
ILS RWY 4
CLOVIS MUNI (CVN)

NA

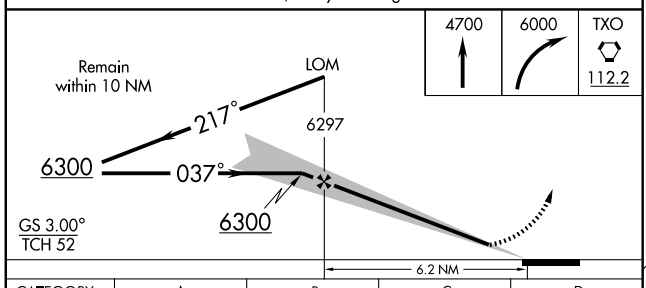
MALSR

MISSED APPROACH: Climb to 4700 then climbing right turn to 6000 direct TXO VORTAC and hold.

AWOS-3	CANNON APP CON★	CLNC DEL	UNICOM
135.375	125.5 352.1	119.0	122.8 (CTAF) L

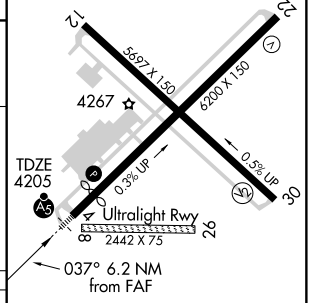


CAUTION: Cannon AFB 12 NM WSW, heavy USAF fighter traffic.



CATEGORY	A	B	C	D
S-ILS 4	4405-½	200 (200-½)		
S-LOC 4	4640-½	435 (500-½)	4640-¾ 435 (500-¾)	4640-1 435 (500-1)
CIRCLING	4680-1	464 (500-1)	4680-1½ 464 (500-1½)	4780-2 564 (600-2)

ELEV 4216 Rwy 4 Idg 5401'



REIL Rwys 12 and 30
MIRL Rwys 4-22 and 12-30 L

FAF to MAP 6.2 NM

Knots	60	90	120	150	180
Min:Sec	6:12	4:08	3:06	2:29	2:04

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	5401
CH 97300	037°	TDZE	4205
W04A		Apt Elev	4216

RNAV (GPS) RWY 4
CLOVIS MUNI (CVN)

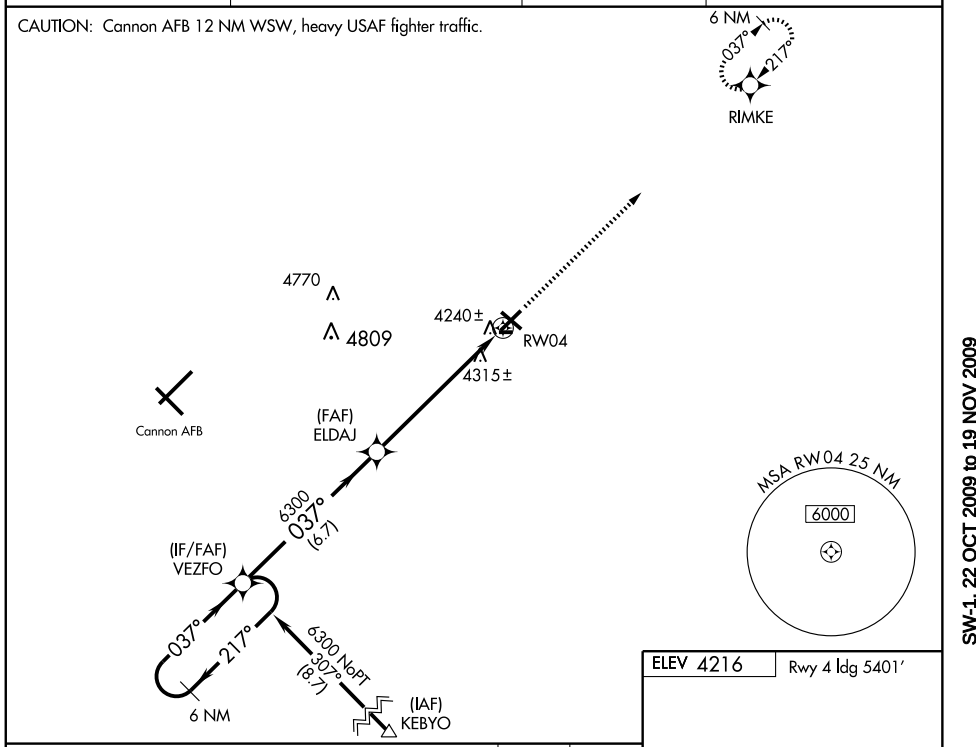
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -23°C (-9°F)
For inoperative MALSR, increase LNAV/VNAV Cat. D visibility to 1.

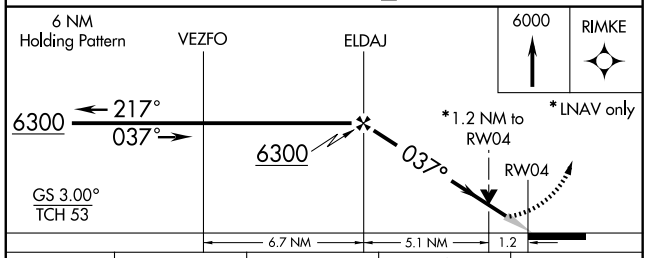
MALSR

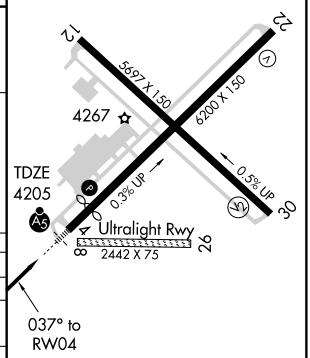
MISSED APPROACH: Climb to 6000 direct RIMKE and hold.

AWOS-3	CANNON APP CON*	CLNC DEL	UNICOM
135.375	125.5 352.1	119.0	122.8 (CTAF) L

CAUTION: Cannon AFB 12 NM WSW, heavy USAF fighter traffic.







CATEGORY	A	B	C	D
LPV DA	4460-½ 255 (300-½)			
LNAV/VNAV DA	4500-½ 295 (300-½)			4500-¾ 295 (300-¾)
LNAV MDA	4640-½ 435 (500-½)		4640-¾ 435 (500-¾)	4640-1 435 (500-1)
CIRCLING	4680-1 464 (500-1)		4680-1½ 464 (500-1½)	4780-2 564 (600-2)

REIL Rwys 12 and 30
MIRL Rwys 4-22 and 12-30 L

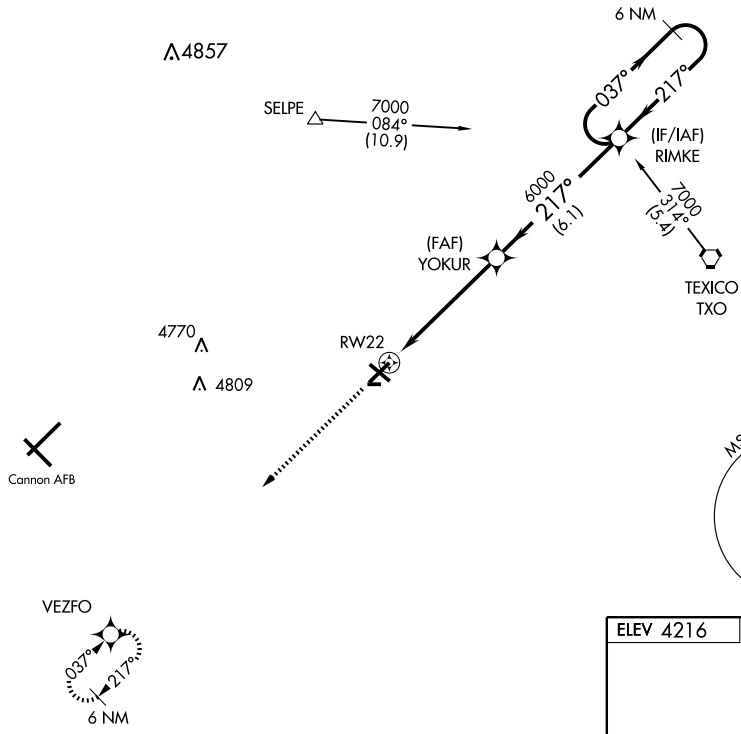
SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6200
217°	TDZE	4216
	Apt Elev	4216

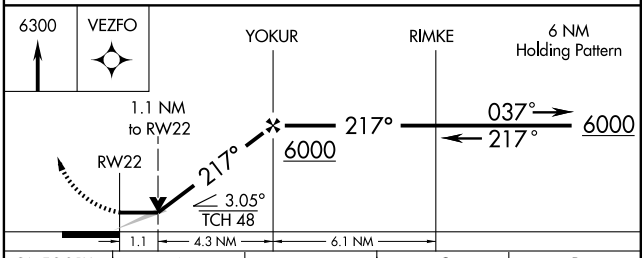
RNAV (GPS) RWY 22
CLOVIS MUNI (CVN)

DME/DME RNP-0.3 NA.	MISSED APPROACH: Climb to 6300 direct VEZFO and hold.

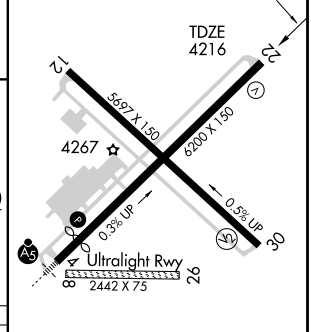
AWOS-3	CANNON APP CON★	CLNC DEL	UNICOM
135.375	125.5 352.1	119.0	122.8 (CTAF) L



CAUTION: Cannon AFB 12 NM WSW, heavy USAF fighter traffic.



CATEGORY	A	B	C	D
LNAV MDA	4620-1	404 (500-1)	4620-1¼	404 (500-1¼)
CIRCLING	4680-1	464 (500-1)	4680-1½ 464 (500-1½)	4780-2 564 (600-2)



REIL Rwys 12 and 30
MIRL Rwys 4-22 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5697
302°	TDZE	4202
	Apt Elev	4216

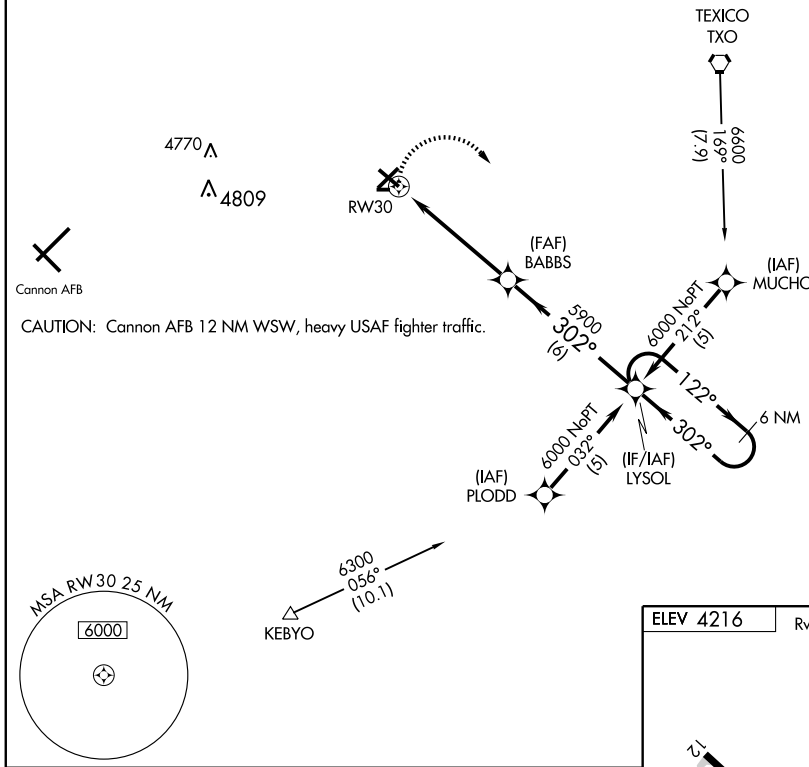
RNAV (GPS) RWY 30

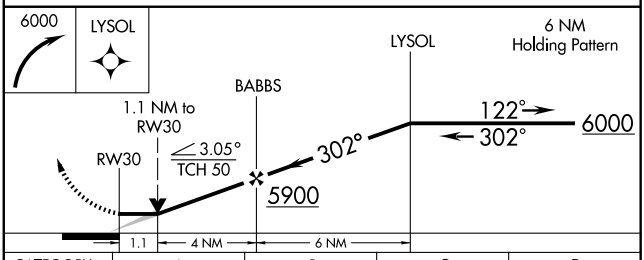
CLOVIS MUNI (CVN)

DME/DME RNP-0.3 NA.	MISSED APPROACH: Climbing right turn to 6000 direct LYSOL and hold.

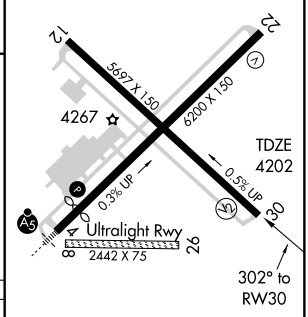
AWOS-3	CANNON APP CON*	CLNC DEL	UNICOM
135.375	125.5 352.1	119.0	122.8 (CTAF) L

Procedure NA for arrivals at TXO Vortac via V62 northwest bound.





CATEGORY	A	B	C	D
LNAV MDA	4620-1 418 (500-1)		4620-1¼ 418 (500-1¼)	
CIRCLING	4680-1 464 (500-1)		4680-1½ 464 (500-1½)	4780-2 564 (600-2)



REIL Rwys 12 and 30
MIRL Rwys 4-22 and 12-30 L

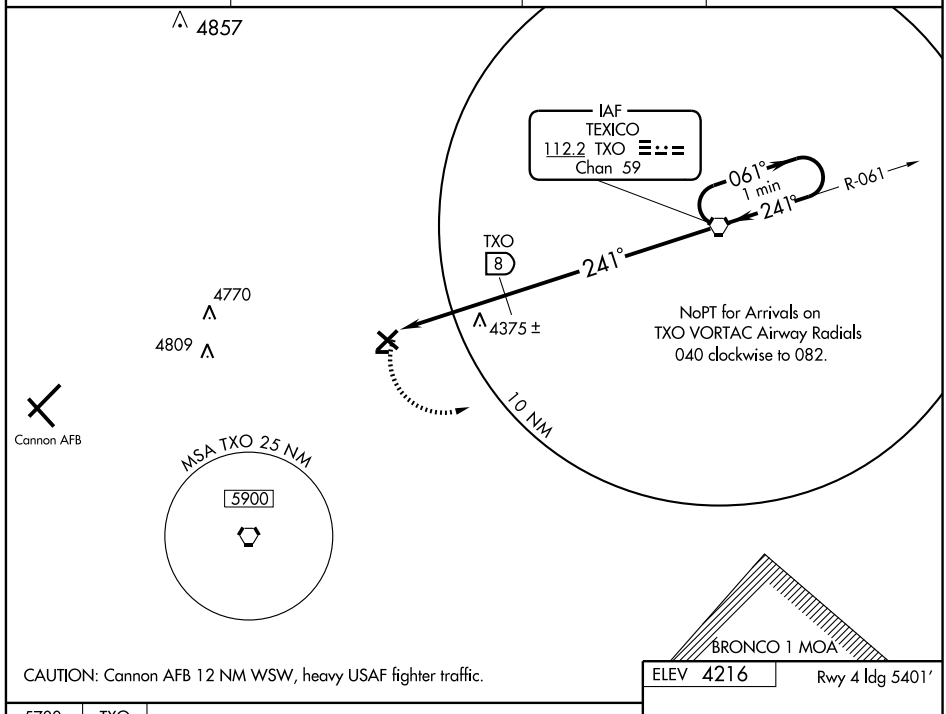
SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC TXO	APP CRS	Rwy Idg	6200
112.2	241°	TDZE	4216
Chan 59		Apt Elev	4216

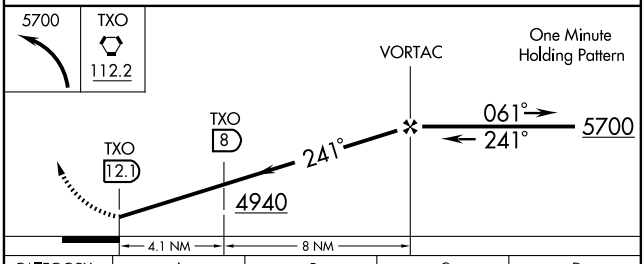
VOR RWY 22
CLOVIS MUNI (CVN)

MISSED APPROACH: Climbing left turn to 5700 direct TXO VORTAC and hold.

AWOS-3	CANNON APP CON ★	CLNC DEL	UNICOM
135.375	125.5 352.1	119.0	122.8 (CTAF) L

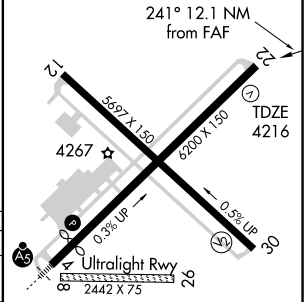


CAUTION: Cannon AFB 12 NM WSW, heavy USAF fighter traffic.



CATEGORY	A	B	C	D
S-22	4940-2 724 (800-2)			4940-2¼ 724 (800-2¼)
CIRCLING	4940-2 724 (800-2)			4940-2¼ 724 (800-2¼)
DME MINIMUMS				
S-22	4640-1 424 (500-1)		4640-1¼ 424 (500-1¼)	
CIRCLING	4680-1 464 (500-1)		4680-1½ 464 (500-1½)	4780-2 564 (600-2)

ELEV 4216 Rwy 4 ldg 5401'

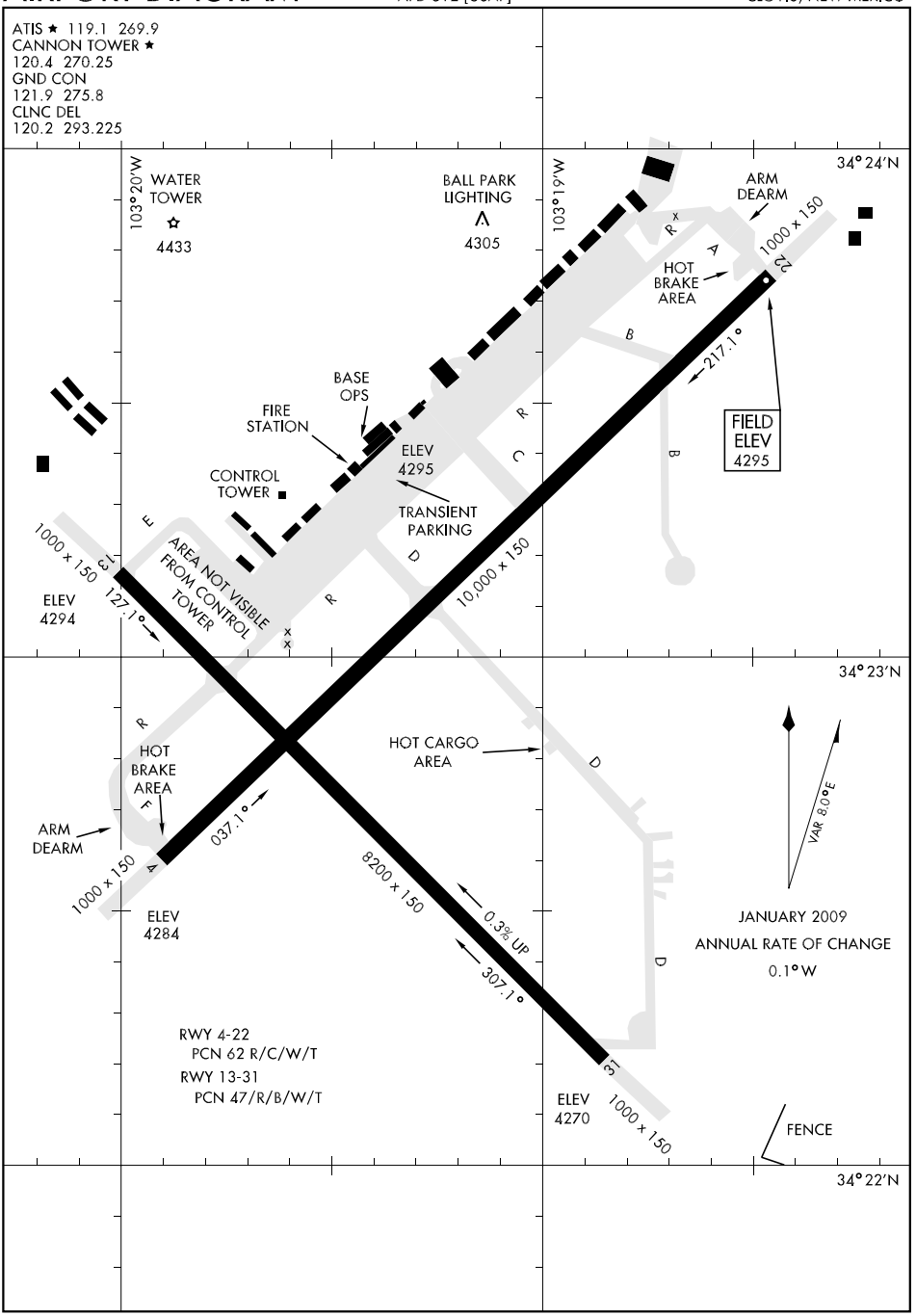


REIL Rwys 12 and 30
MIRL Rwys 4-22 and 12-30 L

FAF to MAP 12.1 NM

Knots	60	90	120	150	180
Min:Sec	12:06	8:04	6:03	4:50	4:02

SW-1, 22 OCT 2009 to 19 NOV 2009


ATIS ★ 119.1 269.9
CANNON TOWER ★
120.4 270.25
GND CON
121.9 275.8
CLNC DEL
120.2 293.225
103°20'W
103°19'W
34°24'N
34°23'N
34°22'N
WATER TOWER
4433
BALL PARK LIGHTING
4305
ARM DEARM
HOT BRAKE AREA
1000 x 150
22
217.1°
FIELD ELEV 4295
BASE OPS
FIRE STATION
ELEV 4295
CONTROL TOWER
TRANSIENT PARKING
AREA NOT VISIBLE FROM CONTROL TOWER
10,000 x 150
1000 x 150
13
127.1°
ELEV 4294
HOT CARGO AREA
HOT BRAKE AREA
ARM DEARM
037.1°
1000 x 150
31
ELEV 4284
8200 x 150
0.3% UP
307.1°
VAR 8.0°E
JANUARY 2009
ANNUAL RATE OF CHANGE
0.1°W
RWY 4-22
PCN 62 R/C/W/T
RWY 13-31
PCN 47/R/B/W/T
ELEV 4270
1000 x 150
FENCE

HI-ILS RWY 4

LOC I-GLO	APCH CRS	Rwy ldg 10,000 TDZE 4284 Arpt Elev 4295	JAL-512 [USAF]	CANNON AFB (KCVS)
108.5	035°			

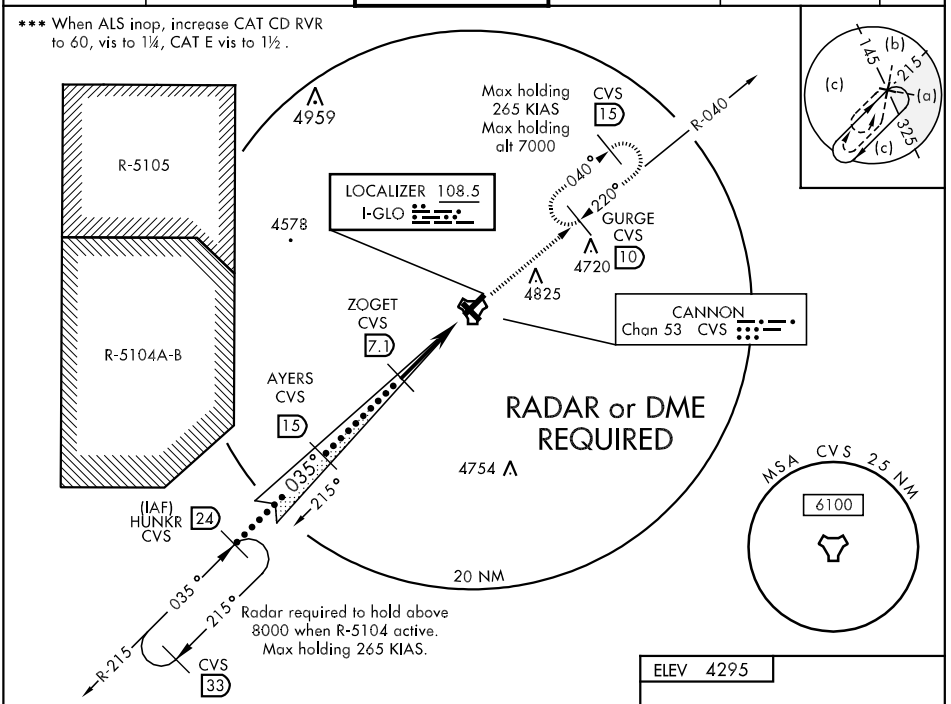
▼ * When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ mile, CAT DE RVR vis to 1½ miles.

ALSF-1 (A1)

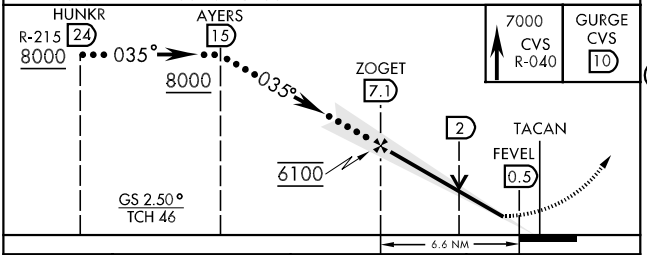
MISSED APPROACH: Climb to 7000 via CVS TACAN R-040 to CVS 10 DME GURGE and hold.

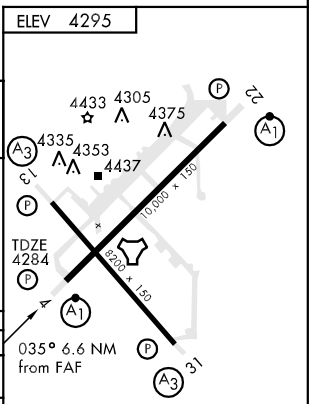
ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	

*** When ALS inop, increase CAT CD RVR to 60, vis to 1¼, CAT E vis to 1½.



EMERG SAFE ALT 100 NM 8900





CATEGORY	C	D	E
S-ILS 4 *	4484/24	200 (200-½)	
S-LOC 4 **	4720/40 436 (500-¾)	4720/50 436 (500-1)	
CIRCLING	4780-1½ 485 (500-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 4 ***	4700/40 416 (500-¾)		4700/50 416 (500-1)

FAF to MAP 6.6 NM					
Knots	120	140	160	180	200
Min:Sec	3:18	2:49	2:28	2:12	1:58

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-ILS RWY 13

LOC I-OVI	APCH CRS	Rwy ldg / TDZE / Arpt Elev	JAL-512 [USAF]	CANNON AFB (KCVS)
110.35	125°	8200 / 4294 / 4295		

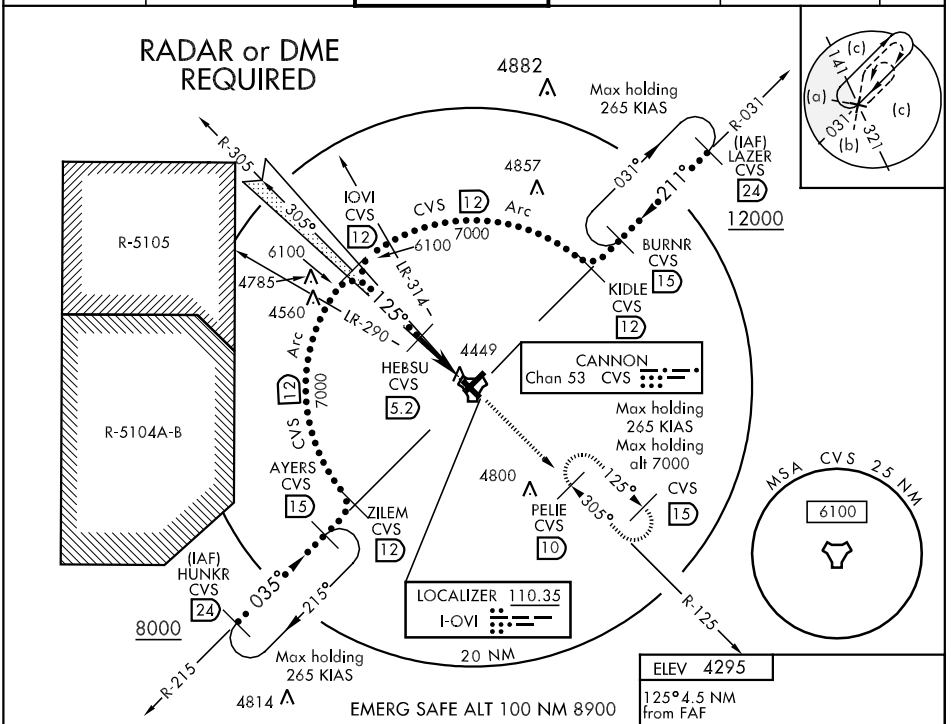
▼ * When ALS inop, increase CAT C vis to 1½, CAT DE vis to 1¾.

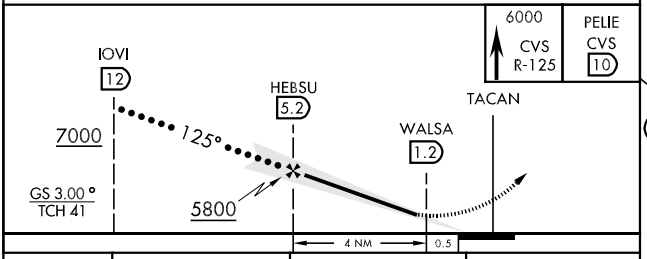
SSALR (A3)

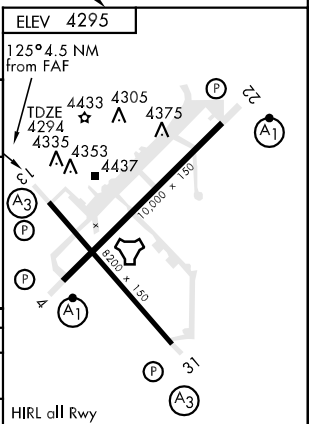
MISSED APPROACH: Climb to 6000 via CVS TACAN R-125 to 10 DME (PELIE) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	

RADAR or DME REQUIRED







CATEGORY	C	D	E
S-ILS 13	4494-¾ 200 (200-¾)		
S-LOC 13	4700-1¼ 406 (500-1¼)		4700-1½ 406 (500-1½)
CIRCLING	4780-1½ 485 (500-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 13 *	4820-1 526 (600-1)	4820-1¼ 526 (600-1¼)	

HIRL all Rwy

(A3) Rwy 31 nstd len 1482'

FAF to MAP 4.0 NM					
Knots	120	140	160	180	200
Min:Sec	2:00	1:43	1:30	1:20	1:12

HI-ILS RWY 22

LOC I-CVS	APCH CRS	Rwy ldg 10,000 / TDZE 4295 / Arpt Elev 4295
109.7	215°	JAL-512 [USAF]

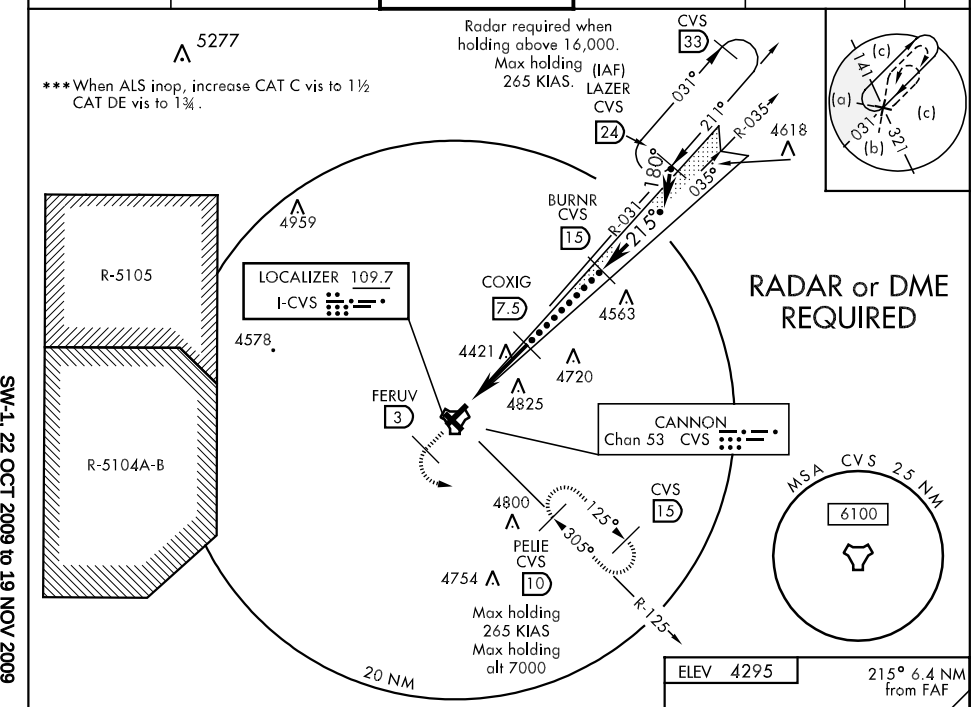
CANNON AFB (KCVS)

▼ * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT DE to vis to 1½ miles.

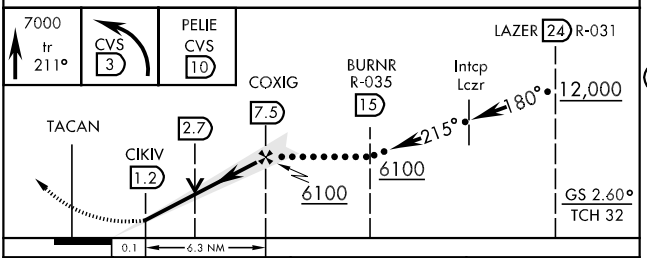
ALSF-1 (A1)

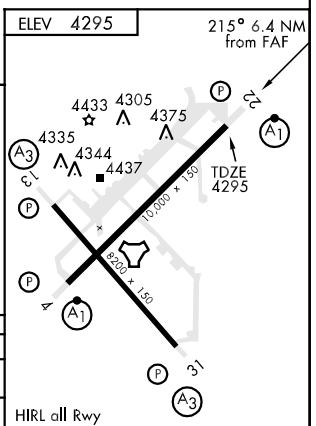
MISSED APPROACH: Climb to 7000 via track 211°. At 3 DME (FERUV) turn left intercept CVS TACAN R-125 direct CVS R-125/10 DME (PELIE) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	



EMERG SAFE ALT 100 NM 8900





CATEGORY	C	D	E
S-ILS 22 *	4495/24	200	(200-½)
S-LOC 22 **	4740/40 445 (500-¾)	4740/50 445 (500-1)	
CIRCLING	4780-1½ 485 (500-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 22 ***	4820/50 525 (600-1)	4820/60 525 (600-1¼)	

LOC FAF to MAP 6.3 NM					
Knots	120	140	160	180	200
Min:Sec	3:09	2:42	2:22	2:06	1:53

HI-ILS RWY 31

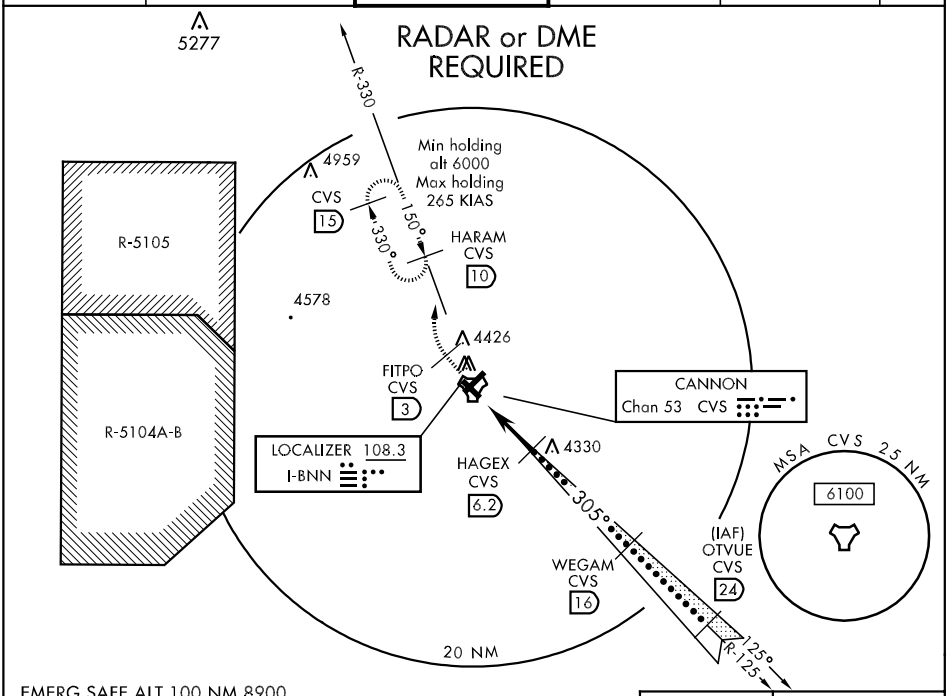
LOC I-BNN	APCH CRS	Rwy ldg 8,200 / TDZE 4270 / Arpt Elev 4295	JAL-512 [USAF]	CANNON AFB (KCVS)
108.3	305°			

* When ALS inop, increase CAT C vis to 1¼ miles, CAT DE vis to 1½ miles.
** When ALS inop, increase CAT CD vis to 1 mile, CAT E vis to 1¼ mile.

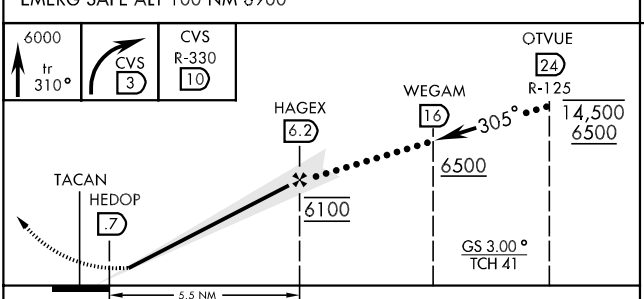
SSALR (A3)

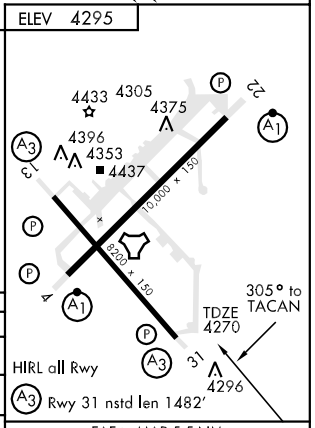
MISSED APPROACH: Climb to 6000 via track 310°. At 3 DME (FITPO) turn right intercept CVS R-330 to CVS 10 DME (HARAM) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	



EMERG SAFE ALT 100 NM 8900





CATEGORY	C	D	E
S-ILS 31	4470-¾ 200 (200-¾)		
S-LOC 31 **	4600-¾ 330 (400-¾)		
CIRCLING	4780-1½ 485 (500-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 31 *	4720-¾ 450 (500-¾)	4720-1 450 (500-1)	

FAF to MAP 5.5 NM					
Knots	120	140	160	180	200
Min:Sec	2:45	2:21	2:03	1:49	1:39

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 4

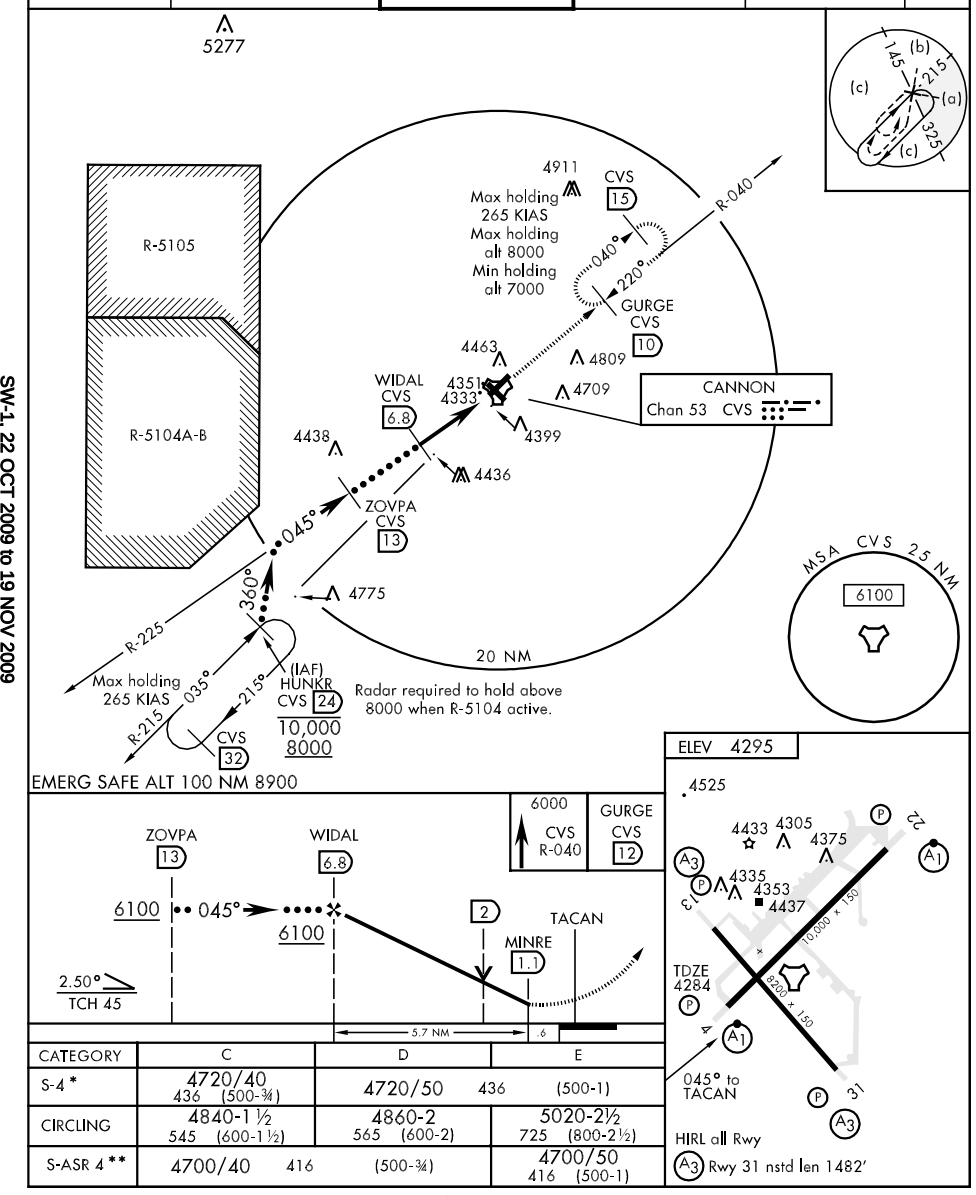
TACAN CVS Chan 53	APCH CRS 045°	Rwy ldg 10,000 TDZE 4284 Arpt Elev 4295	JAL-512 [USAF]	CANNON AFB (KCVS)

▼ * When ALS inop, increase CAT C RVR to 60 and vis to 1¼ mile, CAT DE vis to 1½ miles.
** When ALS inop, increase CAT CD RVR to 60, vis to 1¼ miles, CAT E vis to 1½ miles.

ALSF-1 (A1)

MISSED APPROACH: Climb to 6000 out CVS R-040 to 10 DME (GURGE) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	



CATEGORY	C	D	E
S-4 *	4720/40 436 (500-¾)	4720/50 436 (500-1)	
CIRCLING	4840-1½ 545 (600-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 4 **	4700/40 416 (500-¾)		4700/50 416 (500-1)

HI-TACAN RWY 13

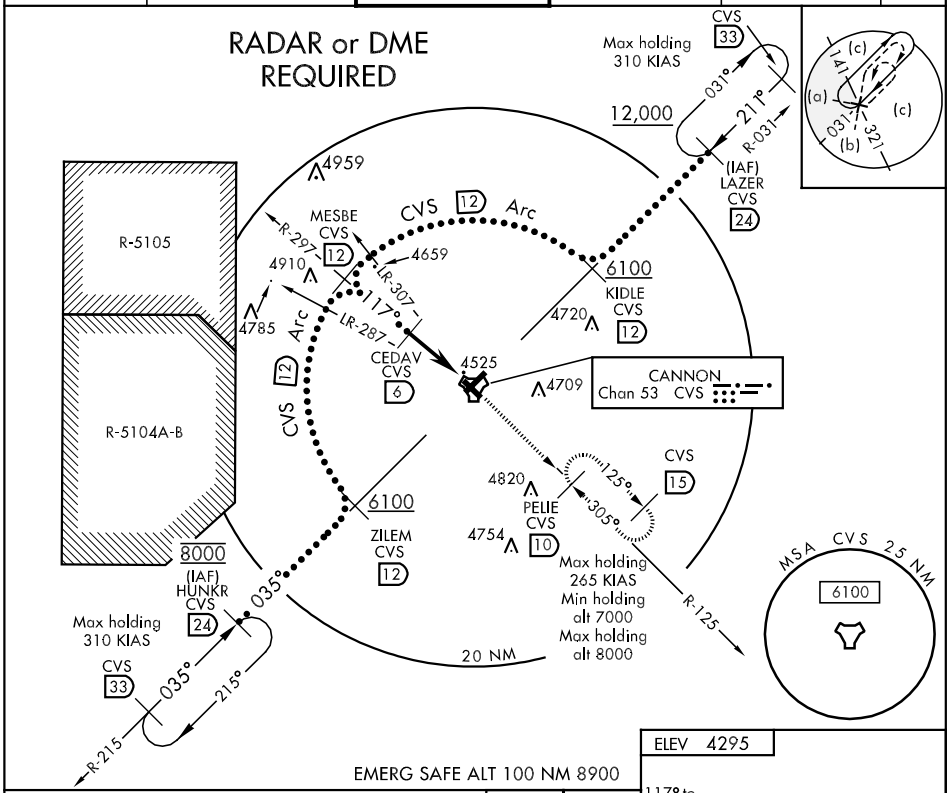
TACAN CVS Chan 53	APCH CRS 120°	Rwy ldg 8200 TDZE 4294 Arpt Elev 4295	JAL-512 [USAF]	CANNON AFB (KCVS)

▼ * When ALS inop, increase CAT C vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** When ALS inop, increase CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.

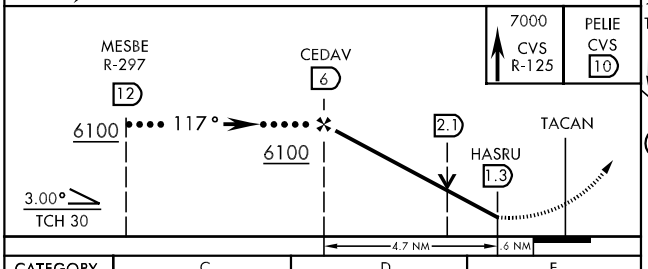
SSALR (A3)

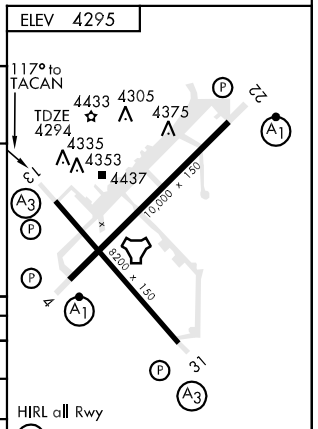
MISSED APPROACH: Climb to 7000 via CVS TACAN R-125 to 10 DME (PELIE) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	



EMERG SAFE ALT 100 NM 8900





CATEGORY	C	D	E
S-13 *	4780-¾ 486 (500-¾)	4780-1 486 (500-1)	4780-1¼ 486 (500-1¼)
CIRCLING	4840-1½ 545 (600-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 13 **	4820-1 526 (600-1)	4820-1¼ 526 (600-1¼)	

HI-TACAN RWY 22

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
CVS Chan 53	209°	10,000	4295	4295

JAL-512 [USAF]

CANNON AFB (KCVS)

▼ * When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles and CAT E vis to 1¾ miles.
** When ALS inop, increase CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.

ALSF-1 (A1)

MISSED APPROACH: Climb to 6000 via track 211°. At 3 DME (FERUV) turn left intercept CVS TACAN R-125 to 10 DME (PELIE) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	

RADAR REQUIRED

Radar required when holding above 16,000.

Max holding 310 KIAS Max holding alt 14,000

5277

CVS 33

029° R-029 209°

(IAF) WURUS CVS 24

WOVDA CVS 15

WEKPO CVS 7.3

ZISRI CVS 4.5

4563 4464 4463 4829

FERUV CVS 3

CANNON Chan 53 CVS

R-5105

R-5104A-B

R-211

Max holding 265 KIAS Max holding alt 6000

4820

125° 305°

PELIE CVS 10

CVS 15

R-125

20 NM

MSA CVS 2.5 NM 6100

(a) 39° (c) 029° 319 (b) (c)

EMERG SAFE ALT 100 NM 8900

6000 tr 211° CVS 3 PELIE CVS 10

WURUS R-029 24

209° 12,000

WEKPO 7.3 WOVDA 15

TACAN ZISRI 4.5 ZORUB 2.7 1.7

6100 6100 5200

2.60° TCH 30

.5 2.8 2.8

ELEV 4295

209° to TACAN

4433 4305 4375 4335 4353 4437

TDZE 4295

10,000 × 150

9200 × 150

HIRL all Rwy

(A3) Rwy 31 nstd len 1482'

CATEGORY	C	D	E
S-22 *	4760/40 465 (500-¾)	4760/50 465 (500-1)	4760/60 465 (500-1¼)
CIRCLING	4840-1½ 545 (600-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 22 **	4820/50 525 (600-1)	4820/60 525 (600-1¼)	

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 31

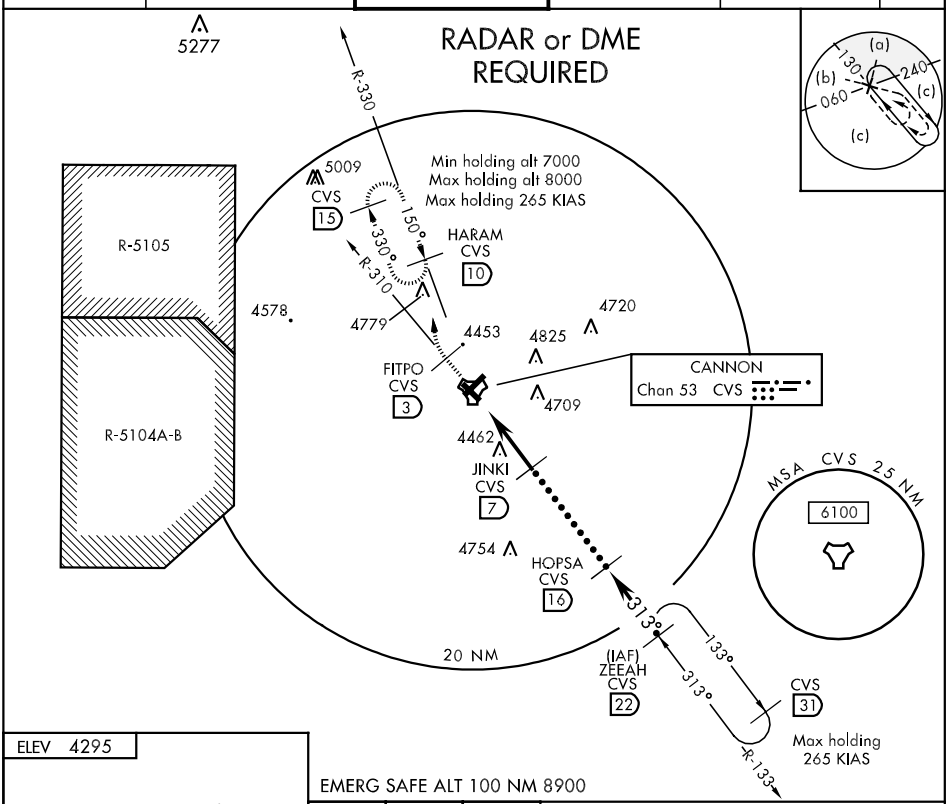
TACAN CVS Chan 53	APCH CRS 313°	Rwy ldg 8,200 TDZE 4270 Arpt Elev 4295	JAL-512 [USAF]	CANNON AFB (KCVS)

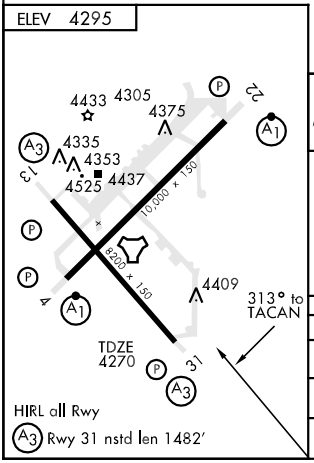
* When ALS inop, increase CAT C vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** When ALS inop, increase CAT C vis to 1½ miles CAT DE vis to 1½ miles.

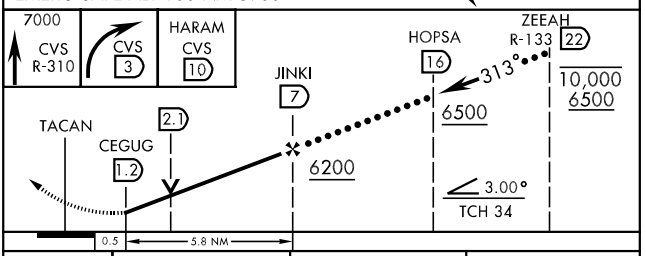
SSALR (A3)

MISSED APPROACH: Climb to 7000 out CVS TACAN R-310 to 3 DME (FITPO) turn right direct CVS R-330/10 DME (HARAM) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	







CATEGORY	C	D	E
S-31 *	4740-¾ 470 (500-¾)	4740-1 470 (500-1)	4740-1¼ 470 (500-1¼)
CIRCLING	4840-1½ 545 (600-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 31 **	4720-¾ 450 (500-¾)	4720-1 450 (500-1)	

SW-1, 22 OCT 2009 to 19 NOV 2009

ILS or LOC RWY 4

LOC I-GLO	APCH CRS	Rwy ldg 10,000 TDZE 4284 Arpt Elev 4295
108.5	035°	

AL-512 [USAF]

CANNON AFB (KCVS)

▼ * When ALS inop, increase to all CAT RVR to 40 and vis to ¾ miles.
** When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT D RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.

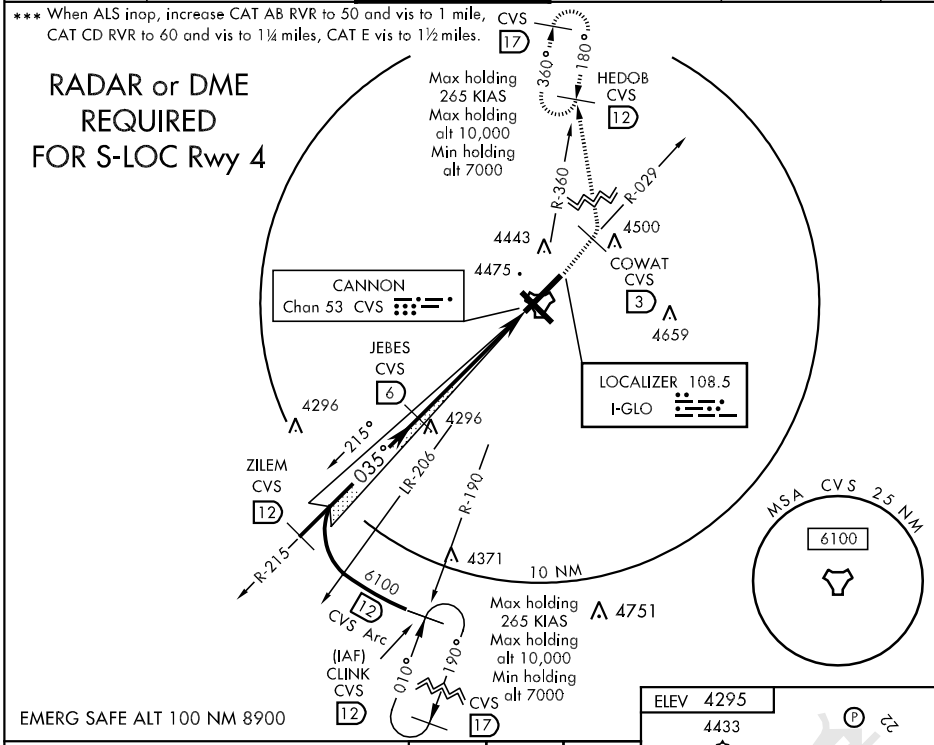
ALSF-1 (A1)

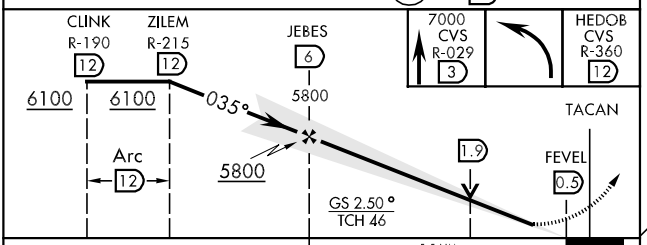
MISSED APPROACH: Climb to 7000 out CVS TACAN R-029, at 3 DME then turn left to CVS R-360/12 DME (HEDOB) and hold.

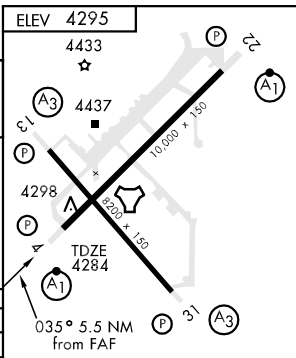
ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	

*** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.

RADAR or DME REQUIRED FOR S-LOC Rwy 4







CATEGORY	A	B	C	D	E
S-ILS 4 *	4484/24		200	(200-½)	
S-LOC 4 **	4680/24 396 (400-½)		4680/40 396 (400-¾)		4680/50 396 (400-1)
CIRCLING	4840-1 545 (600-1)		4840-1½ 545 (600-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 4 ***	4700/24 416 (500-½)		4700/40 416 (500-¾)		4700/50 416 (500-1)

FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

SW-1, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 22

TACAN CVS Chan 53	APCH CRS 209°	Rwy ldg 10,000 TDZE 4295 Arpt Elev 4295

AL-512 [USAF]

CANNON AFB (KCVS)

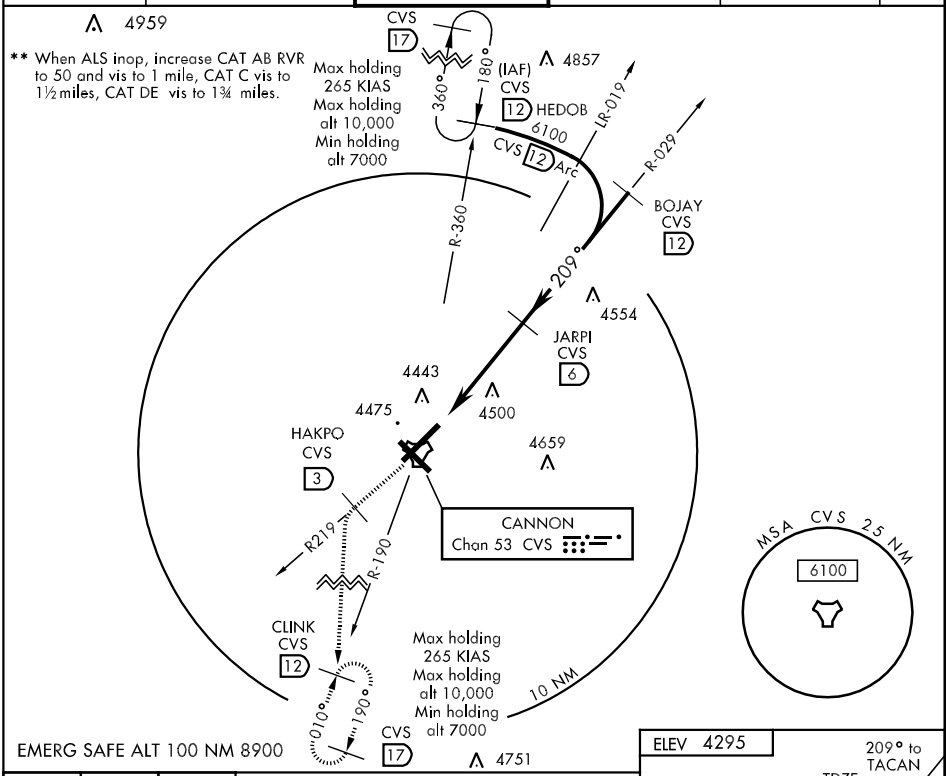
* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles CAT E vis to 1¾ miles.

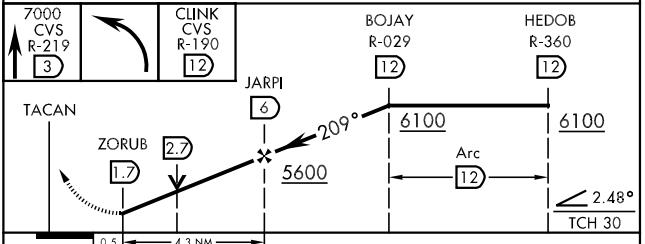
ALSF-1 (A1)

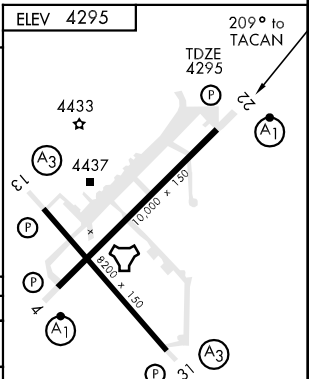
MISSED APPROACH: Climb to 7000 out CVS TACAN R-219, at 3 DME then turn left to CVS R-190/12 (CLINK) and hold.

ATIS ★	CANNON APP CON	CANNON TOWER ★	GND CON	CLNC DEL	ASR
119.1 269.9	125.5 358.3	120.4 270.25	121.9 275.8	120.2 293.225	

** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.







CATEGORY	A	B	C	D	E
S-22 *	4760/24	465 (500-½)	4760/40 465 (500-¾)	4760/50 465 (500-1)	4760/60 465 (500-1¼)
CIRCLING	4840-1	545 (600-1)	4840-1½ 545 (600-1½)	4860-2 565 (600-2)	5020-2½ 725 (800-2½)
S-ASR 22 **	4820/24	525 (600-½)	4820/50 525 (600-1)	4820/60	525 (600-1¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5675
042°	TDZE	4312
	Apt Elev	4314

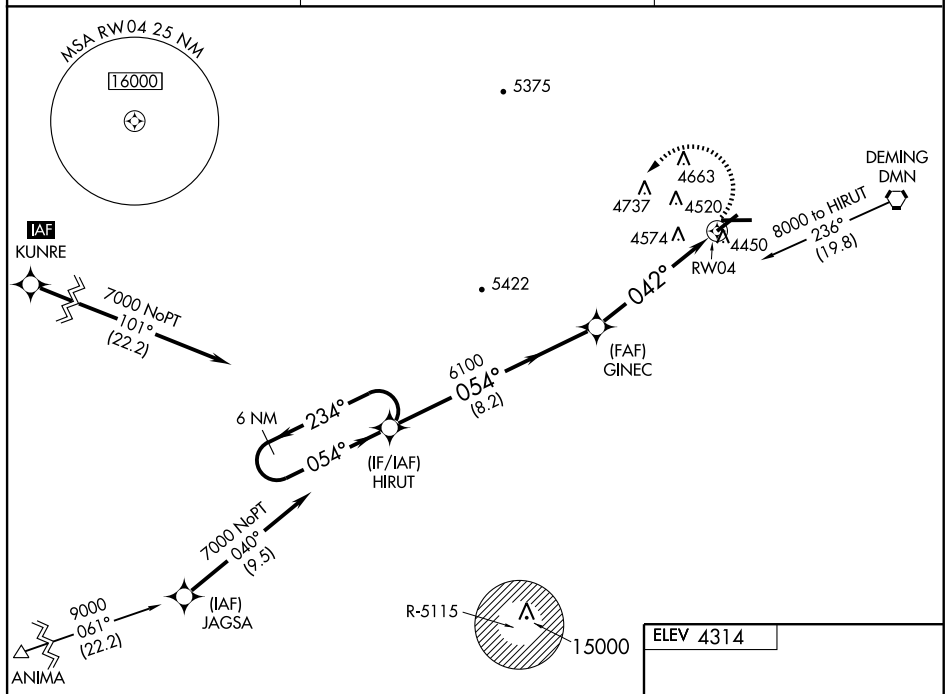
RNAV (GPS) RWY 4

DEMING MUNI (DMN)

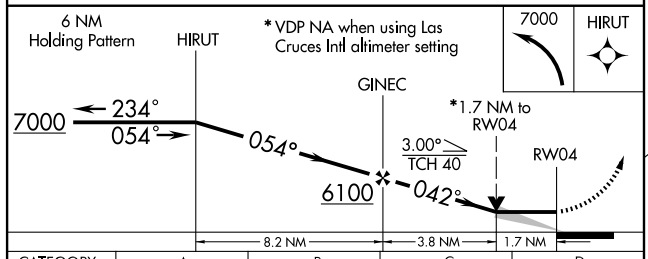
▼ If local altimeter setting not received, use Las Cruces Intl altimeter setting and increase all MDAs 120 feet.
▲ DME/DME RNP-0.3 NA.
IAF ARM APPROACH MODE PRIOR TO IAF.

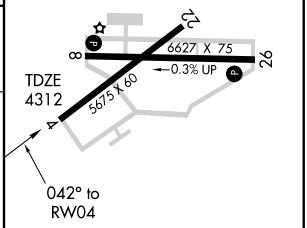
MISSED APPROACH: Climbing left turn to 7000 direct HIRUT and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	128.2 285.5	122.8 (CTAF) L



Procedure NA for arrivals at ANIMA via V16-66 westbound.





CATEGORY	A	B	C	D
LNAV MDA	4880-1	568 (600-1)	4880-1½ 568 (600-1½)	4880-1¾ 568 (600-1¾)
CIRCLING	4880-1 566 (600-1)	4940-1 626 (700-1)	4940-1¾ 626 (700-1¾)	4940-2 626 (700-2)

MIRL Rwys 4-22 and 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6627
260°	TDZE	4303
	Apt Elev	4314

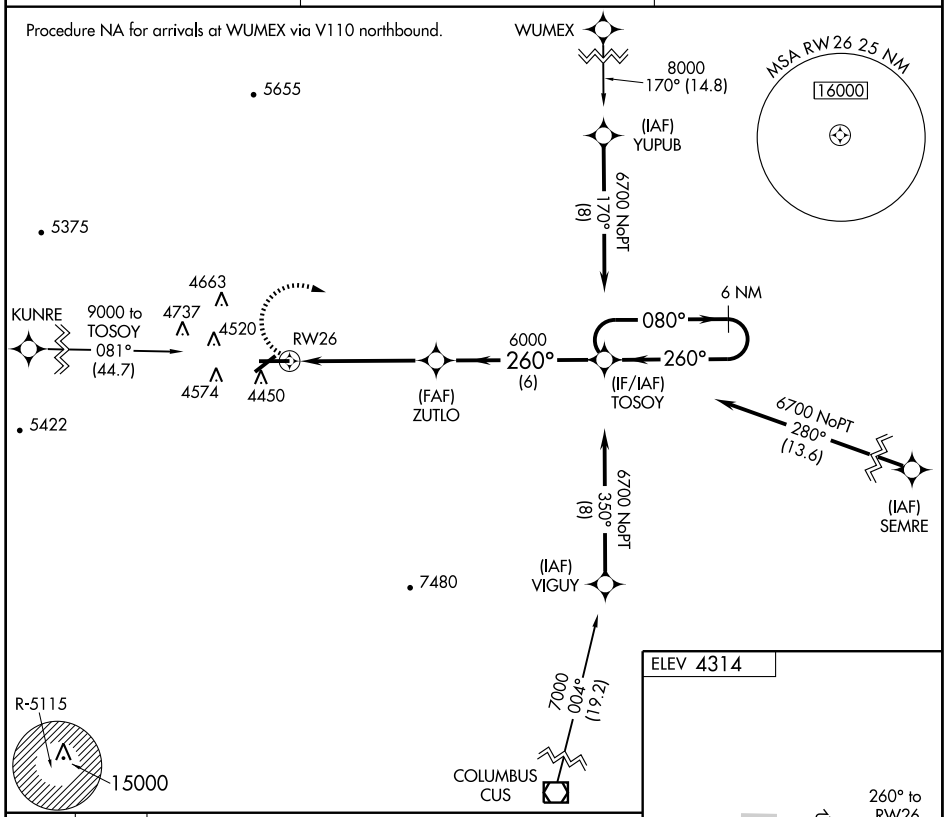
RNAV (GPS) RWY 26
DEMING MUNI (DMN)

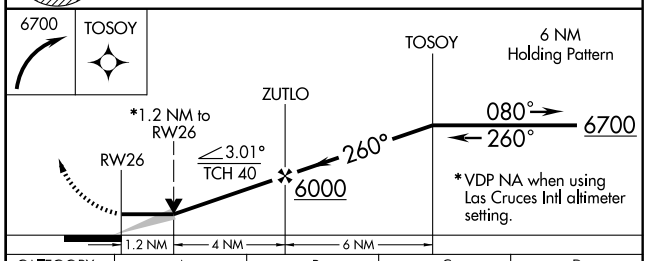
If local altimeter setting not received, use Las Cruces Intl altimeter setting and increase all MDAs 120 feet.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing right turn to 6700 direct TOSOY and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	128.2 285.5	122.8 (CTAF) L

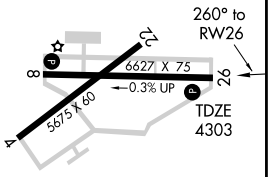
Procedure NA for arrivals at WUMEX via V110 northbound.





CATEGORY	A	B	C	D
LNAV MDA	4720-1 417 (500-1)		4720-1¼ 417 (500-1¼)	
CIRCLING	4820-1 506 (600-1)	4940-1 626 (700-1)	4940-1¾ 626 (700-1¾)	4940-2 626 (700-2)

ELEV 4314



MIRL Rwys 4-22 and 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

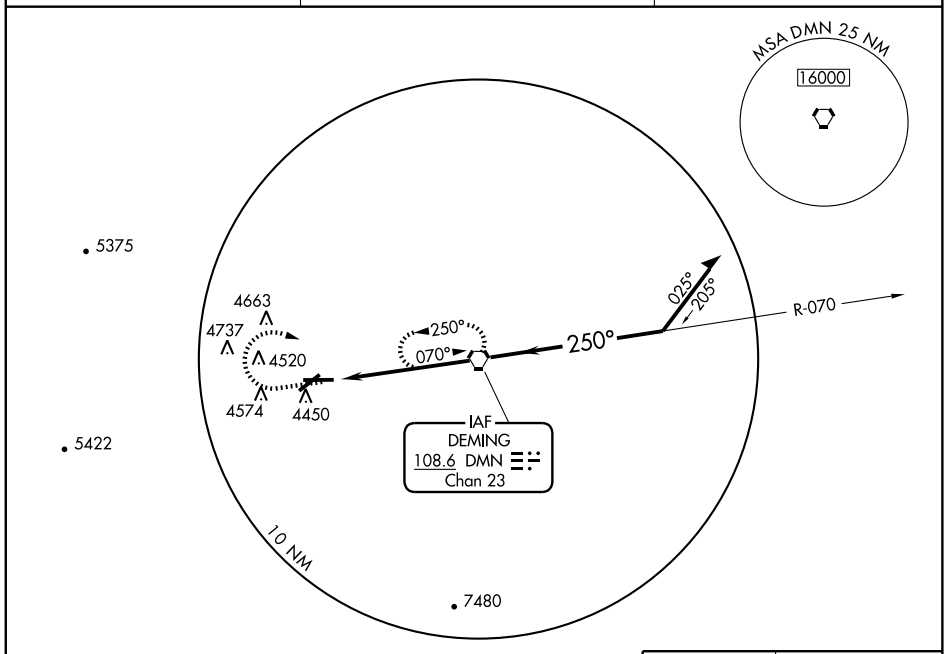
VORTAC DMN	APP CRS	Rwy Idg	6627
108.6	250°	TDZE	4303
Chan 23		Apt Elev	4314

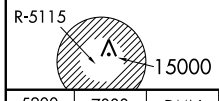
VOR RWY 26
DEMING MUNI (DMN)

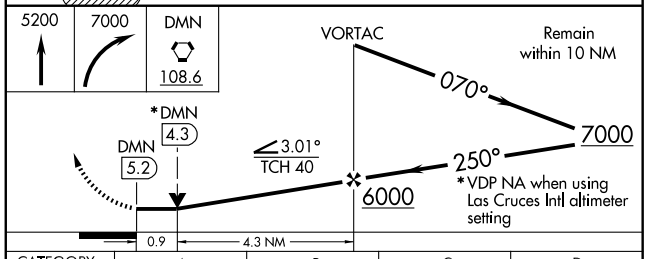
If local altimeter setting not received, use Las Cruces Intl altimeter setting and increase all MDAs 120 feet.

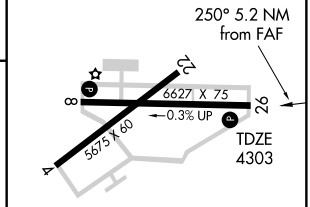
MISSED APPROACH: Climb to 5200 then climbing right turn to 7000 direct DMN VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	128.2 285.5	122.8 (CTAF) L









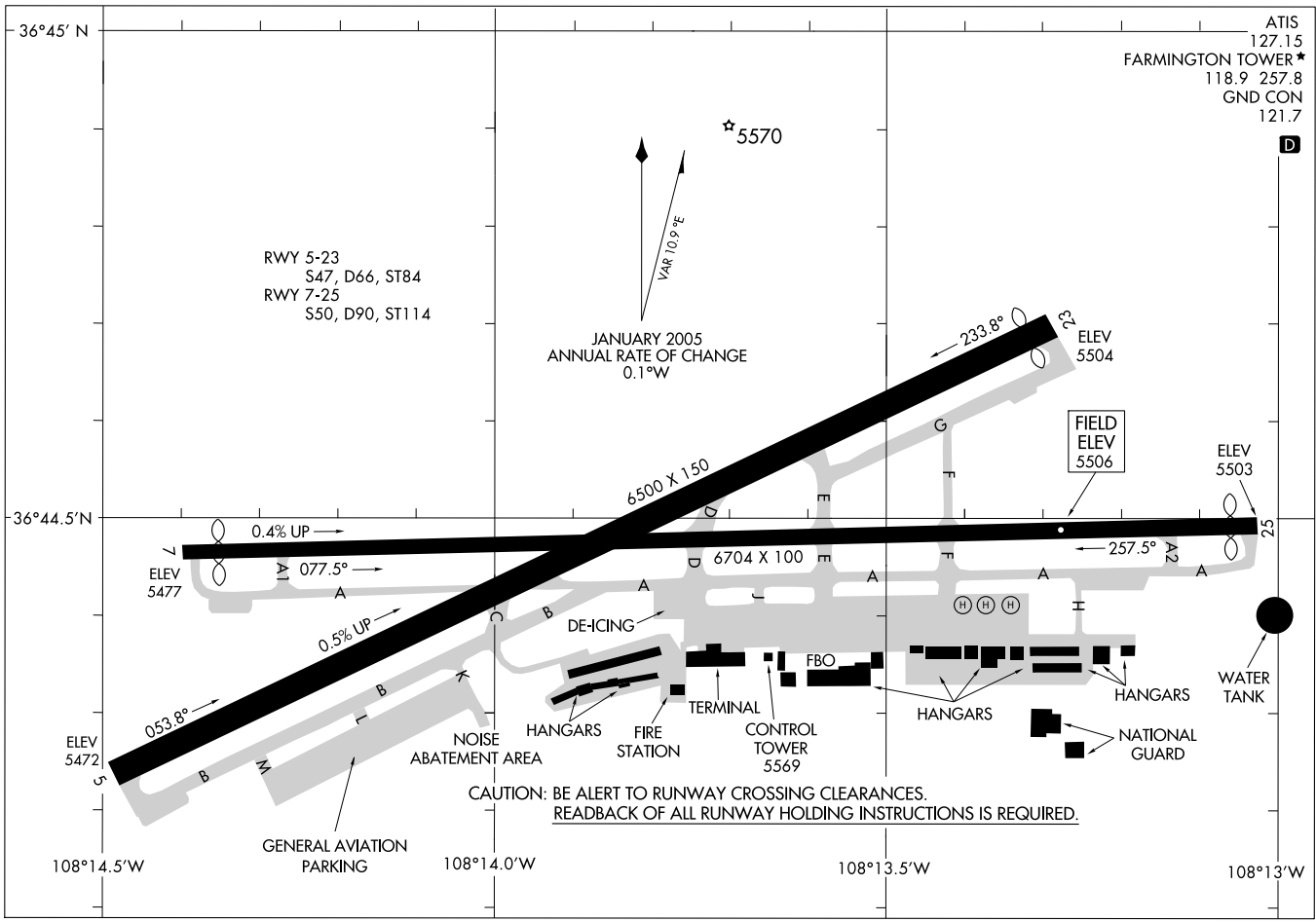
CATEGORY	A	B	C	D
S-26	4640-1 337 (400-1)			
CIRCLING	4820-1 506 (600-1)	4940-1 626 (700-1)	4940-1¾ 626 (700-1¾)	4940-2 626 (700-2)

MIRL Rwys 4-22 and 8-26 L

FAF to MAP 5.2 NM

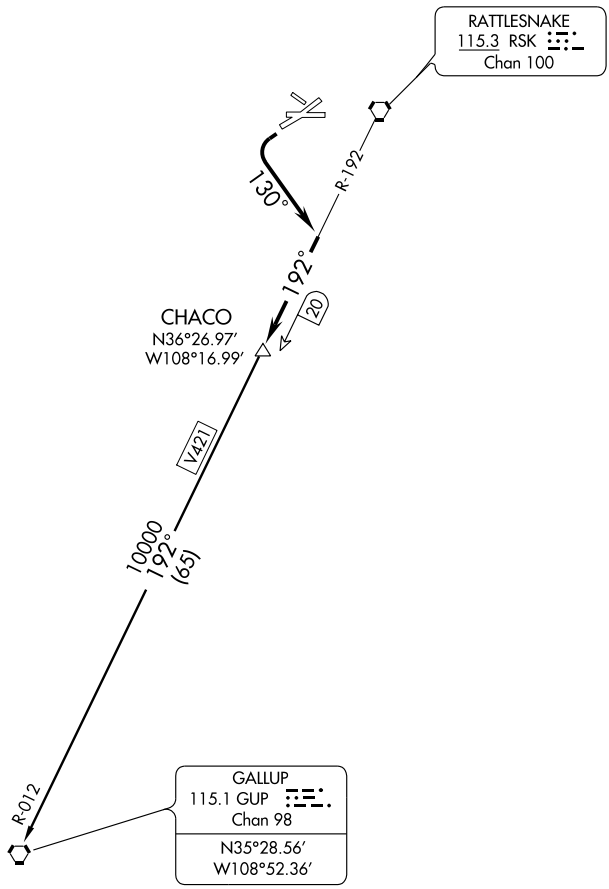
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

SW-1, 22 OCT 2009 to 19 NOV 2009


AIRPORT DIAGRAM
FARMINGTON/ FOUR CORNERS RGNL (FMN)
AL-493 (FAA)
FARMINGTON, NEW MEXICO
ATIS
127.15
FARMINGTON TOWER ★
118.9 257.8
GND CON
121.7
D
5570
VAR 10.9°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
RWY 5-23
S47, D66, ST84
RWY 7-25
S50, D90, ST114
233.8°
23
ELEV
5504
FIELD
ELEV
5506
ELEV
5503
6500 X 150
6704 X 100
0.4% UP
257.5°
25
7
ELEV
5477
077.5°
0.5% UP
053.8°
5
ELEV
5472
DE-ICING
FBO
TERMINAL
HANGARS
FIRE
STATION
CONTROL
TOWER
5569
HANGARS
HANGARS
WATER
TANK
NATIONAL
GUARD
NOISE
ABATEMENT AREA
GENERAL AVIATION
PARKING
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
36°45′ N
36°44.5′N
108°14.5′W
108°14.0′W
108°13.5′W
108°13′W

CHACO ONE DEPARTURE

ATIS 127.15
GND CON
121.7
FARMINGTON TOWER
118.9 (CTAF) 257.8
DENVER CENTER
118.575 348.7
UNICOM 122.95



L-8, H-4

NOTE: Chart not to scale.

NOTE: DME required.

NOTE: This SID requires a minimum climb of 290′ per NM to 6500′ for Rwy 23 departure.

DEPARTURE ROUTE DESCRIPTION

Aircraft departing Runways 23 or 25 turn left heading 130° to intercept RSK R-192 to CHACO. Thence via (assigned route).

GALLUP TRANSITION (CHACO1.GUP): From over CHACO via the RSK R-192 and GUP R-012 to GUP VORTAC.

LOC/DME I-FMN	APP CRS	Rwy Idg	6277
111.9	256°	TDZE	5506
Chan 56		Apt Elev	5506

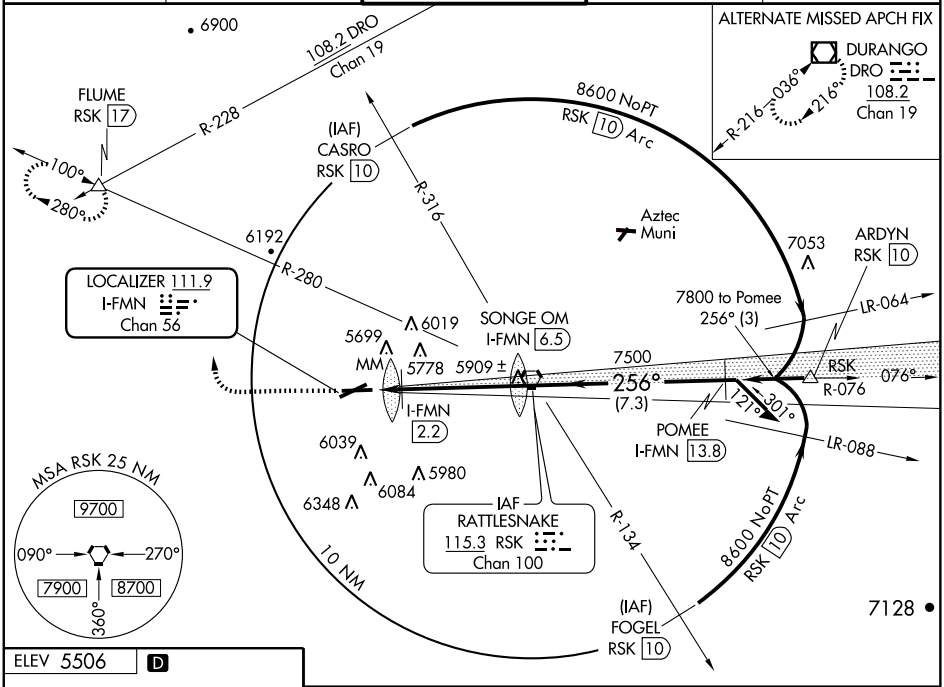
ILS or LOC RWY 25

FARMINGTON/ FOUR CORNERS RGNL (FMN)

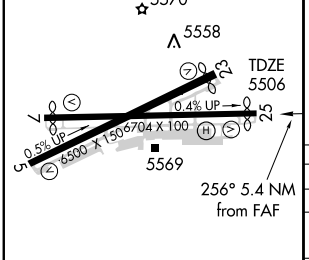
Cat D circling not authorized southeast of Rwy 5 and 25.

MISSED APPROACH: Climb to 6100 then climbing right turn to 9000 via heading 321° and RSK R-280 to FLUME INT and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER*	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95

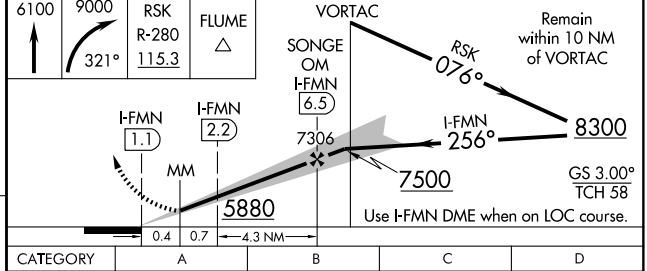


ELEV 5506 D



REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

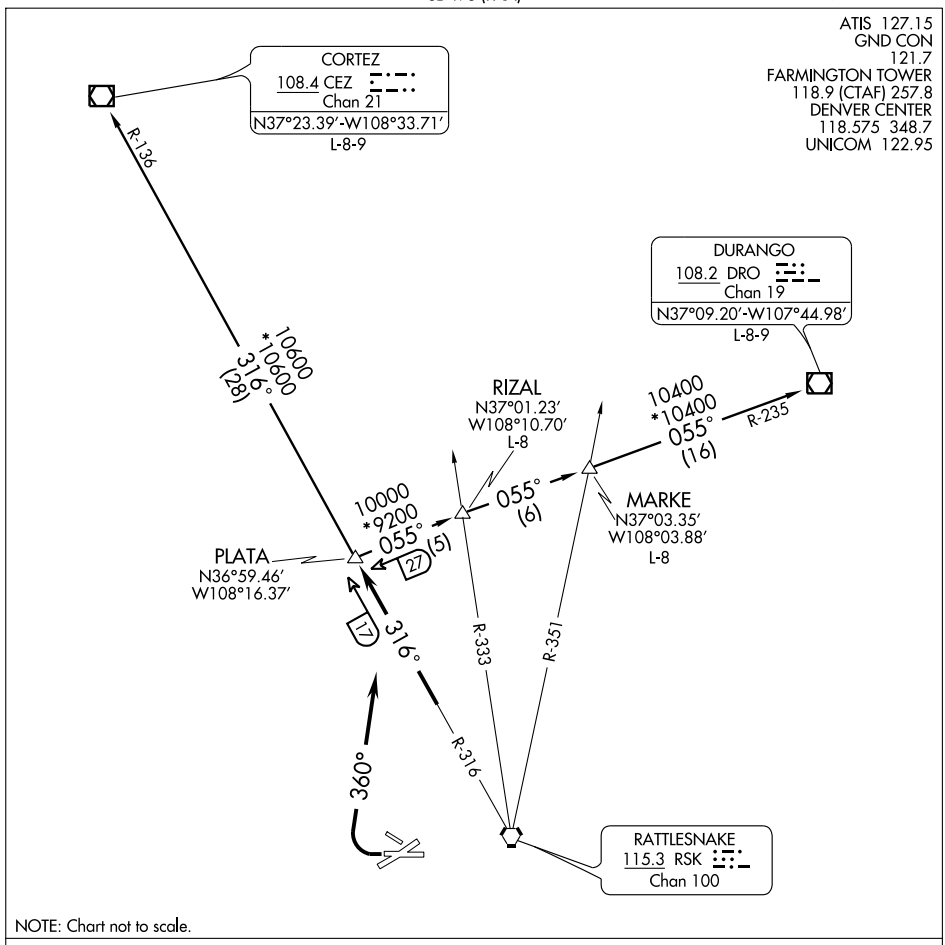
FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-ILS 25	5706-¾ 200 (200-¾)			
S-LOC 25	5880-1 374 (400-1)			5880-1¼ 374 (400-1¼)
CIRCLING	6000-1 494 (500-1)	6120-1 614 (700-1)	6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)
DME MINIMUMS				
S-LOC 25	5780-1 274 (300-1)			
CIRCLING	6000-1 494 (500-1)	6120-1 614 (700-1)	6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

PLATA ONE DEPARTURE



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

Aircraft departure Runways 23 and 25 turn right heading 360° to intercept RSK R-316 to PLATA INT. Thence via (transition) or (assigned route).

CORTEZ TRANSITION (PLATA1.CEZ): From over PLATA INT via RSK R-316 and CEZ R-136 to CEZ VOR/DME.

DURANGO TRANSITION (PLATA1.DRO): From over PLATA INT via DRO R-235 to DRO VOR/DME.

MARKE TRANSITION (PLATA1.MARKE): From over PLATA INT via DRO R-235 to MARKE INT.

RIZAL TRANSITION (PLATA1.RIZAL): From over PLATA INT via DRO R-235 to RIZAL INT.

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS Chan 86210 W05A	APP CRS 053°	Rwy Idg 6375 TDZE 5498 Apt Elev 5506

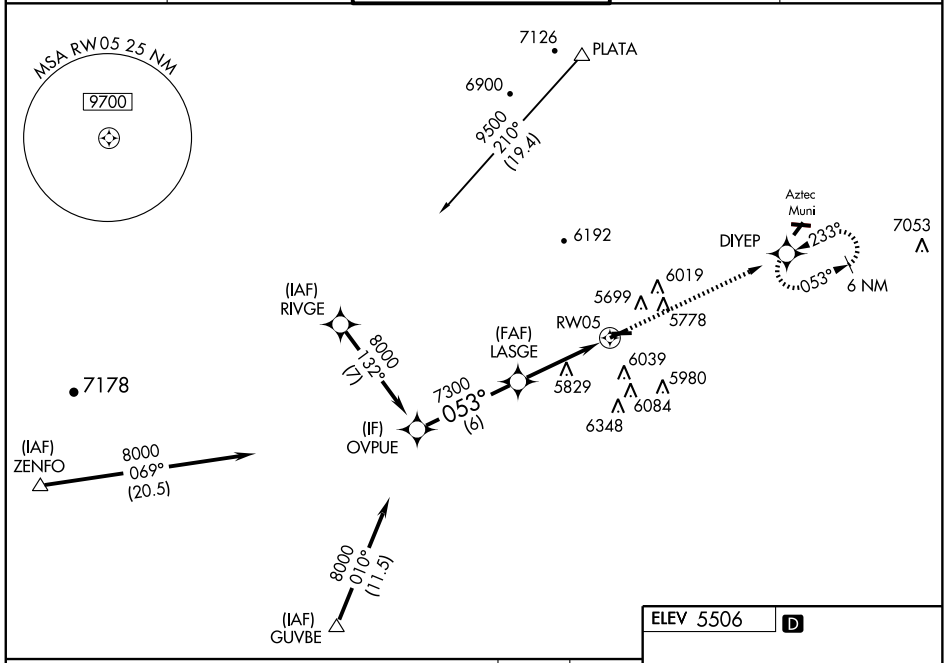
RNAV (GPS) RWY 5

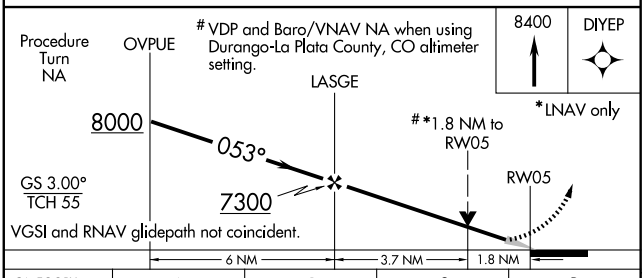
FARMINGTON/ FOUR CORNERS RGNL (FMN)

T Cat D circling not authorized southeast of Rwys 5 and 25.
A Baro-VNAV NA below -26°C (-14°F).
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Durango-La Plata County, CO altimeter setting and increase all DAs/MDAs 260 feet.

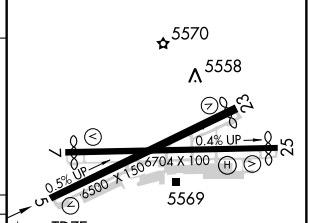
MISSED APPROACH: Climb to 8400 direct DIYEP and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER★	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95





CATEGORY	A	B	C	D
LPV DA	5750-1 252 (300-1)			
LNAV/VNAV DA	5920-1½ 422 (500-1½)			
LNAV MDA	6100-1 602 (600-1)		6100-1¾ 602 (600-1¾)	6100-2 602 (600-2)
CIRCLING	6100-1½ 594 (600-1½)	6120-1½ 614 (700-1½)	6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)



REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 90110 W07A	APP CRS 076°	Rwy Idg 6277 TDZE 5502 Apt Elev 5506

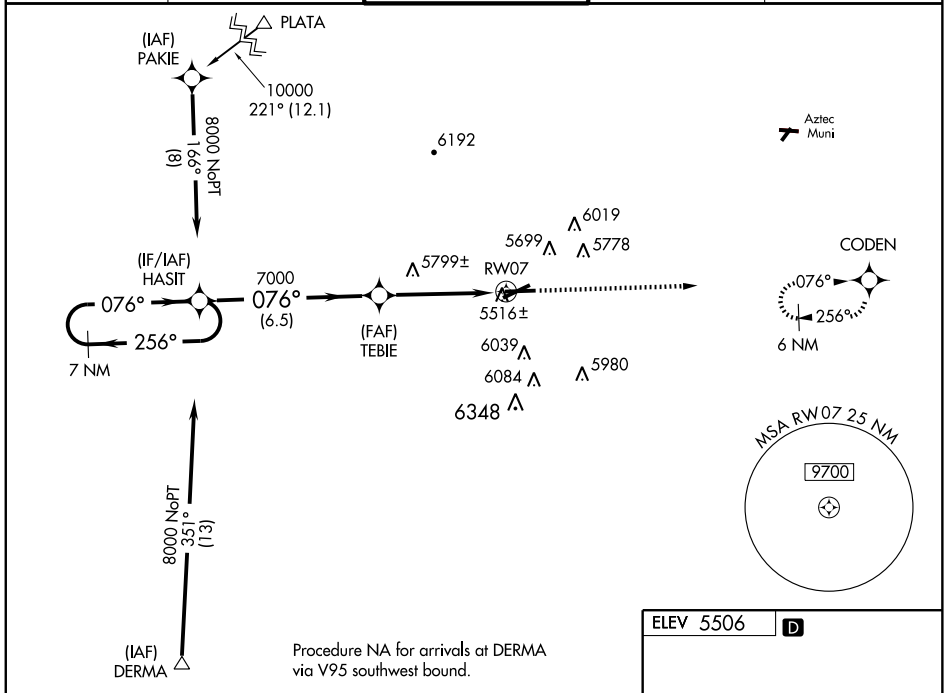
RNAV (GPS) RWY 7

FARMINGTON/ FOUR CORNERS RGNL (FMN)

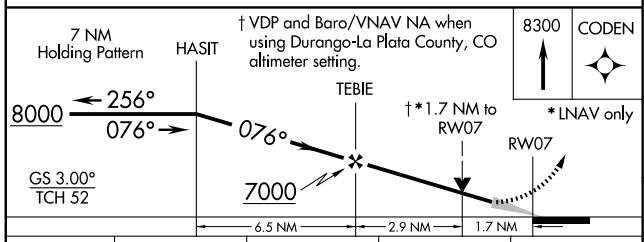
Cat D circling not authorized southeast of Rwys 5 and 25.
Baro-VNAV NA below -26°C (-14°F).
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Durango-La Plata County, CO altimeter setting and increase all DAs/MDAs 260 feet.

MISSED APPROACH: Climb to 8300 direct CODEN and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER*	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95

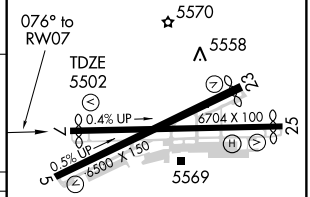


Procedure NA for arrivals at DERMA via V95 southwest bound.



CATEGORY	A	B	C	D
LPV DA	5760-1 258 (300-1)			
LNAV/VNAV DA	5980-1¾ 478 (500-1¾)			
LNAV MDA	6060-1 558 (600-1)		6060-1½ 558 (600-1½)	6060-1¾ 558 (600-1¾)
CIRCLING	6060-1¾ 554 (600-1¾)	6120-1¾ 614 (700-1¾)	6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)

ELEV 5506 D



REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 70714 W23A	APP CRS 233°	Rwy Idg 6375 TDZE 5504 Apt Elev 5506

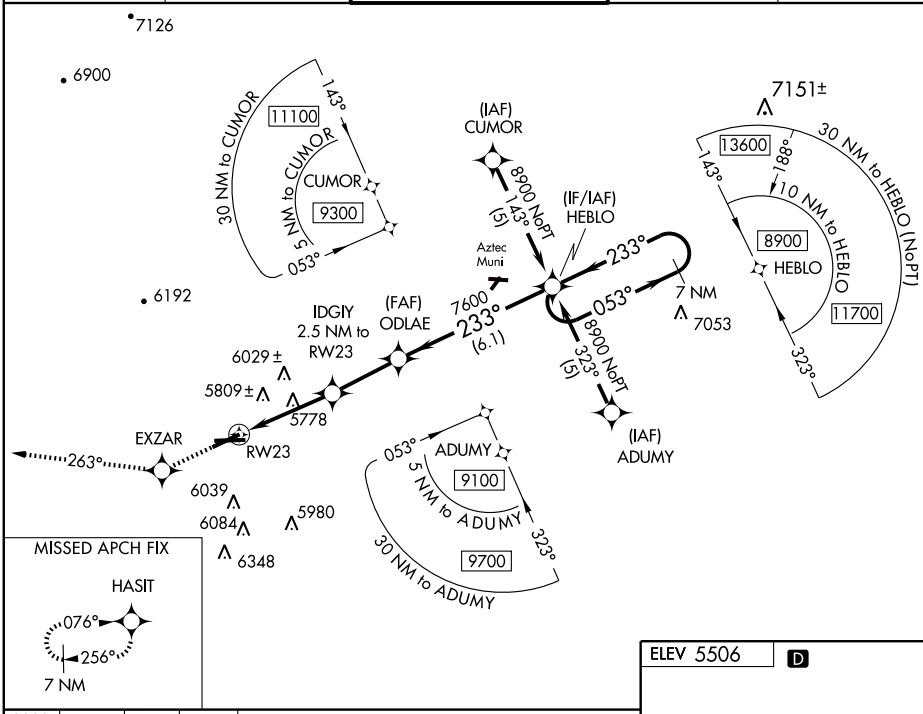
RNAV (GPS) RWY 23

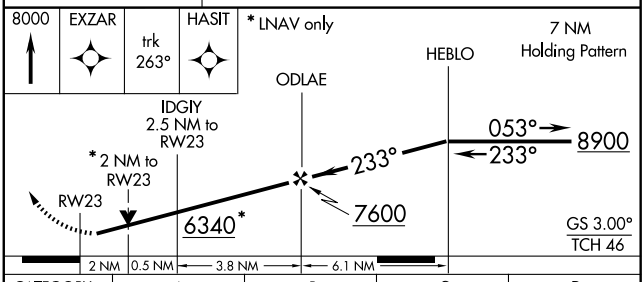
FARMINGTON/FOUR CORNERS RGNL (FMN)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 38°C (100°F).
Circling NA Cat D southeast of Rwys 5 and 25.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

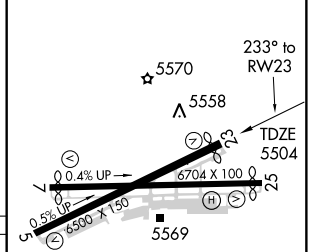
MISSED APPROACH: Climb to 8000 direct EXZAR and via track 263° to HASIT and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER★	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95





CATEGORY	A	B	C	D
LPV DA		5798-1	294 (300-1)	
LNAV/VNAV DA		6138-2¼	634 (700-2¼)	
LNAV MDA	6180-1 676 (700-1)		6180-2 676 (700-2)	6180-2¼ 676 (700-2¼)
CIRCLING	6180-1 674 (700-1)		6180-2 674 (700-2)	6180-2¼ 674 (700-2¼)



REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6277
256°	TDZE	5506
	Apt Elev	5506

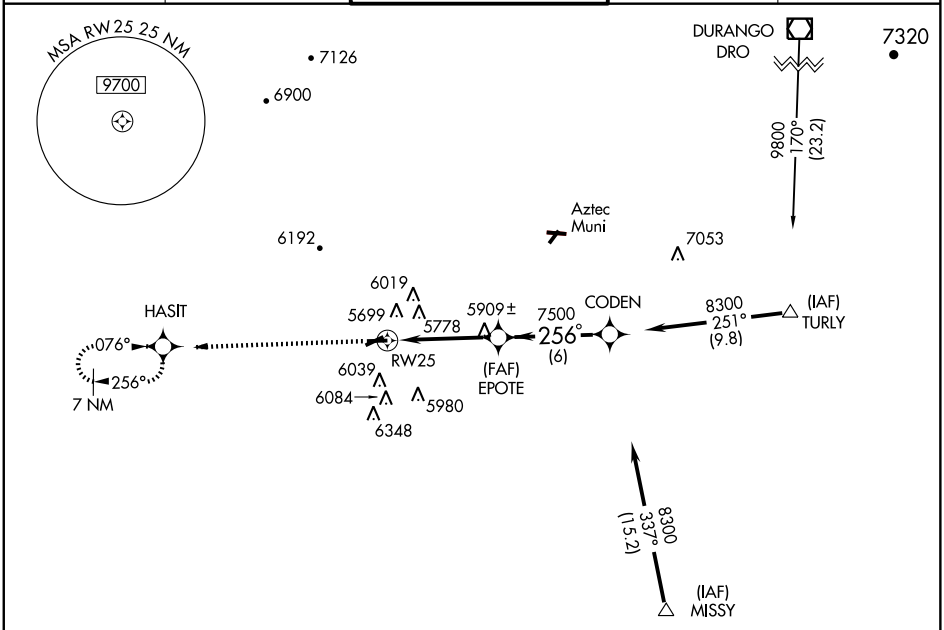
RNAV (GPS) RWY 25

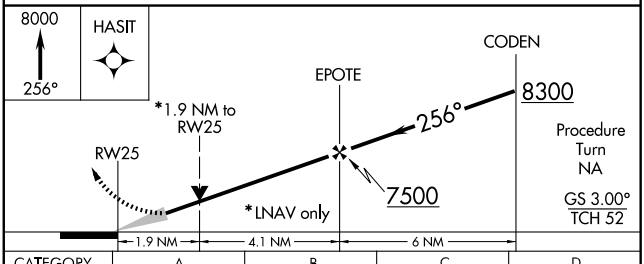
FARMINGTON/ FOUR CORNERS RGNL (FMN)

Baro-VNAV NA below -26°C (-14°F)
NA DME/DME RNP- 0.3 NA.
Cat D circling not authorized southeast of Rwys 5 and 25.

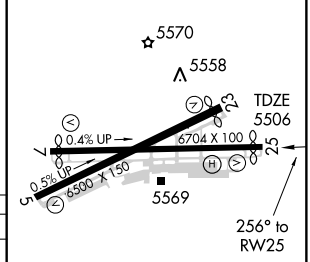
MISSED APPROACH: Climb to 8000 via 256° course to HASIT WP and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER*	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	5860-1¼ 354 (400-1¼)			
LNAV MDA	6160-1 654 (700-1)		6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)
CIRCLING	6160-1¼ 654 (700-1¼)		6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)



REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC RSK	APP CRS	Rwy Idg	6375
115.3	070°	TDZE	5498
Chan 100		Apt Elev	5506

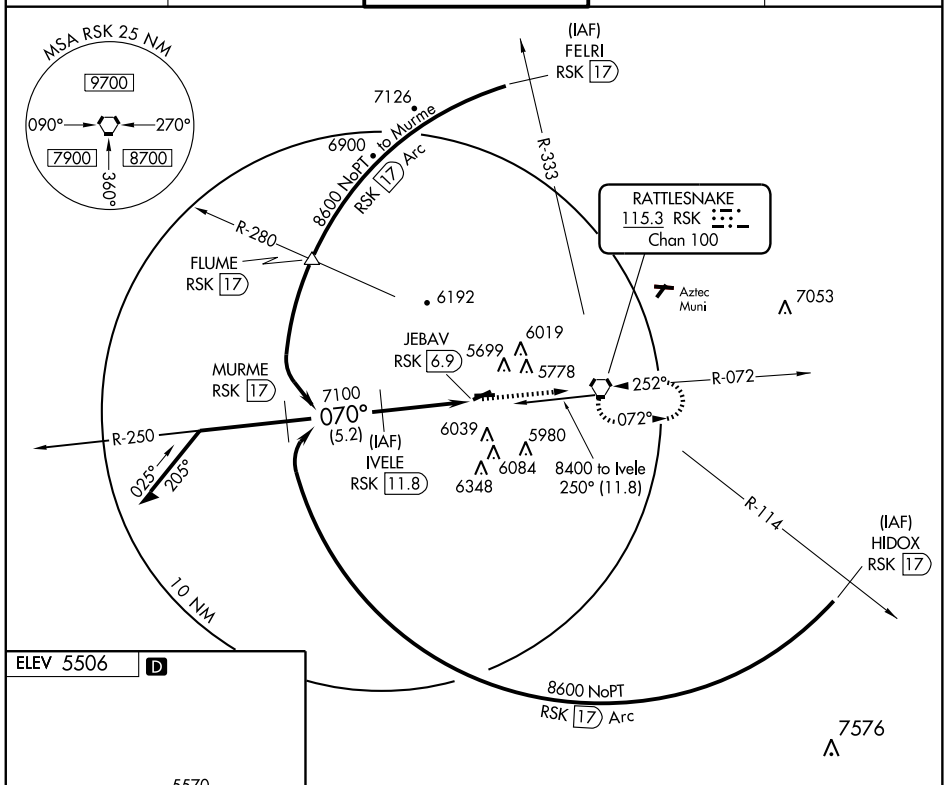
VOR/DME RWY 5

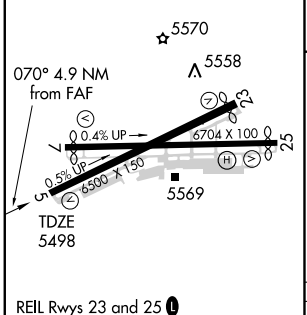
FARMINGTON/FOUR CORNERS RGNL (FMN)

T NA Cat D circling not authorized southeast of Rwys 5 and 25.

MISSED APPROACH: Climb to 8300 direct RSK VORTAC and hold.

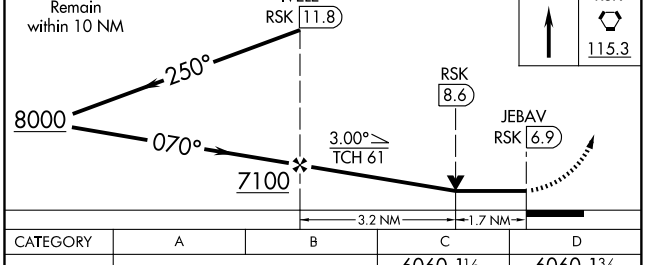
ATIS	DENVER CENTER	FARMINGTON TOWER★	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95





REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-5	6060-1 562 (600-1)		6060-1½ 562 (600-1½)	6060-1¾ 562 (600-1¾)
CIRCLING	6060-1 554 (600-1)	6120-1 614 (700-1)	6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC RSK	APP CRS	Rwy Idg	6277
115.3	072°	TDZE	5502
Chan 100		Apt Elev	5506

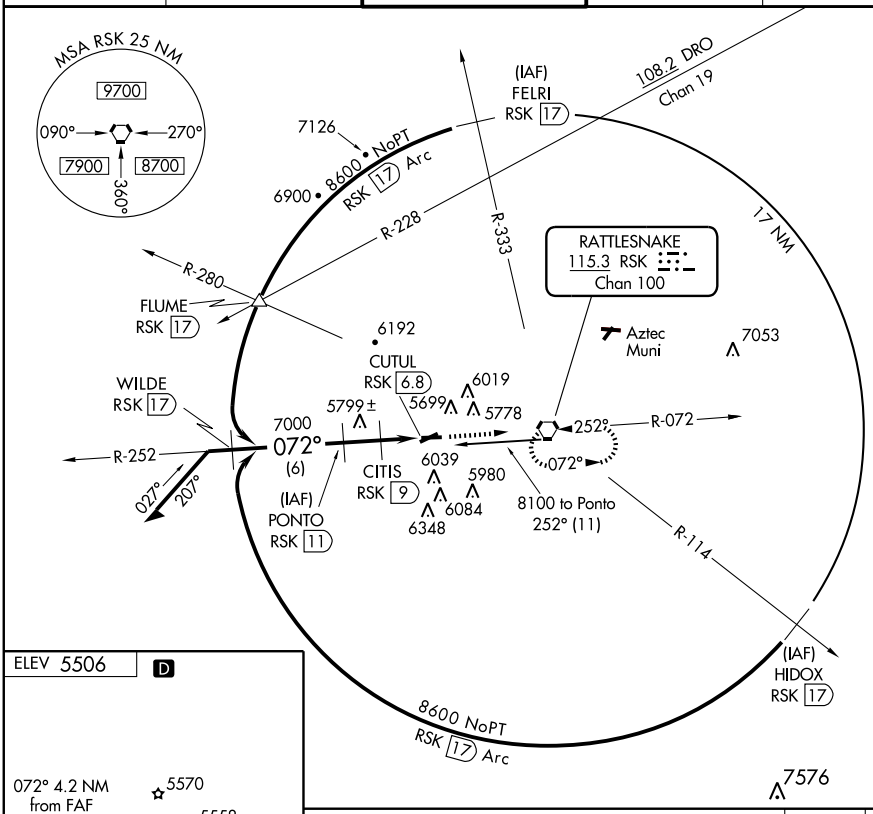
VOR/DME RWY 7

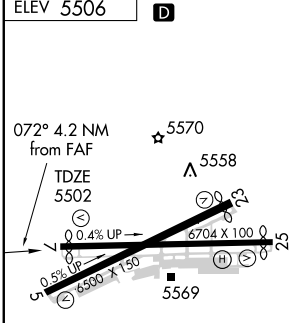
FARMINGTON/ FOUR CORNERS RGNL (FMN)

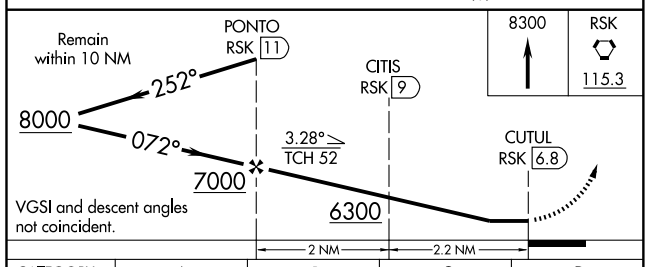
Cat D circling not authorized southeast of Rwys 5 and 25.

MISSED APPROACH: Climb to 8300 direct RSK VORTAC and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER★	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95







CATEGORY	A	B	C	D
S-7	5920-1 418 (500-1)		5920-1¼ 418 (500-1¼)	
CIRCLING	6000-1 494 (500-1)	6120-1 614 (700-1)	6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)

REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC RSK 115.3 Chan 100	APP CRS 254°	Rwy Idg 6375 TDZE 5504 Apt Elev 5506

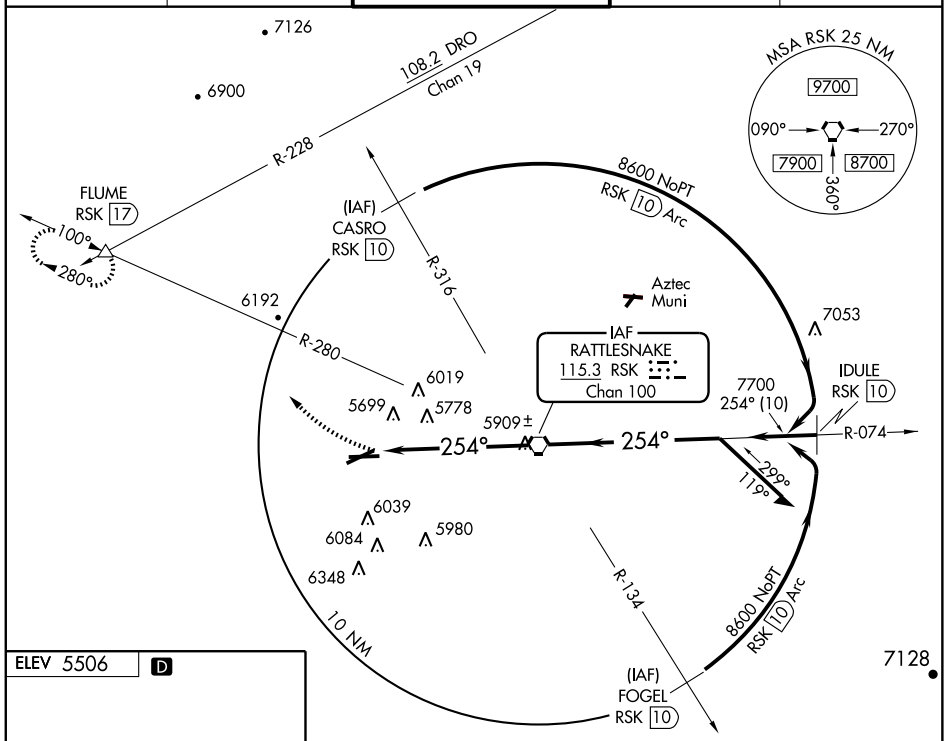
VOR RWY 23

FARMINGTON/ FOUR CORNERS RGNL (FMN)

Cat D circling not authorized southeast of Rwys 5 and 25.

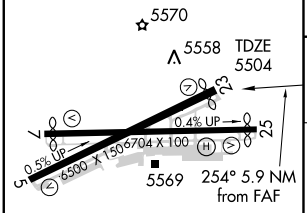
MISSED APPROACH: Climbing right turn to 9000 via RSK R-280 to FLUME Int and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER★	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95



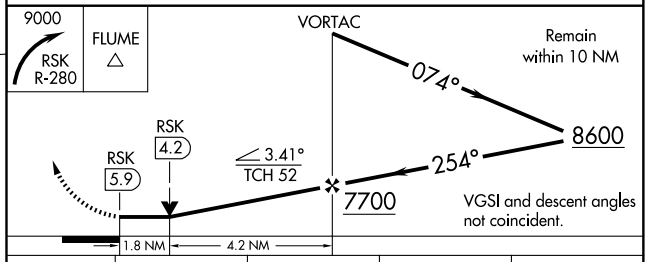
SW-1, 22 OCT 2009 to 19 NOV 2009

ELEV 5506 D



REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



CATEGORY	A	B	C	D
S-23	6120-1	616 (700-1)	6120-1¾ 616 (700-1¾)	6120-2 616 (700-1)
CIRCLING	6120-1	614 (700-1)	6160-1¾ 654 (700-1¾)	6160-2 654 (700-2)

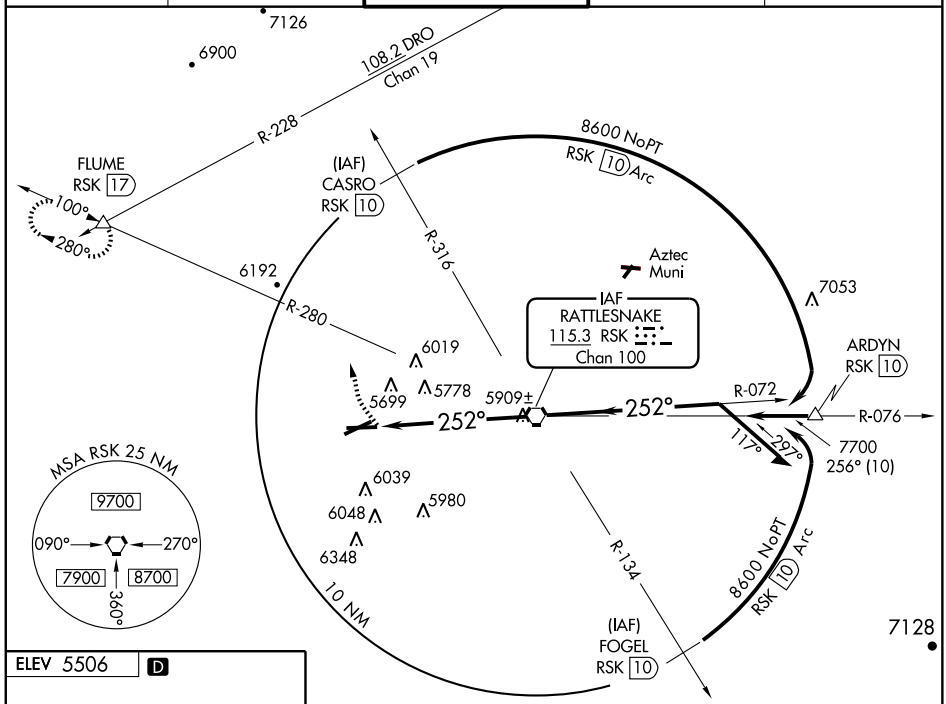
VORTAC RSK 115.3 Chan 100	APP CRS 252°	Rwy Idg 6277 TDZE 5506 Apt Elev 5506

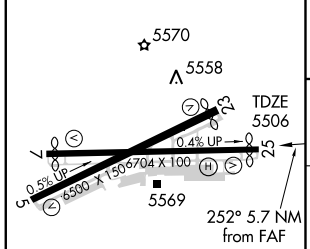
VOR RWY 25

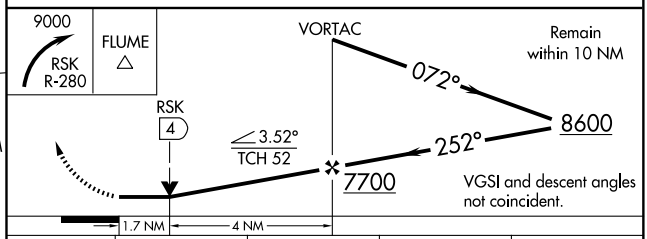
FARMINGTON/FOUR CORNERS RGNL (FMN)

MISSED APPROACH: Climbing right turn to 9000 via RSK R-280 to FLUME Int and hold.

ATIS	DENVER CENTER	FARMINGTON TOWER★	GND CON	UNICOM
127.15	118.575 348.7	118.9 (CTAF) L 257.8	121.7	122.95







REIL Rwys 23 and 25 L
MIRL Rwys 5-23 and 7-25 L

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

CATEGORY	A	B	C	D
S-25	6120-1	614 (700-1)	6120-1¾ 614 (700-1¾)	NA
CIRCLING	6120-1	614 (700-1)	6160-1¾ 654 (700-1¾)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

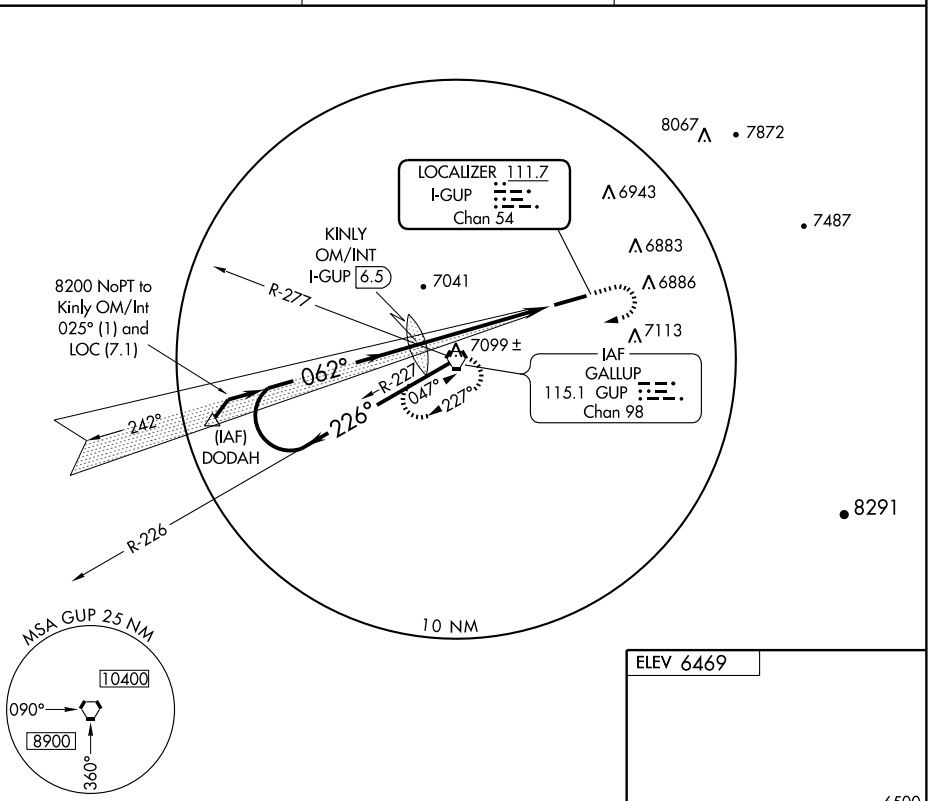
LOC/DME I-GUP	APP CRS	Rwy Idg	7316
111.7	062°	TDZE	6463
Chan 54		Apt Elev	6469

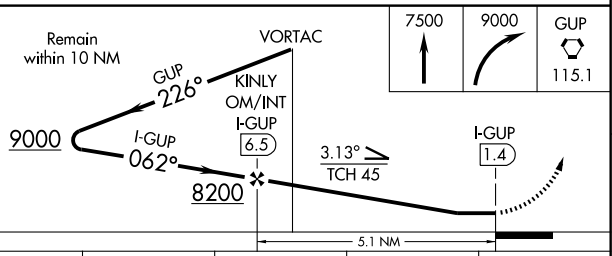
LOC RWY 6
GALLUP MUNI (GUP)

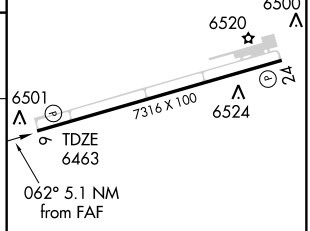
NA

MISSED APPROACH: Climb to 7500 then climbing right turn to 9000 direct GUP VORTAC and hold.

ASOS	ALBUQUERQUE RADIO	UNICOM
118.375	122.1R	122.95 (CTAF) L







CATEGORY	A	B	C	D
S-6	7280-1 817 (900-1)	7280-1¼ 817 (900-1¼)	7280-2½ 817 (900-2½)	7280-2¾ 817 (900-2¾)
CIRCLING	7280-1 811 (900-1)	7280-1¼ 811 (900-1¼)	7280-2½ 811 (900-2½)	7360-3 891 (900-3)

REIL Rwy 24 L
MIRL Rwy 6-24 L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SW-1, 22 OCT 2009 to 19 NOV 2009

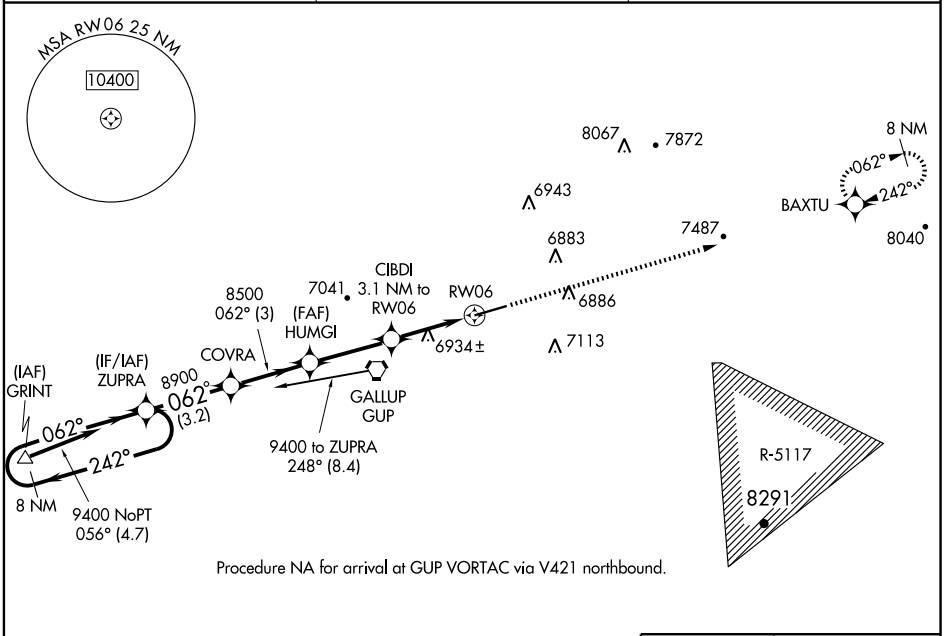
WAAS	APP CRS	Rwy Idg	7316
CH 82099	062°	TDZE	6465
W06A		Apt Elev	6472

RNAV (GPS) RWY 6
GALLUP MUNI (GUP)

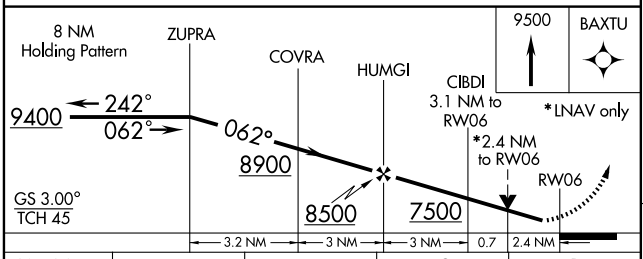
DME/DME RNP-0.3 NA.
VDP NA with Window Rock altimeter setting.
If local altimeter setting not received, use Window Rock altimeter setting and increase all DAs/MDAs 80 feet.

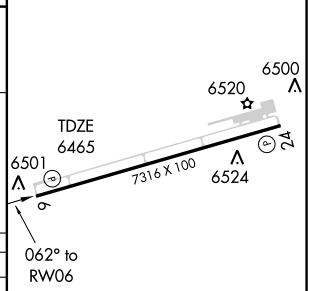
MISSED APPROACH: Climb to 9500 direct BAXTU and hold.

ASOS	ALBUQUERQUE RADIO	UNICOM
118.375	122.1R	122.95 (CTAF) L



Procedure NA for arrival at GUP VORTAC via V421 northbound.





CATEGORY	A	B	C	D
LPV DA	6759-1 294 (300-1)			
LNAV/VNAV DA	NA			
LNAV MDA	7260-1 795 (800-1)	7260-1¼ 795 (800-1¼)	7260-2¼ 795 (800-2¼)	7260-2½ 795 (800-2½)
CIRCLING	7260-1 788 (800-1)	7260-1¼ 788 (800-1¼)	7260-2¼ 788 (800-2¼)	7360-3 888 (900-3)

REIL Rwy 24 L
MIRL Rwy 6-24 L

SW-1, 22 OCT 2009 to 19 NOV 2009

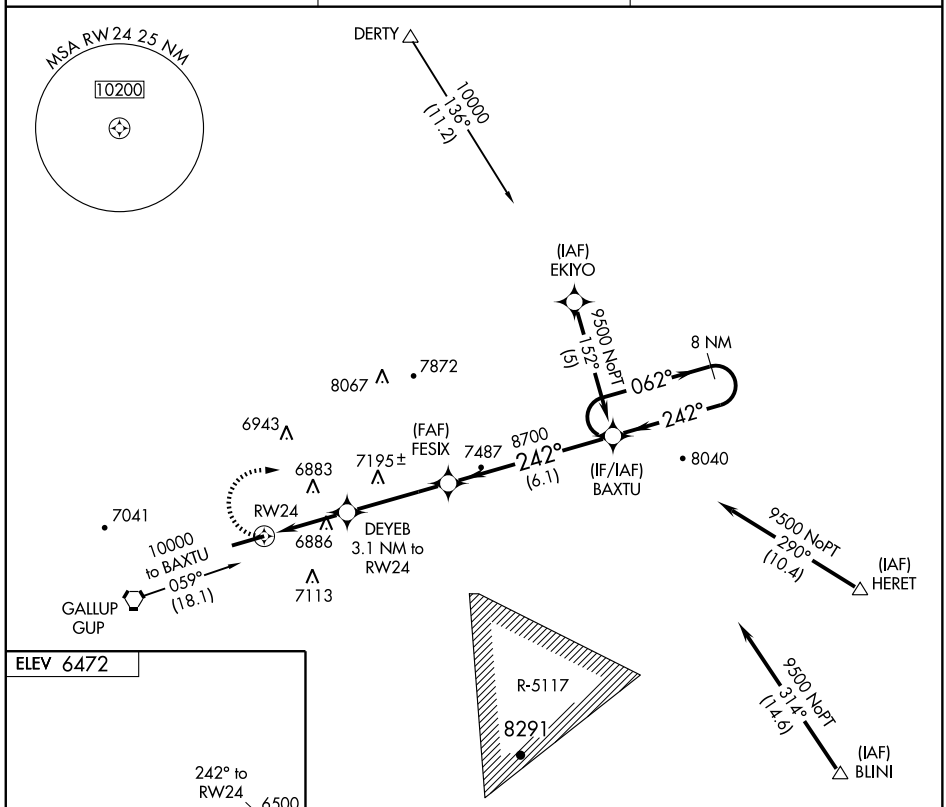
APP CRS	Rwy Idg	7316
242°	TDZE	6472
	Apt Elev	6472

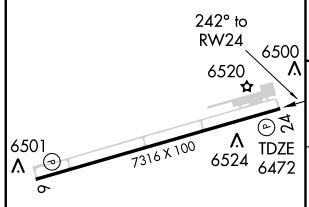
RNAV (GPS) RWY 24
GALLUP MUNI (GUP)

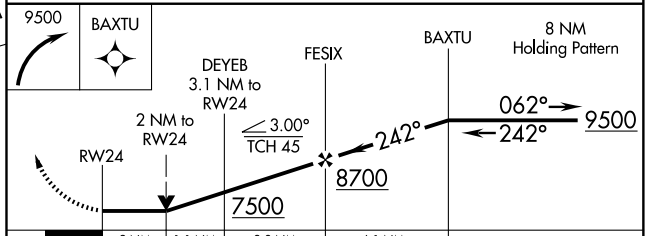
DME/DME RNP-0.3 NA.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 9500 direct BAXTU and hold.

ASOS	ALBUQUERQUE RADIO	UNICOM
118.375	122.1R	122.95 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7140-1	668 (700-1)	7140-1¾ 668 (700-1¾)	7140-2 668 (700-2)
CIRCLING	7140-1	668 (700-1)	7140-1¾ 668 (700-1¾)	7360-3 888 (900-3)

REIL Rwy 24 L
MIRL Rwy 6-24 L

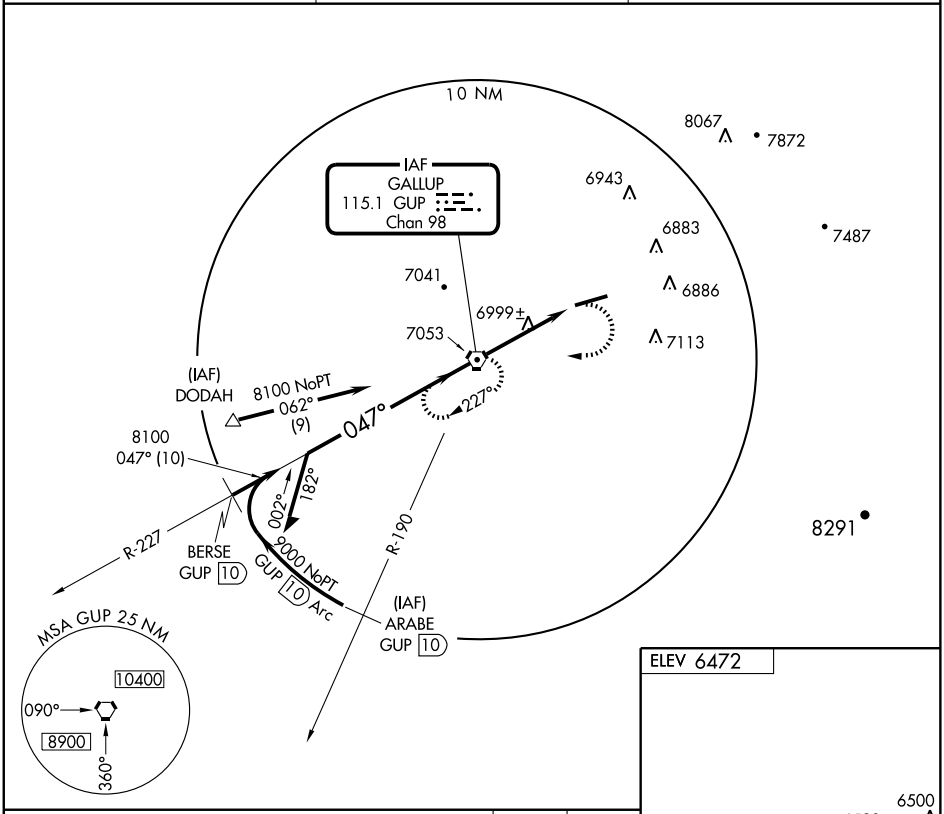
SW-1, 22 OCT 2009 to 19 NOV 2009

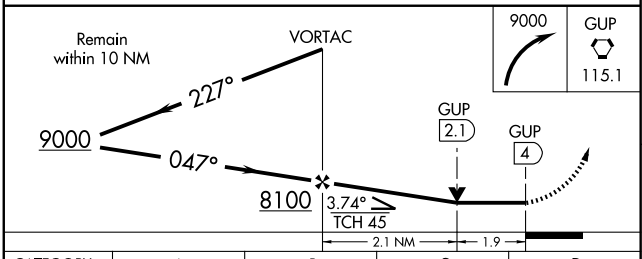
VORTAC GUP	APP CRS	Rwy Idg	7316
115.1	047°	TDZE	6465
Chan 98		Apt Elev	6472

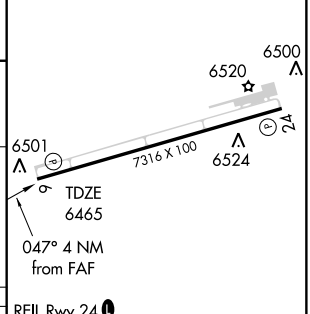
VOR RWY 6
GALLUP MUNI (GUP)

MISSED APPROACH: Climbing right turn to 9000 direct GUP VORTAC and hold.

ASOS	ALBUQUERQUE RADIO	UNICOM
118.375	122.1R	122.95 (CTAF) L







CATEGORY	A	B	C	D
S-6	7260-1 795 (800-1)	7260-1¼ 795 (800-1¼)	7260-2¼ 795 (800-2¼)	7260-2½ 795 (800-2½)
CIRCLING	7260-1 788 (800-1)	7260-1¼ 788 (800-1¼)	7260-2¼ 788 (800-2¼)	7360-3 888 (900-3)

REIL Rwy 24 L
MIRL Rwy 6-24 L

FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

SW-1, 22 OCT 2009 to 19 NOV 2009

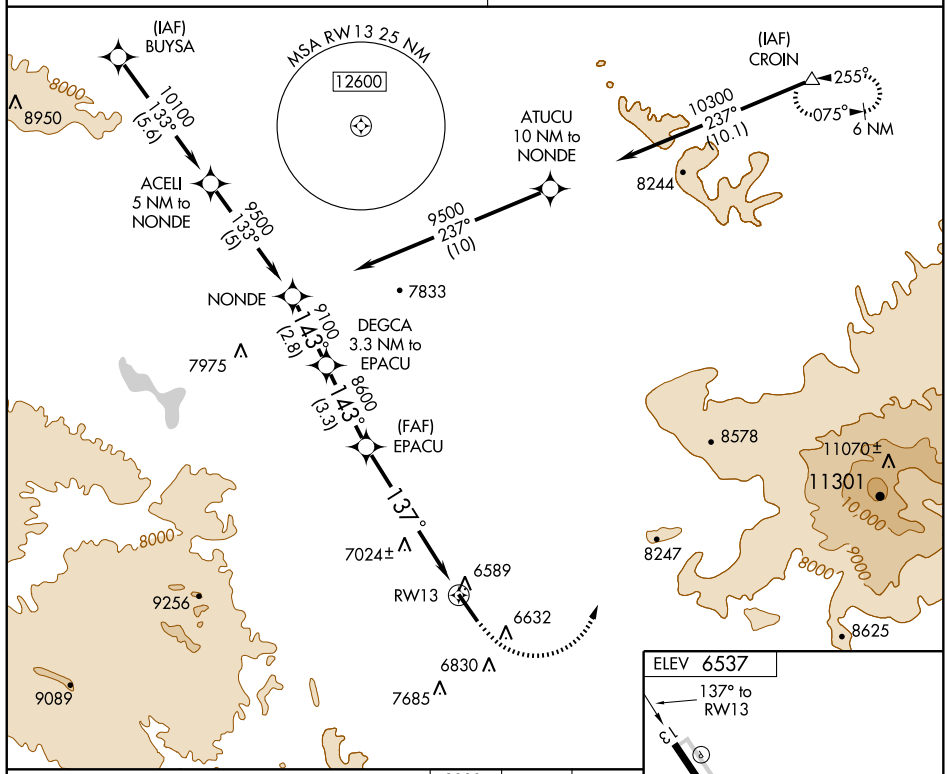
APP CRS	Rwy Idg	7172
137°	TDZE	6537
	Apt Elev	6537

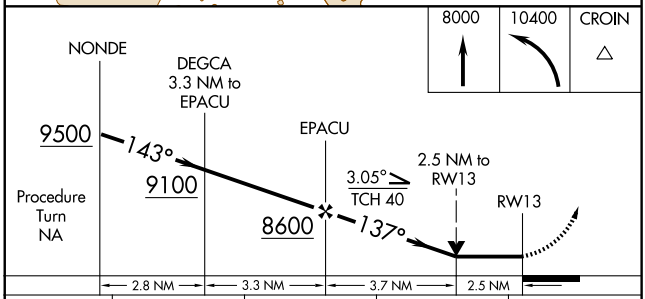
RNAV (GPS) RWY 13
GRANTS-MILAN MUNI (GNT)

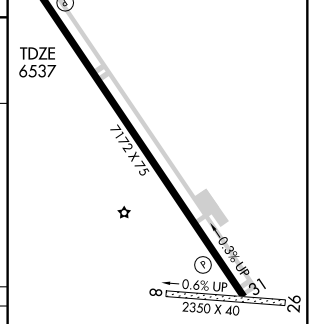
If local altimeter setting not received, procedure NA.
GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.
Circling NA east of Rwy 13-31.
Procedure NA at night.

MISSED APPROACH: Climb to 8000, then climbing left turn to 10400 direct CROIN WP and hold.

ALBUQUERQUE CENTER	UNICOM
124.325 288.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7380-1 843 (900-1)	7380-1¼ 843 (900-1¼)	7380-2½ 843 (900-2½)	NA
CIRCLING	7380-1 843 (900-1)	7420-1¼ 883 (900-1¼)	7480-2¾ 943 (1000-2¾)	NA

MIRL Rwy 13-31 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7172
312°	TDZE	6522
	Apt Elev	6537

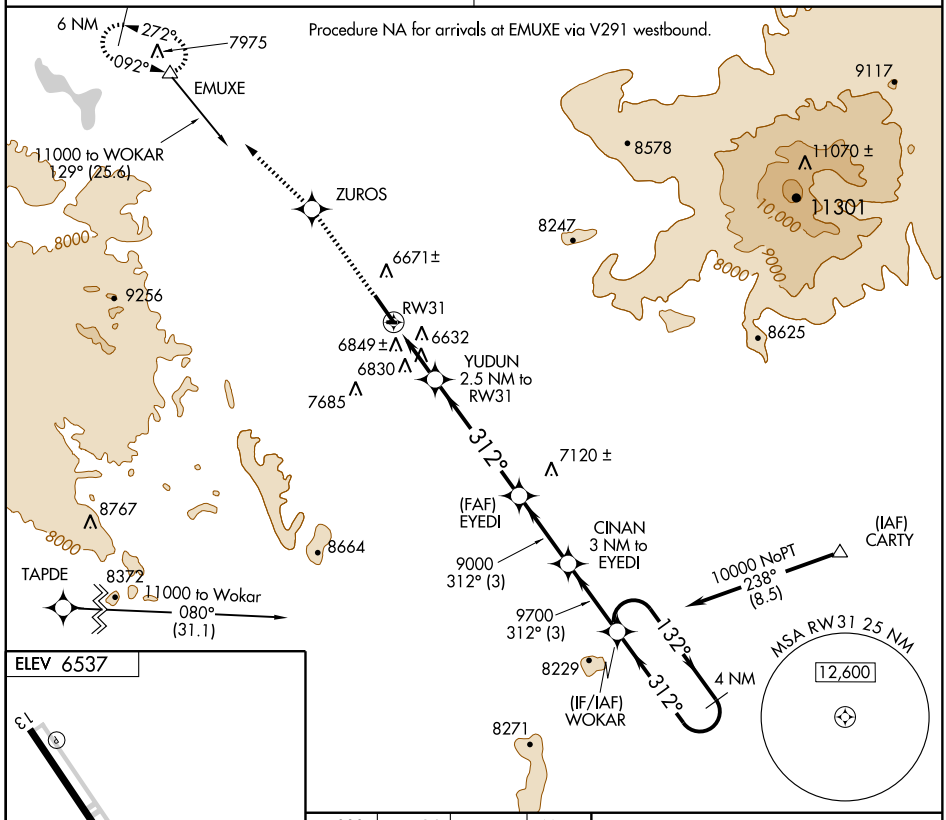
RNAV (GPS) RWY 31
GRANTS-MILAN MUNI (GNT)

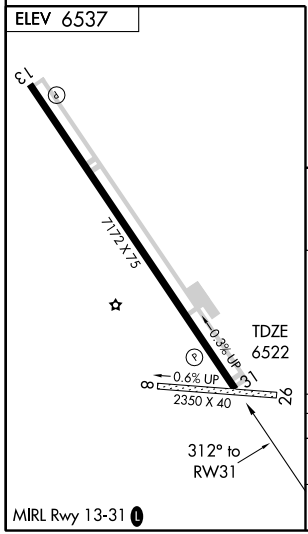
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
NA Circling not authorized east of Rwys 13-31.

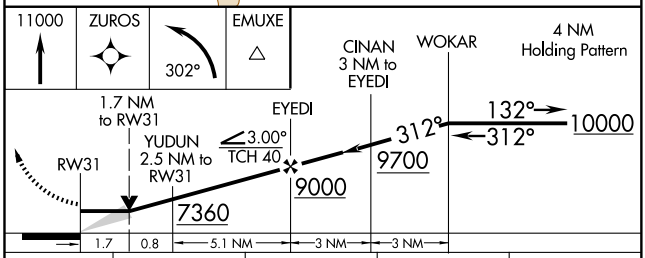
MISSED APPROACH: Climb to 11000 direct ZUROS WP and left turn via 302 ° track to EMUXE WP and hold.

ALBUQUERQUE CENTER	UNICOM
124.325 288.25	122.8 (CTAF) L

Procedure NA for arrivals at EMUXE via V291 westbound.



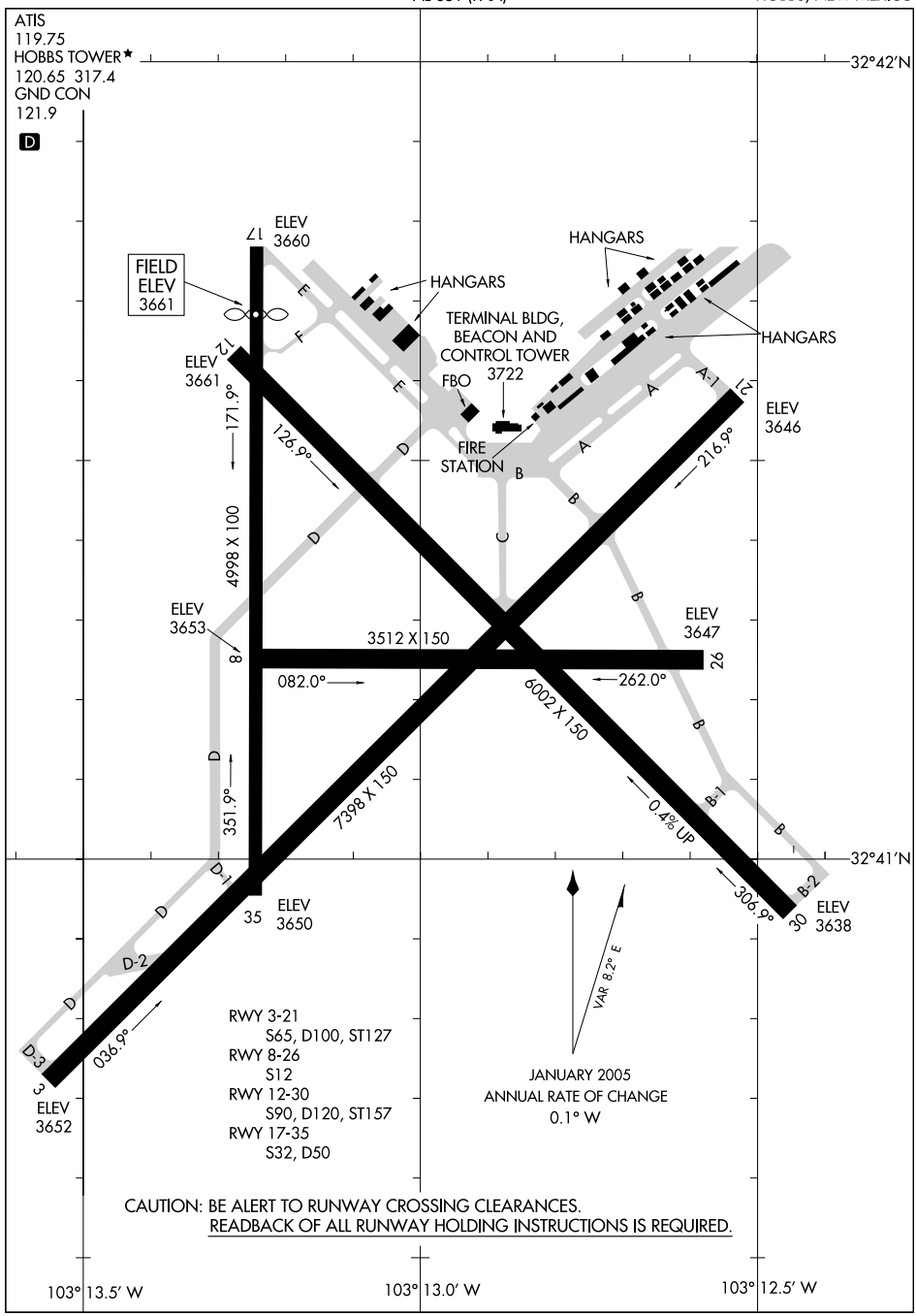




CATEGORY	A	B	C	D
LNAV MDA	7100-1	578 (600-1)	7100-1½ 578 (600-1½)	NA
CIRCLING	7160-1	623 (700-1)	7160-1¾ 623 (700-1¾)	NA

MIRL Rwy 13-31 L

SW-1, 22 OCT 2009 to 19 NOV 2009



SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-HOB	APP CRS	Rwy Idg	7398
108.5	035°	TDZE	3652
Chan 22		Apt Elev	3661

ILS or LOC RWY 3

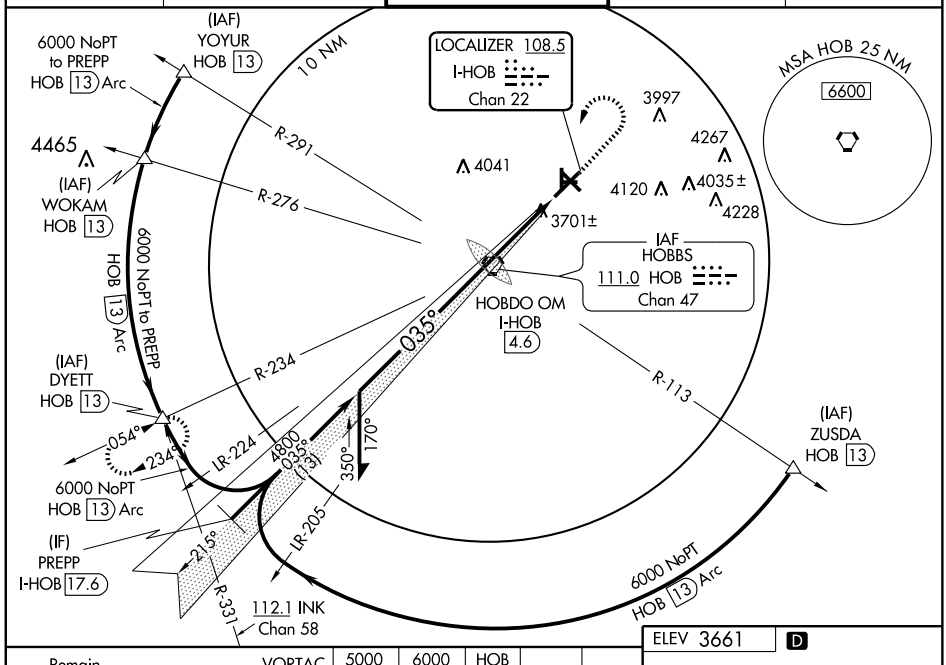
HOBBS/LEA COUNTY RGNL (HOB)

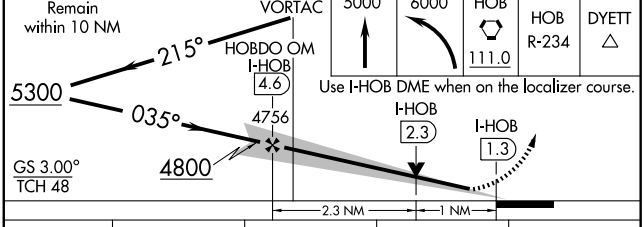
When control tower closed, except for operators with approved weather reporting service, use Carlsbad altimeter setting. VDP NA when using Carlsbad altimeter setting. For inoperative MALSR, increase Carlsbad altimeter setting S-ILS all Cats visibility to 1¾ mile.

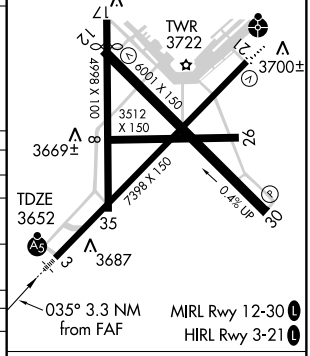
MALSR

MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct HOBBS VORTAC then via HOB VORTAC R-234 to DYETT INT/HOB 13 DME and hold.

ATIS	FORT WORTH CENTER	HOBBS TOWER ★	GND CON	UNICOM
119.75	133.1 298.95	120.65 (CTAF) L 317.4	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 3	3852-½ 200 (200-½)			
S-LOC 3	4020-½ 368 (400-½)			4020-¾ 368 (400-¾)
CIRCLING	4120-1 459 (500-1)	4140-1 479 (500-1)	4140-1½ 479 (500-1½)	4220-2 559 (600-2)
CARLSBAD ALTIMETER SETTING MINIMUMS				
S-ILS 3	4133-1¼ 481 (500-1¼)			
S-LOC 3	4300-½ 648 (700-½)		4300-1¼ 648 (700-1¼)	4300-1½ 648 (700-1½)
CIRCLING	4400-1¾ 739 (800-1¾)	4420-1¾ 759 (800-1¾)	4420-2¼ 759 (800-2¼)	4440-2½ 779 (800-2½)

FAF to MAP 3.3 NM					
Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-HOB	APP CRS	Rwy Idg	7398
108.5	215°	TDZE	3649
Chan 22		Apt Elev	3661

LOC/DME BC RWY 21

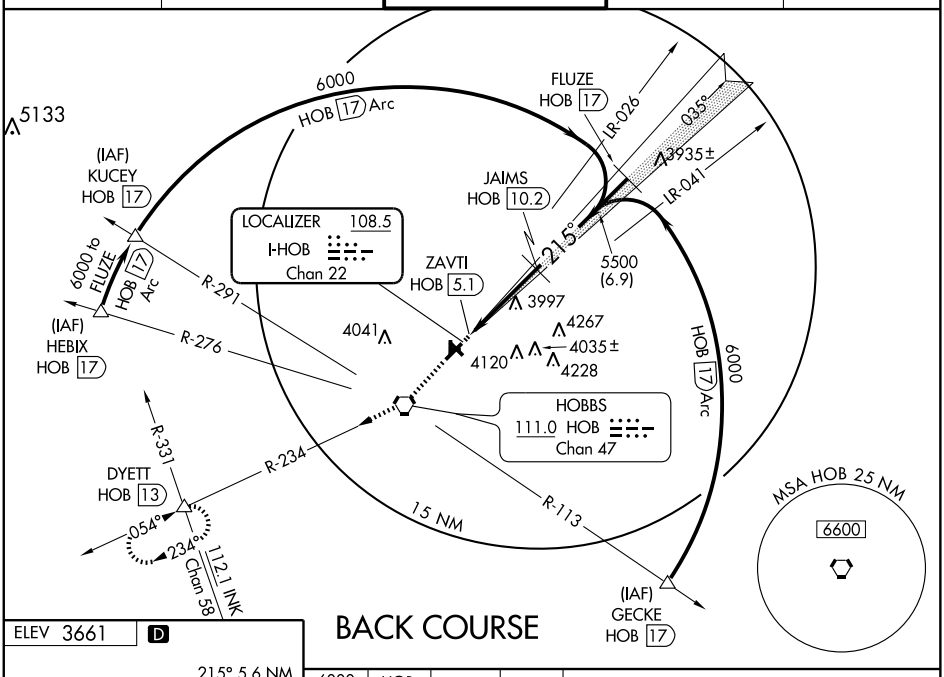
HOBBS/LEA COUNTY RGNL (HOB)

When control tower closed, except for operators with approved weather reporting service, use Cavern City Air Terminal altimeter setting. Inoperative table does not apply.
DME from HOB VORTAC. Simultaneous reception of I-HOB and HOB DME required.

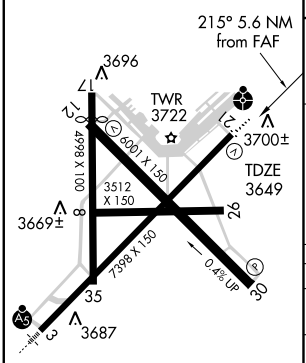
ODALS

MISSED APPROACH: Climb to 6000 direct HOB VORTAC then via HOB R-234 to DYETT INT/13 DME and hold.

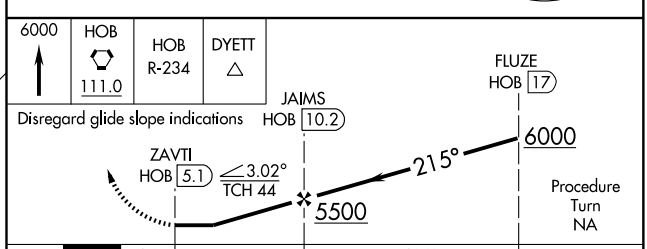
ATIS	FORT WORTH CENTER	HOBBS TOWER ★	GND CON	UNICOM
119.75	133.1 298.95	120.65 (CTAF) L 317.4	121.9	122.95



BACK COURSE



MIRL Rwy 12-30 L
HIRL Rwy 3-21 L



CATEGORY	A	B	C	D
S-21	4080-1 431 (500-1)		4080-1¼ 431 (500-1¼)	4080-1½ 431 (500-1½)
CIRCLING	4120-1 459 (500-1)	4140-1 479 (500-1)	4140-1½ 479 (500-1½)	4220-2 559 (600-2)
CAVERN CITY AIR TERMINAL ALTIMETER SETTING MINIMUMS				
S-21	4360-1 711 (700-1)		4360-2 711 (700-2)	4360-2¼ 711 (700-2¼)
CIRCLING	4400-1 739 (800-1)	4420-1¼ 759 (800-1¼)	4420-2¼ 759 (800-2¼)	4440-2½ 779 (800-2½)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 90215 W03A	APP CRS 035°	Rwy Idg 7398 TDZE 3652 Apt Elev 3661

RNAV (GPS) RWY 3

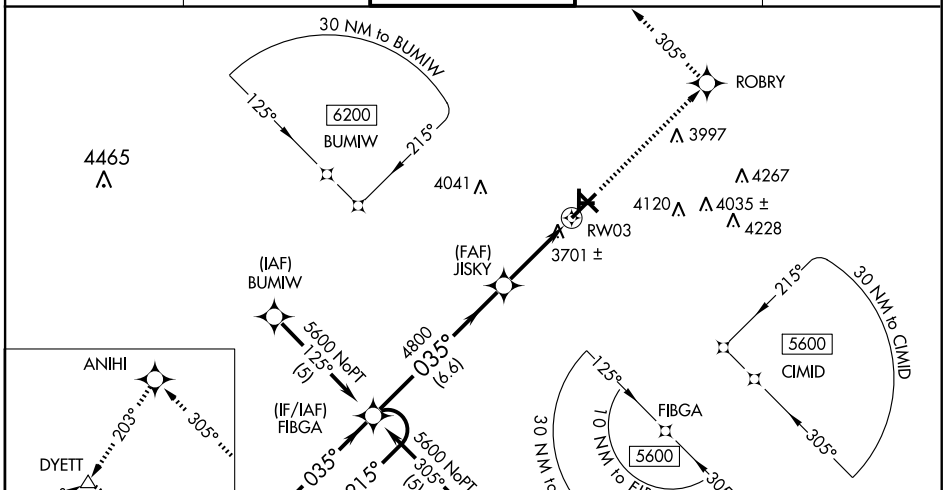
HOBBS/LEA COUNTY RGNL (HOB)

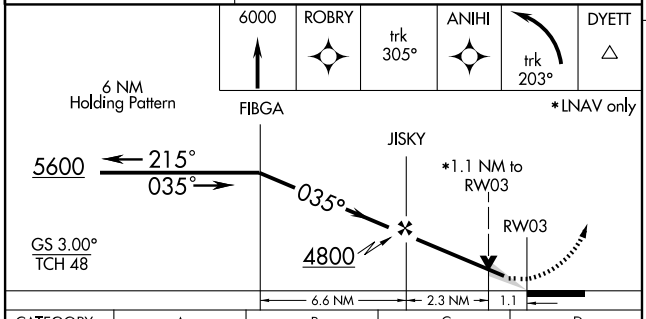
For uncompenstaed Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 40°C (104°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Carlsbad altimeter setting and increase all DA 183 feet and all MDA 200 feet, increase LPV all Cats ¼ mile, LNAV/VNAV all Cats visibility ¾ mile, LNAV Cat C and Circling Cats C/D visibility ½ mile and LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA with Carlsbad altimeter setting. For inoperative MALSR, when using Carlsbad altimeter setting, increase LPV all Cats visibility to 1¼ . For inoperative MALSR increase LNAV Cat D visibility to 1¼ .

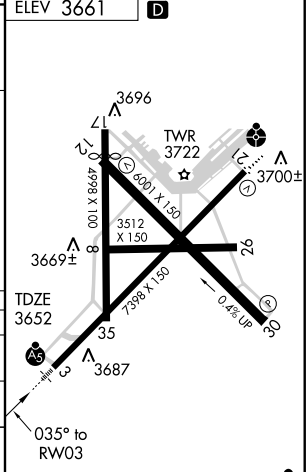
MALSR

MISSED APPROACH: Climb to 6000 direct ROBRY and via track 305° to ANIHI and left turn via track 203° to DYETT and hold.

ATIS	FORT WORTH CENTER	HOBBS TOWER ★	GND CON	UNICOM
119.75	133.1 298.95	120.65 (CTAF) L 317.4	121.9	122.95







CATEGORY	A	B	C	D
LPV DA	3852-½ 200 (200-½)			
LNAV/VNAV DA	4107-1 455 (500-1)			
LNAV MDA	4040-½ 388 (400-½)			4040-1 388 (400-1)
CIRCLING	4120-1 459 (500-1)	4140-1 479 (500-1)		4220-2 559 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7398
215°	TDZE	3649
	Apt Elev	3661

RNAV (GPS) RWY 21

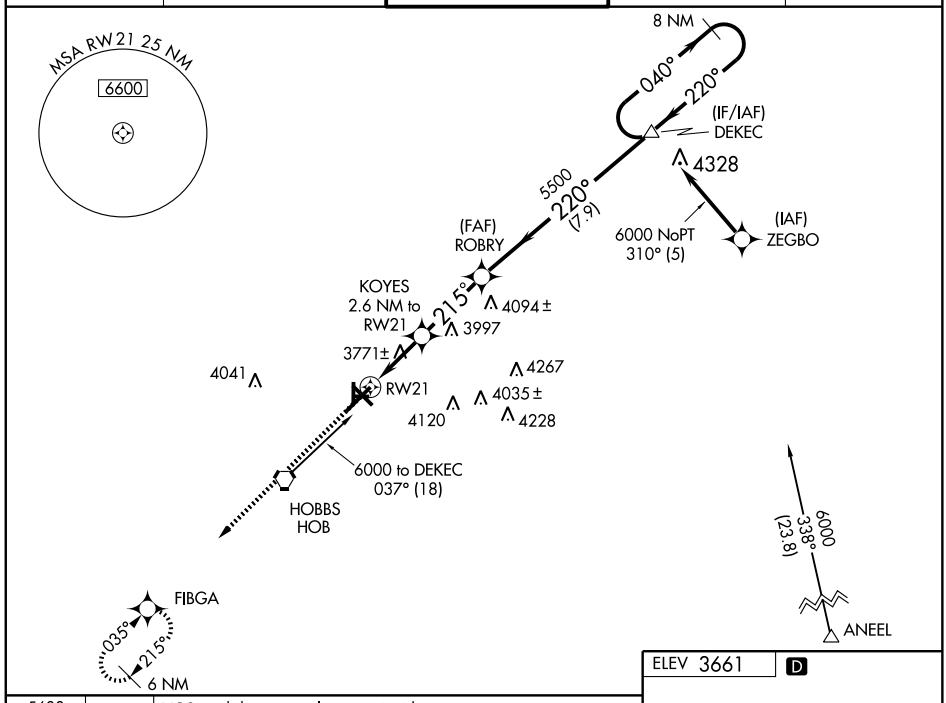
HOBBS/ LEA COUNTY RGNL (HOB)

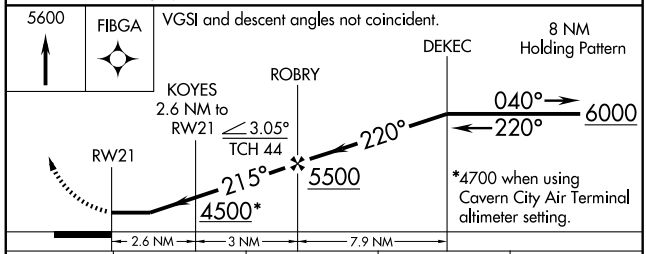
T DME/DME RNP-0.3 NA.
Inoperative table does not apply to ODALS Rwy 21.
A When control tower closed, except for operators with approved weather reporting service, use Cavern City Air Terminal altimeter setting.

ODALS

MISSED APPROACH: Climb to 5600 direct FIBGA and hold.

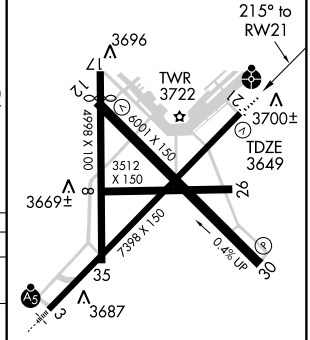
ATIS	FORT WORTH CENTER	HOBBS TOWER ★	GND CON	UNICOM
119.75	133.1 298.95	120.65 (CTAF) L 317.4	121.9	122.95





CATEGORY	A	B	C	D
LNAV MDA	4080-1 431 (500-1)		4080-1¼ 431 (500-1¼)	4080-1½ 431 (500-1½)
CIRCLING	4120-1 459 (500-1)	4140-1 479 (500-1)	4140-1½ 479 (500-1½)	4220-2 559 (600-2)
CAVERN CITY AIR TERMINAL ALTIMETER SETTING MINIMUMS				
LNAV MDA	4360-1 711 (700-1)		4360-2 711 (700-2)	4360-2¼ 711 (700-2¼)
CIRCLING	4400-1 739 (800-1)	4420-1¼ 759 (800-1¼)	4420-2¼ 759 (800-2¼)	4440-2½ 779 (800-2½)

ELEV 3661 D



MIRL Rwy 12-30 L
HIRL Rwy 3-21 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	TDZE	Apt Elev
305°	6001	3649	3661

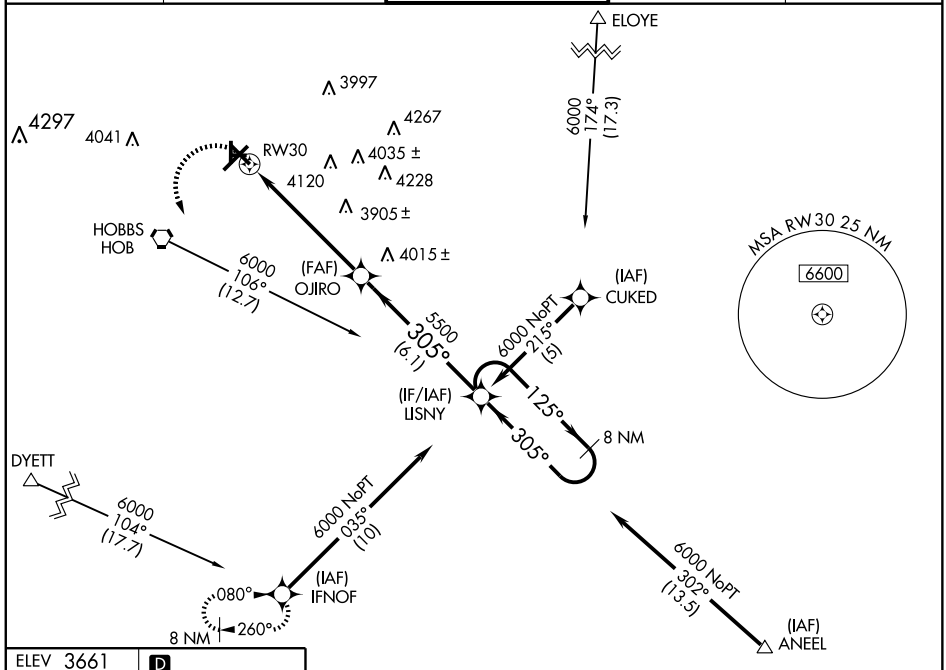
RNAV (GPS) RWY 30

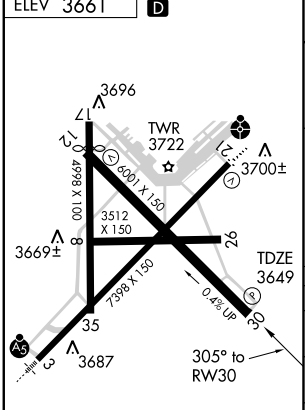
HOBBS/ LEA COUNTY RGNL (HOB)

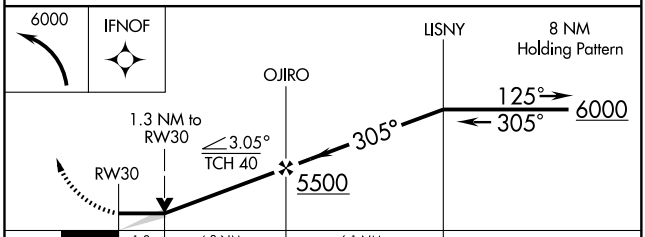
DME/DME RNP-0.3 NA.
When control tower closed, except for operators with approved weather reporting service, use Cavern City Air Terminal altimeter setting.
VDP NA with Cavern City Air Terminal altimeter setting.

MISSED APPROACH: Climbing left turn to 6000 direct IFNOF and hold.

ATIS	FORT WORTH CENTER	HOBBS TOWER ★	GND CON	UNICOM
119.75	133.1 298.95	120.65 (CTAF) L 317.4	121.9	122.95







CATEGORY	A	B	C	D
LNAV MDA	4100-1 451 (500-1)		4100-1¼ 451 (500-1¼)	4100-1½ 451 (500-1½)
CIRCLING	4120-1 459 (500-1)	4140-1 479 (500-1)	4140-1½ 479 (500-1½)	4220-2 559 (600-2)
CAVERN CITY AIR TERMINAL ALTIMETER SETTING MINIMUMS				
LNAV MDA	4380-1 731 (800-1)		4380-2 731 (800-2)	4380-2¼ 731 (800-2¼)
CIRCLING	4400-1 739 (800-1)	4420-1¼ 759 (800-1¼)	4420-2¼ 759 (800-2¼)	4440-2½ 779 (800-2½)

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC HOB	APP CRS	Rwy Idg	7398
111.0	212°	TDZE	3649
Chan 47		Apt Elev	3661

VOR/DME or TACAN RWY 21

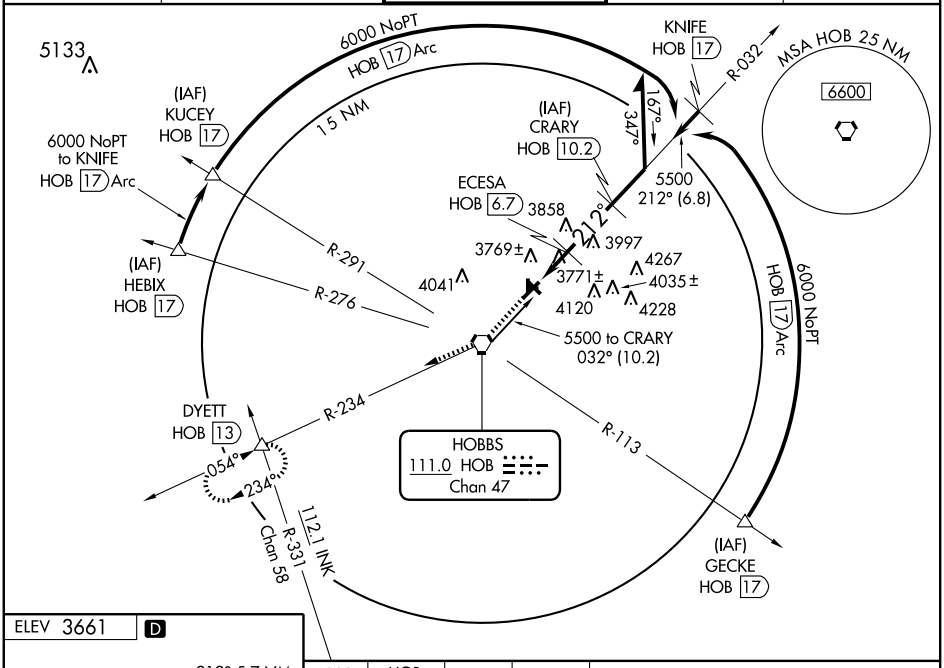
HOBBS/LEA COUNTY RGNL (HOB)

When control tower closed, except for operators with approved weather reporting service, use Cavern City Air Terminal altimeter setting. Inoperative table does not apply.
Straight-in minimums NA when using Cavern City Air Terminal altimeter setting.

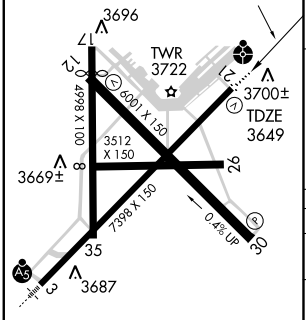
ODALS

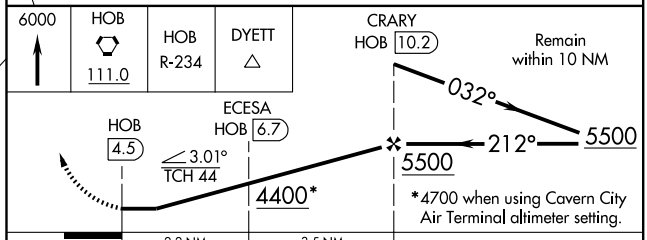
MISSED APPROACH: Climb to 6000 direct HOB VORTAC then via HOB R-234 to DYETT INT/13 DME and hold.

ATIS	FORT WORTH CENTER	HOBBS TOWER ★	GND CON	UNICOM
119.75	133.1 298.95	120.65 (CTAF) L 317.4	121.9	122.95



ELEV 3661 D





CATEGORY	A	B	C	D
S-21	4080-1 431 (500-1)		4080-1¼ 431 (500-1¼)	4080-1½ 431 (500-1½)
CIRCLING	4120-1 459 (500-1)	4140-1 479 (500-1)	4140-1½ 479 (500-1½)	4220-2 559 (600-2)
CAVERN CITY AIR TERMINAL ALTIMETER SETTING MINIMUMS				
S-21	NA			
CIRCLING	4400-1 739 (800-1)	4420-1¼ 759 (800-1¼)	4420-2¼ 759 (800-2¼)	4440-2½ 779 (800-2½)

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC HOB	APP CRS	Rwy Idg	7398
111.0	031°	TDZE	3652
Chan 47		Apt Elev	3661

VOR or TACAN RWY 3

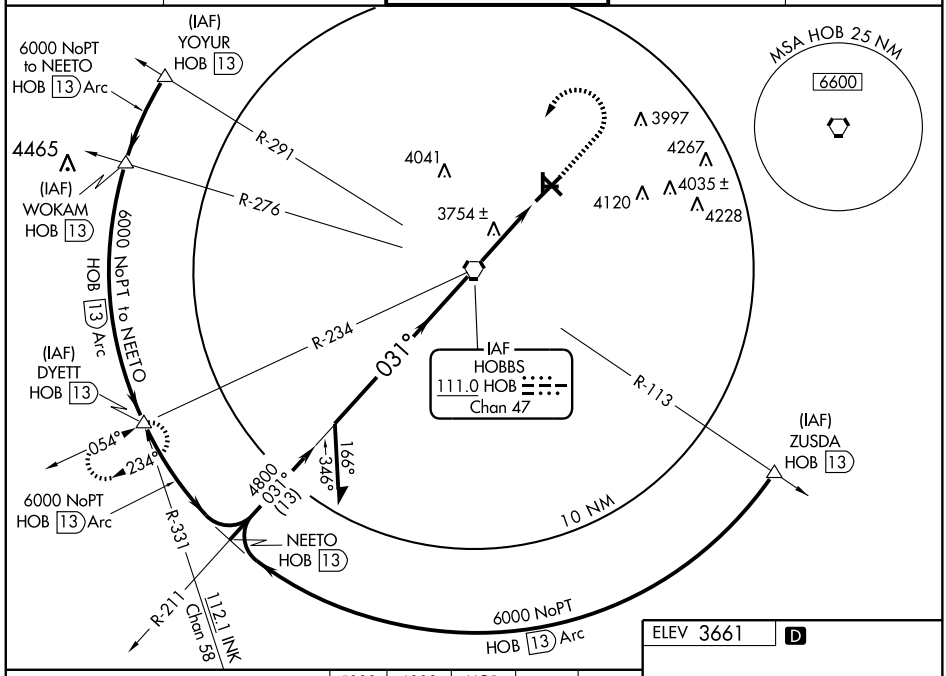
HOBBS/LEA COUNTY RGNL (HOB)

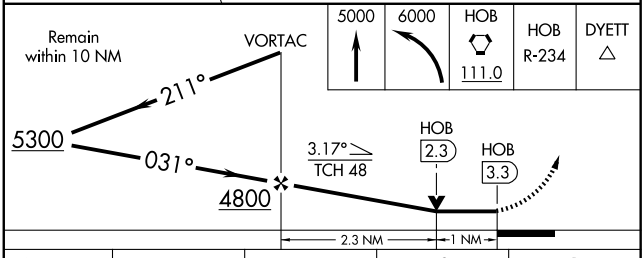
When control tower closed, except for operators with approved weather reporting service, use Cavern City Air Terminal altimeter setting.
For inoperative MALSR increase Cat D S-3 visibility to 1¼ miles.
VDP NA when using Cavern City Air Terminal altimeter setting.

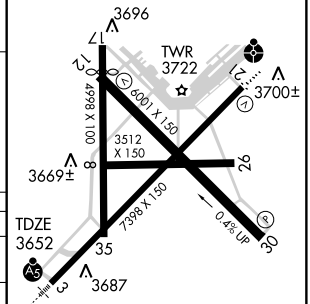
MALSR

MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct HOB VORTAC, then via HOB R-234 to DYETT INT/13 DME and hold.

ATIS	FORT WORTH CENTER	HOBBS TOWER ★	GND CON	UNICOM
119.75	133.1 298.95	120.65 (CTAF) L 317.4	121.9	122.95







CATEGORY	A	B	C	D
S-3	4020-½ 368 (400-½)			4020-1 368 (400-1)
CIRCLING	4120-1 459 (500-1)	4140-1 479 (500-1)	4140-1½ 479 (500-1½)	4220-2 559 (600-2)
CAVERN CITY AIR TERMINAL ALTIMETER SETTING MINIMUMS				
S-3	4300-½ 648 (700-½)		4300-1¼ 648 (700-1¼)	4300-1½ 648 (700-1½)
CIRCLING	4400-1 739 (800-1)	4420-1¼ 759 (800-1¼)	4420-2¼ 759 (800-2¼)	4440-2½ 779 (800-2½)

FAF to MAP 3.3 NM

Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

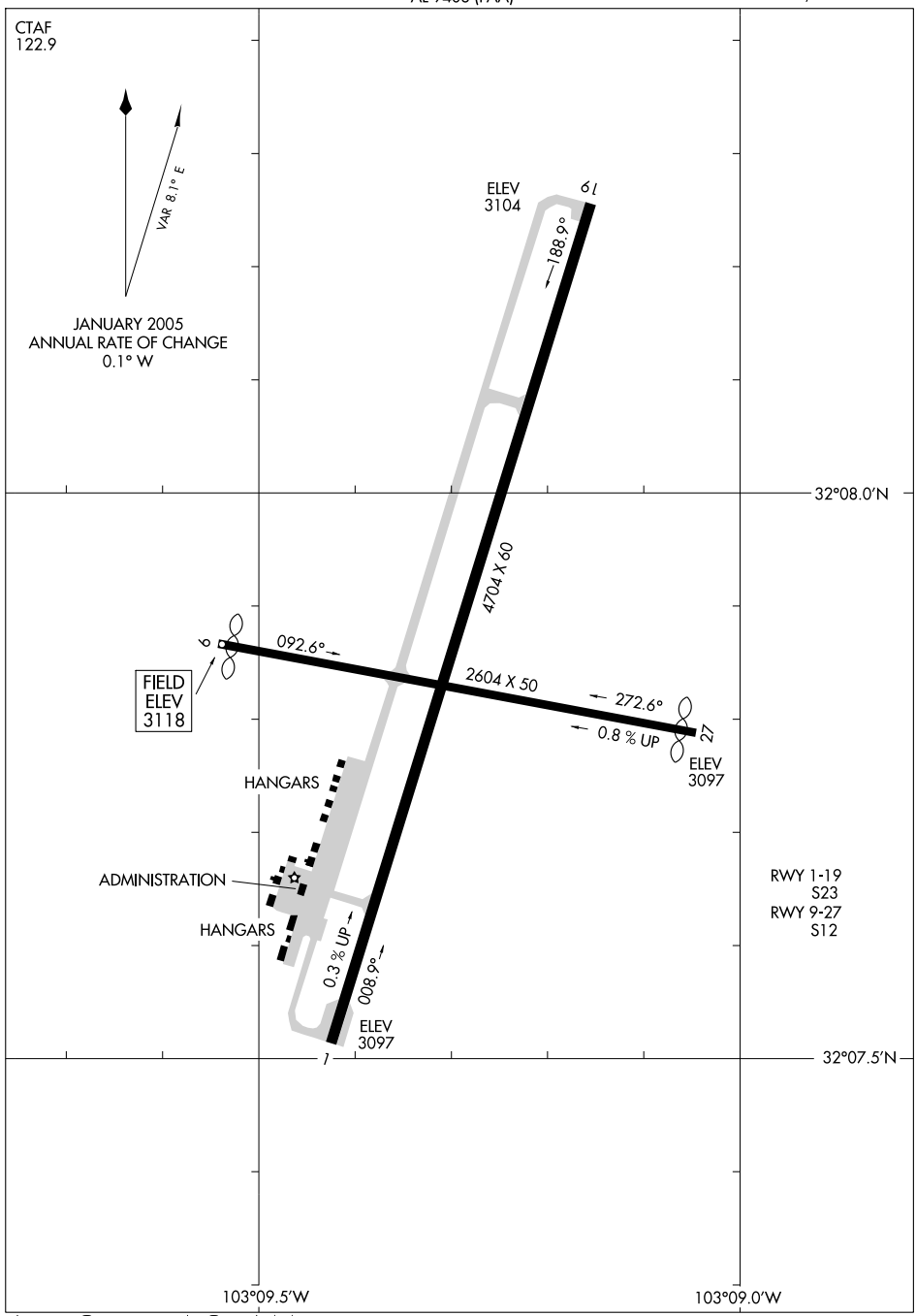
SW-1, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-9408 (FAA)

JAL/LEA COUNTY (E26)
JAL, NEW MEXICO



SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-LRU	APP CRS	Rwy Idg	7499
109.3	304°	TDZE	4443
Chan 30		Apt Elev	4456

ILS or LOC RWY 30

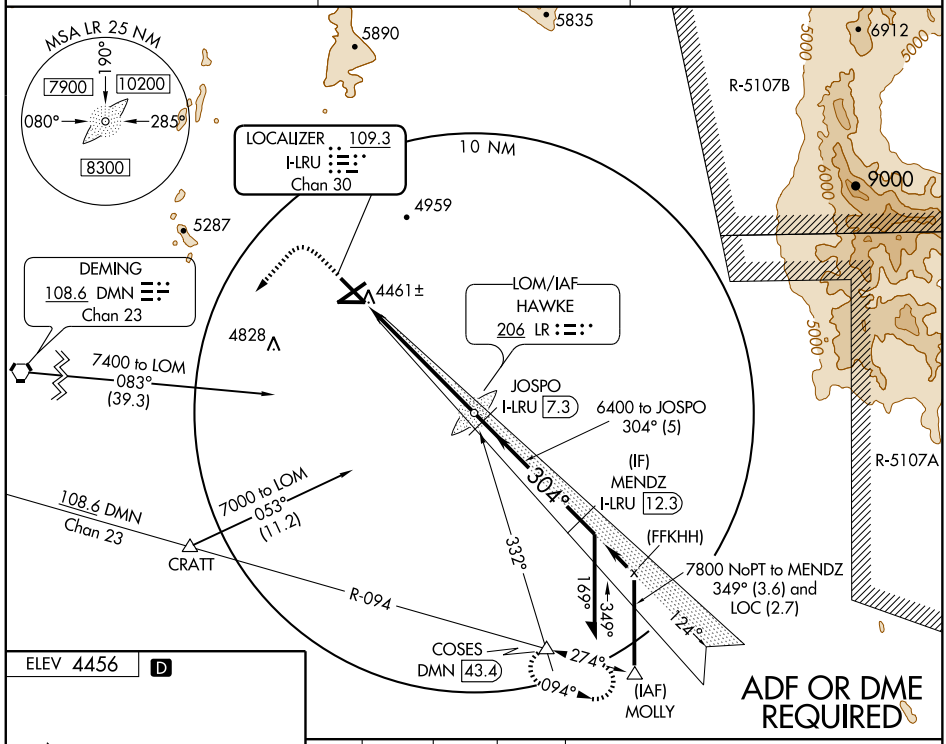
LAS CRUCES INTL (LRU)

S-LOC: DME required.
NA If local altimeter setting not received, procedure NA. For inoperative MALSR, increase S-LOC Cat. D visibility to 1.

MALSR

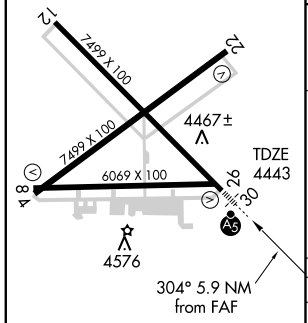
MISSED APPROACH: Climb to 5100 then climbing left turn to 9000 via 210° heading and DMN VORTAC R-094 to COSES INT and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
119.025	128.2 285.5	122.7 (CTAF) L



SW-1, 22 OCT 2009 to 19 NOV 2009

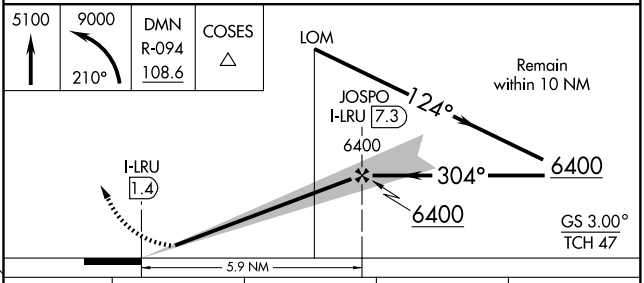
ELEV 4456 D



MIRL Rwys 4-22, 12-30 and 8-26 L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

5100	9000	DMN	COSES
	210°	R-094	△
		108.6	



CATEGORY	A	B	C	D
S-ILS 30	4643-½ 200 (200-½)			
S-LOC 30	4720-½ 277 (300-½)			4720-¾ 277 (300-¾)
CIRCLING	4940-1 484 (500-1)		4940-1½ 484 (500-1½)	5020-2 564 (600-2)

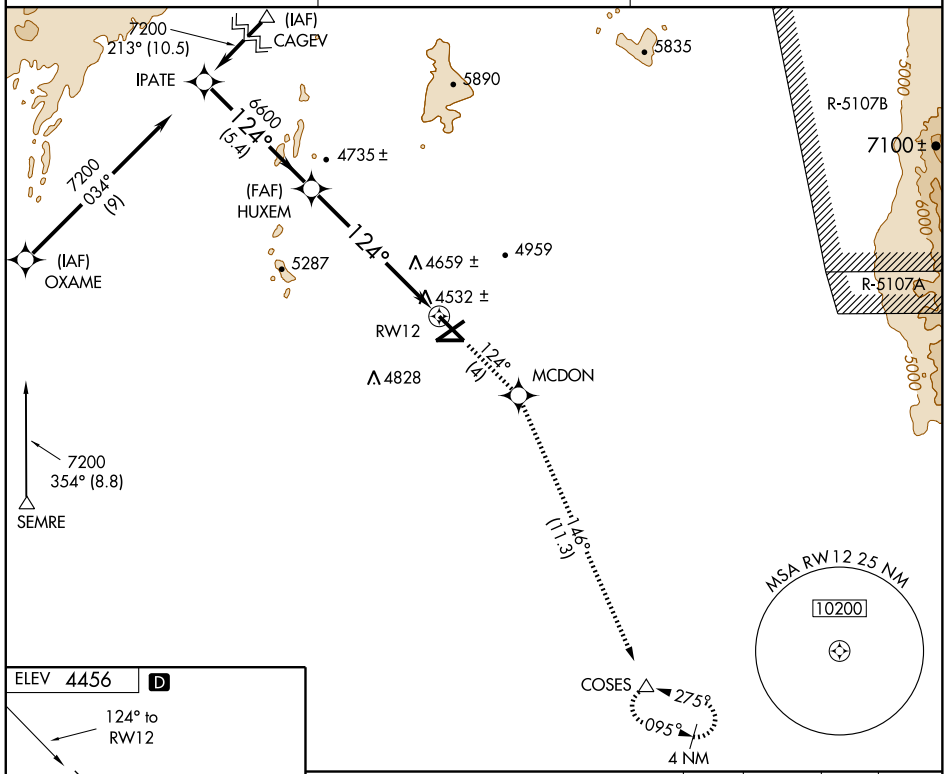
APP CRS	Rwy Idg	7499
124°	TDZE	4456
	Apt Elev	4456

RNAV (GPS) RWY 12
LAS CRUCES INTL (LRU)

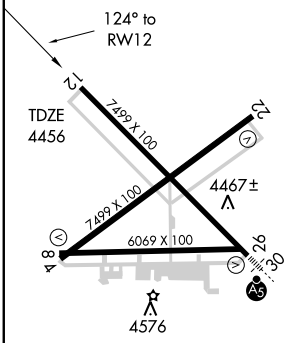
Baro-VNAV NA below -15°C (5°F).
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.

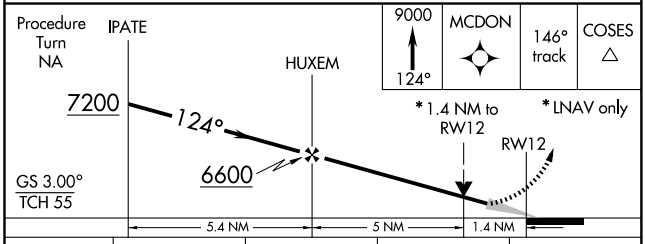
MISSED APPROACH: Climb to 9000 via 124° course to MCDON WP, and 146° track to COSES WP and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
119.025	128.2 285.5	122.7 (CTAF)



ELEV 4456 D





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	4800-1¼ 344 (400-1¼)			
LNAV MDA	4940-1 484 (500-1)		4940-1¼ 484 (500-1¼)	4940-1½ 484 (500-1½)
CIRCLING	4940-1¼ 484 (500-1¼)		4940-1½ 484 (500-1½)	5020-2 564 (600-2)

MIRL Rwys 4-22, 12-30 and 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7499
304°	TDZE	4443
	Apt Elev	4456

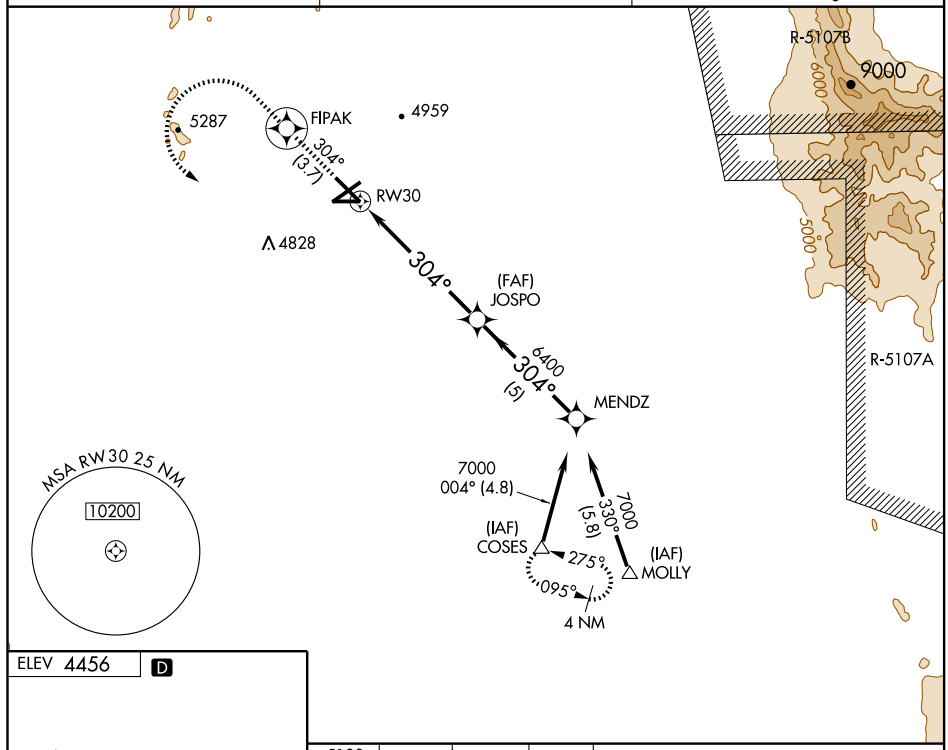
RNAV (GPS) RWY 30
LAS CRUCES INTL (LRU)

Baro-VNAV NA below -15°C (5°F).
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
For inoprerative MALSR increase LNAV Cat D visibility to 1¼.
If local altimeter setting not received, procedure NA.

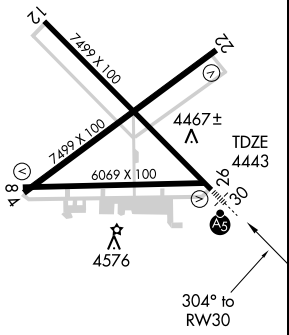
MALSR

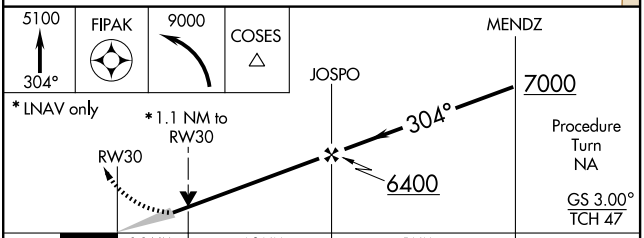
MISSED APPROACH: Climb to 5100 via 304° course to FIPAK WP then climbing left turn to 9000 direct COSES WP and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
119.025	128.2 285.5	122.7 (CTAF) L



ELEV 4456 D





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	4780-¾ 337 (400-¾)			
LNAV MDA	4840-½ 397 (400-½)			4840-1 397 (400-1)
CIRCLING	4940-1¼ 484 (500-1¼)		4940-1½ 484 (500-1½)	5020-2 564 (600-2)

MIRL Rwys 4-22, 12-30 and 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5004
022°	TDZE	6870
	Apt Elev	6877

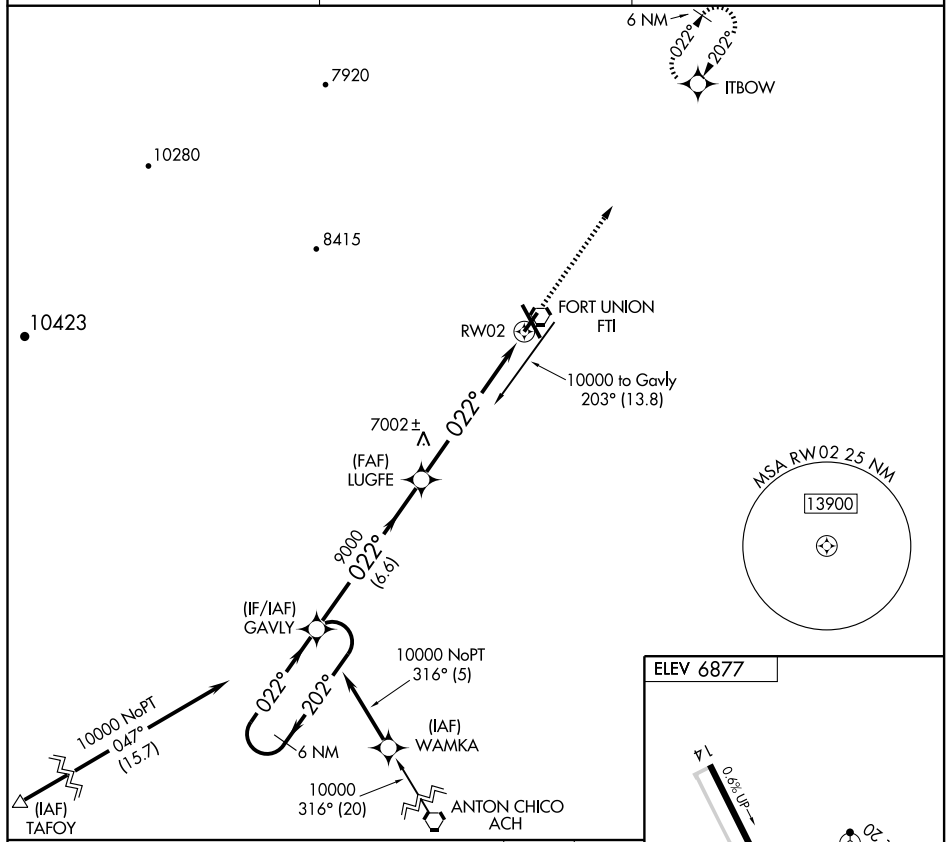
RNAV (GPS) RWY 2
LAS VEGAS MUNI (LVS)

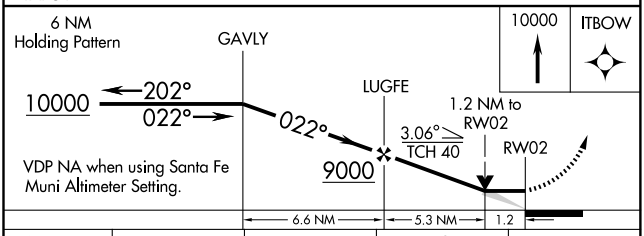
DME/DME RNP-0.3 NA.
Inoperative table does not apply to Cat C.
If local altimeter setting not received, use Santa Fe Muni altimeter setting and increase all MDAs 200 feet.

ODALS

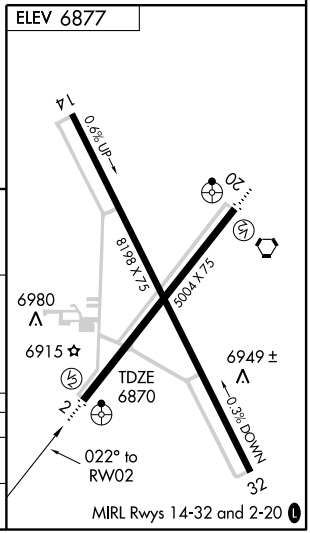
MISSED APPROACH: Climb to 10000 direct ITBOW and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	132.8 346.35	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	7280-¾	410 (500-¾)	7280-1¼ 410 (500-1¼)	NA
CIRCLING	7400-1 523 (600-1)	7420-1 543 (600-1)	7420-1½ 543 (600-1½)	NA



SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5004
202°	TDZE	6867
	Apt Elev	6877

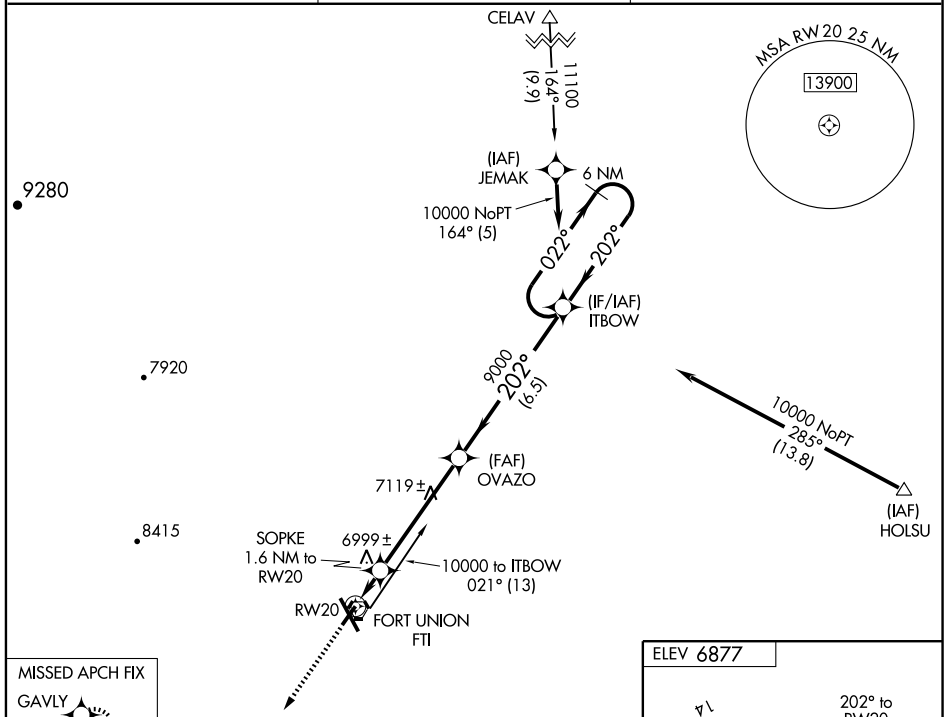
RNAV (GPS) RWY 20
LAS VEGAS MUNI (LVS)

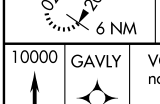
DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Santa Fe Muni altimeter setting and increase all MDAs 200 feet.
Straight-in minimums NA when using Santa Fe Muni altimeter setting.

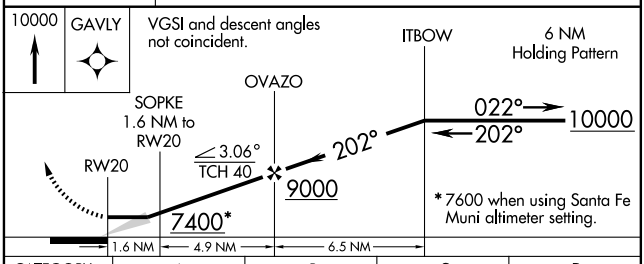
ODALS

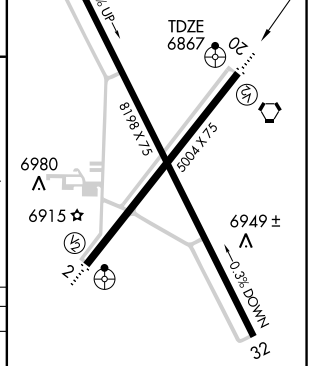
MISSED APPROACH: Climb to 10000 direct GAVLY and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	132.8 346.35	122.8 (CTAF) L









CATEGORY	A	B	C	D
LNAV MDA	7260-¾ 393 (400-¾)			NA
CIRCLING	7400-1 523 (600-1)	7420-1 543 (600-1)	7420-1½ 543 (600-1½)	NA

MIRL Rwys 14-32 and 2-20 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8198
319°	TDZE	6877
	Apt Elev	6877

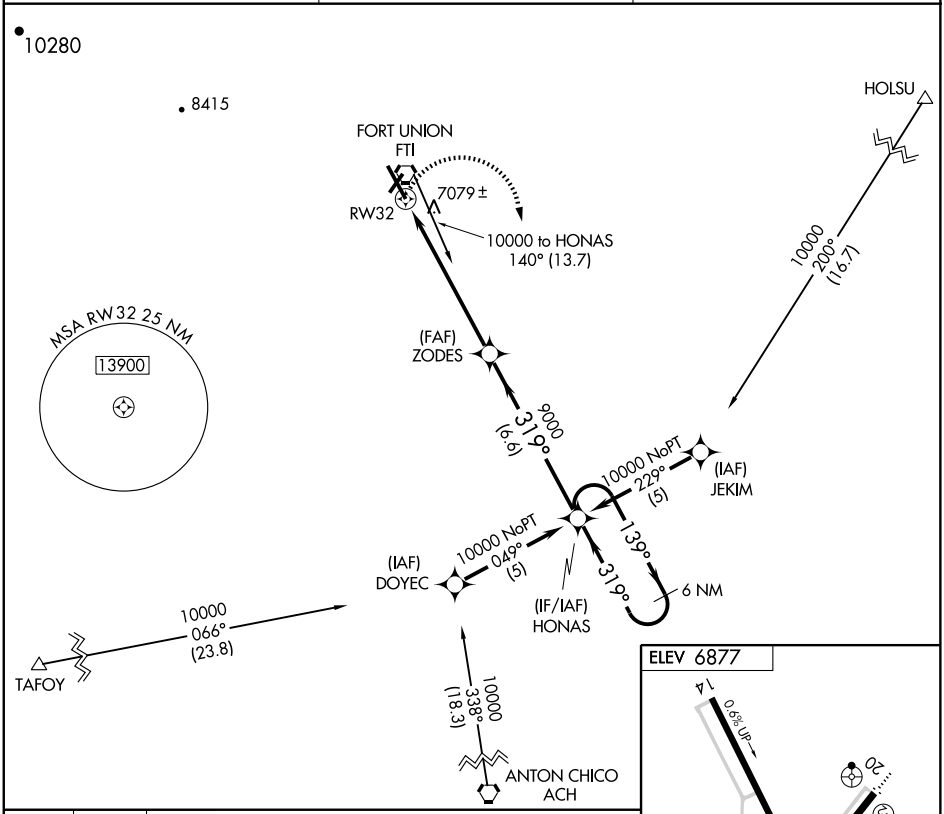
RNAV (GPS) RWY 32

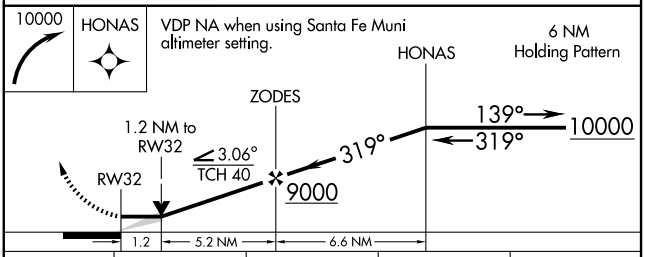
LAS VEGAS MUNI (LVS)

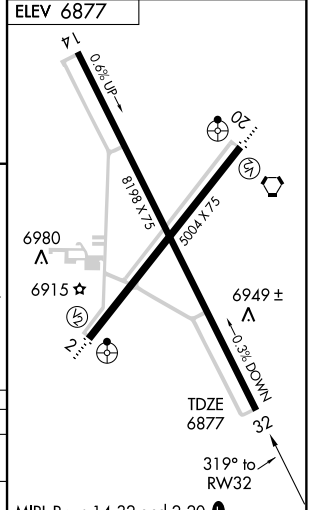
DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Santa Fe Muni altimeter setting and increase all MDAs 200 feet.

MISSED APPROACH: Climbing right turn to 10000 direct HONAS and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	132.8 346.35	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7320-1 443 (500-1)		7320-1¼ 443 (500-1¼)	NA
CIRCLING	7400-1 523 (600-1)	7420-1 543 (600-1)	7420-1½ 543 (600-1½)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC FTI	APP CRS	Rwy Idg	5004
117.3	027°	TDZE	6870
Chan 120		Apt Elev	6877

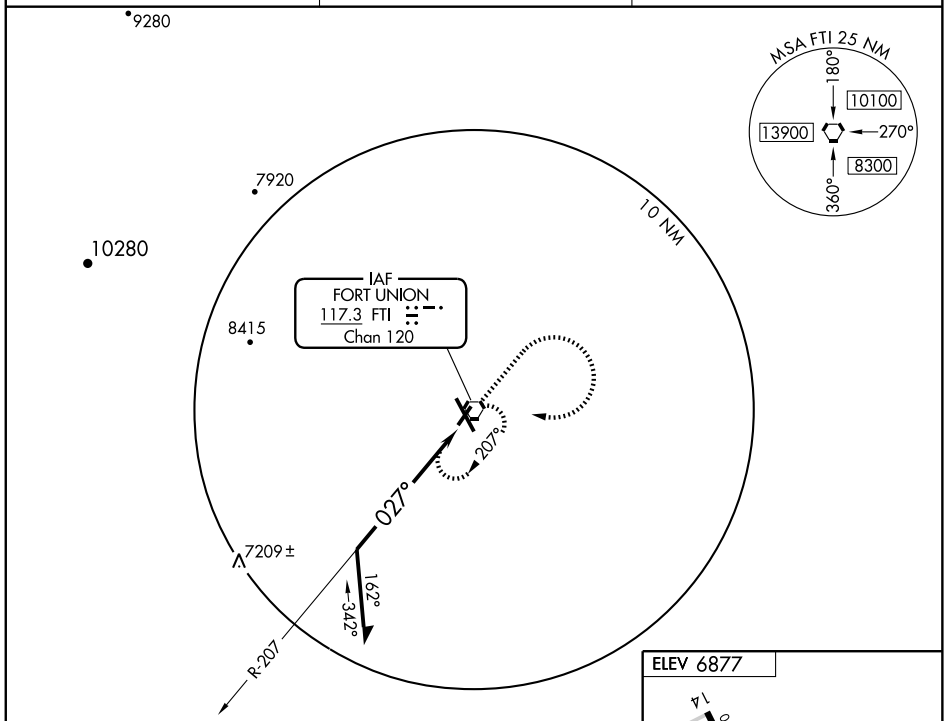
VOR RWY 2
LAS VEGAS MUNI (LVS)

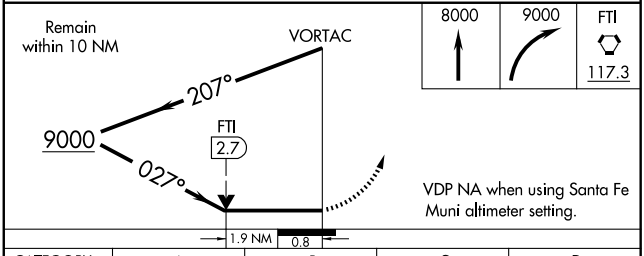
▼ Inoperative table does not apply.
▲ If local altimeter setting not received, use Santa Fe Muni altimeter setting and increase all MDAs 200 feet.

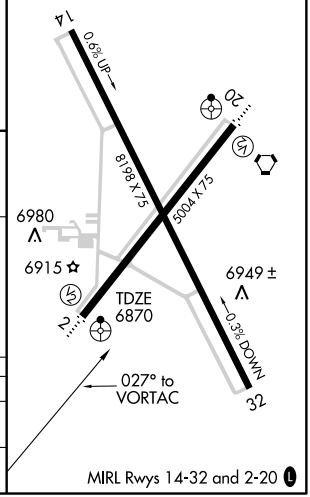
ODALS

MISSED APPROACH: Climb to 8000 then climbing right turn to 9000 direct FTI VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	132.8 346.35	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-2	7520-1	650 (700-1)	7520-1¾ 650 (700-1¾)	NA
CIRCLING	7520-1	643 (700-1)	7520-1¾ 643 (700-1¾)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC FTI 117.3 Chan 120	APP CRS 192°	Rwy Idg 5004 TDZE 6867 Apt Elev 6877

VOR RWY 20

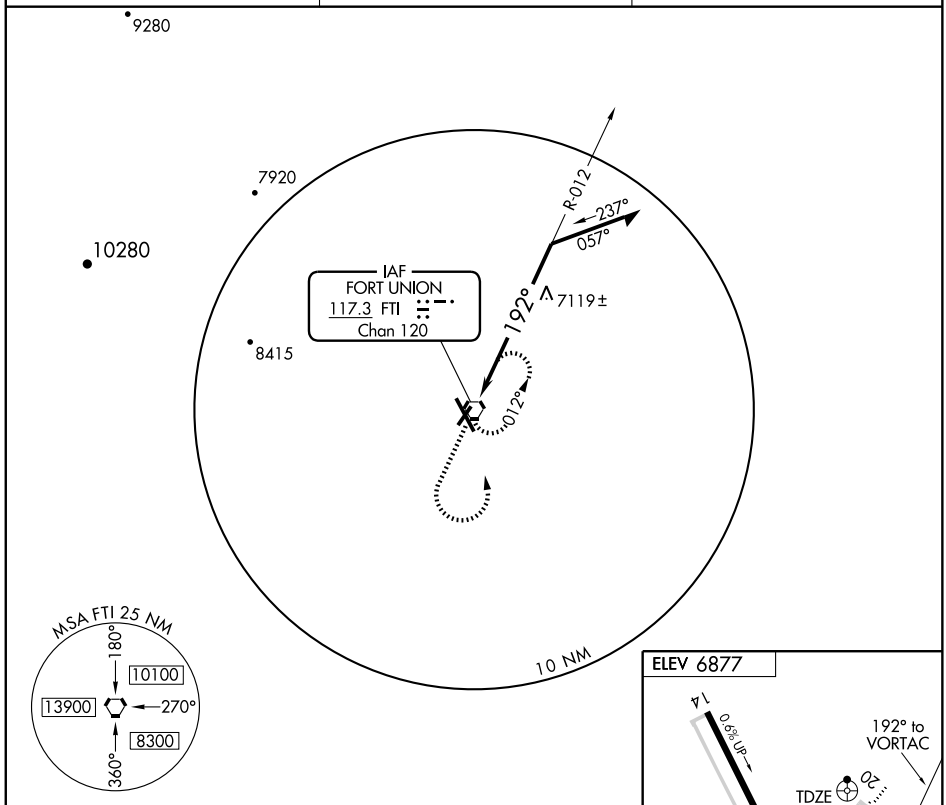
LAS VEGAS MUNI (LVS)

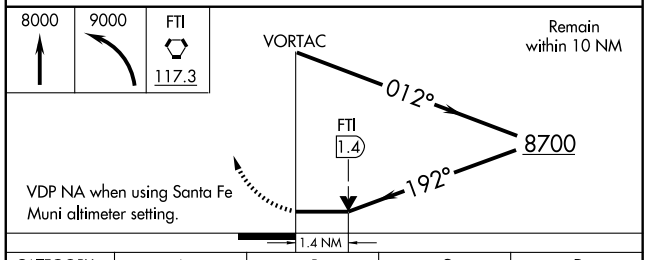
▼ Inoperative table does not apply.
▲ If local altimeter setting not received, use Santa Fe Muni altimeter setting and increase all MDAs 200 feet.

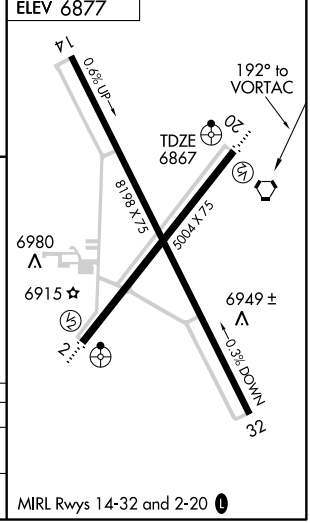
ODALS

MISSED APPROACH: Climb to 8000 then climbing left turn to 9000 direct FTI VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.525	132.8 346.35	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-20	7420-1	553 (600-1)	7420-1½ 553 (600-1½)	NA
CIRCLING	7420-1	543 (600-1)	7420-1½ 543 (600-1½)	NA

MIRL Rwys 14-32 and 2-20 L

SW-1, 22 OCT 2009 to 19 NOV 2009

LOS ALAMOS, NEW MEXICO

AL-10276 (FAA)

APP CRS	Rwy Idg	5550
272°	TDZE	7132
	Apt Elev	7171

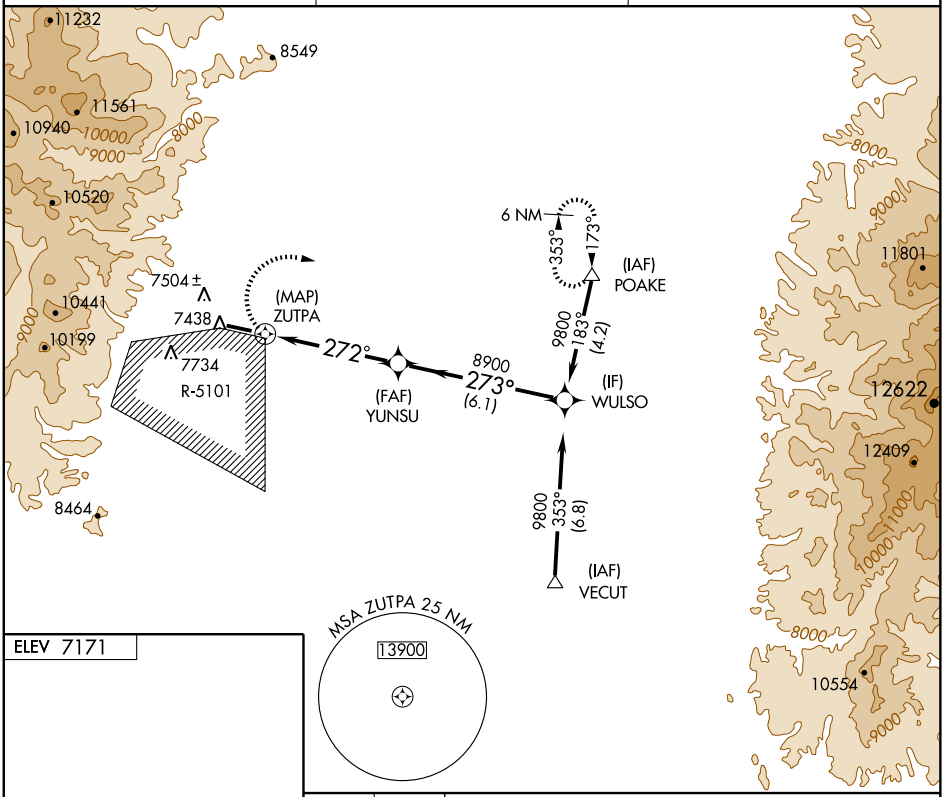
RNAV (GPS) RWY 27

LOS ALAMOS (LAM)

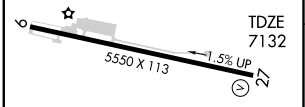
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 11000 direct POAKE and hold.

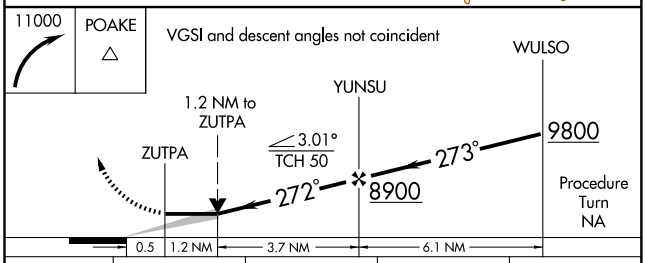
AWOS-3	ALBUQUERQUE CENTER	UNICOM
124.175	132.8 346.35	123.0 (CTAF) L



ELEV 7171



REIL Rwy 27 L
MIRL Rwy 9-27 L

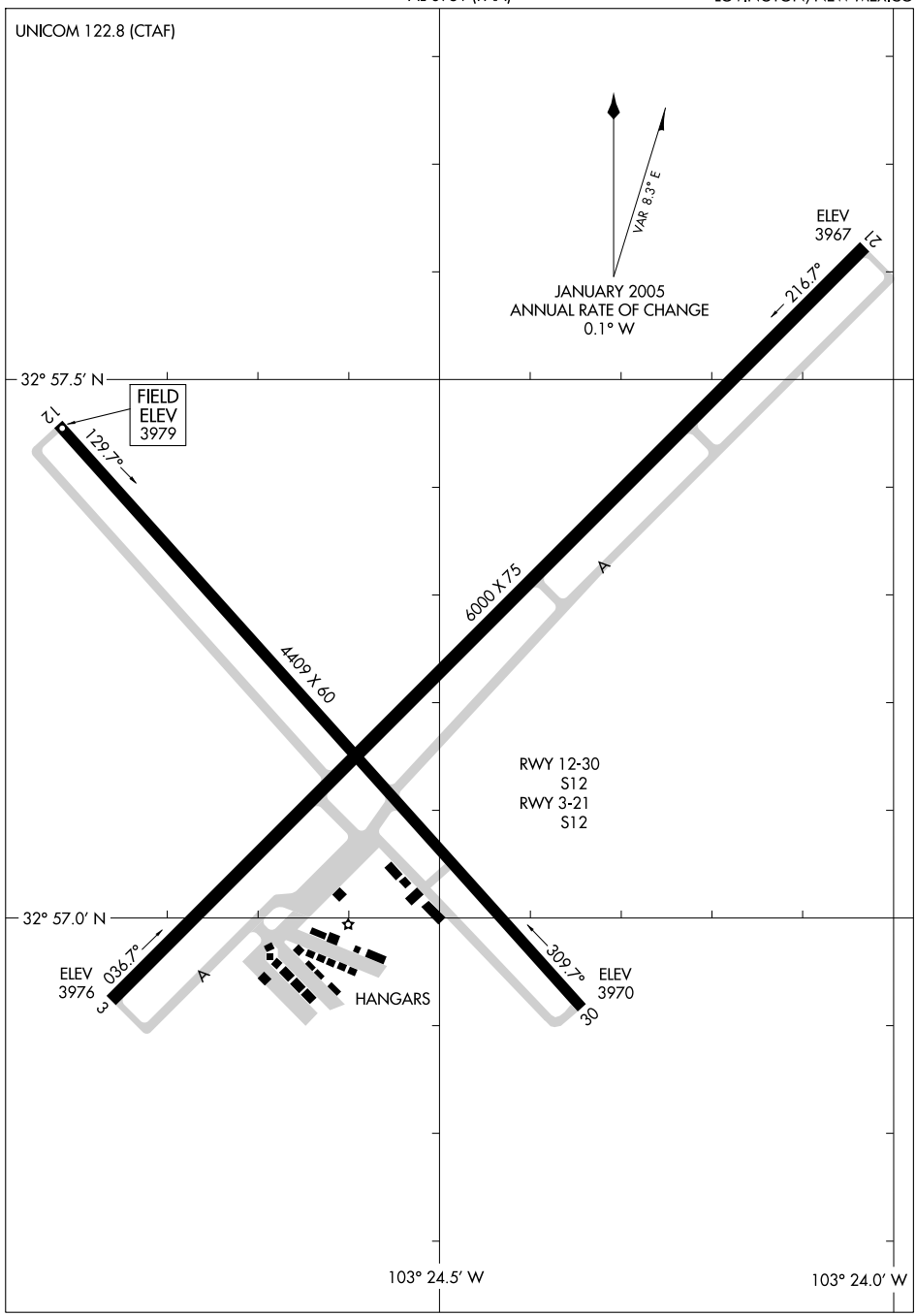


CATEGORY	A	B	C	D
LNAV MDA	7680-1 548 (600-1)		7680-1½ 548 (600-1½)	NA
CIRCLING	NA			

SW-1, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

LOVINGTON/LEA COUNTY-ZIP FRANKLIN MEMORIAL (E∅6)
AL-6951 (FAA)
LOVINGTON, NEW MEXICO



SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6000
035°	TDZE	3976
	Apt Elev	3979

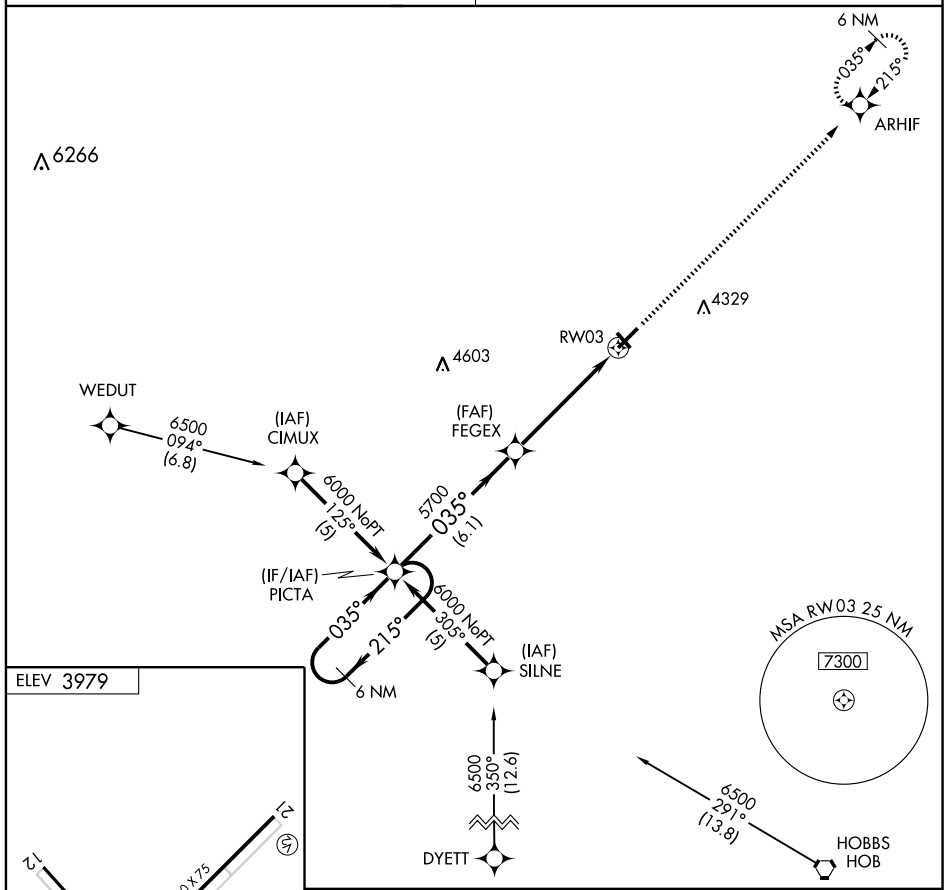
RNAV (GPS) RWY 3

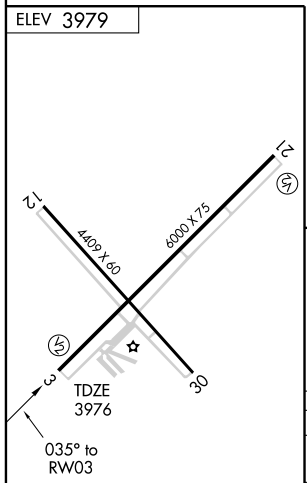
LOVINGTON/ LEA COUNTY-ZIP FRANKLIN MEMORIAL (EØ6)

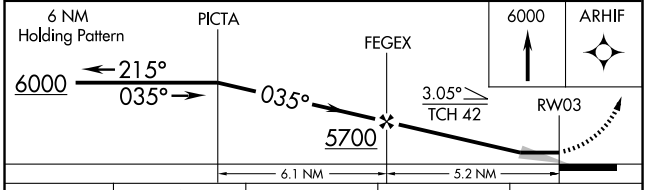
DME/DME RNP- 0.3 NA.
NA Use Hobbs altimeter setting, when not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct ARHIF and hold.

FORT WORTH CENTER	UNICOM
133.1 298.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4560-1 584 (600-1)		4560-1½ 584 (600-1½)	NA
CIRCLING	4600-1 621 (700-1)		4600-1¾ 621 (700-1¾)	NA

MIRL Rwys 3-21 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6000
215°	TDZE	3972
	Apt Elev	3979

RNAV (GPS) RWY 21

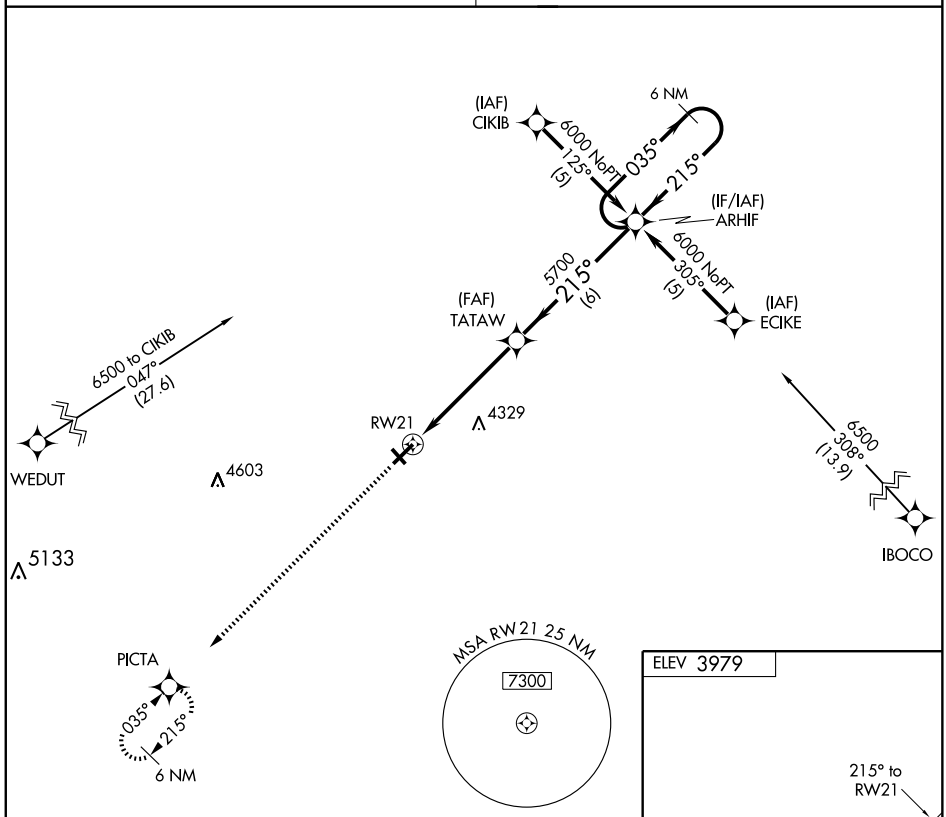
LOVINGTON/ LEA COUNTY- ZIP FRANKLIN MEMORIAL (E06)

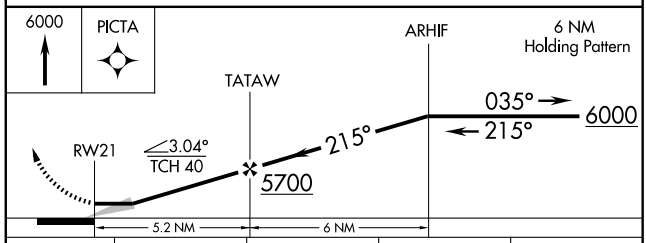
DME/DME RNP- 0.3 NA.
Use Hobbs altimeter setting, when not received, procedure NA.

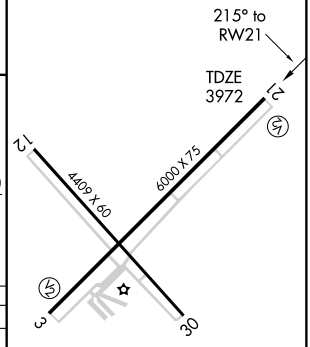
MISSED APPROACH: Climb to 6000 direct PICTA and hold.

FORT WORTH CENTER
133.1 298.95

UNICOM
122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4540-1	568 (600-1)	4540-1½ 568 (600-1½)	NA
CIRCLING	4600-1	621 (700-1)	4600-1¾ 621 (700-1¾)	NA

MIRL Rwys 3-21 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

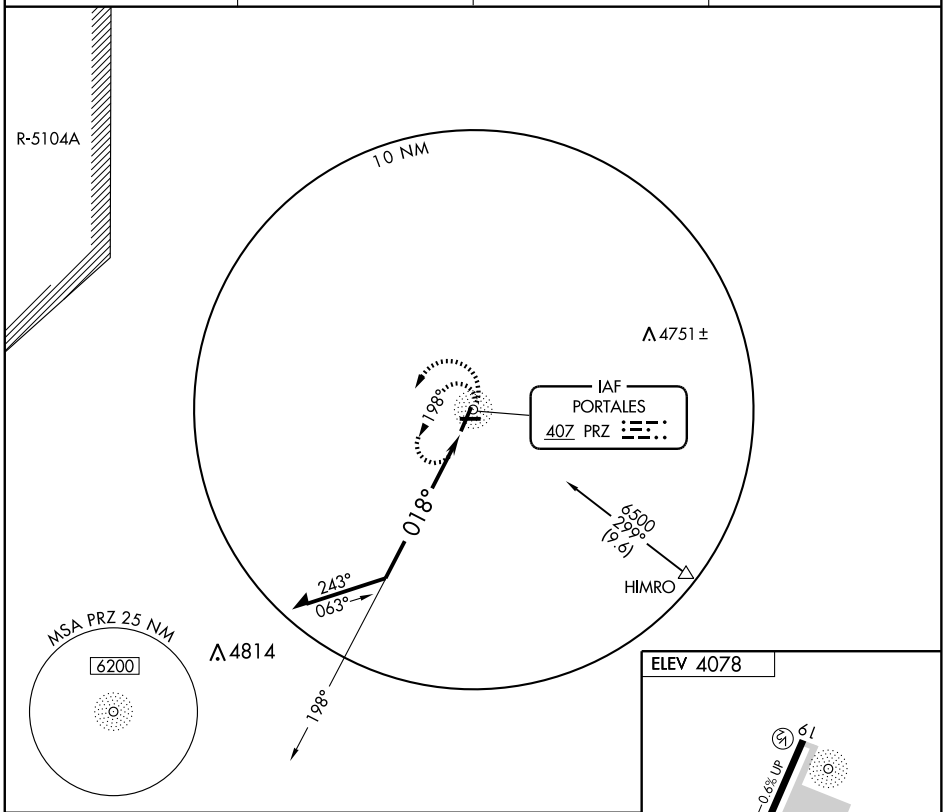
NDB PRZ	APP CRS		
407	018°	Rwy Idg	5700
		TDZE	4078
		Apt Elev	4078

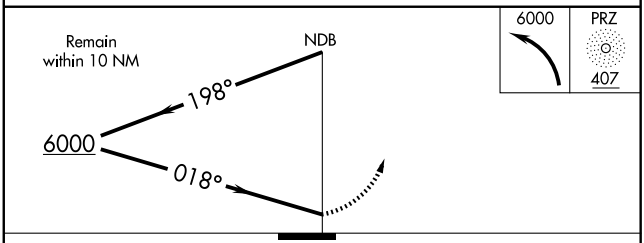
NDB RWY 1
PORTALES MUNI (PRZ)

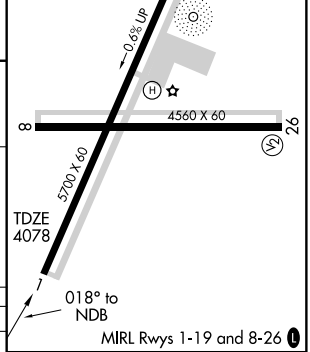
NA When local altimeter setting not received, use Clovis Muni altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climbing left turn to 6000 in PRZ NDB holding pattern.

AWOS-3	CANNON APP CON ★	CANNON CLNC DEL	UNICOM
118.175	125.5 352.1	119.0	122.8 (CTAF) L







MIRL Rwys 1-19 and 8-26 L

CATEGORY	A	B	C	D
S-1	4680-1	602 (700-1)	4680-1¾ 602 (700-1¾)	NA
CIRCLING	4680-1	602 (700-1)	4680-1¾ 602 (700-1¾)	NA

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

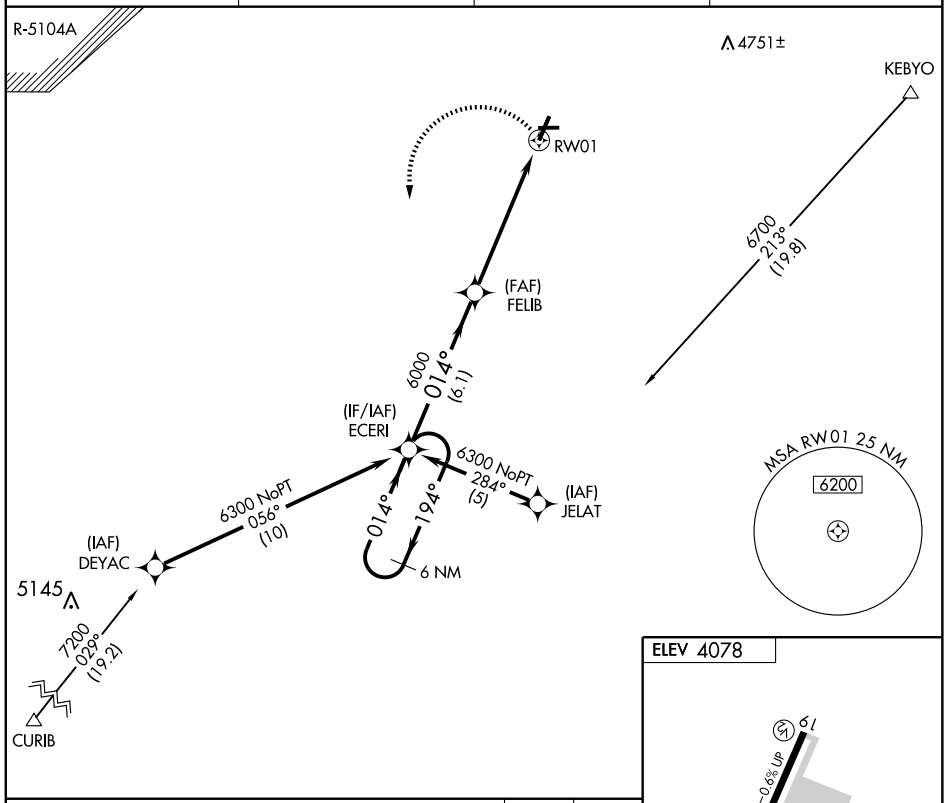
APP CRS	Rwy Idg	5700
014°	TDZE	4078
	Apt Elev	4078

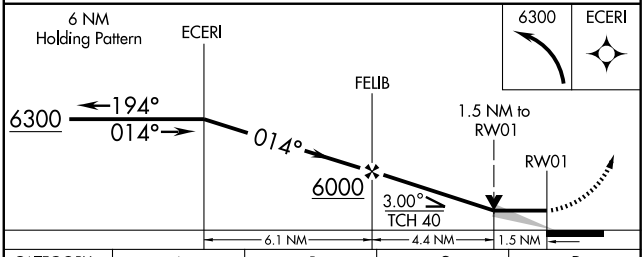
RNAV (GPS) RWY 1
PORTALES MUNI (PRZ)

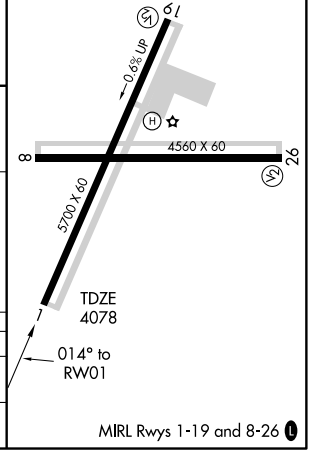
DME/DME RNP- 0.3 NA.
VDP NA when using Clovis Muni altimeter setting.
If local altimeter setting not received, use Clovis Muni altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climbing left turn to 6300 direct ECERI and hold.

AWOS-3	CANNON APP CON ★	CANNON CLNC DEL	UNICOM
118.175	125.5 352.1	119.0	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4580-1	502 (600-1)	4580-1½ 502 (600-1½)	NA
CIRCLING	4580-1	502 (600-1)	4580-1½ 502 (600-1½)	NA

MIRL Rwys 1-19 and 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6328
024°	TDZE	6346
	Apt Elev	6352

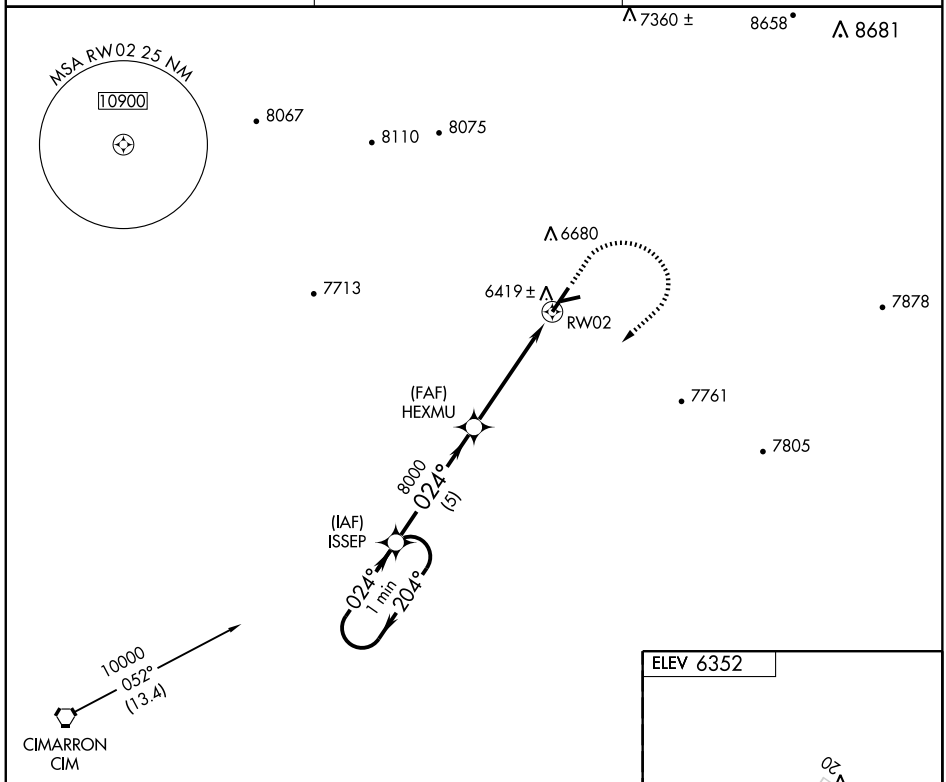
GPS RWY 2

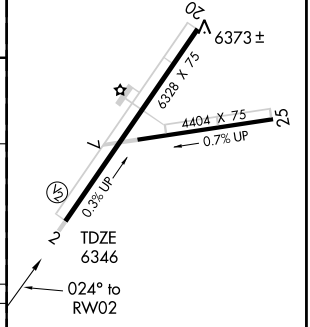
RATON MUNI/CREWS FIELD (RTN)

T
NA Cat. D circling not authorized west of Rwy 2-20.

MISSED APPROACH: Climb to 7800 then climbing right turn to 9000 direct ISSEP WP and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	132.8 346.35	122.8 (CTAF) L ★





CATEGORY	A	B	C	D
S-2	6680-1 334 (400-1)			
CIRCLING	6820-1 468 (500-1)	6880-1 528 (600-1)	6880-1½ 528 (600-1½)	6920-2 568 (600-2)

MIRL Rwys 2-20 and 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

RATON, NEW MEXICO

AL-920 (FAA)

APP CRS	Rwy Idg	4404
248°	TDZE	6338
	Apt Elev	6352

GPS RWY 25

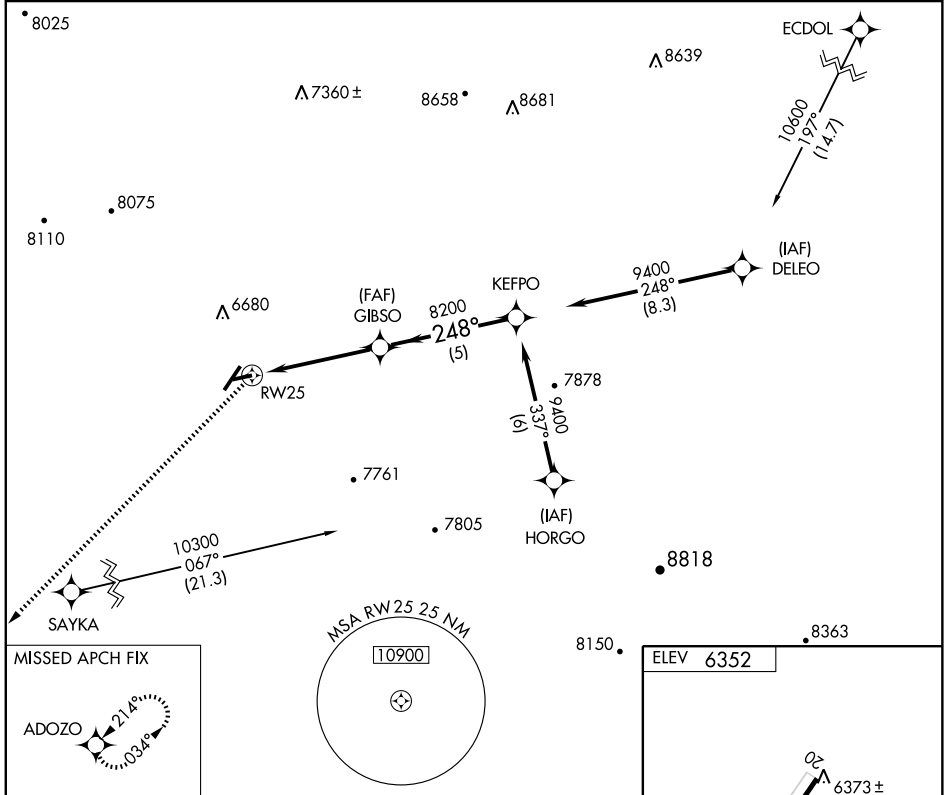
RATON MUNI/CREWS FIELD (RTN)

T
A NA

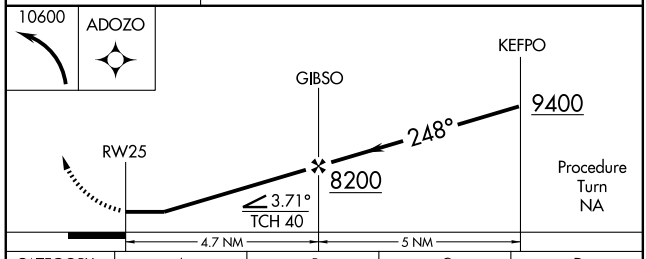
Cat. D circling not authorized west of Rwy 2-20.

MISSED APPROACH: Climbing left turn to 10600 direct ADOZO WP and hold.

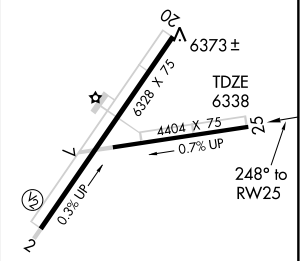
ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	132.8 346.35	122.8 (CTAF) L★



MISSED APCH FIX



ELEV 6352



CATEGORY	A	B	C	D
S-25	6640-1 302 (300-1)			
CIRCLING	6820-1 468 (500-1)	6880-1 528 (600-1)	6880-1½ 528 (600-1½)	6920-2 568 (600-2)

MIRL Rwys 2-20 and 7-25 L

SW-1, 22 OCT 2009 to 19 NOV 2009

NDB MXR	APP CRS	Rwy Idg	6328
284	024°	TDZE	6346
		Apt Elev	6352

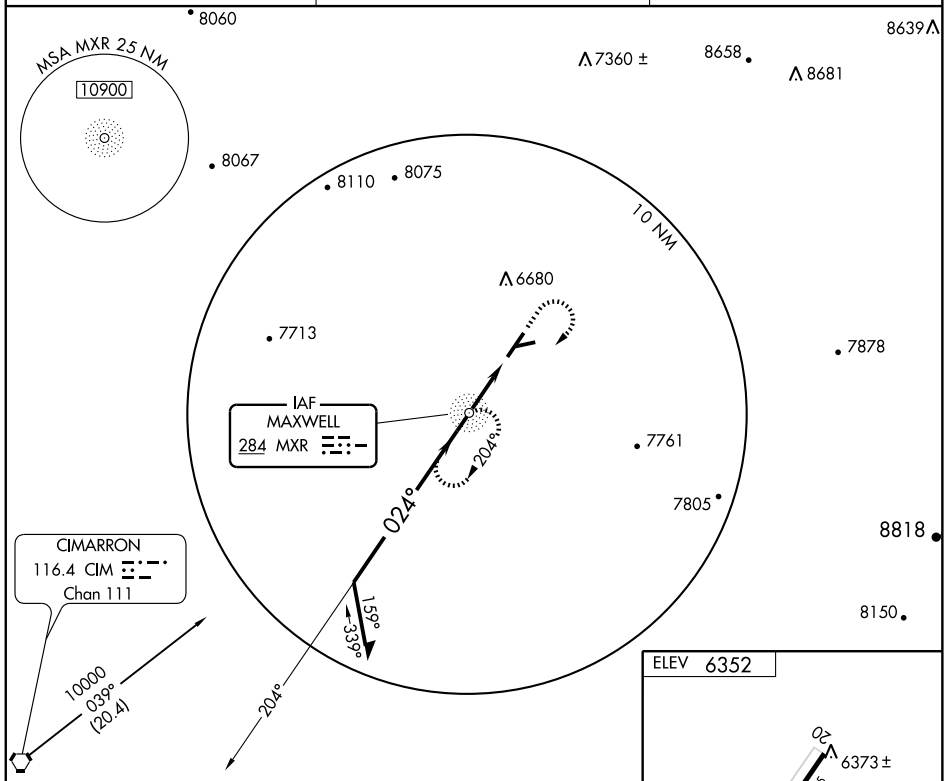
NDB RWY 2

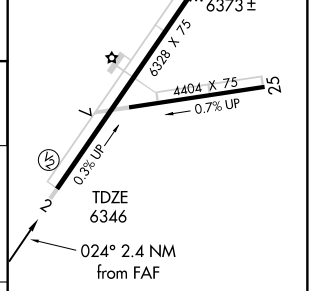
RATON MUNI/CREWS FIELD (RTN)

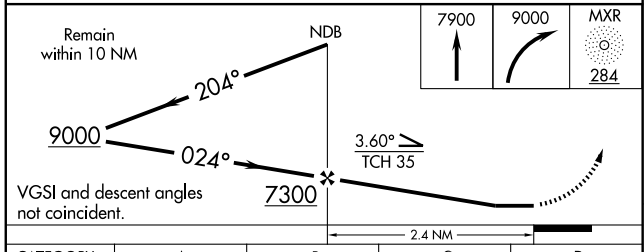
T
NA Cat. D circling not authorized west of Rwy 2-20.

MISSED APPROACH: Climb to 7900 then climbing right turn to 9000 direct MXR NDB and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
118.375	132.8 346.35	122.8 (CTAF) L★







7900	9000	MXR
		284

CATEGORY	A	B	C	D
S-2	6720-1 374 (400-1)			6720-1¼ 374 (400-1¼)
CIRCLING	6820-1 468 (500-1)	6880-1 528 (600-1)	6880-1½ 528 (600-1½)	6920-2 568 (600-2)

MIRL Rwys 2-20 and 7-25 L

FAF to MAP 2.4 NM

Knots	60	90	120	150	180
Min:Sec	2:24	1:36	1:12	0:58	0:48

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC CIM 116.4 Chan 111	APP CRS 037°	Rwy Idg 6328 TDZE 6346 Apt Elev 6352

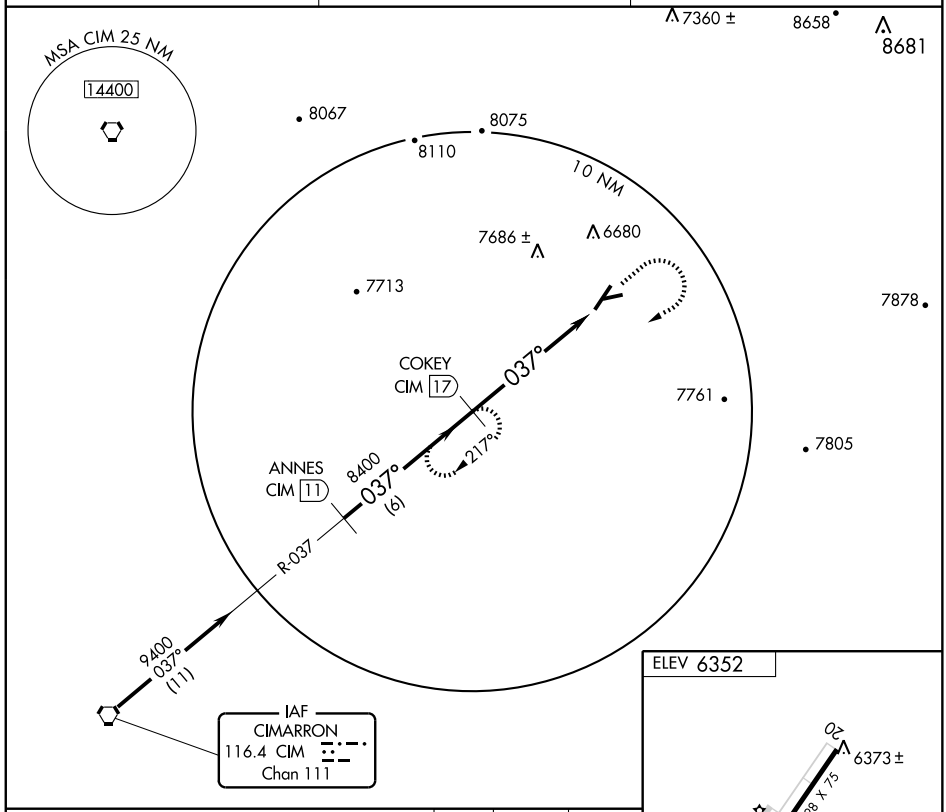
VOR/DME RWY 2

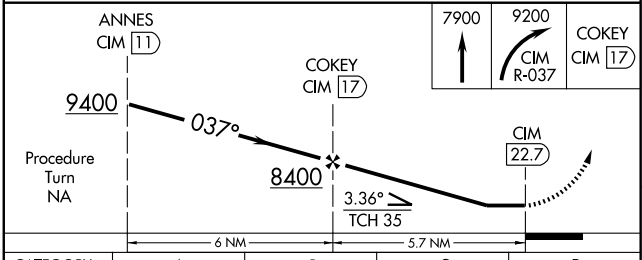
RATON MUNI/CREWS FIELD (RTN)

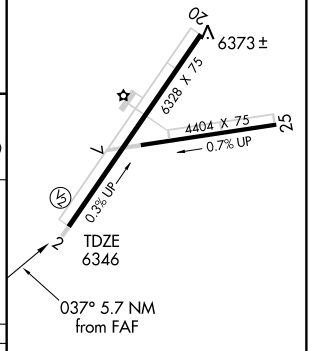
Cat. D circling not authorized west of Rwy 2-20.

MISSED APPROACH: Climb to 7900 then climbing right turn to 9200 via CIM R-037 to COKEY 17 DME and hold.

ASOS 118.375	ALBUQUERQUE CENTER 132.8 346.35	UNICOM 122.8 (CTAF) L★





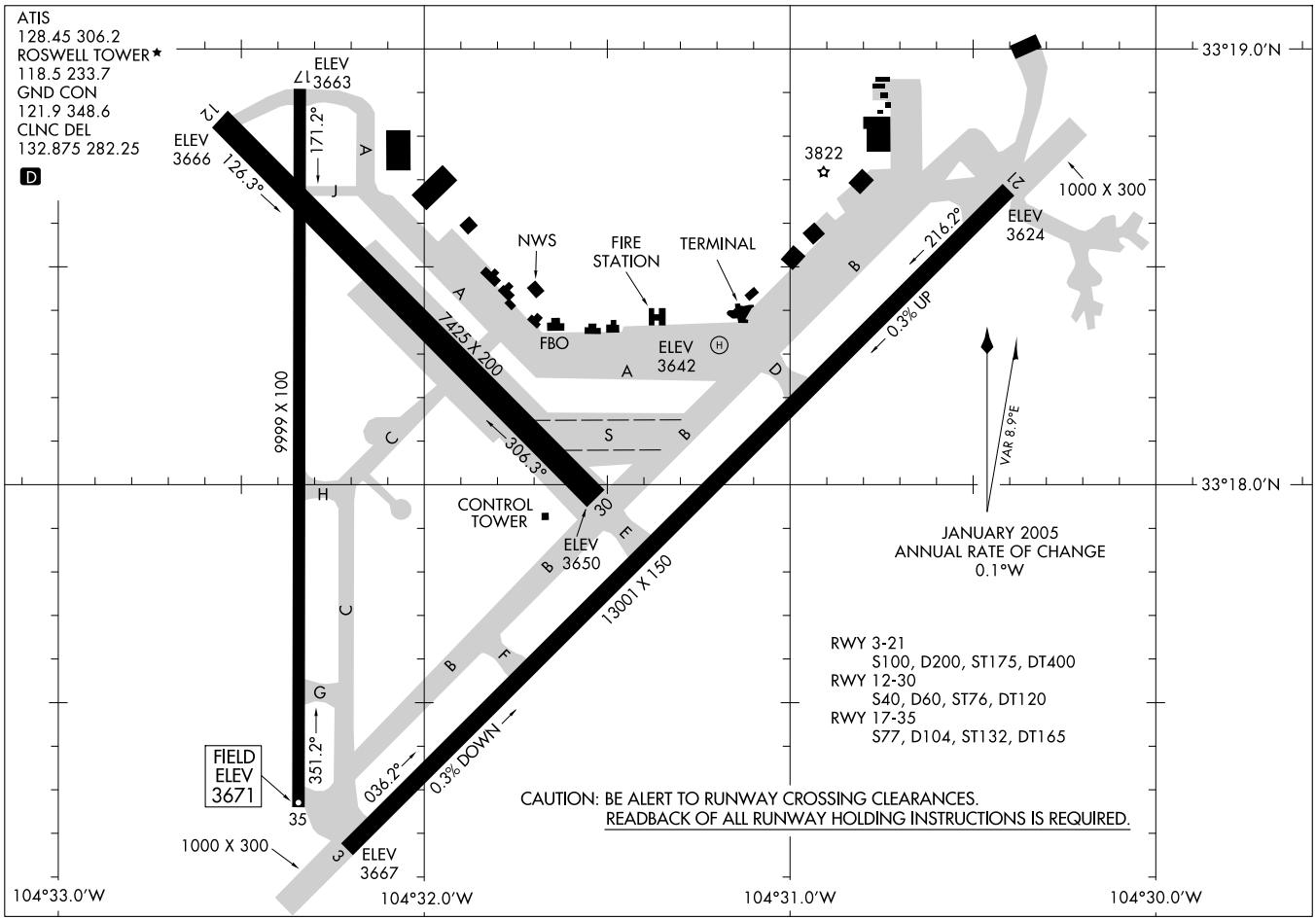


MIRL Rwys 2-20 and 7-25 L

CATEGORY	A	B	C	D
S-2	7720-1¼ 1374 (1400-1¼)	7720-1½ 1374 (1400-1½)	7720-3 1374 (1400-3)	
CIRCLING	7720-1¼ 1368 (1400-1¼)	7720-1½ 1368 (1400-1½)	7720-3 1368 (1400-3)	

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-354 (FAA)

ROSWELL INTL AIR CENTER (ROW)
ROSWELL, NEW MEXICO

HI-ILS RWY 21

LOC I-ROW	APCH CRS	Rwy ldg 13,001
109.9	215°	TDZE 3632
Chan 36		Arpt Elev 3669

JAL-354 [USAF]

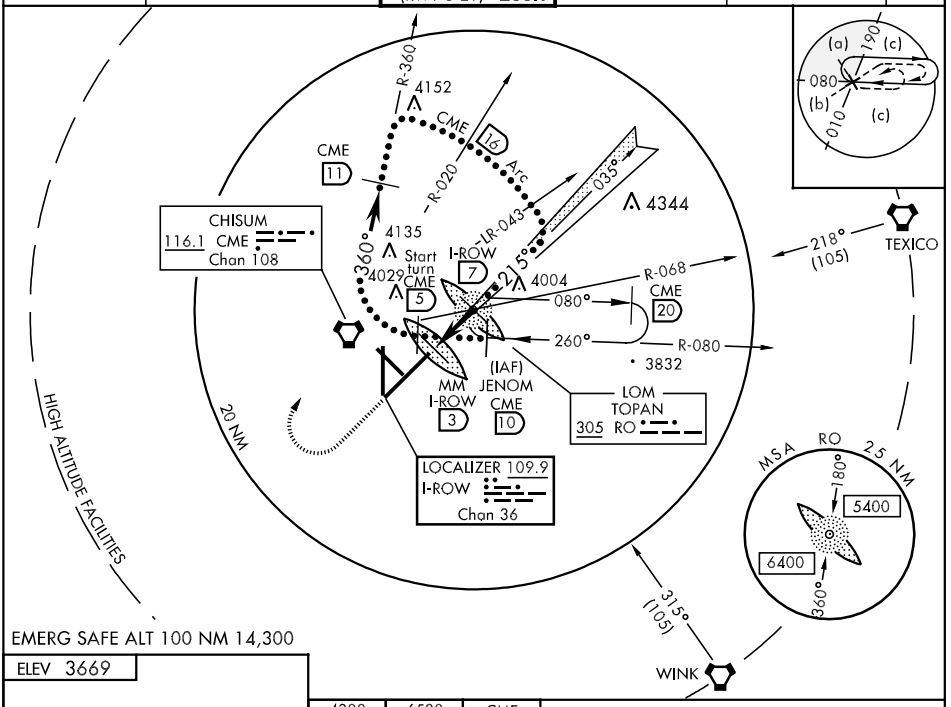
ROSWELL INTL AIR CENTER (KROW)

T *When ALS inop, increase CAT D vis to 1¼ miles and CAT E vis to 1½ miles.
USE I-ROW DME WHEN ON LOCALIZER COURSE.

MALSR

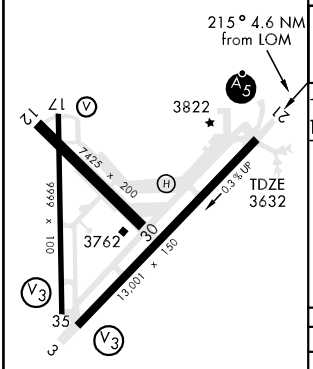
MISSED APPROACH: Climb to 4300 then climbing right turn to 6500 direct CME VORTAC.

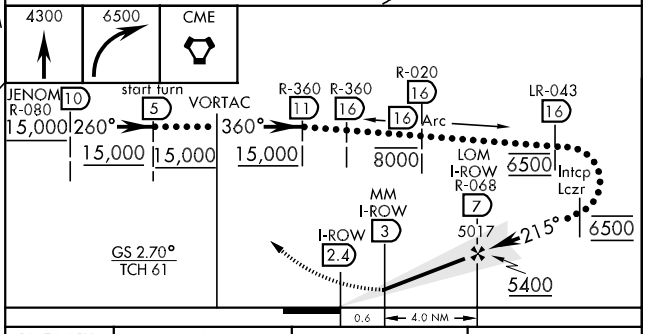
ATIS	ROSWELL APP CON	ROSWELL TOWER ★	CLNC DEL	GND CON	ASR
128.45 306.2	119.6 L ★ (RWY 17-35) 239.0	118.5 (CTAF) L ★ (RWY 3-21) 233.7	132.875 282.25	121.9 348.6	



EMERG SAFE ALT 100 NM 14,300

ELEV 3669





FAF to MAP 4.6 NM					
Knots	120	140	160	180	200
Min:Sec	2:18	1:58	1:43	1:32	1:23

CATEGORY	C	D	E
S-ILS 21	3837-½	205	(200-½)
S-LOC 21	4000-½ 368 (400-½)	4000-¾	368 (400-¾)
CIRCLING	4140-1½ 471 (500-1½)	4220-2 551 (600-2)	4380-2½ 711 (800-2½)
S-ASR 21 *	4040-¾ 408 (400-¾)	4040-1	408 (400-1)

SW-1, 22 OCT 2009 to 19 NOV 2009

HI-VOR/DME A or TACAN-A

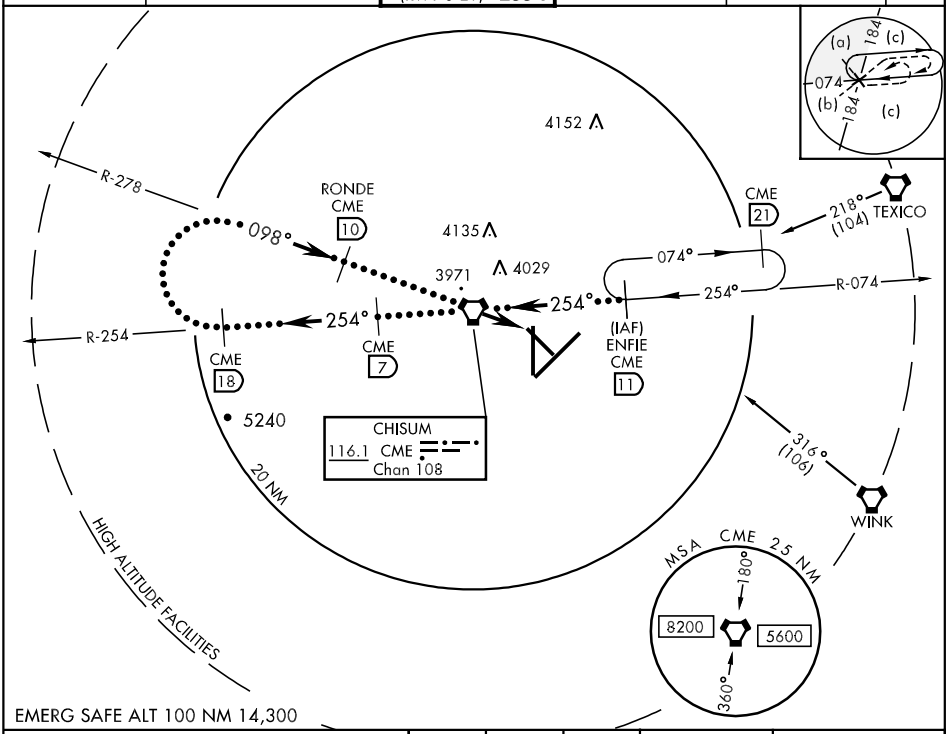
VORTAC CME 116.1 Chan 108	APCH CRS 098°	Rwy ldg N/A TDZE N/A Arpt Elev 3669

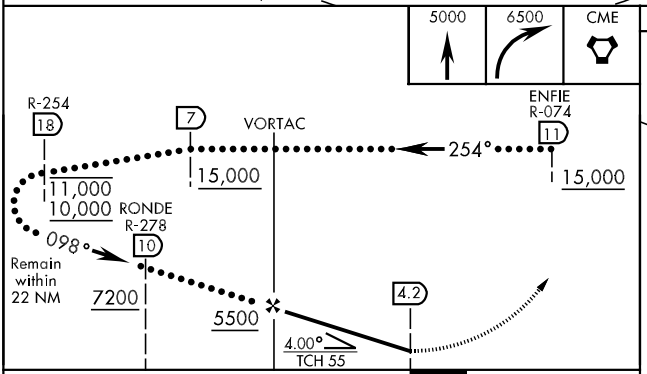
JAL-354 [USAF]

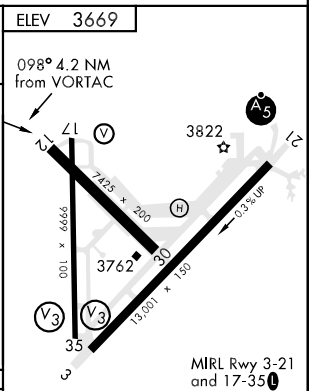
ROSWELL INTL AIR CENTER (KROW)

MISSED APPROACH: Climb to 5000 then climbing right turn to 6500 direct CME VORTAC

ATIS	ROSWELL APP CON	ROSWELL TOWER ★	CLNC DEL	GND CON	ASR
128.45 306.2	119.6 L ★ (RWY 17-35) 239.0	118.5 (CTAF) L ★ (RWY 3-21) 233.7	132.875 282.25	121.9 348.6	







CATEGORY	C	D	E
CIRCLING	4140-1½ 471 (500-1½)	4220-2 551 (600-2)	4380-2½ 711 (800-2½)

LOC/DME I-ROW	APP CRS	Rwy Idg	13001
109.9	215°	TDZE	3632
Chan 36		Apt Elev	3669

ILS RWY 21

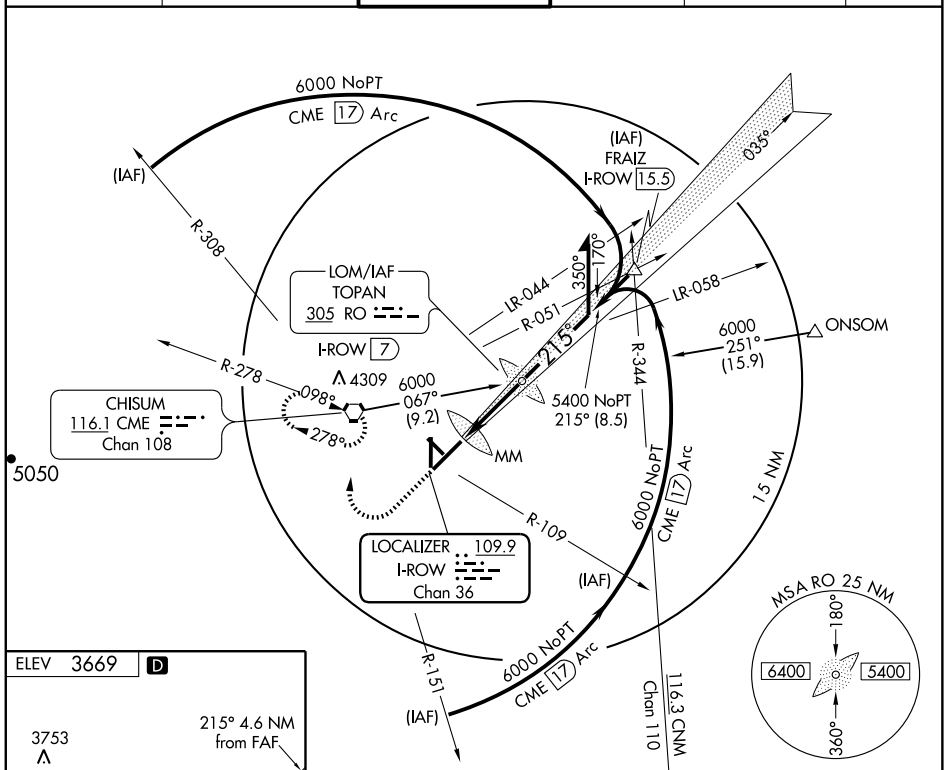
ROSWELL INTL AIR CENTER (ROW)

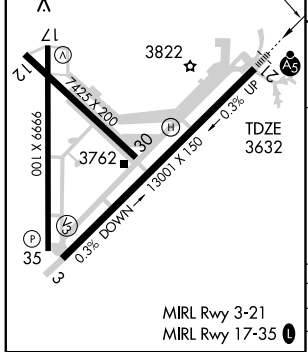
ASR

MALSR

MISSED APPROACH: Climb to 4300 then climbing right turn to 6000 direct CME VORTAC and hold.

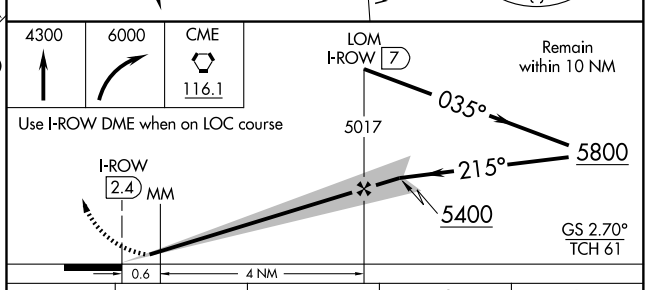
ATIS	ROSWELL APP CON★	ROSWELL TOWER★	GND CON	CLNC DEL	UNICOM
128.45 306.2	119.6 239.0	118.5 (CTAF) L 233.7	121.9 348.6	132.875 282.25	122.95





MIRL Rwy 3-21
MIRL Rwy 17-35 L

FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32



CATEGORY	A	B	C	D
S-ILS 21	3837-½ 205 (200-½)			
S-LOC 21	4000-½ 368 (400-½)			4000-¾ 368 (400-¾)
CIRCLING	4140-1 471 (500-1)		4140-1½ 471 (500-1½)	4220-2 551 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-ROW	APP CRS	Rwy Idg	13001
109.9	035°	TDZE	3665
Chan 36		Apt Elev	3669

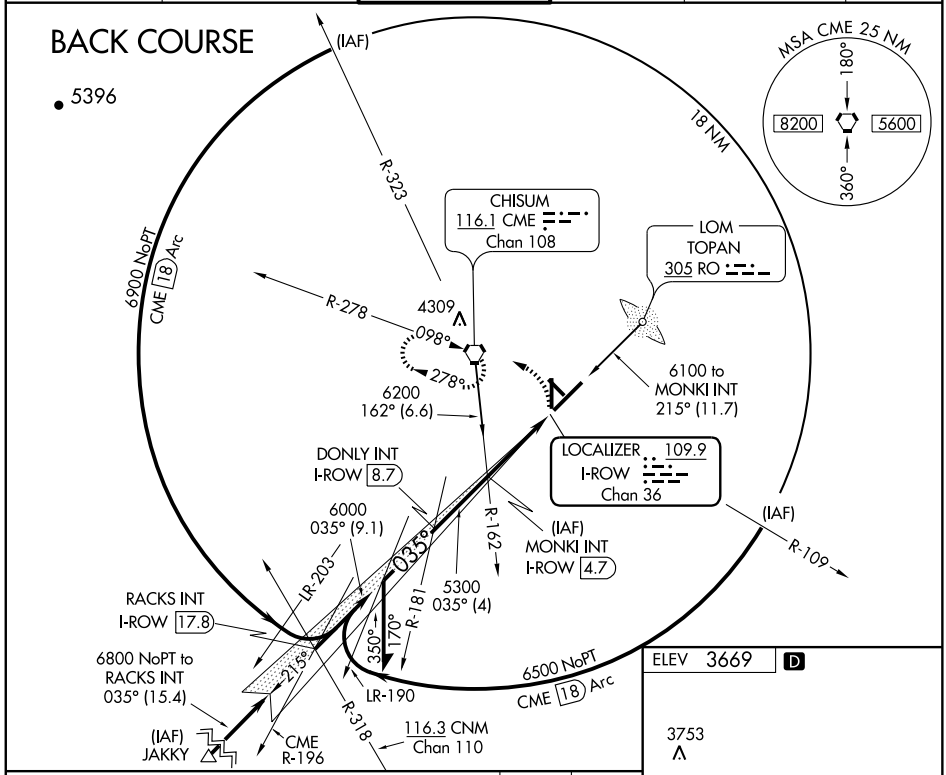
LOC BC RWY 3

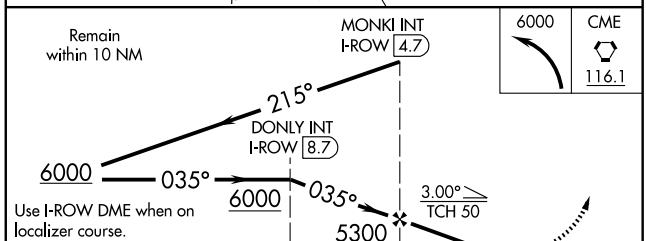
ROSWELL INTL AIR CENTER (ROW)

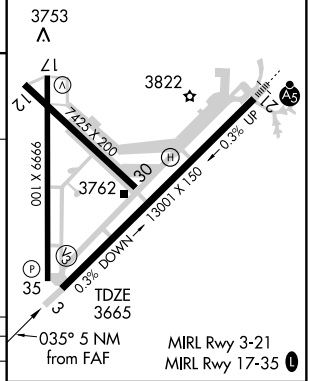
ASR

MISSED APPROACH: Climbing left turn to 6000 direct CME VORTAC and hold.

ATIS	ROSWELL APP CON★	ROSWELL TOWER★	GND CON	CLNC DEL	UNICOM
128.45 306.2	119.6 239.0	118.5 (CTAF) Ⓛ 233.7	121.9 348.6	132.875 282.25	122.95







CATEGORY	A	B	C	D
S-3	4100-1 435 (500-1)		4100-1¼ 435 (500-1¼)	4100-1½ 435 (500-1½)
CIRCLING	4140-1 471 (500-1)		4140-1½ 471 (500-1½)	4220-2 551 (600-2)

FAF to MAP 4.2 NM

Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	13001
CH 50202	035°	TDZE	3667
W03A		Apt Elev	3671

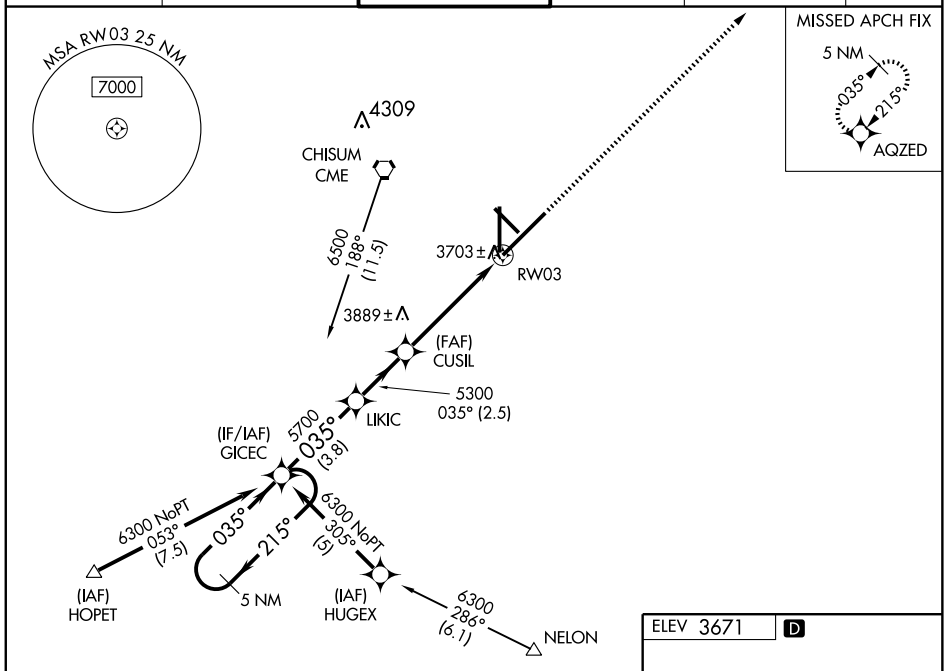
RNAV (GPS) RWY 3

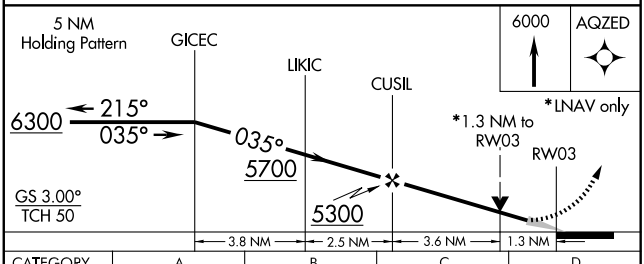
ROSWELL INTL AIR CENTER (ROW)

DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (106°F).
If local altimeter setting not received, use Artesia altimeter setting and increase all DAs/MDAs 100 feet.
VDP and Baro-VNAV NA when using Artesia altimeter setting.
ASR

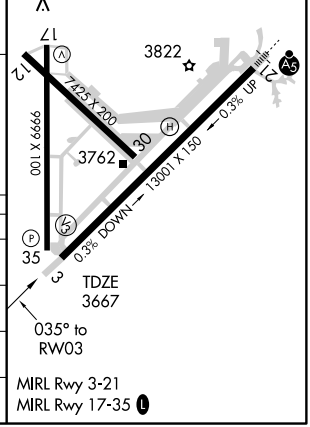
MISSED APPROACH: Climb to 6000 direct AQZED and hold.

ATIS	ROSWELL APP CON ★	ROSWELL TOWER ★	GND CON	CLNC DEL	UNICOM
128.45 306.2	119.6 239.0	118.5 (CTAF) L 233.7	121.9 348.6	132.875 282.25	122.95





CATEGORY	A	B	C	D
LPV DA	3917-¾ 250 (300-¾)			
LNAV/VNAV DA	3987-1 320 (400-1)			
LNAV MDA	4140-1 473 (500-1)		4140-1¼ 473 (500-1¼)	4140-1½ 473 (500-1½)
CIRCLING	4140-1 469 (500-1)		4140-1½ 469 (500-1½)	4240-2 569 (600-2)



MIRL Rwy 3-21
MIRL Rwy 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	9999
CH 65702	170°	TDZE	3666
W17A		Apt Elev	3671

RNAV (GPS) RWY 17

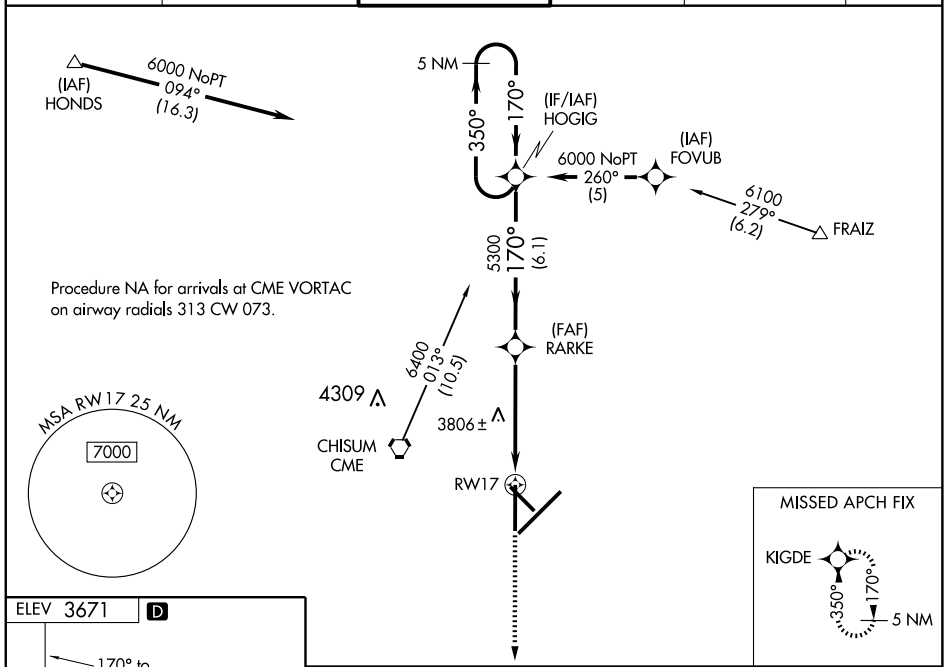
ROSWELL INTL AIR CENTER (ROW)

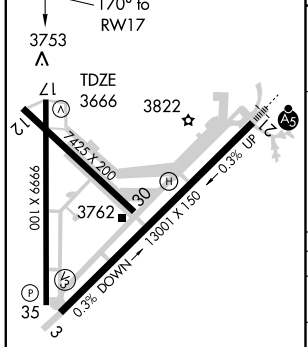
DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (106°F).
If local altimeter setting not received, use Artesia altimeter setting and increase all DAs/MDAs 100 feet.
VDP and Baro-VNAV NA when using Artesia altimeter setting.

ASR

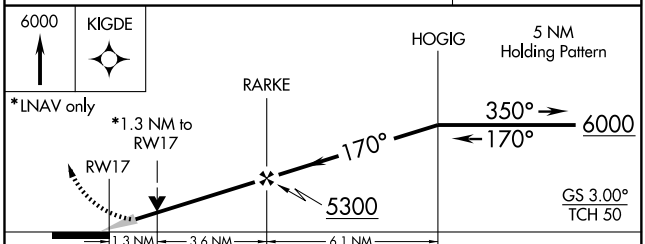
MISSED APPROACH: Climb to 6000 direct KIGDE and hold.

ATIS	ROSWELL APP CON*	ROSWELL TOWER*	GND CON	CLNC DEL	UNICOM
128.45 306.2	119.6 239.0	118.5 (CTAF) L 233.7	121.9 348.6	132.875 282.25	122.95





MIRL Rwy 3-21
MIRL Rwy 17-35 L



CATEGORY	A	B	C	D
LPV DA	3916-¾ 250 (300-¾)			
LNAV/VNAV DA	4003-1¼ 337 (400-1¼)			
LNAV MDA	4120-1 454 (500-1)		4120-1¼ 454 (500-1¼)	4120-1½ 454 (500-1½)
CIRCLING	4140-1¼ 469 (500-1¼)		4140-1½ 469 (500-1½)	4240-2 569 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS CH 69302 W21A	APP CRS 215°	Rwy Idg 13001 TDZE 3633 Apt Elev 3671

RNAV (GPS) RWY 21

ROSWELL INTL AIR CENTER (ROW)

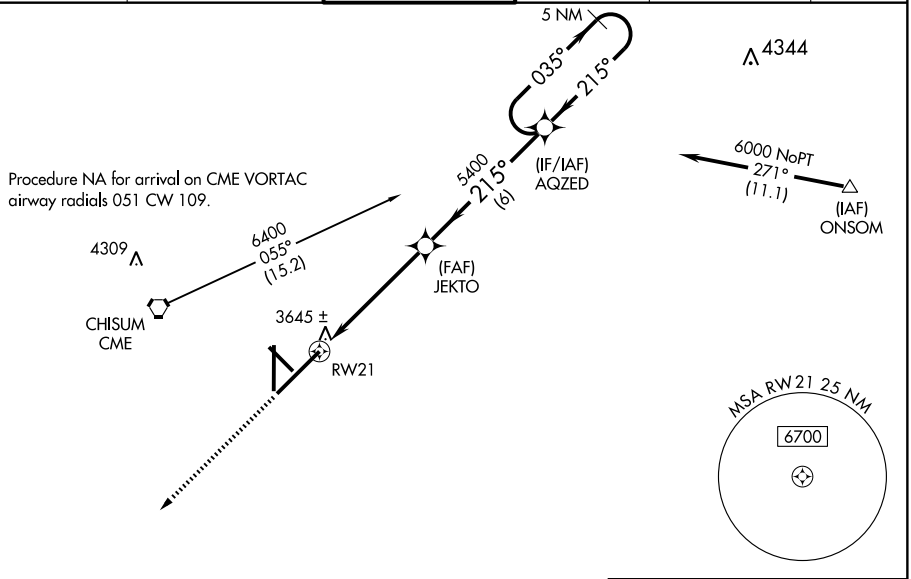
ASR

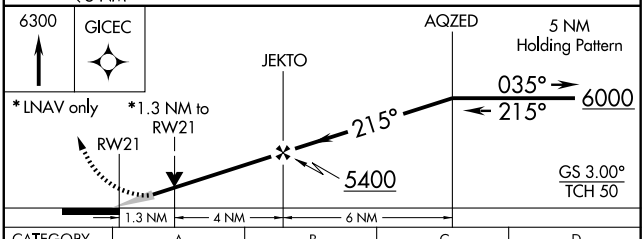
DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (106°F).
If local altimeter setting not received, use Artesia altimeter setting and increase all DAs/MDAs 100 feet.
VDP and Baro-VNAV NA when using Artesia altimeter setting.
For inoperative MALSR increase LPV all Cats. visibility to 1.

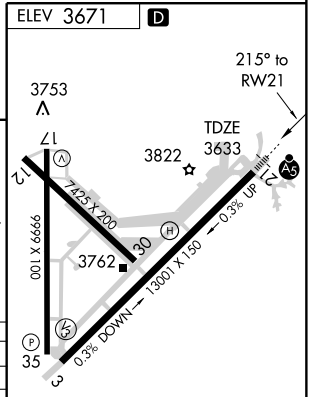
MALSR

MISSED APPROACH: Climb to 6300 direct GICEC and hold.

ATIS	ROSWELL APP CON ★	ROSWELL TOWER ★	GND CON	CLNC DEL	UNICOM
128.45 306.2	119.6 239.0	118.5 (CTAF) L 233.7	121.9 348.6	132.875 282.25	122.95







CATEGORY	A	B	C	D
LPV DA	3899-½ 266 (300-½)			
LNAV/VNAV DA	3981-¾ 348 (400-¾)			
LNAV MDA	4080-½ 447 (500-½)		4080-¾ 447 (500-¾)	4080-1 447 (500-1)
CIRCLING	4140-1¼ 469 (500-1¼)		4140-1½ 469 (500-1½)	4240-2 569 (600-2)

MIRL Rwy 3-21
MIRL Rwy 17-35 L

SW-1, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	9999
CH 70402	350°	TDZE	3671
W35A		Apt Elev	3671

RNAV (GPS) RWY 35

ROSWELL INTL AIR CENTER (ROW)

DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (106°F).
If local altimeter setting not received, use Artesia altimeter setting and increase all DAs/MDAs 100 feet.
VDP and Baro-VNAV NA when using Artesia altimeter setting.
ASR

MISSED APPROACH: Climb to 6000 direct HOGIG and hold.

ATIS	ROSWELL APP CON ★	ROSWELL TOWER ★	GND CON	CLNC DEL	UNICOM
128.45 306.2	119.6 239.0	118.5 (CTAF) L 233.7	121.9 348.6	132.875 282.25	122.95

Procedure NA for arrivals at CME VORTAC via V291 northwest bound.

MISSED APCH FIX
5 NM 170° 350° HOGIG

MSA RW35 25 NM
7000

4309
CHISUM CME
3703± RW35
6400 154° (14.8)
3859±
(FAF) SIBPO
350° (6) 5400
HAGER 6000 227° (8.3)
(IAF) HOPET 6000 NoPT 079° (14.5)
(IF/IAF) KIGDE
6000 NoPT 260° (5) (IAF) LELIY
6000 NoPT 328° (3.3)
170° 350°
(IAF) NELON
5 NM

ELEV 3671 D

3753
17
12
3822
7425 X 200
9999 X 100
30
3762
13001 X 150
0.3% UP
0.3% DOWN
35
TDZE 3671
350° to RW35
MIRL Rwy 3-21
MIRL Rwy 17-35 L

6000 HOGIG
*LNAV only
*1.3 NM to RW35
SIBPO
KIGDE
5 NM Holding Pattern
170° 350° 6000
RW35
350°
5400
GS 3.00°
TCH 50
1.3 NM 3.9 NM 6 NM

CATEGORY	A	B	C	D
LPV DA	3921-¾ 250 (300-¾)			
LNAV/VNAV DA	3953-1 282 (300-1)			
LNAV MDA	4120-1 449 (500-1)		4120-1¼ 449 (500-1¼)	4120-1½ 449 (500-1½)
CIRCLING	4140-1 469 (500-1)		4140-1½ 469 (500-1½)	4240-2 569 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC CME	APP CRS	Rwy Idg	N/A
116.1	098°	TDZE	N/A
Chan 108		Apt Elev	3671

VOR-B

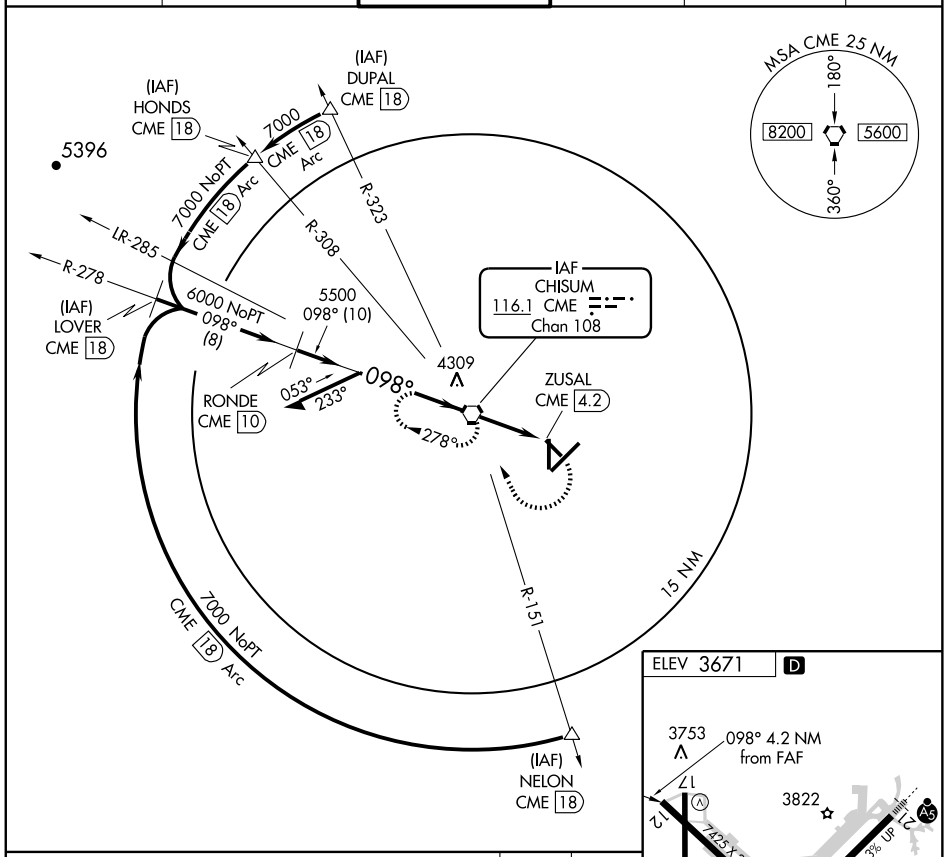
ROSWELL INTL AIR CENTER (ROW)

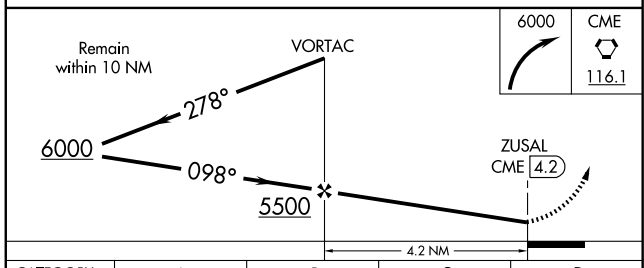
ASR

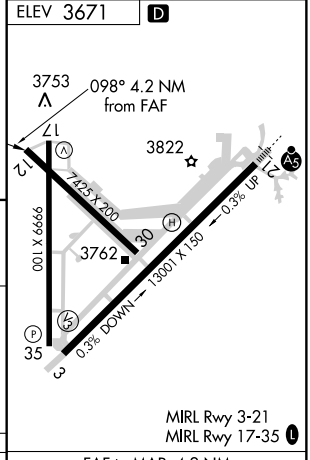
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 6000 direct CME VORTAC and hold.

ATIS	ROSWELL APP CON★	ROSWELL TOWER★	GND CON	CLNC DEL	UNICOM
128.45 306.2	119.6 239.0	118.5 (CTAF) L 233.7	121.9 348.6	132.875 282.25	122.95







CATEGORY	A	B	C	D
CIRCLING	4140-1	469 (500-1)	4140-1½ 469 (500-1½)	4240-2 569 (600-2)

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	TDZE	Apt Elev
241°	8099	6768	6811

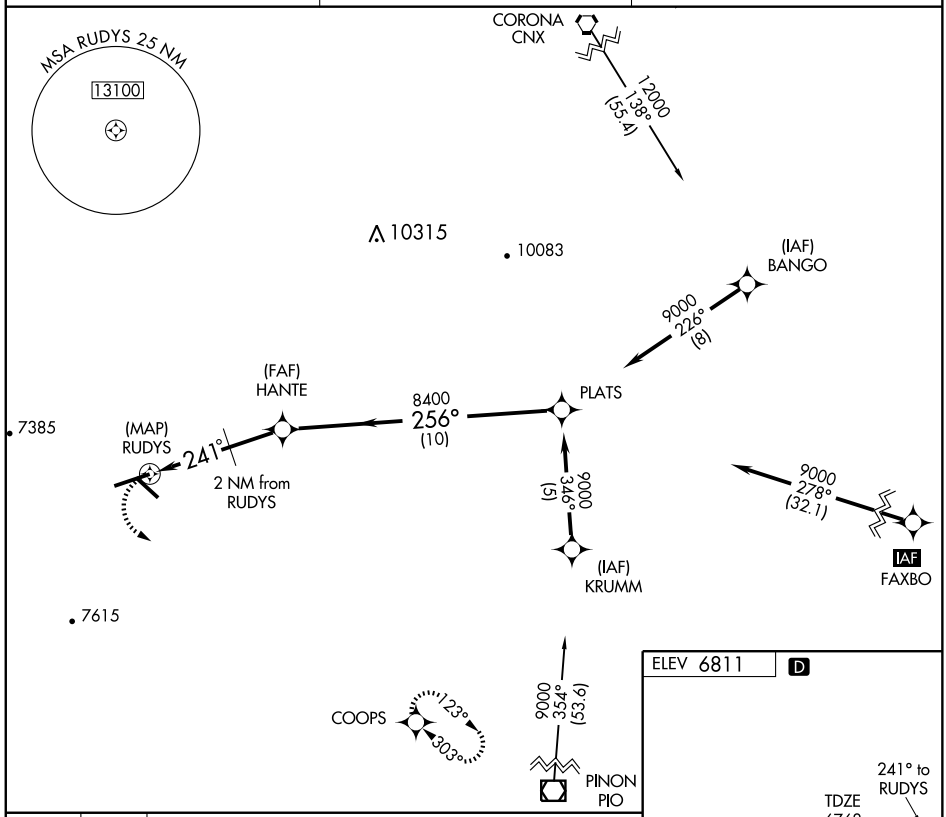
GPS RWY 24

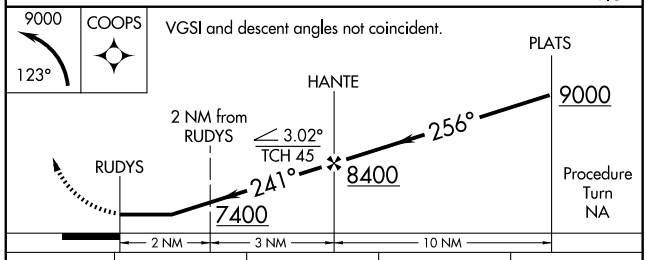
RUIDOSO/ SIERRA BLANCA RGNL (SRR)

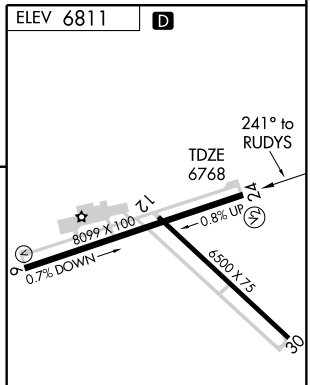
V NA — If local altimeter setting not received, procedure not authorized.
IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climbing left turn to 9000 via 123° course to COOPS WP and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
126.475	132.65 257.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-24	7200-1 432 (500-1)		7200-1¼ 432 (500-1¼)	7200-1½ 432 (500-1½)
CIRCLING	7240-1 429 (500-1)	7300-1 489 (500-1)	7320-1½ 509 (600-1½)	7440-2 629 (700-2)

MIRL Rwys 6-24 and 12-30 L

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SRR	APP CRS	Rwy Idg	8099
110.7	241°	TDZE	6771
Chan 44		Apt Elev	6814

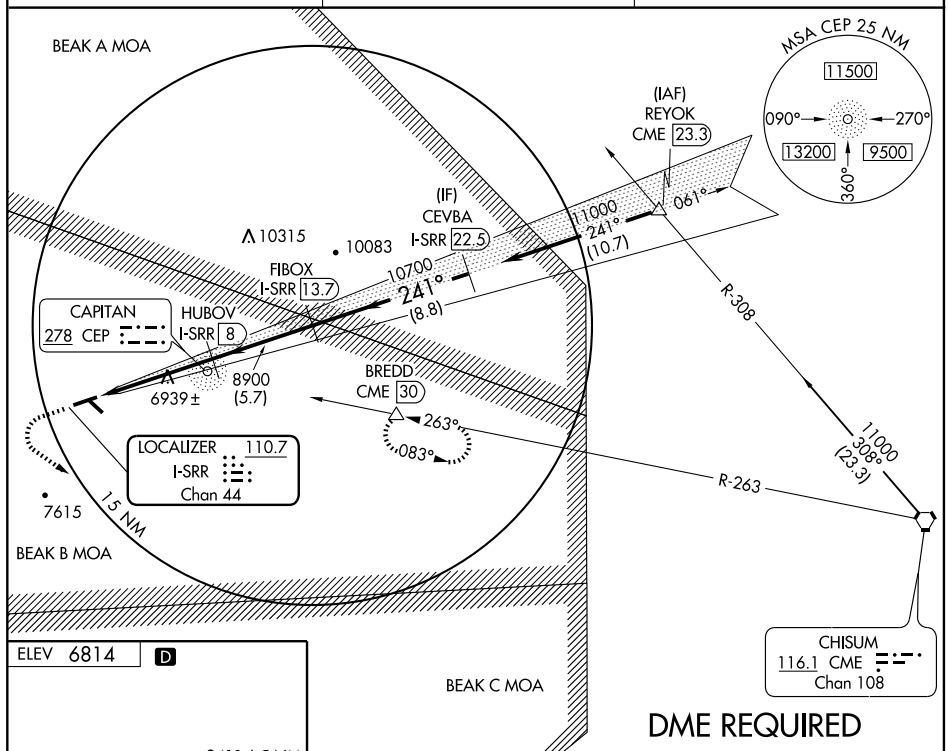
ILS or LOC/DME RWY 24

RUIDOSO/ SIERRA BLANCA RGNL (SRR)

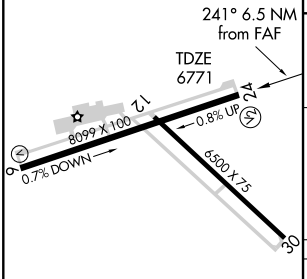
T
NA If local altimeter setting not received procedure not authorized.
Use I-SRR DME when on localizer course.
Circling not authorized to Rwy 12/30.

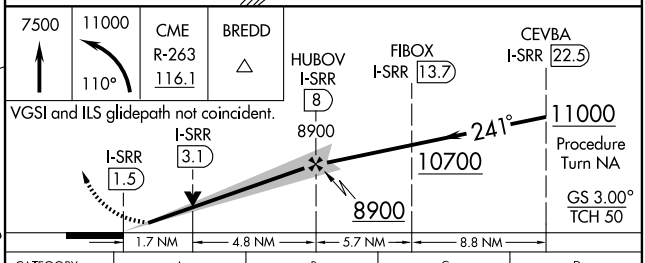
MISSED APPROACH: Climb to 7500 then climbing left turn to 11000 via heading 110° and CME VORTAC R-263 to BREDD/CME 30 DME and hold, continue climb-in-hold to 11000.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
126.475	132.65 257.6	122.8 (CTAF) L



DME REQUIRED





CATEGORY	A	B	C	D
S-ILS 24	6971-¾ 200 (200-¾)			
S-LOC 24	7220-1 449 (500-1)		7220-1¼ 449 (500-1¼)	7220-1½ 449 (500-1½)
CIRCLING	7320-1 506 (600-1)	7360-1 546 (600-1)	7360-1½ 546 (600-1½)	7500-2¼ 686 (700-2¼)

MIRL Rwys 6-24 and 12-30 L

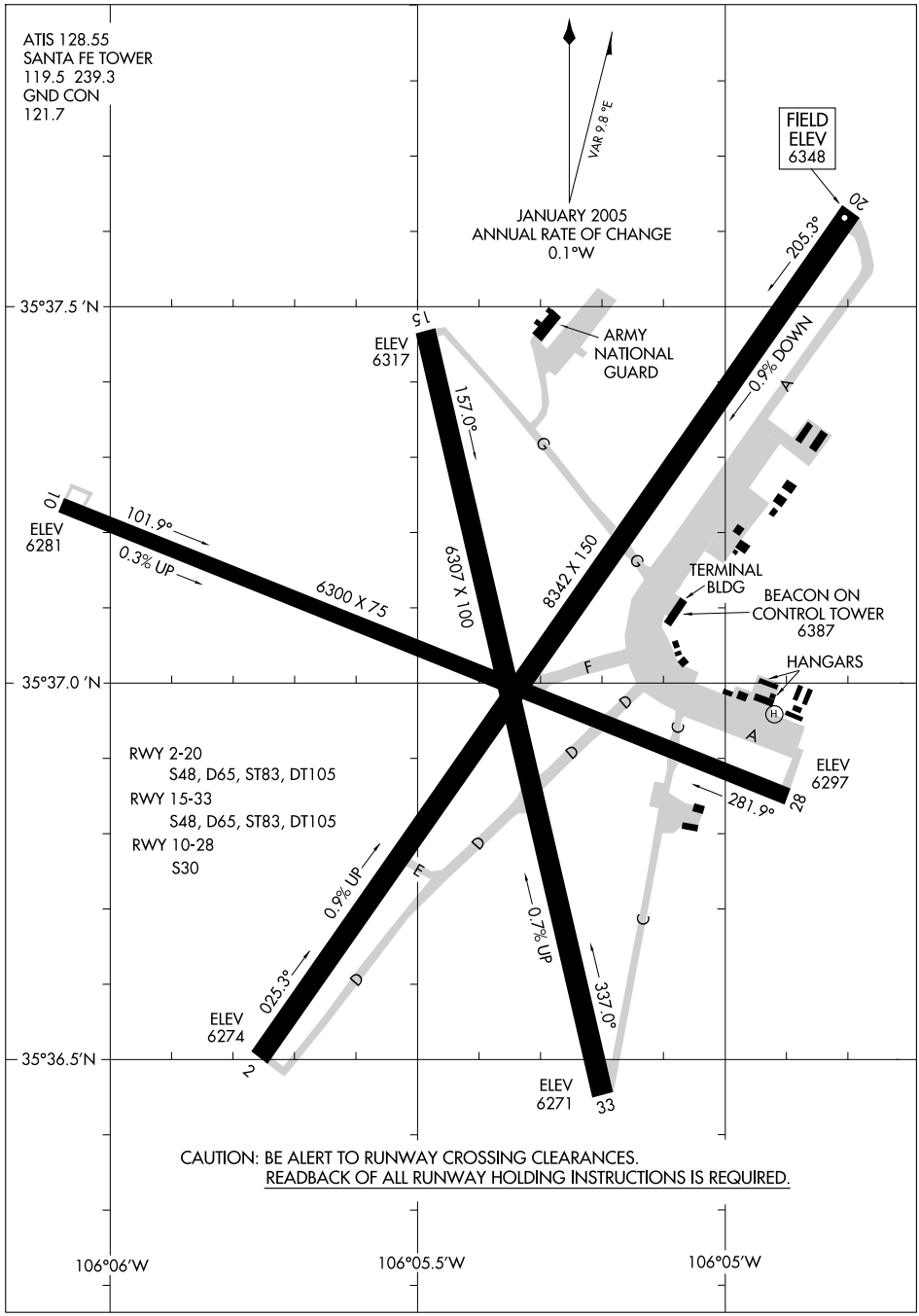
SW-1, 22 OCT 2009 to 19 NOV 2009

08101

AIRPORT DIAGRAM

AL-548 (FAA)

SANTA FE MUNI (SAF)
SANTA FE, NEW MEXICO



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-1, 22 OCT 2009 to 19 NOV 2009

SANTA FE, NEW MEXICO

AL-548 (FAA)

LOC/DME I-SGB	APP CRS	Rwy Idg	8342
111.7	023°	TDZE	6303
Chan 54		Apt Elev	6348

ILS or LOC RWY 2

SANTA FE MUNI (SAF)

MISSED APPROACH: Climb to 7300, then climbing right turn to 9000 direct DOMAN LOM and hold, continue climb-in-hold to 9000.

ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) L 239.3	121.7	122.95

ADF and DME REQUIRED

MSA SG 25 NM
13900
090° 270°
11900

10 NM

LOCALIZER 111.7
I-SGB
Chan 54

ZEDAN
SAF 30

354° 174°

R-354

7472 7052 7206 10554 7003 6732 6500 7203 7705

LOM
DOMAN
341 SG

DOMAN INT
I-SGB 5.4

6534 ±

234°

054°

R-271

(IAF)
HEGMI
SAF 12

R-255

CIBVU INT
I-SGB 10.3

7600

023°
(4.9)

R-232

R-219

SANTA FE
110.6 SAF
Chan 43

R-104

(IAF)
ECISA
SAF 12

SAF 12 Arc

10400

8800

023°
(5.2)

(IAF)
LIYIR
SAF 17

LR-230

LR-209

10400 to FAKER
108° (4.9) and
LOC (2.9)

(EYIYA)

203°

(IF)
FAKER INT
I-SGB 15.5

8897

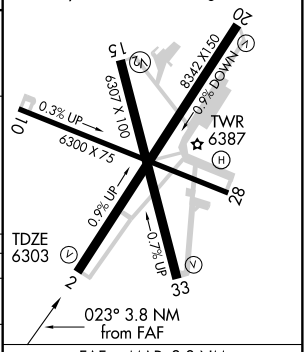
10400
SAF 12 Arc

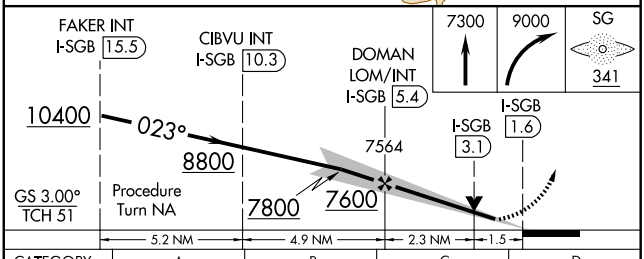
SW-1, 22 OCT 2009 to 19 NOV 2009

ELEV 6348

6387

REIL Rwys 20, 15 and 33
MIRL Rwys 20-15 and 15-33 L





CATEGORY	A	B	C	D
S-ILS 2	6503-¾ 200 (200-¾)			
S-LOC 2	6800-1 497 (500-1)		6800-1¼ 497 (500-1¼)	6800-1½ 497 (500-1½)
CIRCLING	6840-1 492 (500-1)		6920-1½ 572 (600-1½)	7020-2¼ 672 (700-2¼)

FAF to MAP 3.8 NM

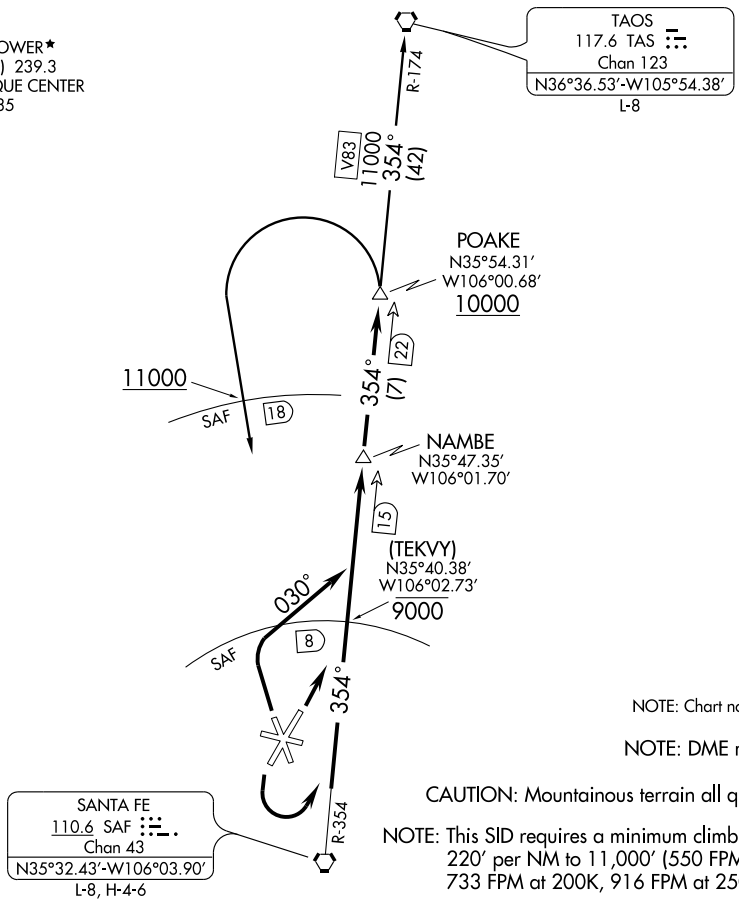
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

POAKE ONE DEPARTURE

SL-548 (FAA)

SANTA FE MUNI (SAF)
SANTA FE, NEW MEXICO

ATIS 128.55
GND CON
121.7
SANTA FE TOWER★
119.5 (CTAF) 239.3
ALBUQUERQUE CENTER
132.8 346.35



NOTE: Chart not to scale.

NOTE: DME required.

CAUTION: Mountainous terrain all quadrants.

NOTE: This SID requires a minimum climb of 220′ per NM to 11,000′ (550 FPM at 150K, 733 FPM at 200K, 916 FPM at 250K).

SW-1, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRPTION

TAKE-OFF RUNWAY 2: Climb on runway heading to....

TAKE-OFF RUNWAY 20: Climbing left turn to....

TAKE-OFF RUNWAY 33: Climbing right turn to heading 030° to....

....Intercept and proceed via SAF R-354 to POAKE DME fix. Cross 8 DME north of SAF VORTAC at or below 9000′. Cross POAKE DME fix at or above 10000′. Thence via assigned (transition) or (route).

SANTA FE TRANSITION (POAKE1.SAF): From POAKE DME fix left turn direct SAF VORTAC. Thence via (assigned route). Cross 18 DME north of SAF VORTAC at or above 11000′.

TAOS TRANSITION (POAKE1.TAS): From POAKE DME fix via SAF R-354 and V83 (TAS R-174) to TAS VORTAC. Thence via (assigned route).

APP CRS	Rwy Idg	8342
023°	TDZE	6303
	Apt Elev	6348

RNAV (GPS) RWY 2
SANTA FE MUNI (SAF)

NA

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

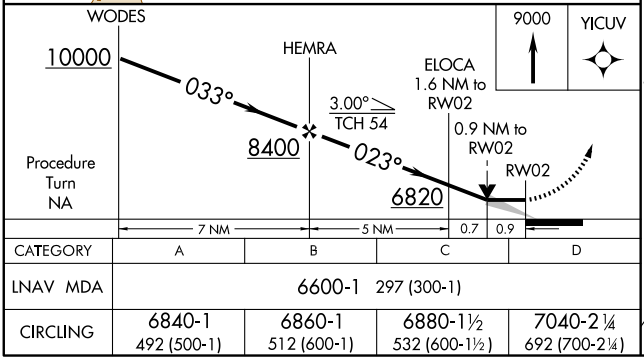
MISSED APPROACH: Climb to 9000 direct YICUV WP and hold.

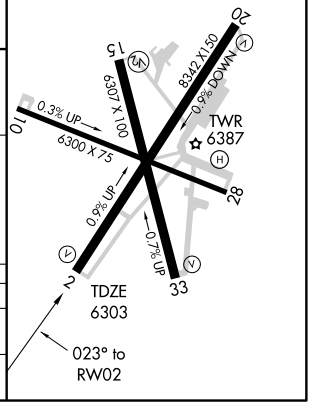
ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) L 239.3	121.7	122.95

Procedure NA for arrivals at DULKE via V190 southwestbound.
Procedure NA for arrivals at NELGE via V611 southwestbound.
Procedure NA for arrivals at ZIASE via V62-263 westbound.

6 NM
355°
175°
7003
YICUV
6500
6732
7052
7206
9361
7472
7203
RW02
ELOCA
1.6 NM to RW02
6534 ±
7705
023°
(FAF)
HEMRA
7251 ±
10000
095°
(17.5)
(IAF)
ZIASE
8400
033°
(7)
WODES
MSA RW02 25 NM
13900
10000
058°
(13.7)
(IAF)
NELGE
10000
349°
(11.6)
(IAF)
DULKE
8897

ELEV 6348
REIL Rwys 20, 15 and 33
MIRL Rwys 2-20 and 15-33 L
6387A





CATEGORY	A	B	C	D
LNAV MDA	6600-1 297 (300-1)			
CIRCLING	6840-1 492 (500-1)	6860-1 512 (600-1)	6880-1½ 532 (600-1½)	7040-2¼ 692 (700-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

SANTA FE, NEW MEXICO

AL-548 (FAA)

APP CRS	Rwy Idg	6307
155°	TDZE	6318
	Apt Elev	6348

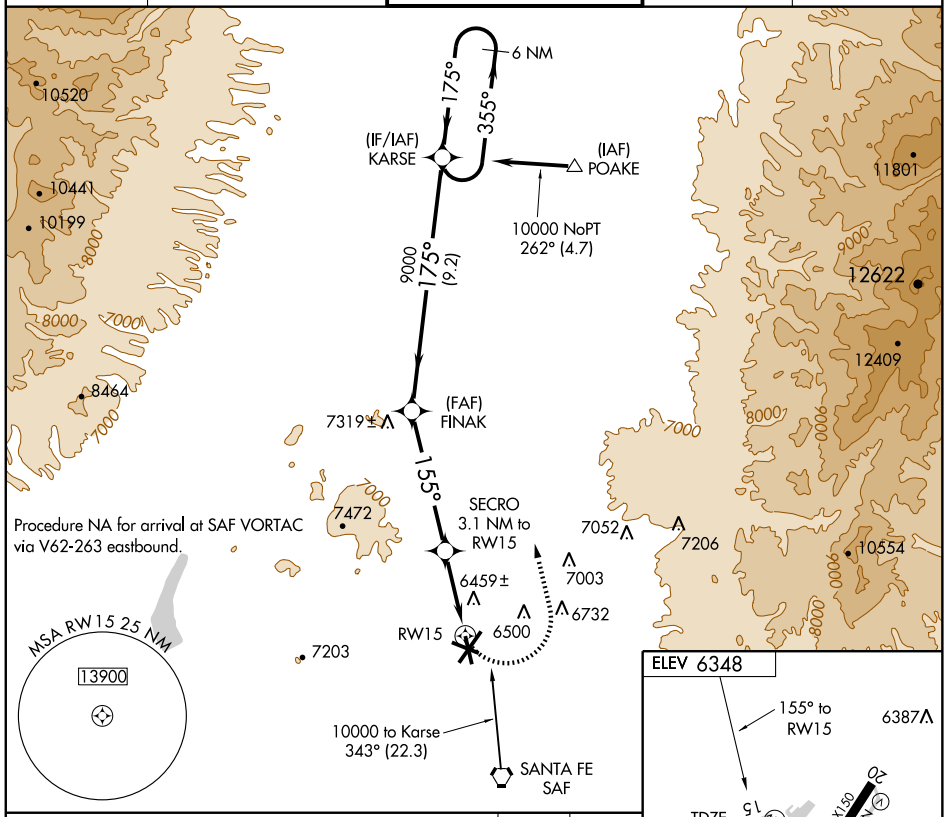
RNAV (GPS) RWY 15

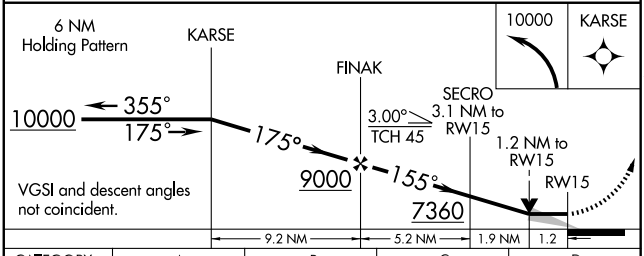
SANTA FE MUNI (SAF)

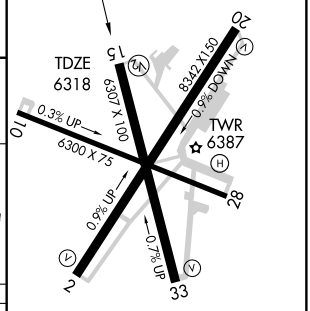
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Procedure NA at night.

MISSED APPROACH: Climbing left turn to 10000 direct KARSE WP and hold.

ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) L 239.3	121.7	122.95







CATEGORY	A	B	C	D
LNAV MDA	6720-1 402 (400-1)		6720-1¼ 402 (400-1¼)	
CIRCLING	6840-1 492 (500-1)	6860-1 512 (600-1)	6880-1½ 532 (600-1½)	7040-2¼ 692 (700-2¼)

REIL Rwys 20, 15 and 33
MIRL Rwys 2-20 and 15-33 L

SW-1, 22 OCT 2009 to 19 NOV 2009

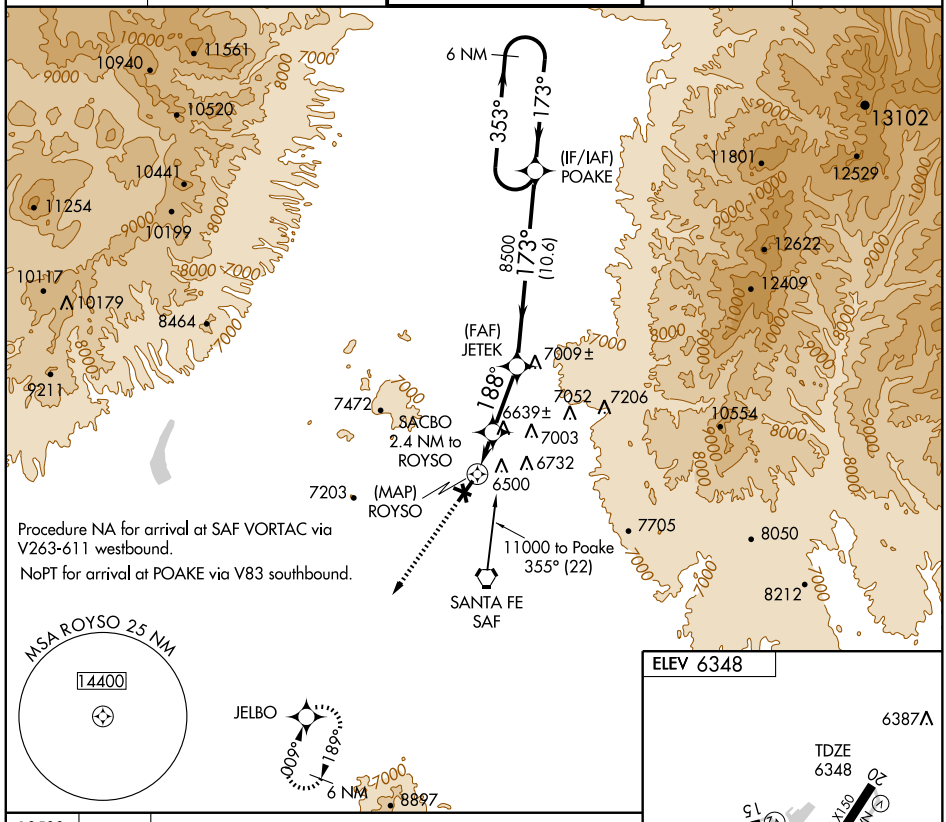
APP CRS	Rwy Idg	8342
188°	TDZE	6348
	Apt Elev	6348

RNAV (GPS) RWY 20
SANTA FE MUNI (SAF)

T NA — GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Procedure NA at night.

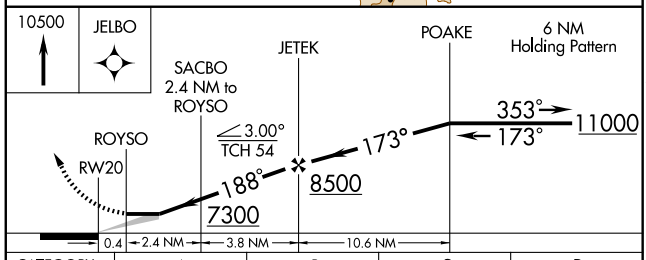
MISSED APPROACH: Climb to 10500 direct JELBO WP and hold.

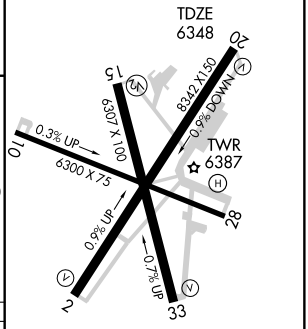
ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) L 239.3	121.7	122.95



Procedure NA for arrival at SAF VORTAC via V263-611 westbound.

NoPT for arrival at POAKE via V83 southbound.





CATEGORY	A	B	C	D
LNAV MDA	6900-1 552 (600-1)		6900-1½ 552 (600-1½)	6900-1¾ 552 (600-1¾)
CIRCLING	6900-1 552 (600-1)		6900-1½ 552 (600-1½)	7040-2¼ 692 (700-2¼)

REIL Rwys 20, 15 and 33
MIRL Rwys 2-20 and 15-33 L

SW-1, 22 OCT 2009 to 19 NOV 2009

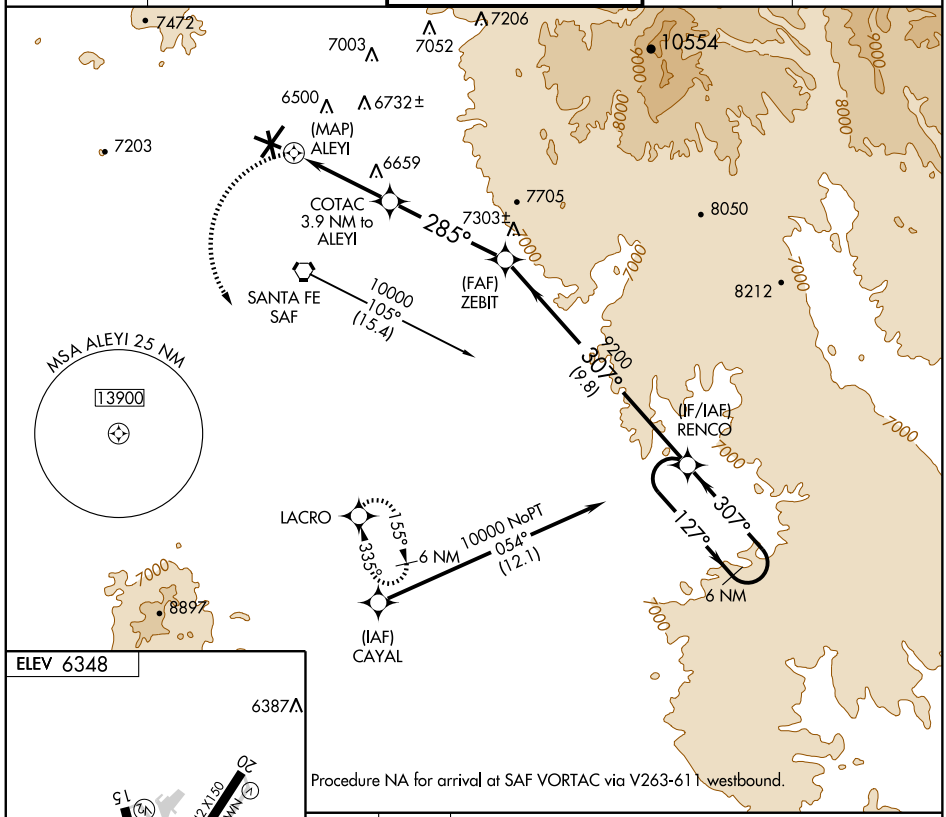
APP CRS	Rwy Idg	6300
285°	TDZE	6307
	Apt Elev	6348

RNAV (GPS) RWY 28
SANTA FE MUNI (SAF)

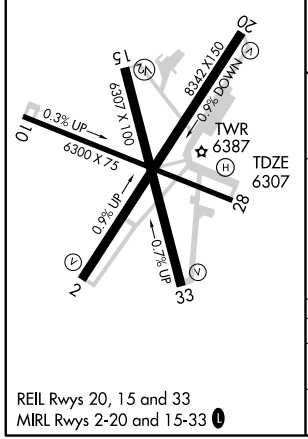
T
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 9000 direct LACRO WP and hold.

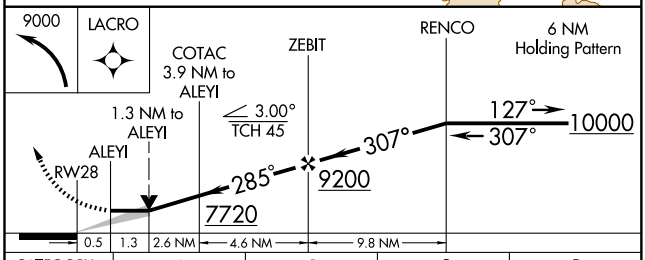
ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) L 239.3	121.7	122.95



ELEV 6348



Procedure NA for arrival at SAF VORTAC via V263-611 westbound.



CATEGORY	A	B	C	D
LNAV MDA	6920-1 613 (600-1)		6920-1¾ 613 (600-1¾)	6920-2 613 (600-2)
CIRCLING	6920-1 572 (600-1)		6920-1¾ 572 (600-1¾)	7040-2¼ 692 (700-2¼)

REIL Rwys 20, 15 and 33
MIRL Rwys 2-20 and 15-33 L

SW-1, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 33

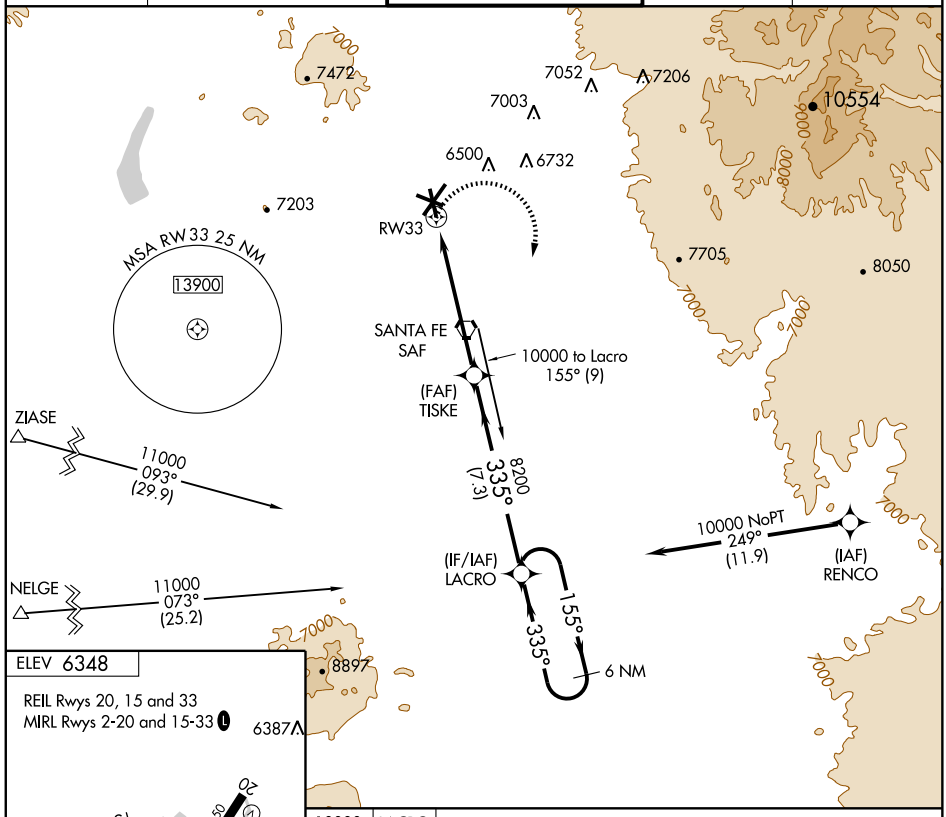
SANTA FE MUNI (SAF)

APP CRS	Rwy Idg	6307
335°	TDZE	6304
	Apt Elev	6348

NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 10000 direct LACRO WP and hold.

ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) L 239.3	121.7	122.95

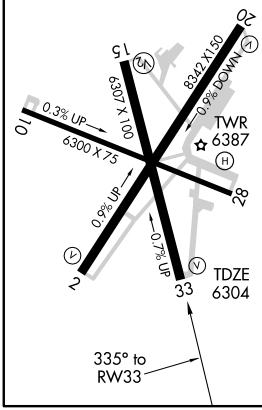


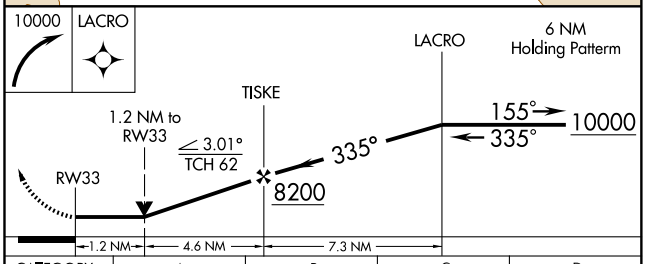
ELEV 6348

REIL Rwys 20, 15 and 33

MIRL Rwys 2-20 and 15-33 L

6387





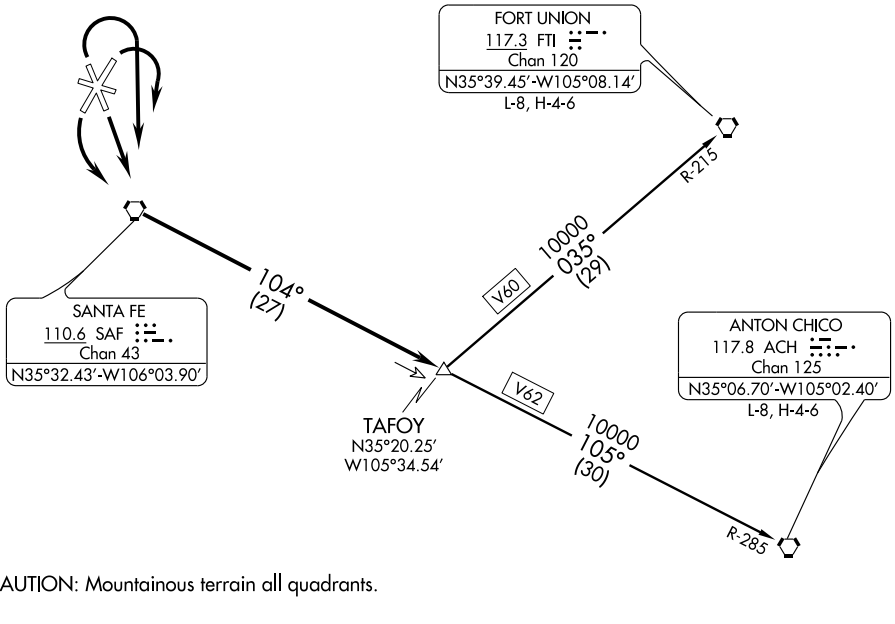
CATEGORY	A	B	C	D
LNAV MDA	6720-1 416 (400-1)		6720-1¼ 416 (400-1¼)	
CIRCLING	6840-1 492 (500-1)	6860-1 512 (600-1)	6880-1½ 532 (600-1½)	7040-2¼ 692 (700-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

TAFOY TWO DEPARTURE

SL-548 (FAA)

ATIS 128.55
GND CON
121.7
SANTA FE TOWER★
119.5 (CTAF) 239.3
ALBUQUERQUE CENTER
132.8 346.35



CAUTION: Mountainous terrain all quadrants.

NOTE: Takeoff runways 2, 33: Cat. A, B standard;
Cat. C, D requires a minimum climb of 330'/NM until passing 9800' or a 2900' ceiling and 3 miles visibility.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 15: Climb direct to....

TAKE-OFF RUNWAY 20: Climbing left turn direct to....

TAKE-OFF RUNWAYS 2 & 33: Climbing right turn direct to....

....the SAF VORTAC. Proceed via the SAF R-104 to TAFOY INT, climb and maintain 10000 MSL. Thence via assigned (transition) or (route).

ANTON CHICO TRANSITION (TAFOY2.ACH): From over TAFOY INT, via V62/ ACH R-285 to ACH VORTAC. Thence via (assigned) route.

FORT UNION TRANSITION (TAFOY2.FTI): From over TAFOY INT via V60/FTI R-215 to FTI VORTAC. Thence via (assigned) route.

SW-1, 22 OCT 2009 to 19 NOV 2009

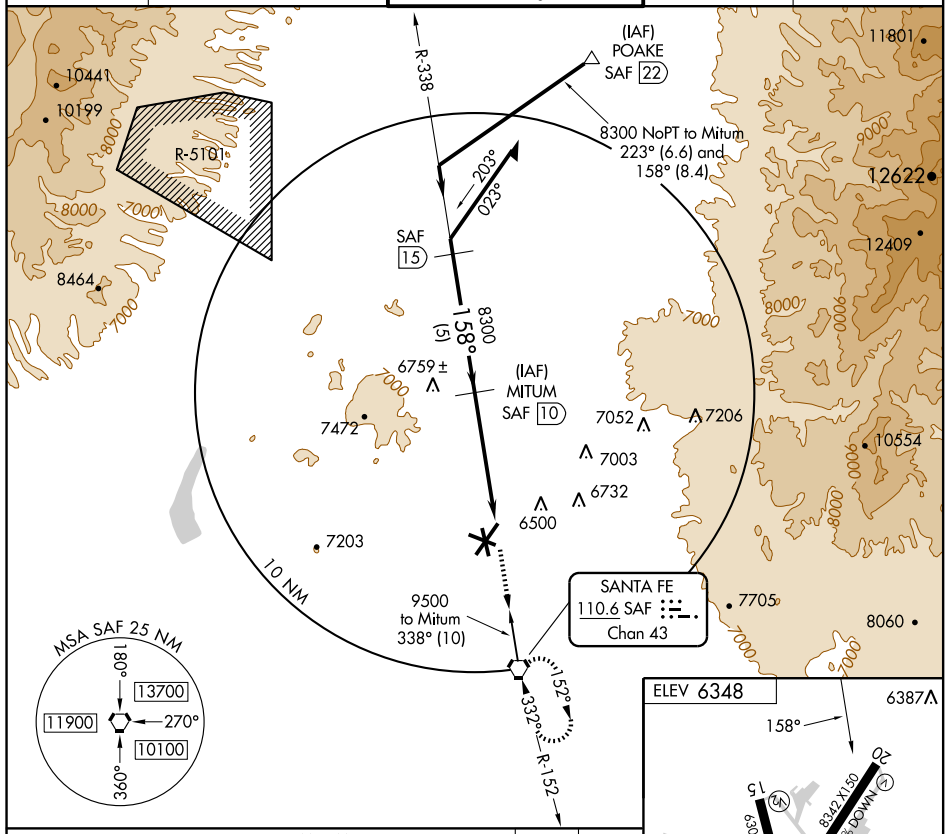
VORTAC SAF	APP CRS	Rwy Idg	N/A
110.6	158°	TDZE	N/A
Chan 43		Apt Elev	6348

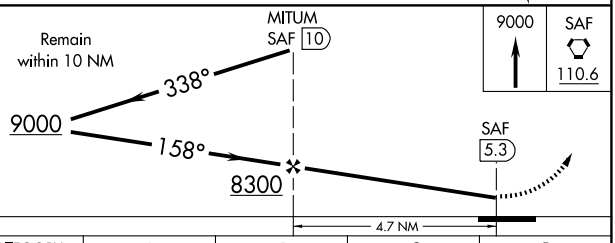
VOR/DME-A
SANTA FE MUNI (SAF)

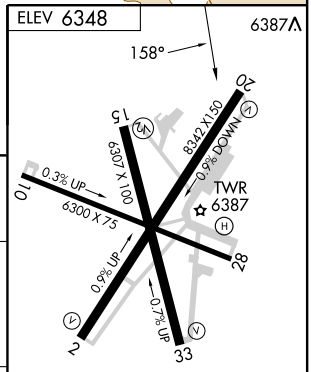
When Control Tower closed, except for operators with approved weather reporting service, use Albuquerque altimeter setting.

MISSED APPROACH: Climb to 9000 direct SAF VORTAC and hold, continue climb-in-hold to 9000.

ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) L 239.3	121.7	122.95







CATEGORY	A	B	C	D
CIRCLING	6960-1 612 (700-1)		6960-1¾ 612 (700-1¾)	7020-2¼ 672 (700-2¼)
ALBUQUERQUE ALTIMETER SETTING MINIMUMS				
CIRCLING	7860-1¼ 1512 (1600-1¼)	7860-1½ 1512 (1600-1½)	7860-3 1512 (1600-3)	7920-3 1572 (1600-3)

REIL Rwys 20, 15 and 33
MIRL Rwys 2-20 and 15-33 L

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

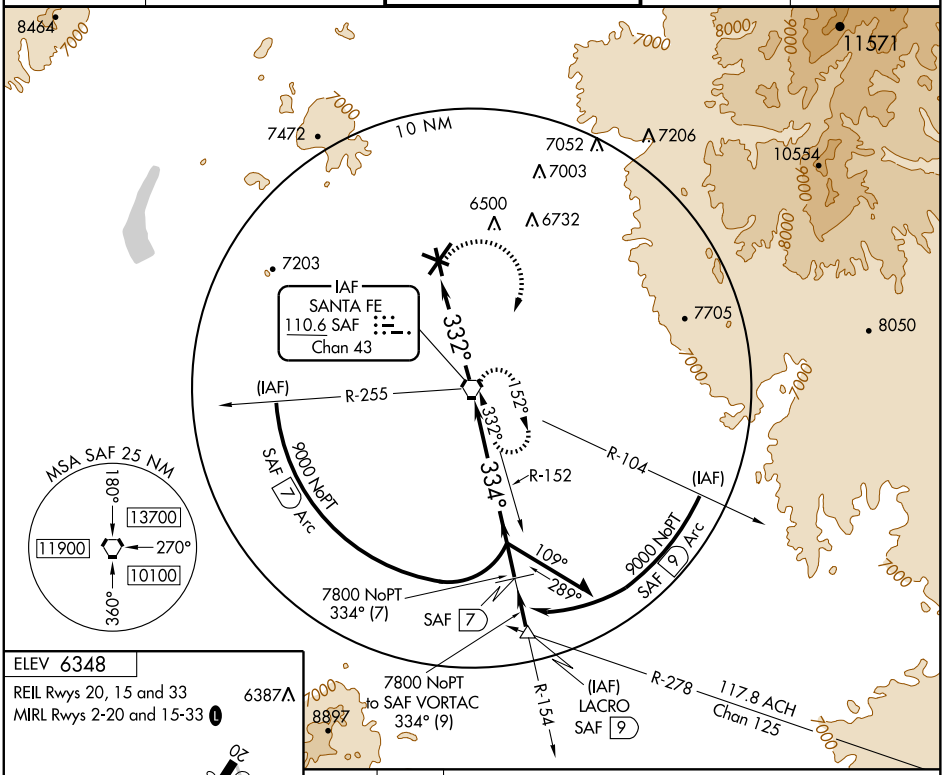
VORTAC SAF	APP CRS	Rwy Idg	6307
110.6	332°	TDZE	6304
Chan 43		Apt Elev	6348

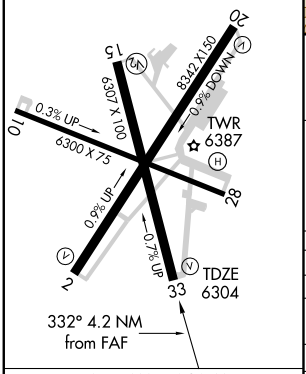
VOR RWY 33
SANTA FE MUNI (SAF)

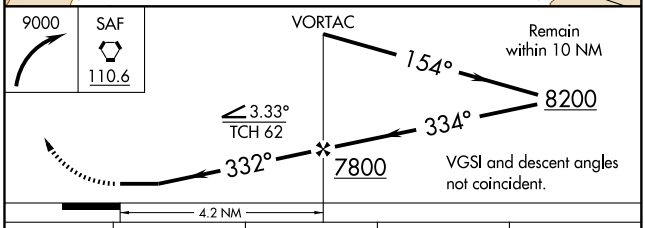
When Control Tower closed, except for operators with approved weather reporting service, use Albuquerque altimeter setting.

MISSED APPROACH: Climbing right turn to 9000 direct SAF VORTAC and hold, continue climb-in-hold to 9000.

ATIS	ALBUQUERQUE CENTER	SANTA FE TOWER ★	GND CON	UNICOM
128.55	132.8 346.35	119.5 (CTAF) Ⓛ 239.3	121.7	122.95







CATEGORY	A	B	C	D
S-33	6720-1 416 (400-1)		6720-1¼ 416 (400-1¼)	
CIRCLING	6840-1 492 (500-1)	6860-1 512 (600-1)	6860-1½ 512 (600-1½)	7020-2¼ 672 (700-2¼)
ALBUQUERQUE ALTIMETER SETTING MINIMUMS				
S-33	7620-1¼ 1316 (1300-1¼)	7620-1½ 1316 (1300-1½)	7620-3 1316 (1300-3)	
CIRCLING	NA			

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

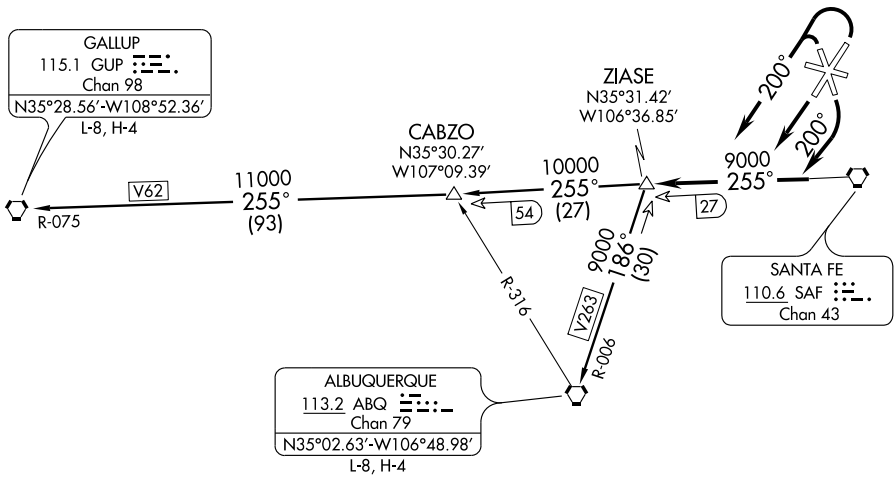
SW-1, 22 OCT 2009 to 19 NOV 2009

ZIASE TWO DEPARTURE

SL-548 (FAA)

SANTA FE MUNI (SAF)
SANTA FE, NEW MEXICO

ATIS 128.55
GND CON
121.7
SANTA FE TOWER★
119.5 (CTAF) 239.3
ALBUQUERQUE CENTER
132.8 346.35



CAUTION: Mountainous terrain all quadrants.

NOTE: Takeoff runways 2 and 33 requires a minimum climb of 280' per NM until passing 7900, or 1300' ceiling and 3 miles visibility.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 2 & 33: Climbing left turn to heading 200° to....

TAKE-OFF RUNWAY 15: Climbing right turn to heading 200° to....

TAKE-OFF RUNWAY 20: Climb on runway heading to....

....intercept and proceed via SAF R-255 to ZIASE INT. Climb and maintain 9000' MSL. Thence via assigned (transition) or (route).

ALBUQUERQUE TRANSITION (ZIASE2.ABQ): From over ZIASE INT via V263/ABQ R-006 to ABQ VORTAC. Thence via (assigned route).

GALLUP TRANSITION (ZIASE2.GUP): From over ZIASE INT via V62/SAF R-255 and GUP R-075 to GUP VORTAC. Thence via (assigned route).

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS		
101°	Rwy Idg	8500
	TDZE	4111
	Apt Elev	4112

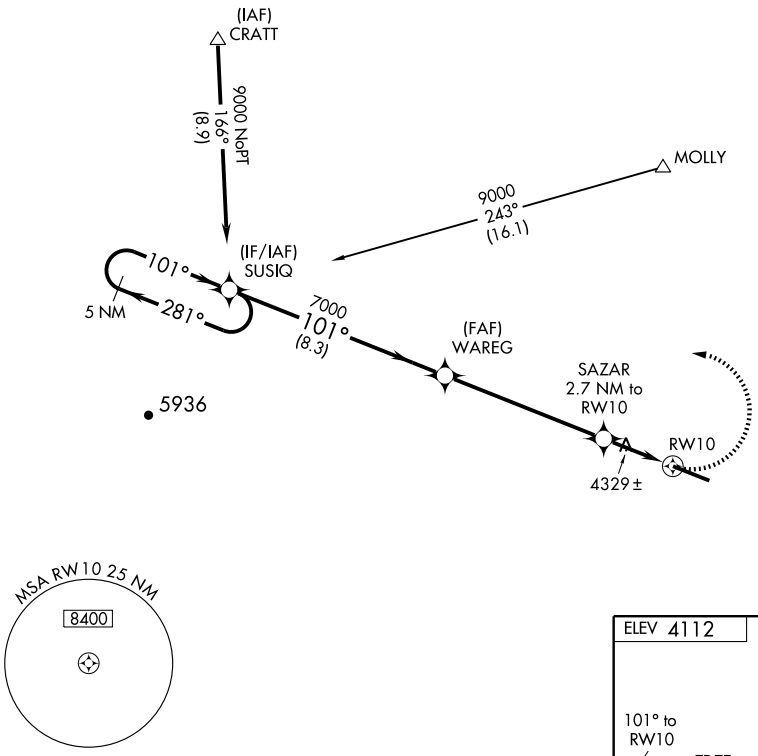
RNAV (GPS) RWY 10

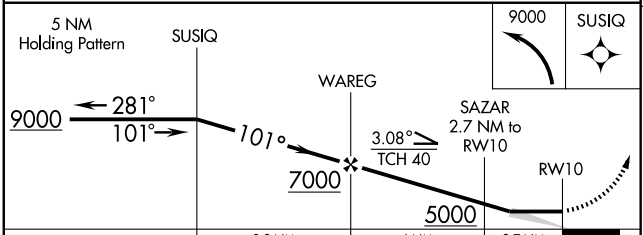
SANTA TERESA/DONA ANA COUNTY AT SANTA TERESA (5T6)

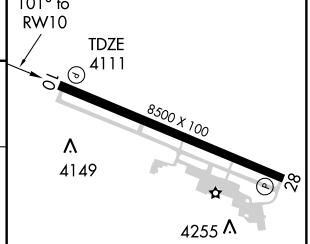
DME/DME RNP-0.3 NA.
NA Use El Paso Intl altimeter setting; if not received, procedure NA.

MISSED APPROACH: Climbing left turn to 9000 direct SUSIQ and hold.

ALBUQUERQUE CENTER	UNICOM
128.2 285.5	122.725 (CTAF)







CATEGORY	A	B	C	D
LNAV MDA	4700-1	589 (600-1)	4700-1½ 589 (600-1½)	4700-1¾ 589 (600-1¾)
CIRCLING	4700-1	588 (600-1)	4700-1½ 588 (600-1½)	4700-2 588 (600-2)

REIL Rwys 10 and 28
MIRL Rwys 10-28

SW-1, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-SVC	APP CRS	Rwy Idg	6802
111.7	258°	TDZE	5380
Chan 54		Apt Elev	5446

LOC/DME RWY 26

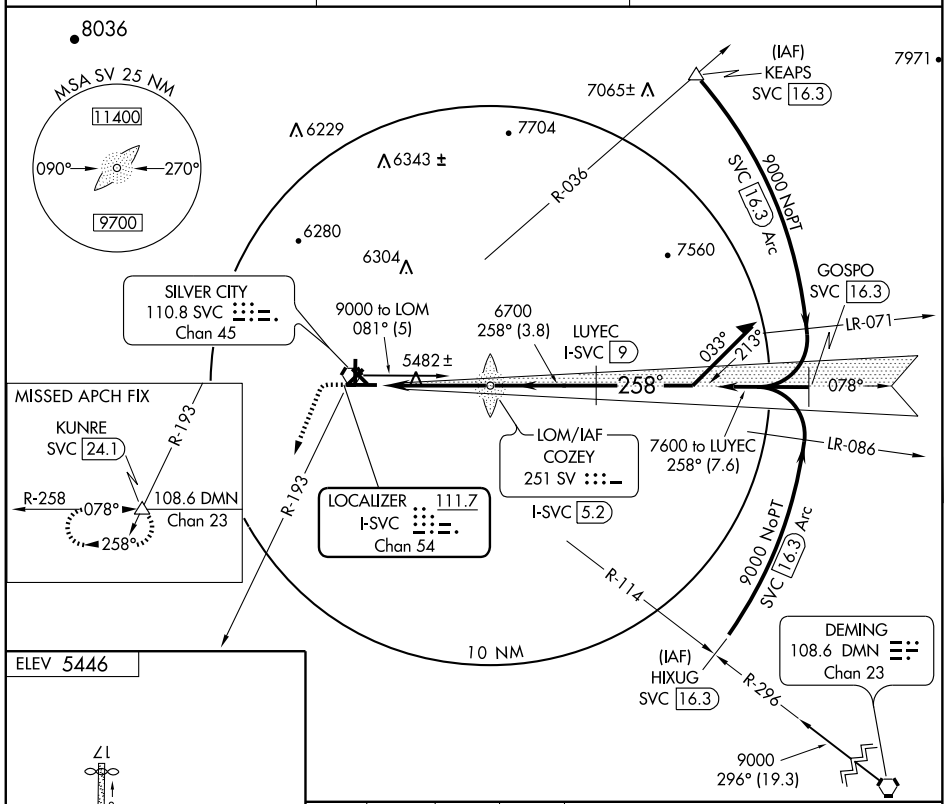
SILVER CITY/GRANT COUNTY (SVC)

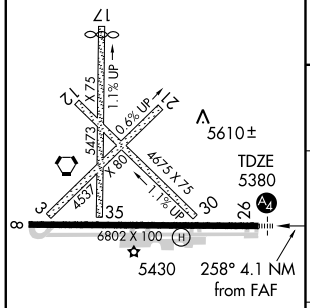
T
NA If local altimeter setting not received, procedure NA.

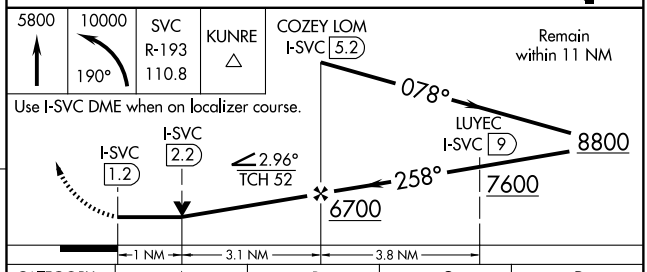
MALS

MISSED APPROACH: Climb to 5800, then climbing left turn to 10000 via heading 190° and SVC VORTAC R-193 to KUNRE INT/SVC VORTAC 24.1 DME and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
126.725	134.45 327.15	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-26	5740-¾ 360 (300-¾)			5740-1¼ 360 (300-1¼)
CIRCLING	5920-1 474 (500-1)	5940-1 494 (500-1)	5960-1½ 514 (600-1½)	6020-2 574 (600-2)

REIL Rwy 8
MIRL Rwy 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6802
078°	TDZE	5386
	Apt Elev	5446

RNAV (GPS) RWY 8

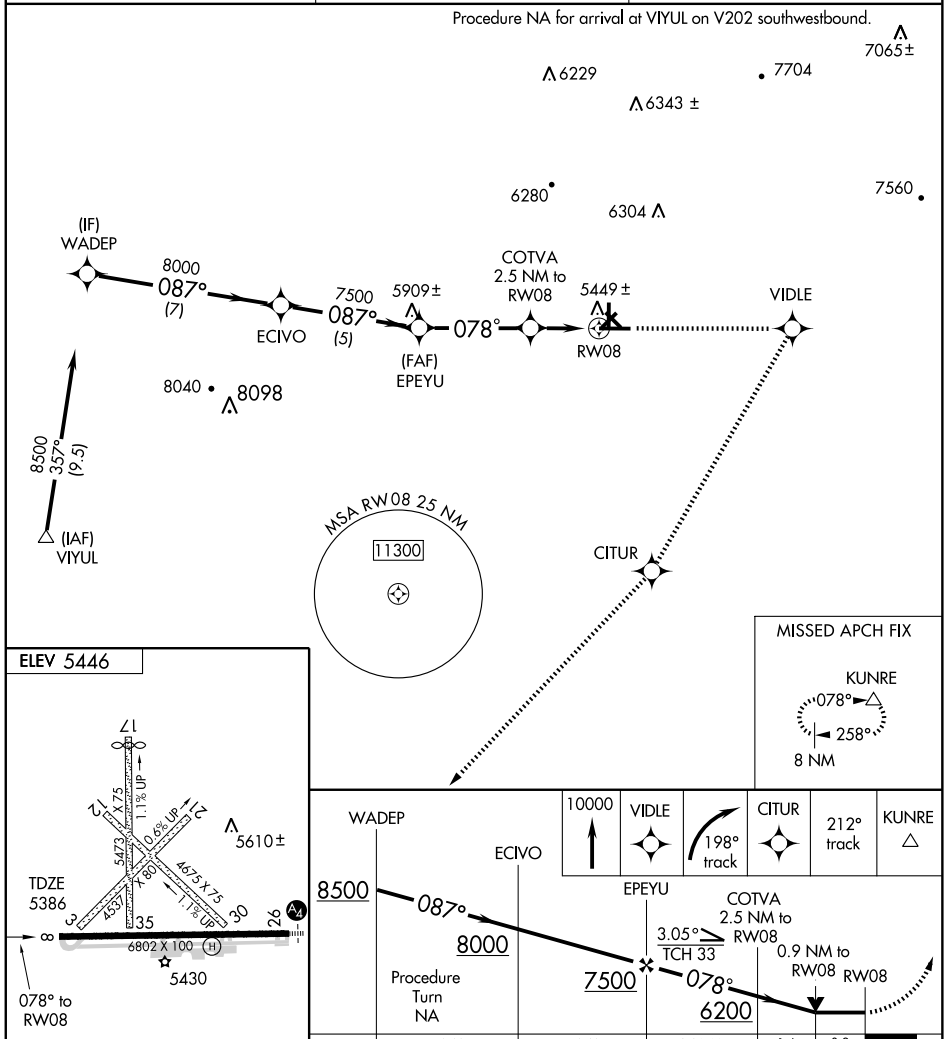
SILVER CITY/GRANT COUNTY (SVC)

DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.
Circling Rwy 3 NA at night.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 10000 direct VIDLE and right turn via 198° track to CITUR and via 212° track to KUNRE and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
126.725	134.45 327.15	122.8 (CTAF) L

Procedure NA for arrival at VIYUL on V202 southwestbound.



REIL Rwy 8
MIRL Rwy 8-26 L

CATEGORY	A	B	C	D
LNAV MDA	5700-1 314 (300-1)			
CIRCLING	5880-1 434 (500-1)	5900-1 454 (500-1)	5940-1½ 494 (500-1½)	6000-2 554 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

SILVER CITY, NEW MEXICO

AL-793 (FAA)

WAAS	APP CRS	Rwy Idg	6802
CH 87100	258°	TDZE	5380
W26A		Apt Elev	5446

RNAV (GPS) RWY 26

SILVER CITY/ GRANT COUNTY (SVC)

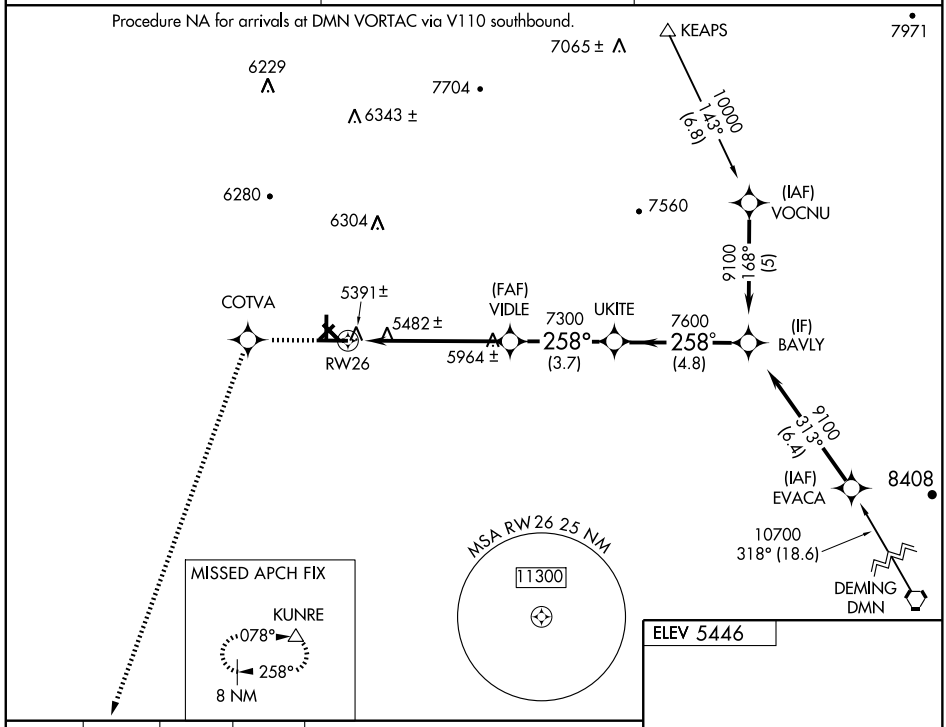
DME/DME RNP -0.3 NA. Circling Rwy 3 NA at night.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (101°F).
If local altimeter setting not received, procedure NA.
Inoperative table does not apply to LPV and LNAV/VNAV.

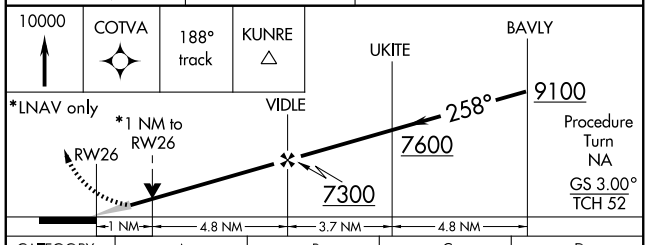
MALS

MISSED APPROACH: Climb to 10000 direct COTVA and via 188° track to KUNRE and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
126.725	134.45 327.15	122.8 (CTAF)

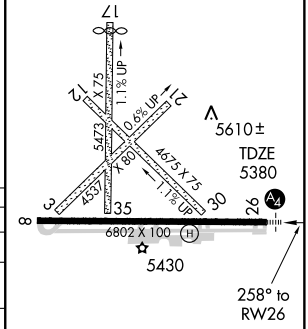
Procedure NA for arrivals at DMN VORTAC via V110 southbound.





CATEGORY	A	B	C	D
LPV DA	5630-¾ 250 (200-¾)			
LNAV/VNAV DA	5789-1½ 409 (400-1½)			
LNAV MDA	5740-¾ 360 (300-¾)			5740-1¼ 360 (300-1¼)
CIRCLING	5880-1½ 434 (500-1½)	5900-1½ 454 (500-1½)	5940-1½ 494 (500-1½)	6000-2 554 (600-2)

ELEV 5446



REIL Rwy 8
MIRL Rwy 8-26

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC SVC	APP CRS	Rwy Idg	N/A
110.8	308°	TDZE	N/A
Chan 45		Apt Elev	5446

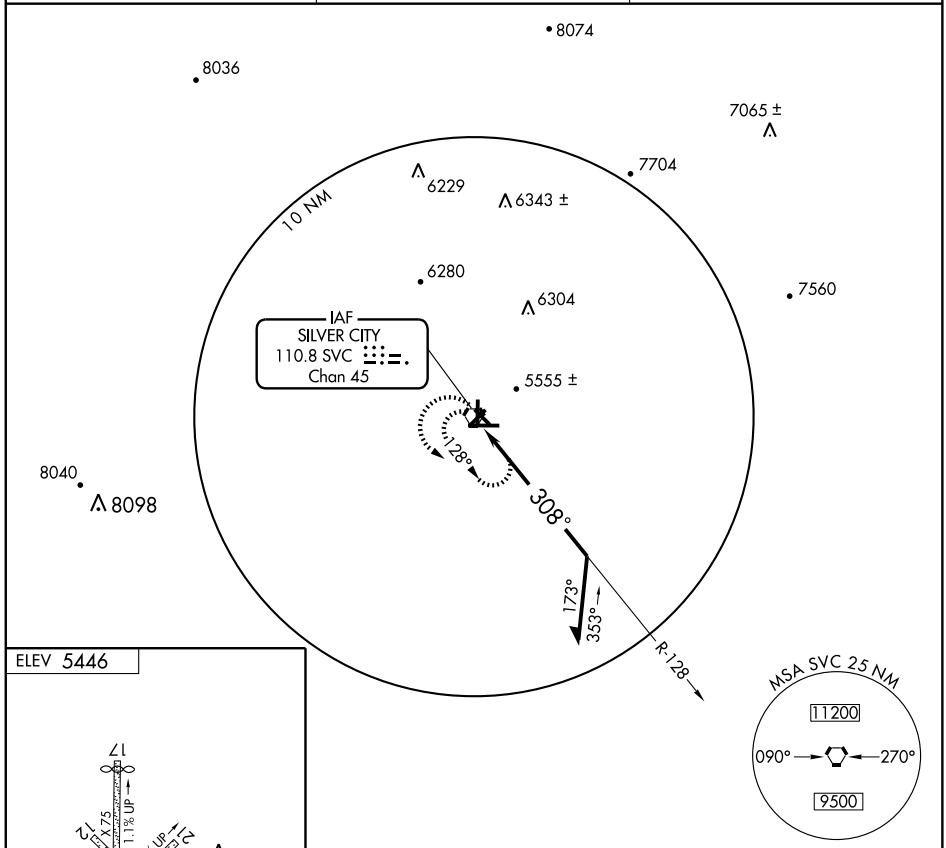
VOR-A

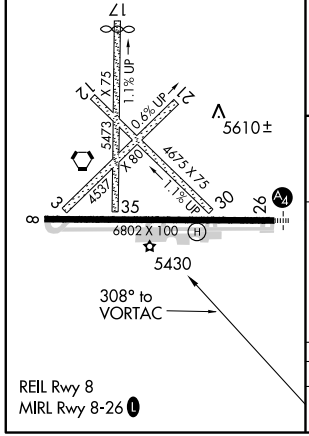
SILVER CITY/GRANT COUNTY (SVC)

When local altimeter setting not received, procedure not authorized.

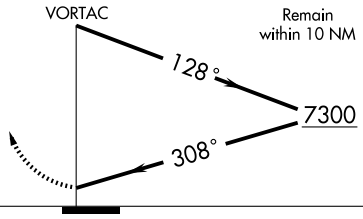
MISSED APPROACH: Climbing left turn to 8000 via SVC R-128, then reverse course to SVC VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
126.725	134.45 327.15	122.8 (CTAF) L





8000	Reverse Course	SVC
SVC R-128		110.8



CATEGORY	A	B	C	D
CIRCLING	5920-1 477 (500-1)	5940-1 497 (500-1)	5960-1½ 517 (600-1½)	6020-2 577 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC SVC	APP CRS	Rwy Idg	N/A
110.8	308°	TDZE	N/A
Chan 45		Apt Elev	5446

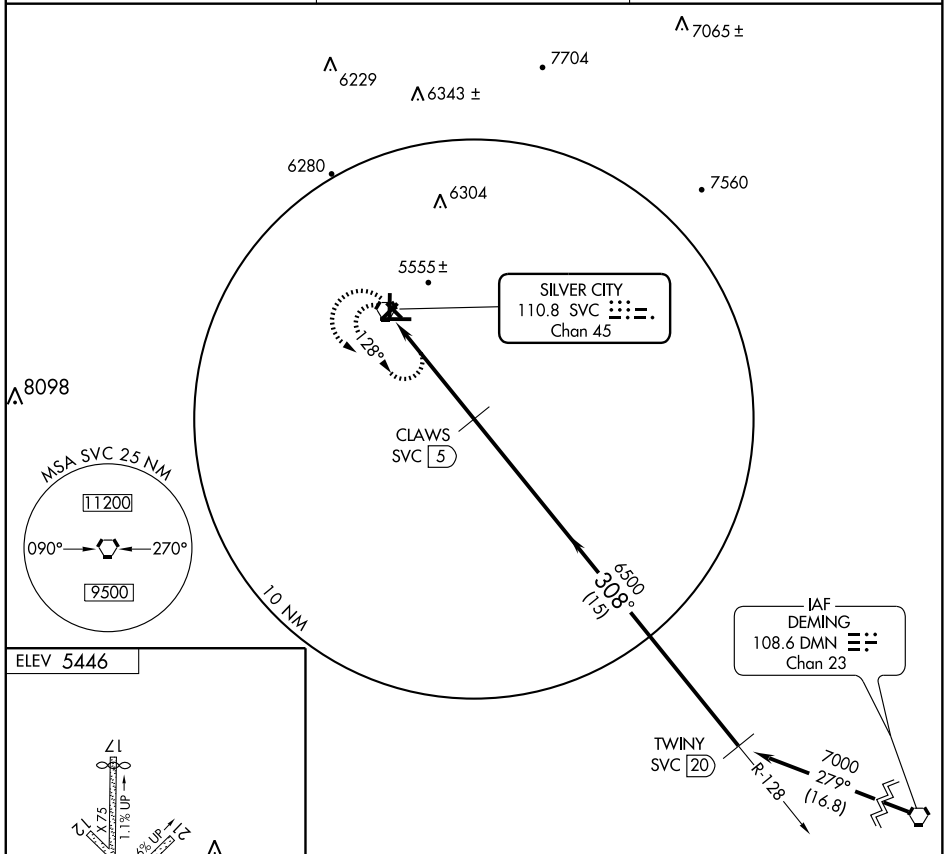
VOR/DME-B

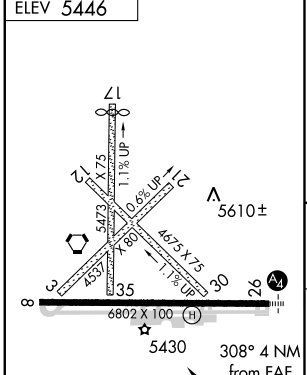
SILVER CITY/GRANT COUNTY (SVC)

When local altimeter setting not received, procedure not authorized.

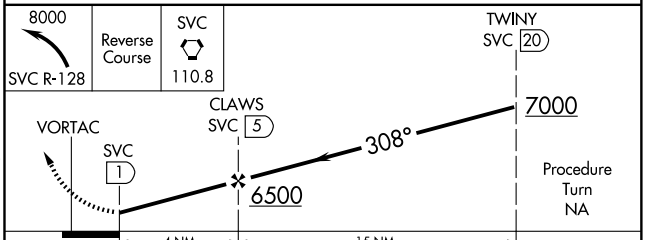
MISSED APPROACH: Climbing left turn to 8000 via SVC R-128 then reverse course to SVC VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
126.725	134.45 327.15	122.8 (CTAF) L





REIL Rwy 8
MIRL Rwy 8-26 L



CATEGORY	A	B	C	D
CIRCLING	5920-1	5940-1	5960-1½	6020-2
	477 (500-1)	497 (500-1)	517 (600-1½)	577 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

SOCORRO, NEW MEXICO

AL-550 (FAA)

APP CRS	Rwy Idg	5659
345°	TDZE	4782
	Apt Elev	4875

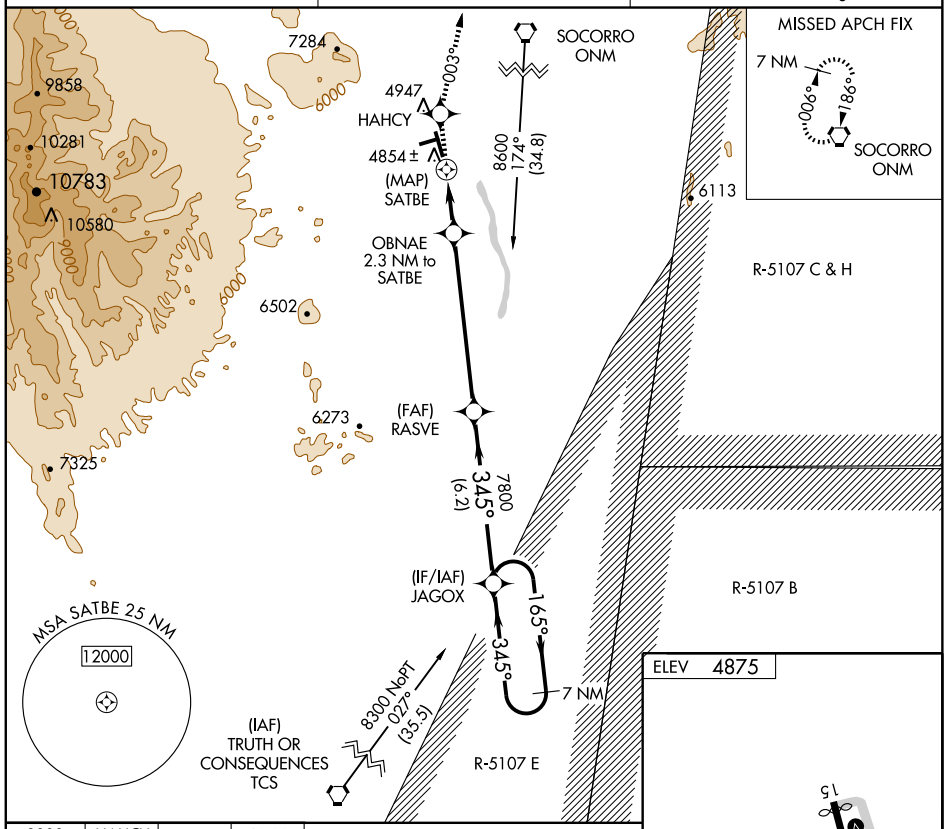
RNAV (GPS) Y RWY 33

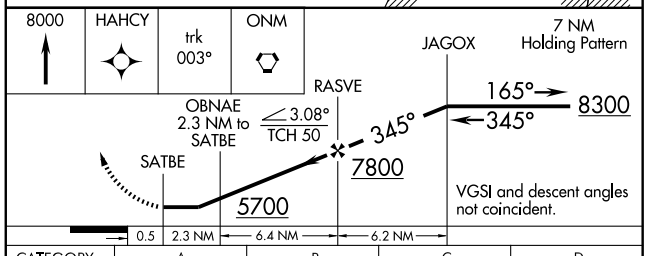
SOCORRO MUNI (ONM)

Circling NA west of Rwy 15-33. DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. Procedure NA when R-5107E active. Obtain local altimeter setting on CTAF; when not received, procedure NA.

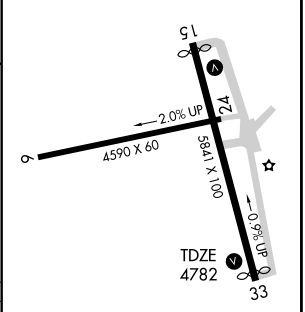
MISSED APPROACH: Climb to 8000 direct HAHCY and via track 003° to ONM VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
118.325	124.325 288.25	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	5260-1 478 (500-1)		5260-1¼ 478 (500-1¼)	NA
CIRCLING	5260-1 385 (400-1)	5340-1 465 (500-1)	5340-1½ 465 (500-1½)	NA



MIRL Rwys 15-33 and 6-24 L

SW-1, 22 OCT 2009 to 19 NOV 2009

SOCORRO, NEW MEXICO

AL-550 (FAA)

WAAS	APP CRS	Rwy Idg	5659
CH 49114	335°	TDZE	4782
W33A		Apt Elev	4875

RNAV (GPS) Z RWY 33

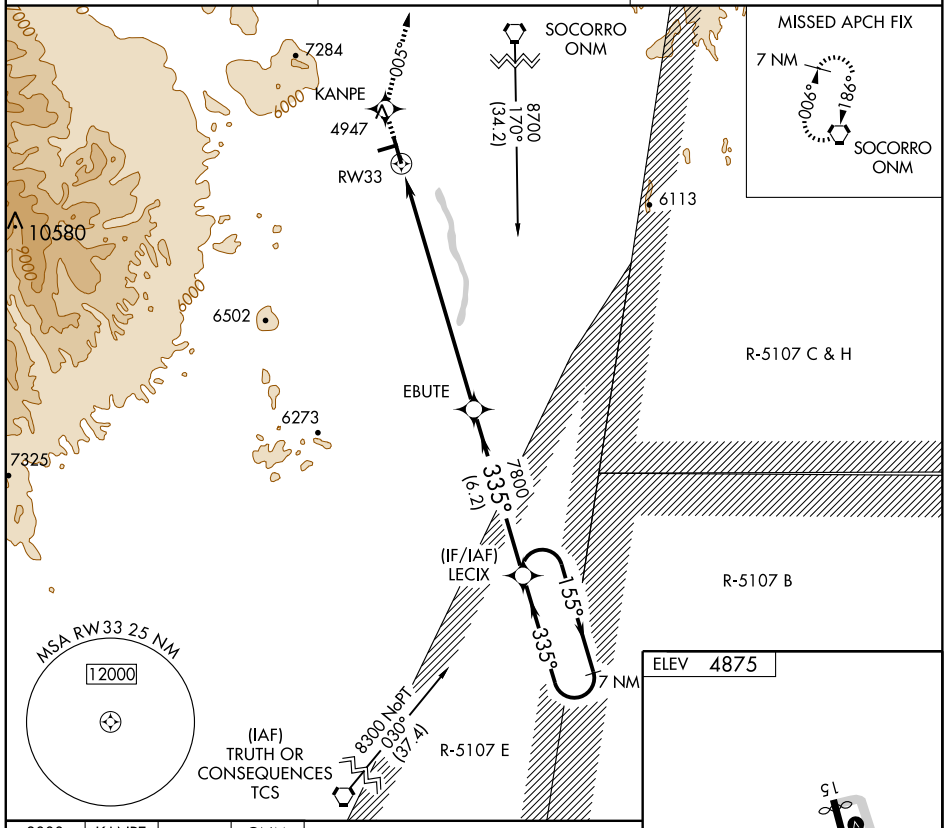
SOCORRO MUNI (ONM)

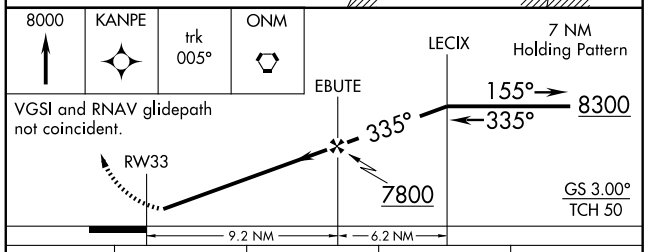
T
A NA

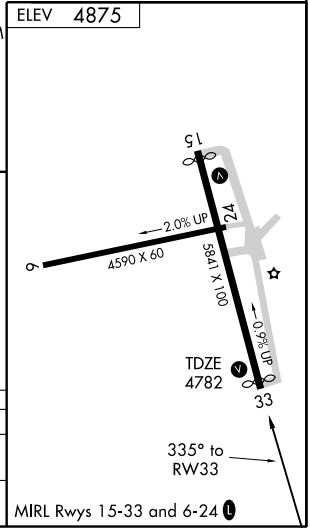
Circling NA west of Rwy 15-33. DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. Circling requires descent on GS to CMDA. Procedure NA when R-5107E active. Obtain local altimeter setting on CTAF; when not received, procedure NA.

MISSED APPROACH: Climb to 8000 direct KANPE and via track 005° to ONM VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
118.325	124.325 288.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	5032-1 250 (300-1)			NA
CIRCLING	5260-1 385 (400-1)	5340-1 465 (500-1)	5340-1½ 465 (500-1½)	NA

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC ONM	APP CRS	Rwy Idg	N/A
116.8	179°	TDZE	N/A
Chan 115		Apt Elev	4875

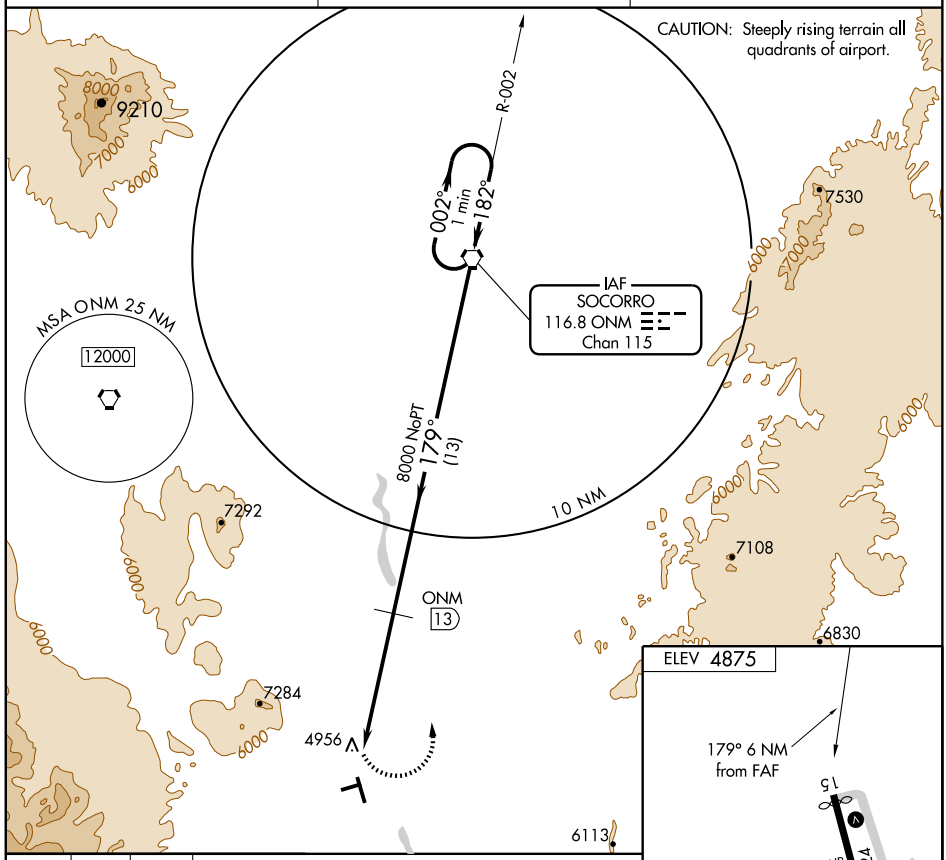
VOR/DME-A
SOCORRO MUNI (ONM)

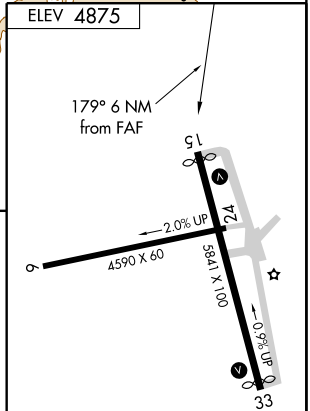
T ANA — When local altimeter not available, procedure not authorized. Circling not authorized west of Rwy 15-33. If arrival over Socorro VOR is above 8000 descend in the holding pattern to 8000 before commencing approach.

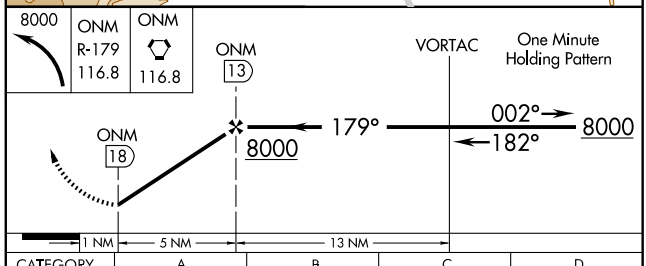
MISSED APPROACH: Climbing left turn to 8000 intercept ONM R-179 direct to ONM VORTAC and hold.

AWOS-3	ALBUQUERQUE CENTER	UNICOM
118.325	124.325 288.25	122.8 (CTAF) L

CAUTION: Steeply rising terrain all quadrants of airport.







CATEGORY	A	B	C	D
CIRCLING	6540-1¼ 1665 (1700-1¼)	6540-1½ 1665 (1700-1½)	6540-3 1665 (1700-3)	NA

MIRL Rwys 15-33 and 6-24 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5803
045°	TDZE	7068
	Apt Elev	7091

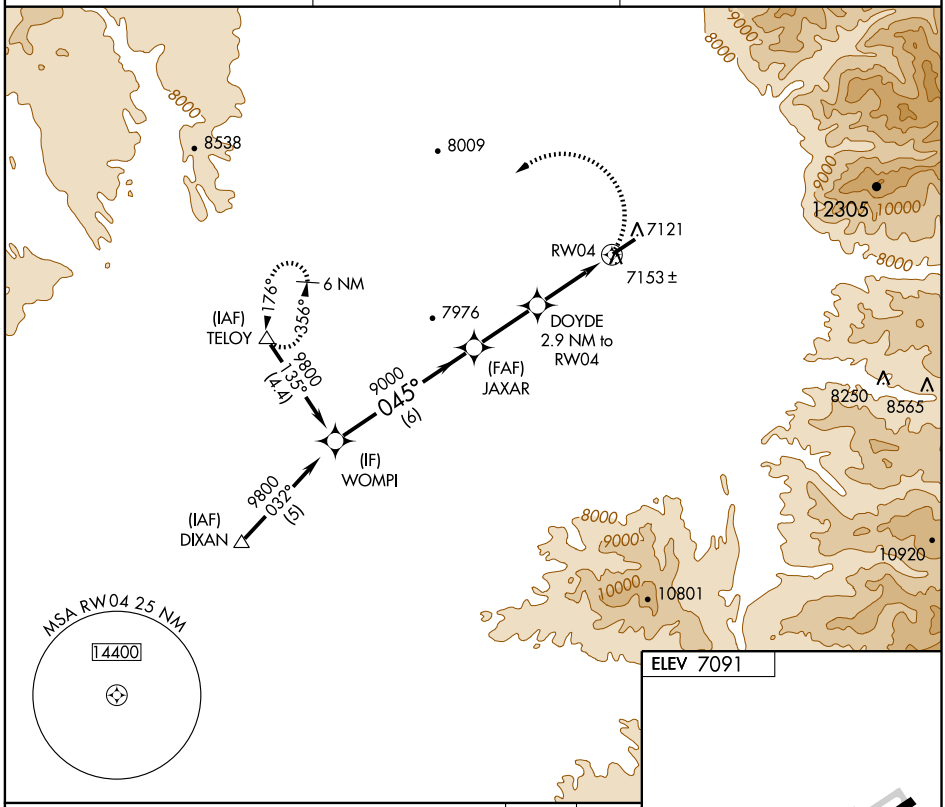
RNAV (GPS) RWY 4

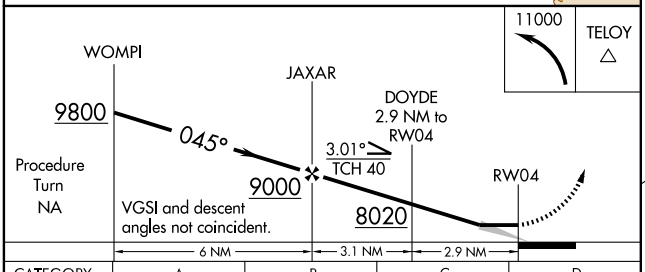
TAOS RGNL (SKX)

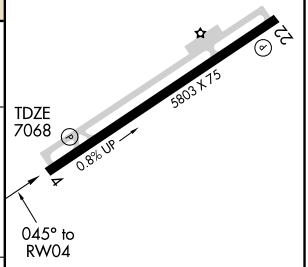
DME/DME RNP-0.3 NA
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing left turn to 11000 direct TELOY and hold.

AWOS-3	ALBUQUERQUE RADIO	UNICOM
132.975	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7480-1 412 (400-1)		7480-1¼ 412 (400-1¼)	
CIRCLING	7540-1 449 (500-1)	7560-1 469 (500-1)	7600-1½ 509 (600-1½)	7660-2 569 (600-2)

MIRL Rwy 4-22 L

SW-1, 22 OCT 2009 to 19 NOV 2009

VORTAC TAS	APP CRS	Rwy Idg	N/A
117.6	116°	TDZE	N/A
Chan 123		Apt Elev	7091

VOR/DME-B
TAOS RGNL (SKX)

MISSED APPROACH: Climbing right turn to 12000 direct TAS VORTAC and hold.

AWOS-3	ALBUQUERQUE RADIO	UNICOM
132.975	122.1R	122.8 (CTAF) L

NoPT for arrival on TAS VORTAC airway radial 353.

R-296

116° 1 min 296°

IAF TAOS 117.6 TAS Chan 123

10000 (8) 116°

RESOY TAS 8

ZUTRI TAS 14.3

10 NM

8655 11302 12711 12115 13161 12305 10470 8640 8250 8565 8538 8009 7976 7229± 7121 10801 9023

MSA TAS 25 NM
180° 12600 14400 360°

ELEV 7091

116° 6.3 NM from FAF

5803 X 75 0.8% UP 22 4

MIRL Rwy 4-22 L

One Minute Holding Pattern

VORTAC

12000 296° 116°

RESOY TAS 8

ZUTRI TAS 14.3

116° 10000

VGSI and descent angles not coincident.

8 NM 6.3 NM

12000 TAS 117.6

CATEGORY	A	B	C	D
CIRCLING	8000-1¼ 909 (1000-1¼)		8000-2¾ 909 (1000-2¾)	8000-3 909 (1000-3)

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
007°	TDZE	N/A
	Apt Elev	4850

RNAV (GPS)-A

TRUTH OR CONSEQUENCES MUNI (TCS)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA DUCAS transition NA when R-5111 A-D active.

MISSED APPROACH: Climbing left turn to 9000 direct LAYEN WP and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
120.675	128.2 285.5	122.8 (CTAF) L

NoPT for arrivals at LAYEN on V110 northbound.

TRUTH OR CONSEQUENCES
TCS
5240

MSA PELVE 25 NM
13400

9000 to LAYEN
182° (17)

(MAP)
PELVE

5547±
GALDE
3.5 NM to
PELVE

5849±

6543

(FAF)
CITAL

6081

6223

7500
007°
(6.5)

R-5111
C&D

(IAF)
KAPEY

9000 NoPT
080°
(13.7)

(IF/IAF)
LAYEN

187°
007°
6 NM

9000 NoPT
284°
(6)

7665±

(IAF)
HEMAT

10000
284°
(19.2)

DUCAS

ELEV 4850

7108 X 150
0.8% UP
7200 X 75
4878
2932 X 130
3301 X 130
3
15
19
25
07
33
31
007° to PELVE
MIRL Rwy 13-31 L

6 NM
Holding Pattern

LAYEN

9000
187°
007°
007°
7500
CITAL
GALDE
3.5 NM to
PELVE
6200
PELVE

9000
LAYEN

6.5 NM
4.2 NM
3.5 NM

CATEGORY	A	B	C	D
CIRCLING	5280-1 430 (500-1)	5300-1 450 (500-1)	5340-1½ 490 (500-1½)	5400-2 550 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

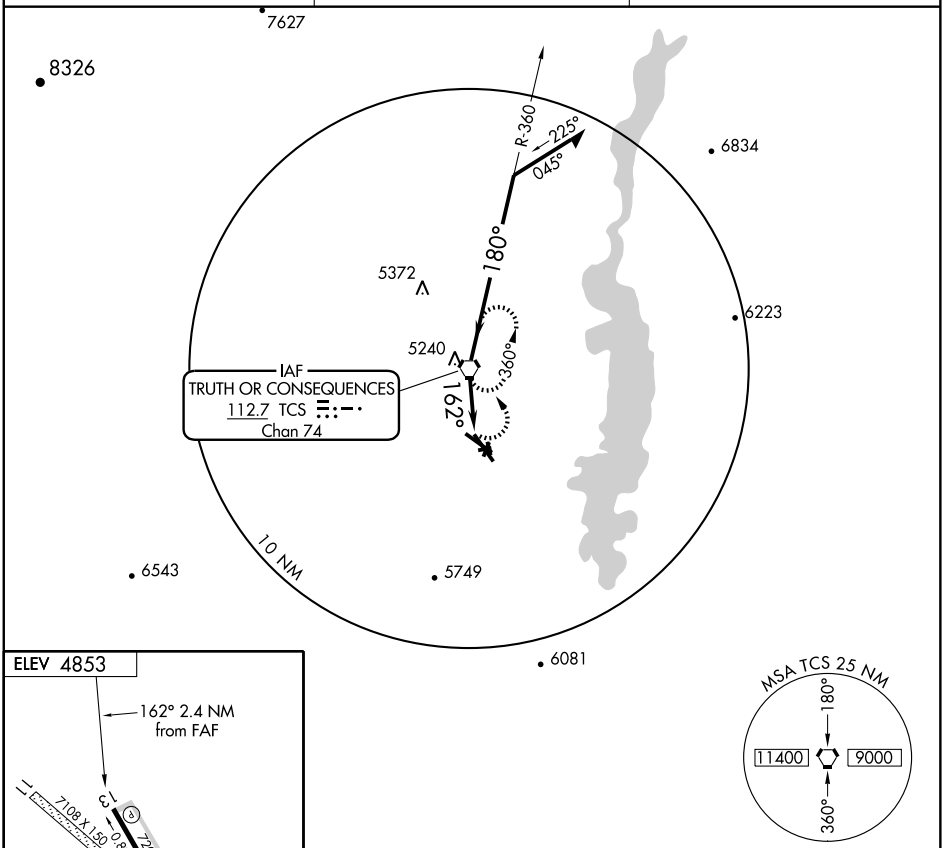
VORTAC TCS	APP CRS	Rwy Idg	N/A
112.7	162°	TDZE	N/A
Chan 74		Apt Elev	4853

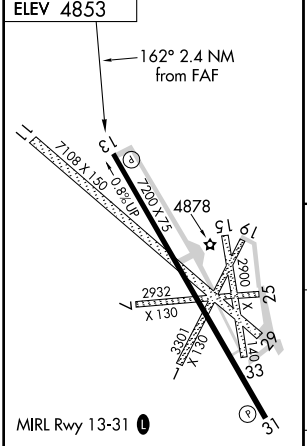
VOR-A

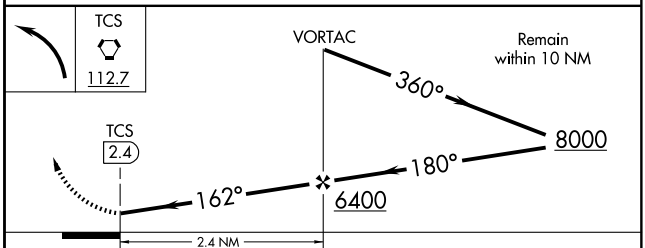
TRUTH OR CONSEQUENCES MUNI (TCS)

MISSED APPROACH: Climbing left turn direct to TCS VORTAC. Climb to 8000 in holding pattern.

ASOS	ALBUQUERQUE CENTER	UNICOM
120.675	128.2 285.5	122.8 (CTAF) L







FAF to MAP 2.4 NM					
Knots	60	90	120	150	180
Min:Sec	2:24	1:36	1:12	0:58	0:48

CATEGORY	A	B	C	D
CIRCLING	5560-1 707 (800-1)		5560-2 707 (800-2)	5560-2¼ 707 (800-2¼)

SW-1, 22 OCT 2009 to 19 NOV 2009

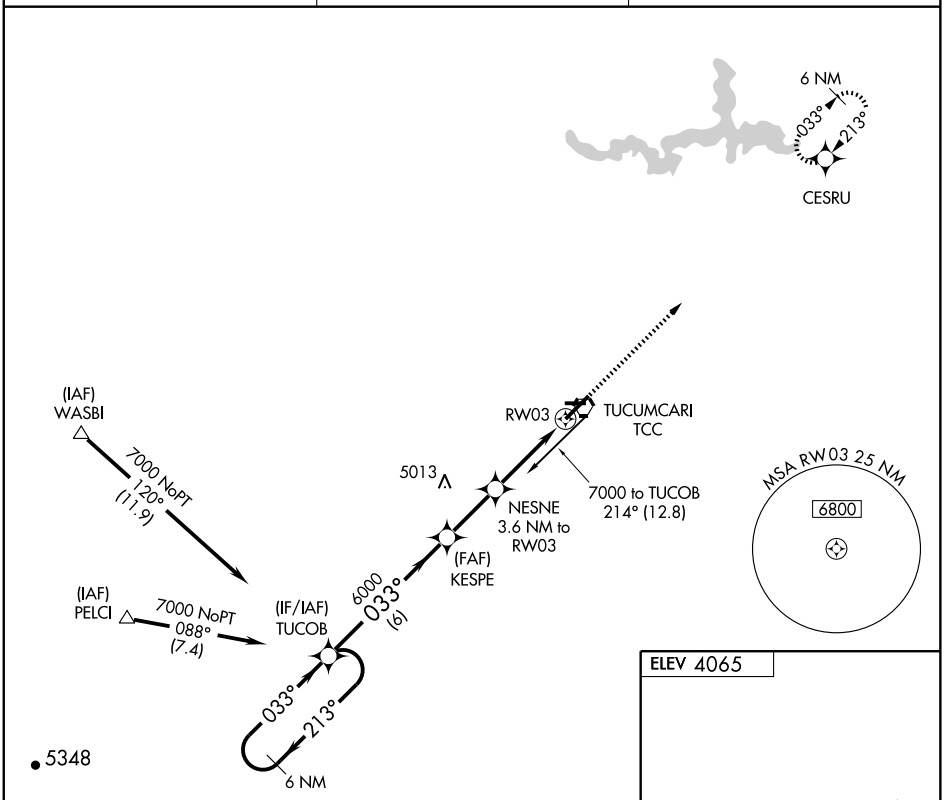
APP CRS		
033°	Rwy Idg	7102
	TDZE	4043
	Apt Elev	4065

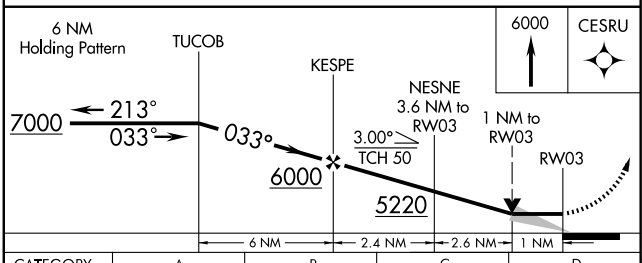
RNAV (GPS) RWY 3
TUCUMCARI MUNI (TCC)

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.

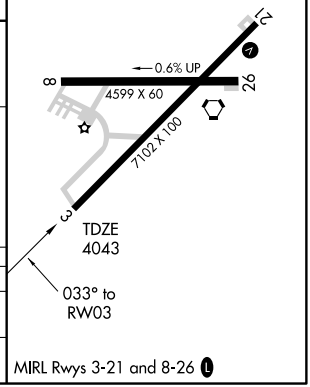
MISSED APPROACH: Climb to 6000 direct CESRU and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
119.275	126.85 285.6	122.95 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	4420-1 377 (400-1)			4420-1¼ 377 (400-1¼)
CIRCLING	4580-1 515 (600-1)		4580-1½ 515 (600-1½)	4620-2 555 (600-2)



SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7102
213°	TDZE	4047
	Apt Elev	4065

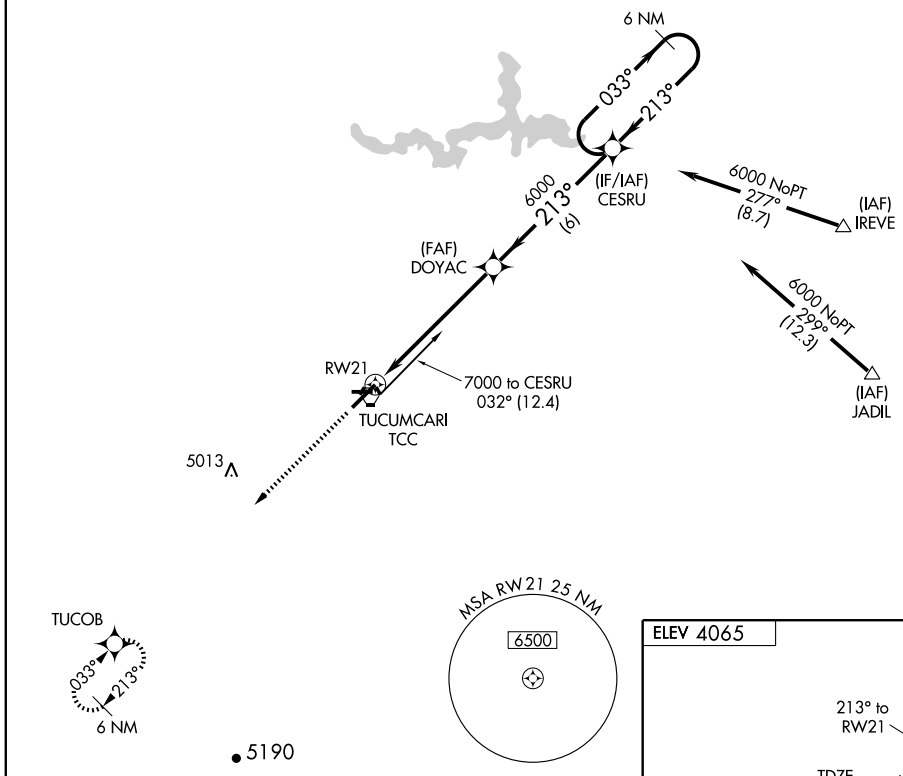
RNAV (GPS) RWY 21
TUCUMCARI MUNI (TCC)

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
Circling to Rwy 8 NA at night.
If local altimeter setting not received, procedure NA.

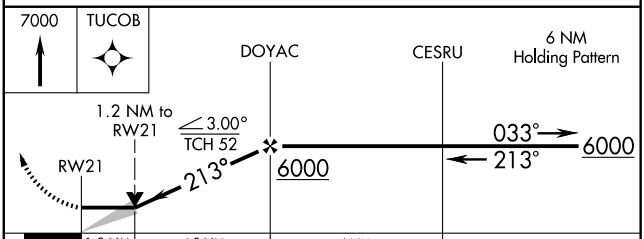
MISSED APPROACH: Climb to 7000 direct TUCOB and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
119.275	126.85 285.6	122.95 (CTAF) L

Procedure NA for arrival at TCC VORTAC via V402 westbound.

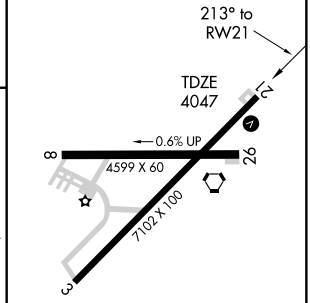


5190



CATEGORY	A	B	C	D
LNAV MDA	4480-1	433 (500-1)	4480-1¼ 433 (500-1¼)	4480-1½ 433 (500-1½)
CIRCLING	4580-1	515 (600-1)	4580-1½ 515 (600-1½)	4620-2 555 (600-2)

ELEV 4065



MIRL Rwys 3-21 and 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4599
258°	TDZE	4055
	Apt Elev	4065

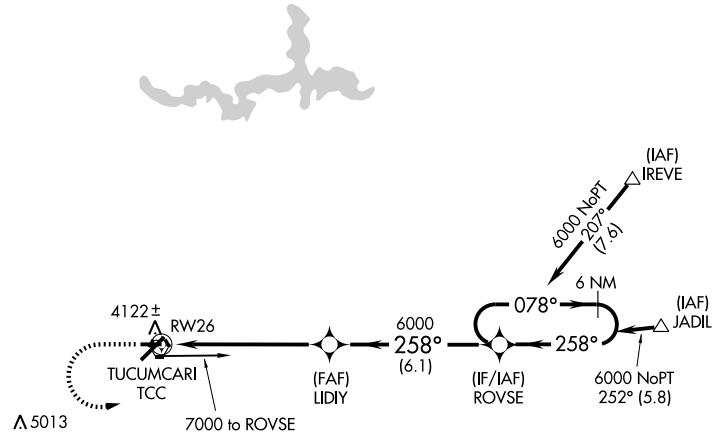
RNAV (GPS) RWY 26
TUCUMCARI MUNI (TCC)

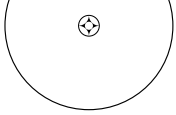
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
Circling to Rwy 8 NA at night.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct ROVSE and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
119.275	126.85 285.6	122.95 (CTAF) L

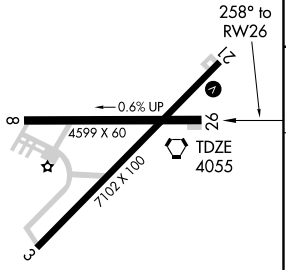
Procedure NA for arrival at TCC VORTAC via V402 westbound.

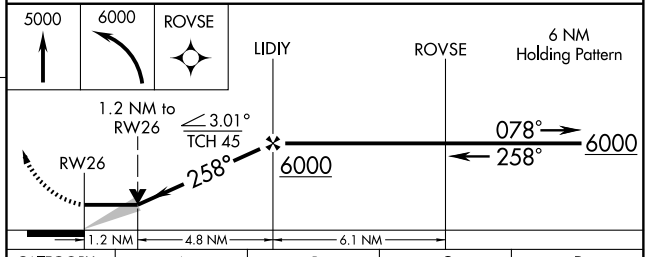




ELEV 4065

5270





CATEGORY	A	B	C	D
LNAV MDA	4460-1 405 (400-1)		4460-1¼ 405 (400-1¼)	
CIRCLING	4580-1 515 (600-1)		4580-1½ 515 (600-1½)	4620-2 555 (600-2)

MIRL Rwys 3-21 and 8-26 L

SW-1, 22 OCT 2009 to 19 NOV 2009

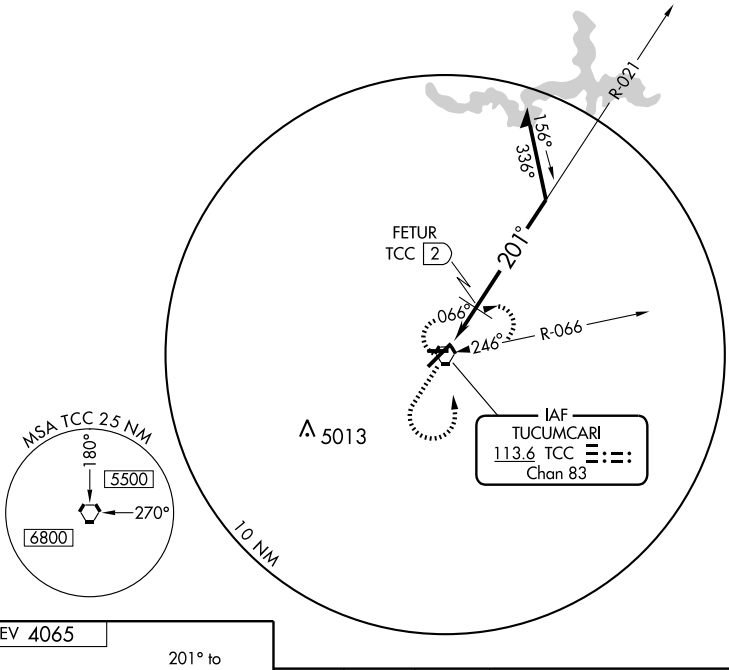
VORTAC TCC	APP CRS	Rwy Idg	7102
113.6	201°	TDZE	4047
Chan 83		Apt Elev	4065

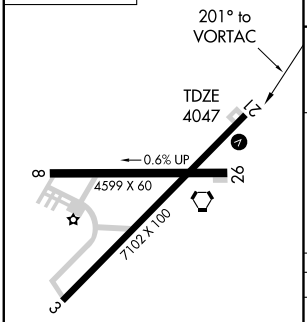
VOR RWY 21
TUCUMCARI MUNI (TCC)

If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 5100 then climbing left turn to 6100 direct TCC VORTAC and hold.

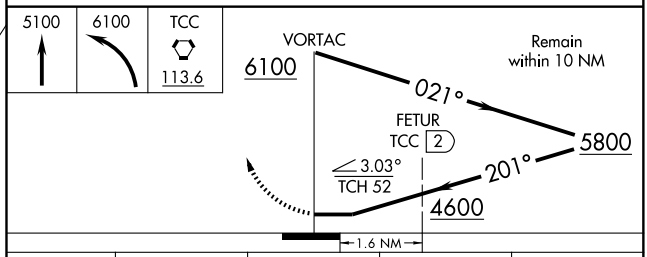
ASOS	ALBUQUERQUE CENTER	UNICOM
119.275	126.85 285.6	122.95 (CTAF) L





MIRL Rwys 3-21 and 8-26 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-21	4600-1	553 (600-1)	4600-1½ 553 (600-1½)	4600-1¾ 553 (600-1¾)
CIRCLING	4600-1	535 (600-1)	4600-1½ 535 (600-1½)	4620-2 555 (600-2)
FETUR FIX MINIMUMS				
S-21	4480-1	433 (500-1)	4480-1¼ 433 (500-1¼)	4480-1½ 433 (500-1½)
CIRCLING	4580-1	515 (600-1)	4580-1½ 515 (600-1½)	4620-2 555 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

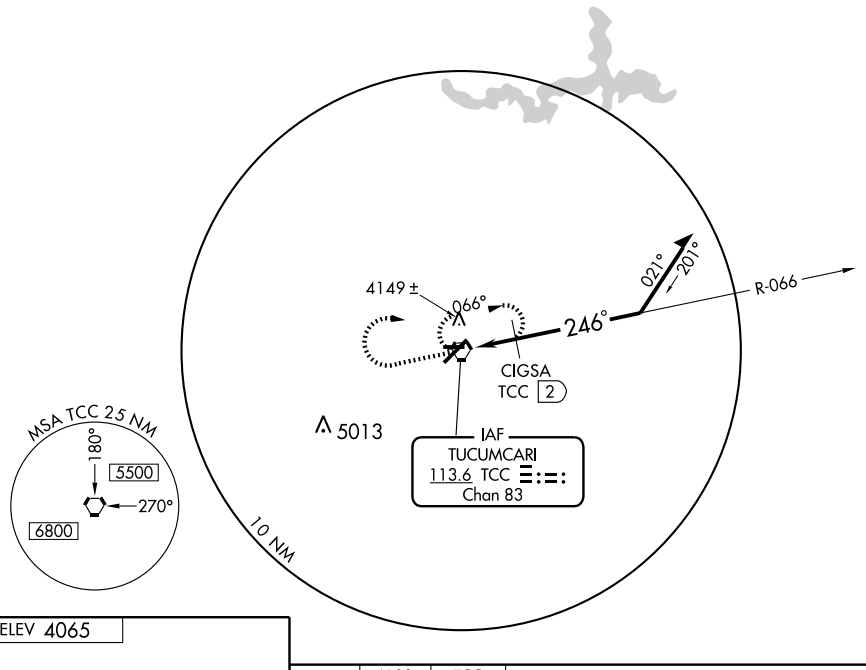
VORTAC TCC	APP CRS	Rwy Idg	4599
113.6	246°	TDZE	4055
Chan 83		Apt Elev	4065

VOR RWY 26
TUCUMCARI MUNI (TCC)

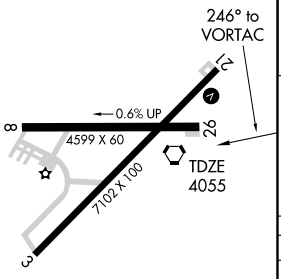
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 5100 then climbing right turn to 6100 direct TCC VORTAC and hold.

ASOS	ALBUQUERQUE CENTER	UNICOM
119.275	126.85 285.6	122.95 (CTAF) L

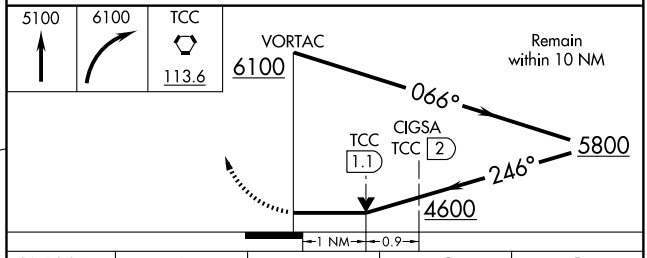


ELEV 4065



MIRL Rwys 3-21 and 8-26 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-26	4600-1 545 (600-1)		4600-1½ 545 (600-1½)	4600-1¾ 545 (600-1¾)
CIRCLING	4600-1 535 (600-1)		4600-1½ 535 (600-1½)	4620-2 555 (600-2)
CIGSA FIX MINIMUMS				
S-26	4400-1 345 (400-1)			4400-1¼ 345 (400-1¼)
CIRCLING	4580-1 515 (600-1)		4580-1½ 515 (600-1½)	4620-2 555 (600-2)

SW-1, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	4807
057°	TDZE	6454
	Apt Elev	6454

RNAV (GPS) RWY 6

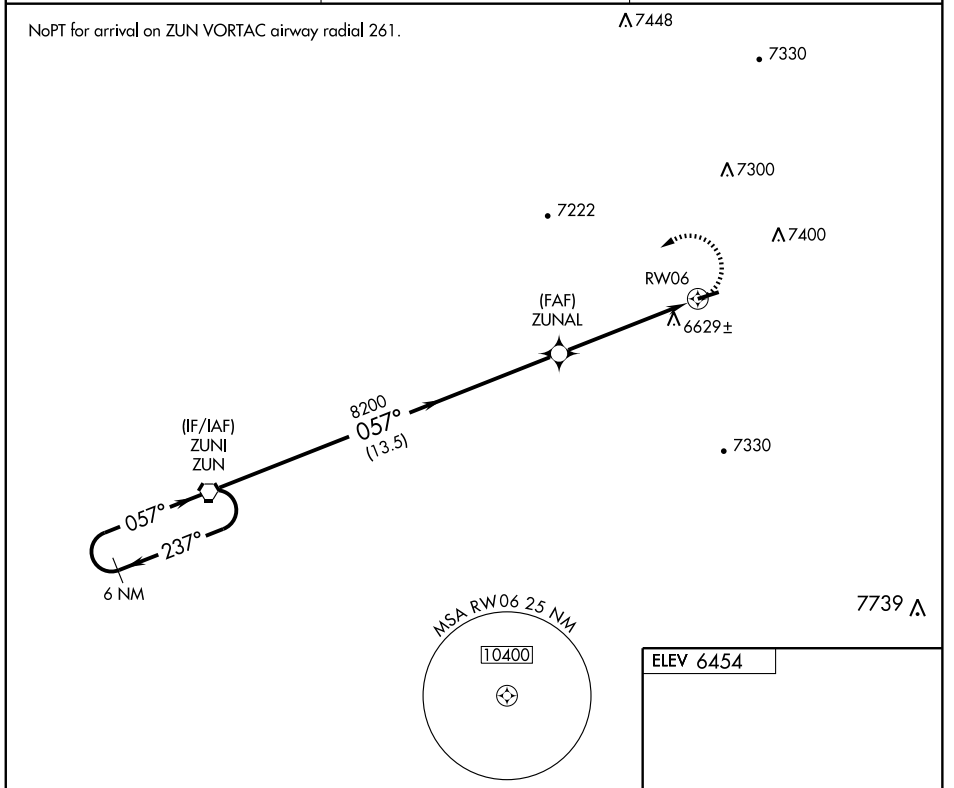
ZUNI PUEBLO/BLACK ROCK (ZUN)

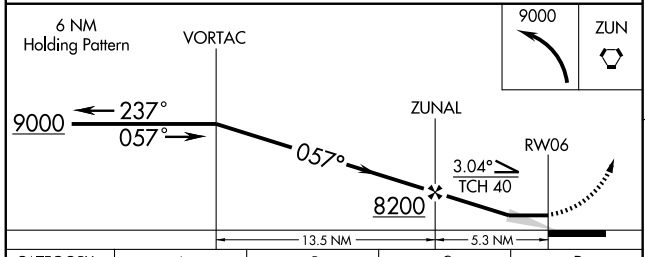
DME/DME RNP -0.3 NA.
Use Gallup, NM altimeter setting; if not received, procedure not authorized.

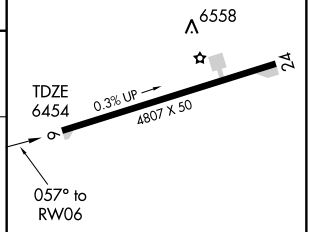
MISSED APPROACH: Climbing left turn to 9000 direct ZUN VORTAC and hold.

ALBUQUERQUE CENTER	UNICOM	CTAF
124.325 288.25	122.8	122.9

NoPT for arrival on ZUN VORTAC airway radial 261.







CATEGORY	A	B	C	D
LNAV MDA	7320-1 866 (900-1)	7320-1¼ 866 (900-1¼)	7320-2½ 866 (900-2½)	NA
CIRCLING	7860-1¼ 1406 (1500-1¼)	7880-1½ 1426 (1500-1½)	7880-3 1426 (1500-3)	NA

LIRL Rwy 6-24

SW-1, 22 OCT 2009 to 19 NOV 2009

ZUNI PUEBLO, NEW MEXICO

AL-6651 (FAA)

VORTAC ZUN	APP CRS	Rwy Idg	4807
113.4	053°	TDZE	6454
Chan 81		Apt Elev	6454

VOR/DME RWY 6

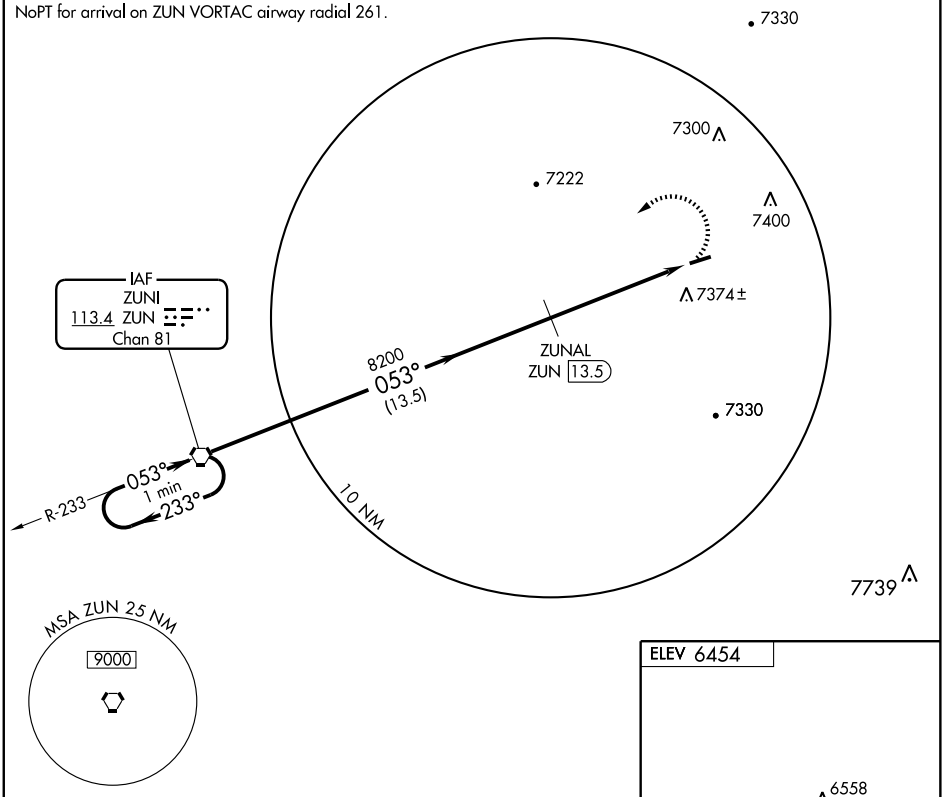
ZUNI PUEBLO/ BLACK ROCK (ZUN)

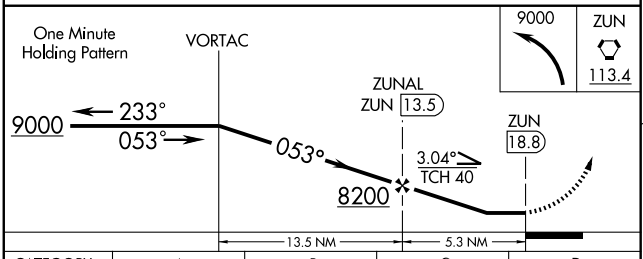
NA — Use Gallup, NM altimeter setting; if not received procedure not authorized.

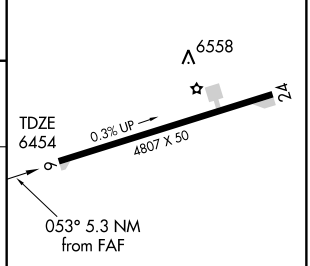
MISSED APPROACH: Climbing left turn to 9000 direct ZUN VORTAC and hold.

ALBUQUERQUE CENTER	UNICOM	CTAF
124.325 288.25	122.8	122.9

NoPT for arrival on ZUN VORTAC airway radial 261.







CATEGORY	A	B	C	D
S-6	7820-1¼ 1366 (1400-1¼)	7820-1½ 1366 (1400-1½)	7820-3 1366 (1400-3)	NA
CIRCLING	7860-1¼ 1406 (1500-1¼)	7880-1½ 1426 (1500-1½)	7880-3 1426 (1500-3)	NA

LIRL Rwy 6-24

Knots	60	90	120	150	180
Min:Sec					

SW-1, 22 OCT 2009 to 19 NOV 2009

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL ..... **RNAV (GPS) Rwy 16[12]**
RNAV (GPS) Rwy 34[34]
VOR/DME Rwy 34[15]

[1]NA when local weather not available.
[2]Categories A, B, 1200-2; Categories C, D, 1200-3.
[3]NA when control tower closed.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 2200-2; Categories C, D, 2200-3.

CARSON CITY, NV

CARSON ..... **RNAV (GPS)-A**
Categories A, B, 1700-2; Category C, 1700-3; Category D, 1800-3.
NA when local weather not available.

CEDAR CITY, UT

CEDAR CITY RGNL ..... **ILS Rwy 20**
VOR Rwy 20
Category D, 900-2¾.

DOUGLAS BISBEE, AZ

BISBEE DOUGLAS INTL ..... **VOR/DME or GPS Rwy 17**
VOR Rwy 17
NA when control zone not in effect.

ELKO, NV

ELKO RGNL..... **LDA/DME RWY 23[1]**
RNAV (GPS) Rwy 23[2]
VOR-A[3]
VOR/DME-B[4]

[1]Categories A,B, 900-2; Category C 1000-3; Category D, 1100-3.
[2]Categories A,B, 1400-2; Categories C,D, 1400-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.
[4]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME — ALTERNATE MINIMUMS

FLAGSTAFF, AZ

FLAGSTAFF PULLIAM ..... **ILS or LOC/DME Rwy 21[12]**
VOR or GPS-A[3]

[1]NA when control tower closed.
[2]ILS, Categories B,C,D, 700-2.
[3]Category D, 800-2¼.

FORT HUACHUCA-SIERRA VISTA, AZ

SIERRA VISTA MUNI-LIBBY AAF ..... **ILS or LOC Rwy 26**
NDB Rwy 26
RNAV (GPS) Rwy 8[1]
VOR Rwy 26

NA when control tower closed.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

GLENDALE, AZ

GLENDALE MUNI ..... **RNAV (GPS) Rwy 1**
NA when local weather not available.

GRAND CANYON, AZ

GRAND CANYON NATIONAL PARK ..... **ILS or LOC/DME Rwy 3**
NA when control tower closed.
Category D, 700-2.

VALLE ..... **VOR/DME Rwy 19**
NA except for operators with approved weather reporting service.

KANAB, UT

KANAB MUNI ..... **RNAV (GPS) Rwy 1**
Category B, 1100-2; Category C, 1400-3.

KINGMAN, AZ

KINGMAN ..... **RNAV (GPS) Rwy 3**
RNAV (GPS) Y Rwy 21
VOR/DME Rwy 21
Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LAKE HAVASU CITY, AZ

LAKE HAVASU CITY ..... **VOR/DME or GPS-A**
Categories A,B, 1000-2; Categories C, 1000-2¾; Category D, 1000-3.

LAS VEGAS, NV

HENDERSON EXECUTIVE ..... **RNAV (GPS)-B[1]**
VOR-C[2]
NA when local weather not available.
[1]Categories A,B, 1000-2; Category C, 1000-2¾.
[2]Categories A, B, 2400-2; Category C, 2400-3.

McCARRAN INTL ..... **ILS or LOC Rwy 25L[1]**
ILS or LOC Rwy 25R[1]
ILS or LOC/DME Rwy 1L[2]
RNAV (GPS) Rwy 1R[3]
RNAV (GPS) Rwy 19L[45]
RNAV (GPS) Rwy 19R[45]
VOR/DME-A[2]
VOR Rwy 25L/R[3]
[1]ILS,LOC,Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾, Category E, 1400-3.
[2]ILS,LOC,Categories A,B, 900-2; Category C, 900-2½.
[3]Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.
[4]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.
[5]NA when local weather not available.

NORTH LAS VEGAS ..... **ILS or LOC Rwy 12L**
NA when control tower closed.

LOVELOCK, NV

DERBY FIELD ..... **VOR or GPS-C[1]**
VOR/DME or GPS-A[2]
[1]Categories A,B, 1900-2; Categories C,D, 1900-3.
[2]Categories A,B, 900-2; Category C,900-2¾; Category D, 900-3.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD ..... **VOR or GPS-A**
Category D, 800-2½.

OGDEN, UT

OGDEN-HINCKLEY ..... **ILS Or LOC Rwy 3[12]**
RNAV (GPS) Y Rwy 3
RNAV (GPS) Z Rwy 3
NA when local weather not available.
[1]ILS, Category D, 700-2.
[2]NA when control tower closed.

NAME ALTERNATE MINIMUMS

PHOENIX, AZ

PHOENIX DEER VALLEY ..... **RNAV (GPS)-B[12]**
RNAV (GPS)-C[3]
RNAV(GPS) Rwy 7R[4]
RNAV (GPS) Rwy 25L[14]
[1]NA when local weather not available.
[2]Categories A,B, 1000-2; Category C, 1000-2¾.
[3]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1100-3.
[4]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

PHOENIX-
MESA GATEWAY ..... **ILS or LOC Rwy 30C[12]**
RNAV (GPS) Rwy 30C[1]
RNAV (GPS) Rwy 30L[3]
VOR or TACAN Rwy 30C[1]
[1]NA when local weather not available.
[2]NA when control tower closed.
[3]Category E, 800-2¼.

PHOENIX
SKY HARBOR INTL ..... **ILS or LOC Rwy 7R[1]**
ILS or LOC Rwy 7L[2]
ILS or LOC Rwy 8[3]
ILS or LOC Rwy 25L[2]
ILS or LOC Rwy 26[2]
RNAV (GPS) Y Rwy 7R[2]
RNAV (GPS) Y Rwy 7L[2]
RNAV (GPS) Y Rwy 8[4]
RNAV (GPS) Y Rwy 25L[2]
RNAV (GPS) Y Rwy 25R[2]
RNAV (GPS) Y Rwy 26[2]
[1]ILS, Categories A,B,C, 700-2; Category D, 800-2½. LOC, Category D, 800-2½.
[2]Category D, 800-2½.
[3]ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[4]Category C, 800-2¼; Category D, 800-2½.

PRESCOTT, AZ

ERNEST A. LOVE FIELD .. **ILS/DME Rwy 21L[12]**
RNAV (GPS) Rwy 21L[4]
VOR Rwy 12[3]
[1]NA when control tower closed.
[2]ILS, Category C, 700-2; Category D, 900-3. LOC, Category D, 900-3.
[3]Category D, 900-3.
[4]Category D, 1000-3.

NAME ALTERNATE MINIMUMS

PRICE, UT

CARBON COUNTY RGNL/
BUCK DAVIS FIELD ..... **VOR/DME Rwy 36**
VOR Rwy 36[1]
Category C, 900-2½; Category D, 1100-3.
[1]Categories A, B, 2000-2; Categories C, D, 2000-3.

PROVO, UT

PROVO MUNI .. **ILS or LOC/DME Rwy 13,** 700-2
Na when control tower closed.

RENO, NV

RENO/TAHOE INTL ..... **ILS Rwy 16R,** 2100-7[1]
ILS or LOC/DME Rwy 34L[2]
LOC Rwy 16R[3]
LOC/DME BC Rwy 34L[4]
RNAV (GPS) X Rwy 34L[5]
RNAV (GPS) X Rwy 34R[5]
RNAV (GPS) Y Rwy 16L[6]
RNAV (GPS) Y Rwy 16R[7]
RNAV (GPS) Y Rwy 34L[4]
RNAV (GPS) Y Rwy 34R[8]
RNAV (RNP) Z Rwy 16R, 800-2½
VOR-D, 1600-3
[1]LOC, NA.
[2]ILS,LOC, Categories A,B, 1000-2; Category C, 1000-2¾.
[3]Categories A,B, 1600-2; Categories C,D, 1600-3; Category E, 2400-3.
[4]Categories A,B, 1000-2; Categories C,D, 1000-3.
[5]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[6]Categories A,B, 1400-2; Categories C,D, 1400-3.
[7]Categories A,B, 1800-2; Categories C,D, 1800-3.
[8]Categories A,B, 1000-2; Category C, 1000-2¾.

ST. GEORGE, UT

ST. GEORGE MUNI ..... **RNAV (GPS) Rwy 34**[1]
VOR or GPS-B, 1300-2[2]
VOR-C, 1800-3[2]
VOR/DME Rwy 34[23]
[1]Categories A,B 1100-2¼; Categories C,D, 1100-3.
[2]NA except for operators with approved weather reporting service.
[3]Category C, 800-2¼; Category D, 1000-3.

ST. JOHNS, AZ

ST. JOHNS
INDUSTRIAL AIRPARK ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR/DME-A
NA when local weather not available.

NAME ALTERNATE MINIMUMS

SCOTTSDALE, AZ

SCOTTSDALE ..... **RNAV (GPS)-D**[1]
VOR or GPS-A[23]
VOR or GPS-C[24]
[1]NA when local weather not available.
[2]NA when Scottsdale altimeter not available.
[3]Categories A,B,C, 1100-3.
[4]Categories A,B, 900-2½;Category C, 900-2¾.

TONOPAH, NV

TONOPAH ..... **VOR or GPS-A**
Category D, 800-2¼.

TOOELE, UT

BOLINDER FIELD-
TOOELE VALLEY ..... **ILS or LOC/DME Rwy 17**[1]
RNAV (GPS) Y Rwy 17[2]
RNAV (GPS) Z Rwy 17
NA when local weather not available.
[1]ILS, Category D, 700-2.
[2]Categories A, B, C, D, 900-2½.

TUCSON, AZ

TUCSON INTL ..... **ILS or LOC Rwy 11L**[1]
LOC/DME BC Rwy 29R[2]
RNAV (GPS) Z Rwy 11L[2]
RNAV (GPS) Rwy 29R[2]
RNAV (GPS) Rwy 3[3]
RNAV (GPS) Rwy 29L[4]
RNAV (GPS) Z Rwy 29R[2]
VOR or TACAN Rwy 11L[2]
VOR/DME or TACAN Rwy 29R[2]
[1]ILS,LOC, Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3; Category E, 1100-3.
[2]Category E, 1100-3.
[3]Categories A,B,C,D, 800-2¼.
[4]Category D, 800-2¼.

WENDOVER, UT

WENDOVER ..... **VOR/DME-B**[1]
VOR/DME or TACAN Rwy 26[2]
[1]Categories A,B, 1700-2; Categories C,D,E, 1700-3.
[2]Category E, 800-2¾.

WINNEMUCCA, NV

WINNEMUCCA MUNI ..... **RNAV (GPS) Rwy 14**[12]
RNAV (GPS) Rwy 32[1]
VOR/DME Rwy 14[3]
[1]NA when local weather not available.
[2]Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 1300-3.

WINDOW ROCK, AZ

WINDOW ROCK ..... **VOR/DME-A**
Categories A,B, 1100-2; Categories C,D, 1100-3.

DAVIS-MONTHAN AFB (KDMA), AZ (Tucson) (07242 USAF) ELEV **2704**

RADAR[1] - **(E)** 118.5 125.1 318.1 297.2

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	30[2]	3.0°/59/1320	ABCDE	**2904**-½	200	(200-½)
	12[3]	3.0°/59/950	ABCDE	**2815**-¾	200	(200-¾)

[1]No NOTAM MP 1100-1300Z dly. PAR opr 1700-0300Z wkd or termination of A10 flying (contact scheduling for times at DSN 228-5777). [2]When ALS inop, increase vis ¼ mile. [3]NOT FOR CIVIL USE.

FALLON NAS (KNFL), (VAN VOORHIS FIELD), NV (03191 USN) ELEV **3934**

RADAR[1] - **(E)** 118.3x 121.875x 262.8x 275.6x 310.6x 345.2x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[2]	31L	3.5°/55/905	ABCDE	**4126**-¾	200	(200-¾)
	31R	3.5°/55/903	ABCDE	**4128**-¾	200	(200-¾)
	13L	3.0°/46/881	ABCDE	**4134**-¾	200	(200-¾)
	13R	3.0°/47/912	ABCDE	**4134**-¾	200	(200-¾)
	7	3.0°/36/679	ABCDE	**4129**-¾	200	(200-¾)
ASR[2]	31R		ABCDE	**4200**-1	272	(300-1)
	31L		ABCDE	**4200**-1	274	(300-1)
	13R		ABCD	**4260**-1	326	(400-1)
			E	**4260**-1¼	326	(400-1¼)
	13L		ABC	**4280**-1	346	(400-1)
			DE	**4280**-1¼	346	(400-1¼)
	7		AB	**4340**-1	411	(500-1)
			CD	**4340**-1¼	411	(500-1¼)
			E	**4340**-1½	411	(500-1½)
CIR	All Rwy		AB	**4400**-1	466	(500-1)
			C	**4400**-1½	466	(500-1½)
			D	**4520**-2	586	(600-2)
			E	**4980**-3	1046	(1100-3)

CAUTION: ATC Missed Approach Minimum Climb Rate

	Rwy	Knots	60	120	180	240	300	360
PAR/ASR	7[3]	FPM	300	600	900	1200	1500	1800
	13L/R[4]	FPM	250	500	750	1000	1250	1500
	31L/R[4]	FPM	270	540	810	1080	1350	1620

[1]No-NOTAM MP sked: PAR-2200-0000Z++ Thu, ASR-1500-1700Z++ Wed, when ceil-vis 3000-5 and above. [2]Descent to 5700' not authorized until inbound in initial segment within 10 NM of Rwy. [3]To 7500'. [4]To 7300'.

FORT HUACHUCA/SIERRA VISTA, AZ

Amdt. 4A, OCT 22, 2009 (FAA) ELEV **4719**

SIERRA VISTA MUNI-LIBBY AAF

RADAR[1] - (E) 127.05 254.35 ▽ ⚠NA

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[2]	8		ABCDE	**4919**-¾	200	(200-¾)				
	26		ABCDE	**4829**-¾	200	(200-¾)				
ASR	26		ABC	**5000**-1	371	(400-1)	DE	**5000**-1¼	371	(400-1¼)
	8		AB	**5440**-1	721	(800-1)	C	**5440**-2	721	(800-2)
			D	**5440**-2¼	721	(800-2¼)	E	**5440**-2½	721	(800-2½)
CIR[3]	26		A	**5100**-1	381	(400-1)	B	**5180**-1	461	(500-2)
			C	**5180**-1½	461	(500-1½)	D	**5280**-2	561	(600-2)
			E	**5400**-2½	681	(700-2½)				
	8		AB	**5440**-1	721	(800-1)	C	**5440**-2	721	(800-2)
			D	**5440**-2¼	721	(800-2¼)	E	**5440**-2½	721	(800-2½)

[1]Opr 1500-2300Z Monday-Friday, except for holidays. [2]No NOTAM maintenance period 1500-1900Z on the first Thursday of the month. [3]Circling not authorized south of ruways 8 and 30.

YUMA MCAS/YUMA INTL (KNYL), AZ (09295 USN)

ELEV **213**

RADAR - (E) 120.9x 124.15x 125.55x 125.95x 254.0x 270.8x 278.7x 286.0x 301.2x 305.2x ▽

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	3L	3.0°/54/1059	ABCDE	298-½	100	(100-½)
	21R[1]	3.0°/54/1114	ABCDE	295-½	100	(100-½)
ASR	3L		ABC	540-1	342	(400-1)
			DE	540-1¼	342	(400-1¼)
	3R[2]		ABC	540-1	350	(400-1)
			DE	540-1¼	350	(400-1¼)
	21L		ABC	600-1	390	(400-1)
			DE	600-1¼	390	(400-1¼)
	21R[3]		AB	620-½	425	(500-½)
			CD	620-¾	425	(500-¾)
			E	620-1	425	(500-1)
CIR	3L-21R, 3R-21L		AB	700-1	484	(500-1)
			C	700-1½	484	(500-1½)
			D	780-2	564	(600-2)
			E	800-2	584	(600-2)

[1]Caution - Missed app minimum obstacle climb rate 225' NM to 400' MSL.
[2]Caution - Lighted PAR antenna 27' AGL/217' MSL 650' from threshold, 306' left of runway centerline.
[3]When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1¼ miles and CAT E vis to 1½ miles.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

BATTLE MOUNTAIN, NV

BATTLE MOUNTAIN (BAM)
AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ a min climb of 282' per NM to 7300 or 4700-3 for climb in visual conditions. **Rwy 12,** std. w/ a min climb of 386' per NM to 7600 or 4700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 8200 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 12,** climb heading 122° and BAM R-076 to 10000 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 21,** climb direct BAM VORTAC and BAM R-205 to 10100 before proceeding on course. **Rwy 30,** climb heading 302° and BAM R-324 to 9100 before proceeding on course.

BEAVER, UT

BEAVER MUNI

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA-obstacles. **Rwys13, 31,** 2600-2¾ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13, 31,** climb in visual conditions to cross Beaver Muni Airport Northwestbound at or above 8300 then climb to 10100 via MLF VORTAC R-102 to MLF VORTAC. Do not exceed 210 KIAS until established on MLF VORTAC R-102.

NAME — TAKE-OFF MINIMUMS

BLANDING, UT

BLANDING MUNI

TAKE-OFF MINIMUMS: **Rwy 35**, 800-1 or std. with a min. climb of 350 feet per NM to 6700.

DEPARTURE PROCEDURE: **Rwy 17,** turn left. **Rwy 35**, turn right climb to 9000 via heading 090° and DVC R-223 to DVC VORTAC, then continue climb on course to MEA.

BRIGHAM CITY, UT

BRIGHAM CITY (BMC)
AMDT 5 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34,** std. w/ min. climb of 325' per NM to 5300 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn heading 205° and OGD R-331 to OGD VORTAC. **Rwy 34,** climbing left turn heading 205° and OGD R-331 to OGD VORTAC or for climb in visual conditions: cross Brigham City airport southbound at or above 9200 then via OGD R-351 to OGD VORTAC.

NOTE: **Rwy 16,** poles 266' from DER, 558' right of centerline, 30' AGL/4258' MSL.

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL (IFP)
AMDT 1 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 370' per NM to 1800, or 1700-3 for climb in visual conditions. **Rwy 34,** std. w/ a min. climb of 495' per NM to 5500, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 164° and EED VORTAC R-334 to EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **Rwy 34,** climb via heading 344° to 1600, then climbing right turn direct EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **All Aircraft** climb in EED VORTAC holding pattern (East, right turn, 257° inbound) to cross EED VORTAC at or above MEA for direction of flight before proceeding on course.

NOTE: **Rwy 16,** multiple bushes beginning 3600' from DER, left of centerline, up to 12' AGL/1029' MSL. **Rwy 34,** multiple poles beginning 2211' from DER, right of centerline, up to 105' AGL/821' MSL.

CARSON CITY, NV

CARSON (CXP)
ORIG 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 9,** use JIMPA DEPARTURE.

CASA GRANDE, AZ

CASA GRANDE MUNI

DEPARTURE PROCEDURE: **Rwy 5**, right turn. **Rwy 23**, climb direct TFD VORTAC. Continue climb in holding pattern (SW, right turn, 048° inbound) to MEA for direction of flight.

CEDAR CITY, UT

CEDAR CITY RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 3500-3 or std. with a min. climb of 450' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 20, 26**, turn right. **Rwys 2,8**, turn left, climb direct to CDC VOR/DME, continue climb to 9000 via R-348. Northbound continue on course. All others reverse course, climb to cross CDC VOR/DME at or above MCA for direction of flight.

CHANDLER, AZ

CHANDLER MUNI

DEPARTURE PROCEDURE: **Rwy 4R,** climbing left turn heading 220°. **Rwys 22L,22R,** climbing left turn heading 190°. **All Aircraft,** continue climb via TFD R-350 to TFD VORTAC.

NOTE: **Rwy 4L,** multiple towers and buildings beginning 69' from departure end of runway, 397' left of centerline, up to 80' AGL/1319' MSL.

CHANDLER, AZ (CON'T)

STELLAR AIRPARK

DEPARTURE PROCEDURE: **Rwy 17**, turn left, climb via heading 150°. **Rwy 35**, turn right. **All aircraft** climb via TFD R-350 direct TFD VORTAC.

NOTE: **Rwy 17,** tower and signs beginning 574' from departure end of runway, 183' right of centerline, up to 50' AGL/1124' MSL. Sign 611' from departure end of runway, 365' left of centerline, 42' AGL/1214' MSL.

COLORADO CITY, AZ

COLORADO CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** NA.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwys 20, 29,** turn left. **All aircraft** climb to 7400 via the 160° bearing from AZC NDB then continue climb on course.

COOLIDGE, AZ

COOLIDGE MUNI

DEPARTURE PROCEDURE: **Rwys 5,35,** climbing left turn heading 280° to intercept TFD R-063, then via R-063 to TFD VORTAC before proceeding on course. **Rwy 17,** climbing right turn heading 240° to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course. **Rwy 23,** climb runway heading to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course.

DAVIS-MONTHAN AFB (KDMA)

TUCSON, AZ. 07186

Diverse departures not authorized, use published departure procedure for obstacle avoidance.

TAKE-OFF OBSTACLES: **Rwy 12**: Terrain 0' AGL/2707' MSL, 81' from DER, 500' left of centerline. Terrain 0' AGL/2707' MSL, 46' from DER, 512' left of centerline. Terrain 0' AGL/2707' MSL, 16' from DER, 500' left of centerline. Terrain 0' AGL/2706' MSL, 0' from DER, 200' left of centerline. **Rwy 30**: Terrain 0' AGL/2592' MSL, 0' from DER, 106' left of centerline. Terrain 0' AGL/2592' MSL, 7' from DER, 97' left of centerline. Terrain 0' AGL/2592' MSL, 0' from DER, 484' right of centerline. Terrain 0' AGL/2592' MSL, 13' from DER, 493' right of centerline. Vehicle 11' AGL/2615' MSL, 1017' from DER, 477' left of centerline. Terrain 0' AGL/2612' MSL, 237' from DER, 590' left of centerline.

DELTA, UT

DELTA MUNI

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 412' per NM to 6600, or 1800-3 for climb in visual conditions. Climb in visual conditions NA at night. **Rwy 12,** NA-terrain. **Rwy 30,** NA-airspace.

DEPARTURE PROCEDURE: **Rwy 17,** climb via DTA VORTAC R-347 to DTA VORTAC, or climb in visual conditions to cross departure end of runway southbound at or above 6400, then via DTA VORTAC R-347 to DTA VORTAC, thence...**Rwy 35,** climb via heading 346° to 5800, then climbing left turn via heading 180° and DTA VORTAC R-310 to DTA VORTAC, thence...

...climb in holding pattern (hold south, left turn, 004° inbound) to cross DTA VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 17,** trees 1598' from departure end of runway, 62' right of centerline, 60' AGL/4799' MSL.

DOUGLAS BISBEE, AZ

BISBEE- DOUGLAS INTL

DEPARTURE PROCEDURE: Climb to 5700 in holding pattern, right turn to 140 inbound DUG VORTAC, then assigned route. CAT C,D turbojets climb not to exceed 250 kts. to 8000.

DUCHESNE, UT

DUCHESNE MUNI

DEPARTURE PROCEDURE: Climb direct to MTU VORTAC to depart at or above 7200 eastbound or 10000 westbound.

ELKO, NV

ELKO RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. with a min. climb of 330' per NM to 8000. **Rwy 23**, 2500-3 or std. with a min. climb of 340' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 5**, climb runway heading to 6000, then climbing right turn direct BQU VOR/DME, then...

Rwy 23, (V32 Southwest) climb to 6000, then climbing left turn heading 200°to intercept BQU R-241 (V32).

Rwy 23, all others climb runway heading to 6000, then climbing left turn direct BQU VOR/DME, then...

climb in BQU VOR/DME holding pattern (S, left turns, 340° inbound) to cross BQU VOR/DME at the MEA/MCA/MOCA for direction of flight.

ELY, NV

ELY AIRPORT-YELLAND FIELD

TAKE-OFF MINIMUMS: **Rwys 30,36**, 3000-2 or std. with a min. climb of 700' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 12,30,36**, right turn; **Rwy 18**, straight ahead; intercept . ELY VOR/DME R-150 to 10000. Aircraft departing on V293 southeast climb on course to MEA. Departures V269 or V293 northbound, reverse course to the left, continue climb to cross ELY VOR/DME at or above 12000.

FALLON, NV

FALLON MUNI

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. with a min. climb of 350' per NM to 4300.

DEPARTURE PROCEDURE: **Rwy 21**, turn right. **Rwys 3,13,31**, turn left. All departures climb via HZN R-075 to HZN VORTAC. Climb in holding pattern (W, right turns, 075° inbound) to depart HZN VORTAC at or above: R-240 CW R-149, 8000; R-150 CW R-239, 9000. Continue climb on course to MEA or assigned altitude.

FALLON NAS (KNFL)

FALLON, NV

Diverse departures not authorized.

FLAGSTAFF, AZ

FLAGSTAFF PULLIAM

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. Aircraft departing FLG R-160 CW R-175 climb on course. All others climb southbound on FLG R-172 to 9000, then climbing left turn direct FLG VOR/DME.

FORT HUACHUCA-SIERRA VISTA, AZ

SIERRA VISTA MUNI-LIBBY AAF

TAKE-OFF MINIMUMS: **Rwy 21**, NA.

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **Rwys 26,30**, turn right. **All aircraft** climb to 9500 to TOMBS Int via FHU VOR R-019 or 018° bearing from DAO NDB.

GLENDALE, AZ

GLENDALE MUNI

TAKE-OFF MINIMUMS: **Rwy 19,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 1,** Use DRAKE (RNAV) DEPARTURE.

GLOBE, AZ

SAN CARLOS APACHE (P13)

ADMT 2 08101 (FAA)

DEPARTURE PROCEDURE: Use IZTIR DEPARTURE.

GOODYEAR, AZ

PHOENIX GOODYEAR

TAKE-OFF MINIMUMS: **Rwy 3,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 21,** Use POTER DEPARTURE.

GRAND CANYON, AZ

GRAND CANYON NATIONAL PARK

TAKE-OFF MINIMUMS: **Rwy 3,** NA-environmental.

DEPARTURE PROCEDURE: **Rwy 21,** use GRAND DEPARTURE.

HEBER CITY, UT

HEBER CITY MUNI-RUSS MCDONALD FIELD

DEPARTURE PROCEDURE: **Rwy 3,** Use COOLI RNAV DEPARTURE.

HILL AFB (KHIF)

OGDEN, UT

Diverse departures not authorized, use radar vectors or published Departure Procedures (DP) for obstacle avoidance.

HUNTINGTON, UT

HUNTINGTON MUNI (69V)

AMDT 2A 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 26, 36**, NA. **Rwy 30**, 1700-3 or std. with a min. climb of 300' per NM to 8100.

DEPARTURE PROCEDURE: **Rwys 8, 12,** climbing left turn direct PUC VOR/DME...

Rwy 30, climbing right turn direct PUC VOR/DME....

...continue climb in PUC VOR/DME holding pattern (hold S, right turns, 009° inbound) to MEA for direction of flight.

NOTE: **Rwy 8,** tree 2663' from DER, 922' left of centerline, 40' AGL/5979' MSL. **Rwy 12,** tree 333' from DER, 132' right of centerline, 40' AGL/5919' MSL. **Rwy 30,** tree 2065' from DER, 875' left of centerline, 40' AGL/5999' MSL.

KANAB, UT

KANAB MUNI

TAKE-OFF MINIMUMS: **Rwy 1,** std. with a min. climb of 316' per NM to 7200.

NOTE: Use KACIR ONE RNAV DEPARTURE.

KINGMAN, AZ

KINGMAN

TAKE-OFF MINIMUMS: **Rwys 3,17,21,35**, 800-1 or std. with a min. climb of 210' per NM to 7000.

DEPARTURE PROCEDURE: Climb northbound on IGM R-010 until reaching 6000; reverse course to the left and continue climb to 9000 direct to IGM. If unable to cross IGM at 9000 continue climb in IGM holding pattern (SW, left turns, 027° inbound).

LAGUNA AAF (LGF)

YUMA PROVING GROUND, AZ (03247)

Rwy 6, 18, 36 turn right, climb to 3600 direct BZA VORTAC.

Rwy 24 climb to 3600 direct to BZA VORTAC.

TAKE-OFF OBSTACLES:

Rwy 18: 386' (6' AGL) windsock, 818' from departure end of rwy, 194' left of centerline.

LAKE HAVASU CITY, AZ

LAKE HAVASU CITY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1½ or std. w/ min. climb of 278' per NM to 1200. **Rwy 32,** 600-1½ or std. w/ min. climb of 492' per NM to 1100.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn heading 300° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight. **Rwy 32,** climbing left turn heading 290° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 14,** obstruction light on transmission tower, 1.2 NM from departure end of runway, 1885' left of centerline, 151' AGL/1027' MSL. Transmission tower 1.4 NM from departure end of runway, 1953' left of centerline, 145' AGL/1058' MSL. Bush 1080' from departure end of runway, 500' left of centerline, 31' AGL/825' MSL. Terrain 145' from departure end of runway, 347' left of centerline, 14' AGL/797' MSL. Bush 1256' from departure end of runway, 255' left of centerline, 35' AGL/818' MSL. **Rwy 32,** obstruction light on transmission tower 4052' from departure end of runway, 932' right of centerline, 180' AGL/974' MSL. Transmision tower 2504' from departure end of runway, 1009' right of centerline, 112' AGL/903' MSL.

LAS VEGAS, NV

HENDERSON EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 17L/R,** Cat A/B std. with a min. climb of 491' per NM to 6000, or 2100-3 for climb in visual conditions, Cat C/D NA. **Rwy 35L/R,** Cat A/B std. with a min. climb of 312' per NM to 4700, or 2100-3 for climb in visual conditions, Cat C/D NA.

DEPARTURE PROCEDURE: **Rwy 17L/R,** climbing right turn via LAS R-157 to LAS VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC. **Rwy 35L/R,** climbing right turn via BLD R-257 to BLD VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC.

NOTE: **Rwy 17L,** tree 5610' from departure end of runway, 82' left of centerline, 100' AGL/2739' MSL. Tree 1.9 miles from departure end of runway, 1495' left of centerline, 100' AGL/2859' MSL. **Rwy 17R,** tree 4041' from departure end of runway, 859' left of centerline, 100' AGL/2739' MSL.

MCCARRAN INTL (KLAS)

TAKE-OFF MINIMUMS: **Rwy 25R,** 200-1 or std. with a min. climb of 220' per NM to 2400.

DEPARTURE PROCEDURE: **Rwys 1L, 1R,** climbing right turn direct BLD VORTAC. **Rwys 7L, 7R,** climb via heading 075° to 3400 then climbing right turn direct BLD VORTAC. **Rwys 19L, 19R,** climbing left turn via heading 120° and BLD VORTAC R-257 to BLD VORTAC. **Rwys 25L, 25R,** climb via heading 255° to 2700 then climbing right turn direct BLD VORTAC.

NOTE: **Rwy 1L,** multiple poles, tree, and building 450' from departure end of runway, 283' left of centerline, up to 174' AGL/2132' MSL. Obstruction light on WSK 248' from departure end of runway, 224' right of centerline, 15' AGL/2104' MSL. **Rwy 1R,** multiple sign and building 1331' from departure end of runway, 448' right of centerline, up to 100' AGL/2120' MSL. **Rwy 7L,** multiple poles and trees 747' from departure end of runway, 442' right of centerline, up to 62' AGL/2062' MSL. Tree 1257' from departure end of runway, 789' left of centerline, 65' AGL/2077' MSL. **Rwy 7R,** lighted WSK 126' from departure end of runway, 290' right of centerline, 25' AGL/2051' MSL. **Rwy 19L,** multiple poles, sign and building 1394' from departure end of runway, 320' right of centerline, up to 51' AGL/2256' MSL. **Rwy 19R,** multiple poles, sign, and building 197' from departure end of runway, 125' right of centerline, up to 51' AGL/2256' MSL. Multiple pole and building 1396' from departure end of runway, 356' left of centerline, up to 47' AGL/2262' MSL. **Rwy 25L,** multiple poles, sign, and building 1003' from departure end of runway, 251' left of centerline, up to 63' AGL/2256' MSL. **Rwy 25R,** multiple poles and road 675' from departure end of runway, 17' right of centerline, up to 100' AGL/2301' MSL. Multiple poles and buildings 533' from departure end of runway, 1' left of centerline, up to 150' AGL/2469' MSL.

NORTH LAS VEGAS (VGT)

AMDT 3 08045 (FAA)

DEPARTURE PROCEDURE: Use BOULDER CITY DEPARTURE.

LOGAN, UT

LOGAN-CACHE

TAKE-OFF MINIMUMS: **Rwys 10,28,** NA-obstacles. **Rwy 17**, 2000-3 or std. with min. climb of 270' per NM to 10000. **Rwy 35,** 1500-3 or std. with a min. climb of 270' per NM to 10000.

DEPARTURE PROCEDURE: **Rwy 17,** climbing right turn via LHO VOR/DME R-097 to LHO VOR/DME...**Rwy 35,** climbing left turn via LHO VOR/DME R-055 to LHO VOR/DME...then via LHO VOR/DME R-263 to PIMIE INT, cross PIMIE INT at or above 10000.

NOTE: **Rwy 17,** lighted WSK 194' from departure end of runway, 137' right of centerline, 26' AGL/4465' MSL. Tree 1459' from departure end of runway, 229' left of centerline, 50' AGL/4495' MSL.

LOVELOCK, NV

DERBY FIELD (LOL)

ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1**, 2300-2 or std. with a min. climb of 300' per NM to 6200. **Rwy 7**, 1100-1 or std. with a min. climb of 250' per NM to 5000. **Rwys 19, 25**, 2300-2 or std. with a min. climb of 260' per NM to 6200.

DEPARTURE PROCEDURE: **Rwy 1,** turn right. **Rwys 7,19,25,** turn left, climb direct LLC VORTAC. Aircraft departing 330° CW 359° climb via LLC R-333 to ROBUD INT; 360° CW 089° climb in LLC VORTAC holding pattern (hold NW, left turns, 153° inbound) to depart LLC VORTAC at or above 8600; 090° CW 219° climb on course; 220° CW 329° climb in LLC VORTAC holding pattern to depart LLC VORTAC at or above 8600. Continue climb on course to MEA or assigned altitude.

LUKE AFB (KLUF)

GLENDALE, AZ . . . . . AMDT 3, 09183

Diverse departures not authorized.

Use published DP, if unable to comply with DP notify clearance delivery and request RADAR Vectors.

TAKE-OFF OBSTACLES:

RWY 3L: Taxiing aircraft, 19' AGL/1126' MSL, 1221' from DER, 782' left of centerline. Taxiing aircraft, 19' AGL/1126' MSL, 1407' from DER, 609' left of centerline. Weather equipment, 15' AGL/1117' MSL, 759' from DER, 505' right of centerline. Weather equipment, 15' AGL/1117' MSL, 1209' from DER, 505' right of centerline. Building, 20' AGL/1127' MSL, 1620' from DER, 925' left of centerline.

RWY 21L: Taxiing aircraft, 38' AGL/1120' MSL, 1428' from DER, 774' left of centerline.

MESA, AZ

FALCON FIELD

TAKE-OFF MINIMUMS: **Rwys 4L,4R,** std. with a min. climb of 459' per NM to 3600, or 1100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4L, 4R,** climbing left turn to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound. For climb in visual conditions cross FFZ NDB at or above 2300 then proceed via 220° bearing to PXR R-143 southeast bound. **Rwy 22L, 22R,** climb to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound.

NOTE: **Rwy 4L,** light standard 416' from departure end of runway, 415' left of centerline, 48' AGL/1428' MSL. Obstacle light on building 1313' from departure end of runway, 424' left of centerline, 54' AGL/1434' MSL. **Rwy 4R,** light standard 514' from departure end of runway, 565' right of centerline, 48' AGL/1441' MSL. Tree 1097' from departure end of runway, 650' right of centerline, 50' AGL/1448' MSL. Tree 1060' from departure end of runway, 359' right of centerline, 50' AGL/1451' MSL. **Rwy 22L,** light pole 254' from departure end of runway, 538' right of centerline, 13' AGL/1382' MSL. Windmill 691' from departure end of runway, 528' right of centerline, 30' AGL/1389' MSL. Windmill 715' from departure end of runway, 603' right of centerline, 30' AGL/1389' MSL. Light pole 68' from departure end of runway, 764' right of centerline, 13' AGL/1382' MSL. Tree 175' from departure end of runway, 826' right of centerline, 13' AGL/1383' MSL. **Rwy 22R,** light pole 296' from departure end of runway, 541' right of centerline 13' AGL/1400' MSL. Light pole 495' from departure end of runway, 187' right of centerline, 13' AGL/1382' MSL. LIght pole 594' from departure end of runway, 65' right of centerline, 13' AGL/1382' MSL.

MESQUITE, NV

MESQUITE

TAKE-OFF MINIMUMS: **Rwy 1,** 900-3, or std. with a min. climb of 620' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 1,** climbing left turn, **Rwy 19,** climbing right turn. **All aircraft** climb direct MMM VORTAC. Aircraft departing MMM R-149 CW R-220 climb on course. All others continue climb via MMM R-196 to 6100 and reverse course to cross MMM VORTAC at or above: R-221 CW R-270 and R-331 CW R-060, 6100; R-271 CW R-330, 7300; R-061 CW R-150, 8300.

MICHAEL AAF (KDPG),

DUGWAY PROVING GROUND,UT

.... .Amdt 1, 09099

Rwy 12, 4700-3*

*Or standard with minimum climb of 305 ft/NM to 6100.

DEPARTURE PROCEDURES: **Rwy 12** Climb via heading 122° to 6100, then right turn direct DPG NDB. Continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course, or for climb in visual conditions: Cross Michael AAF, Dugway Proving Ground at or above 8900 before proceeding on course. **Rwy 30** Climb via heading 302° to 6100 then left turn direct DPG NDB, continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD

TAKE-OFF MINIMUMS: **Rwy 34**, CAT A,B 1200-2 or std. with a min. climb of 360' per NM to 6500. CAT C,D NA.

DEPARTURE PROCEDURE: **Rwy 16**, climb direct MLF VORTAC. **Rwy 34,** climbing left turn direct MLF VORTAC. Aircraft departing MLF R-170 CW R-210 climb on course. All other aircraft continue climb southbound via MLF R-190 to 7600, then climbing right turn to cross MLF VORTAC at or above 9000, then climb on course.

MINDEN, NV

MINDEN-TAHOE

TAKE-OFF MINIMUMS: **Rwys 12,16,30,** NA. **Rwy 34,** 4000-3 or std. with a min. climb of 531' per NM to 8700.

DEPARTURE PROCEDURE: **Rwy 34,** use MINDEN RNAV DEPARTURE.

MOAB,UT

CANYONLANDS FIELD

TAKE-OFF MINIMUMS: **Rwy 3**, std. with a min. climb of 320' per NM to 5800. **Rwy 21,** std. with a min. climb of 330' per NM to 5400.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right climb to 6700 via OAB R-293, then climbing right turn direct OAB VOR/DME. Climb in OAB holding pattern (NW, left turns, 113° inbound) to 10000 then proceed on course.

NOTE: **Rwy 3,** tree 4383' from departure end of runway, 1507' right of centerline, 50' AGL/4729' MSL. Road 1749' from departure end of runway, 905' left of centerline, 15' AGL/4635' MSL. Tree 3914' from departure end of runway, 1166' right of centerline, 50' AGL/4690' MSL. Tree 1.25 NM from departure end of runway, 400' right of centerline, 50' AGL/4758' MSL. **Rwy 21,** pole 2026' from departure end of runway, 78' right of centerline, 80' AGL/4625' MSL. Pole 2061' from departure end of runway, 40' right of centerline, 80' AGL/4625' MSL. Pole 2095' from departure end of runway, 857' right of centerline, 80' AGL/4623' MSL. Pole 1980' from departure end of runway, 344' right of centerline, 80' AGL/4602' MSL.

NELLIS AFB (KLSV)

LAS VEGAS, NV 08241

Rwy 3L/R, 10,200-3* SR-SS

Rwy 21L/R, 10,200-3* SR-SS

Diverse departure not authorized.

MILITARY: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 300' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vector climb gradient, A/C must depart VFR.

*CIVIL: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 330' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vectors climb gradient, A/C may use published weather minimums or depart VFR.

TAKE-OFF OBSTACLES: **RWY 3L**: Terrain 0' AGL/1870' MSL, 0' inward of DER, 500' left of centerline. Road 15' AGL/1934' MSL, 1321' from DER, 802' left of centerline. **RWY 3R**: C-5 on taxiway 65' AGL/1936' MSL, 1345' from DER, 822' right of centerline. Road 15' AGL/2014' MSL, 3929' from DER, 1404' right of centerline. **RWY 21L**: Trees 90' AGL/1949' MSL, 4594' from DER, 1596' right of centerline. Trees 90' AGL/1949' MSL, 4940' from DER, 541' right of centerline. Trees 60' AGL/1899' MSL 929' from DER, 724' left of centerline. Trees 60' AGL/1899' MSL, 946' from DER, 626' left of centerline. Trees 60' AGL/1899' MSL, 2720' from DER, 341' left of centerline. Trees 60' AGL/1899' MSL, 2514' from DER, 403' left of centerline.

RWY 21R: Terrain 0' AGL/1835' MSL, 0' inward of DER, 500' right of centerline. Trees 90' AGL/1949' MSL, 4594' from DER, 597' right of centerline. Building 45' AGL/1904' MSL, 2274' from DER, 1037' right of centerline. Road 15' AGL/1874' MSL, 1404' from DER, 465' right of centerline.

NOGALES, AZ

NOGALES INTL

TAKE-OFF MINIMUMS: **Rwy 3**, 5000-3 or std. with a min. climb of 350' per NM to 8000. **Rwy 21**, 5000-3 or std. with a min. climb of 300' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right. **All aircraft** climb via OLS R-276 and TUS R-176 to cross ARVEY Int at or above 10000. Continue on course to MEA or assigned altitude.

OGDEN, UT

OGDEN-HINCKLEY (OGD)

AMDT 2 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,16,** NA- Obstacles.

DEPARTURE PROCEDURE: **Rwys 3, 21, 25, 34,** Use EMONT DEPARTURE.

PAGE, AZ

PAGE MUNI (PGA)
AMDT 2 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA – obstacles **Rwy 15,** 300-1 or std. w/ min. climb of 252' per NM to 6500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climb via 157° heading to 6000, then climbing right turn to PGA VOR/DME. cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA, or climb in visual conditions: cross Page airport at or above 6100, before proceeding on course. **Rwy 33,** climb via 337° heading to 6000, then climbing left turn to PGA VOR/DME. Cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA.

NOTE: **Rwy 15,** terrain 192' from departure end of runway, 274' right of centerline, 4323' MSL, tree 1.07 NM from departure end of runway, 167' left of centerline, 4519 MSL, transmission lines 1.96 NM from departure end of runway, 825' left of centerline, 100' AGL/4519' MSL, power line 4.00 NM from departure end of runway, 3606' right of centerline, 75' AGL/4819' MSL, power line 4.35 NM from departure end of runway, 3968' right of centerline, 75' AGL/4919' MSL, power line 5.36 NM from departure end of runway, 5039' right of centerline, 75' AGL/5119' MSL, power line 4.51 NM from departure end of runway, 4136' right of centerline, 75' AGL/5019' MSL, tree 4.52 NM from departure end of runway, 1508' right of centerline, 100' AGL/5173' MSL, AAO 4.58 NM from departure end of runway, 1617' right of centerline, 200' AGL/5187' MSL, AAO 5.15 NM from departure end of runway, 4456' left of centerline, 200' AGL/5190' MSL, tree 5.56 NM from departure end of runway, 4097' right of centerline, 30' AGL/5249' MSL, AAO 5.98 NM from departure end of runway, 653' left of centerline, 200' AGL/5440' MSL.

PARKER, AZ

AVI SUQUILLA

TAKE-OFF MINIMUMS: **Rwy 1**, 800-1½. **Rwy 19**, 300-1.

DEPARTURE PROCEDURE: **Rwy 19**, right turn. **Rwy 1**, left turn. Climb via R-067 to PKE VORTAC, to cross above 4500. Continue climb on course to MEA or assigned altitude.

PAYSON, AZ

PAYSON

TAKE-OFF MINIMUMS: **Rwy 6,** std. with a min. climb of 360' per NM to 9300, or 2500-3 for climb in visual conditions. **Rwy 24,** std. with a min. climb of 375' per NM to 9300, or 2500-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 6, 24,** for climb in visual conditions: Cross Payson Airport at or above 7500, then proceed on course.

NOTE: **Rwy 24,** bush 15' from departure end of runway, 133' right of centerline, 6' AGL/5148' MSL. Tree 320' from departure end of runway, 183' right of centerline, 12' AGL/5154' MSL. Fence 85' from departure end of runway, 84' left of centerline, 4' AGL/5141' MSL. Tree 164' from departure end of runway, 126' left of centerline, 9' AGL/5147' MSL.

PHOENIX, AZ

PHOENIX-DEER VALLEY

DEPARTURE PROCEDURE: Use DEER VALLEY DEPARTURE.

PHOENIX SKY HARBOR INTL (PHX)
AMDT 4A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 26,** 700-3 or std. with a min. climb of 358' per NM to 2000.

DEPARTURE PROCEDURE: **Rwys 7L, 7R, 8,** climb via 078° heading to 3000, then climbing right turn direct PHOENIX (PXR) VORTAC. **Rwys 25L, 25R**, climb via 258° heading to 1550 then climbing right turn to join the PXR R-260 (V16) westbound, climb to 5000. **Rwy 26,** climb via 258° heading to 1550 then climbing left turn to join the PXR R-260 (V16) westbound, climb to 5000. Westbound departures continue climb on PXR R-260. All others, climbing right turn direct PXR VORTAC.

NOTE: **Rwy 7L,** building 1332' from DER, 798' left of centerline, 67' AGL/1176' MSL. **Rwy 7R,** rod 716' from DER, 184' right of centerline, 87' AGL/1196' MSL. **Rwy 8,** light standard 3530' from DER, 1207' left of centerline, 123' AGL/1232' MSL. Light standard 3479' from DER, 1003' left of centerline, 118' AGL/1227' MSL. **Rwy 25L,** light standard 1129' from DER, 774' left of centerline, 91' AGL/1200' MSL. ASDE-X equipment 411' from DER, 531' left of centerline, 29' AGL/1135' MSL. **Rwy 26,** light 59' from DER, 63' right of centerline, 16' AGL/1125' MSL. Pole 58' from DER, 90' right of centerline, 25' AGL/1125' MSL. Light 78' from DER of runway, 64' right of centerline, 18' AGL/1127' MSL. Light 38' from DER, 440' left of centerline, 24' AGL/1135' MSL. Light standard 77' from DER, 453' left of centerline, 27' AGL/1136' MSL. Light standard 74' from DER, 456' right of centerline, 33' AGL/1142' MSL. Light standard 77' from DER, 434' right of centerline, 31' AGL/1140' MSL. Tree 113' from DER, 294' right of centerline, 24' AGL/1133' MSL. Building 2.32 NM from DER, 3309' right of centerline,406' AGL/1496' MSL. Building 2.28 NM from DER, 3612' right of centerline, 663' AGL/1750' MSL. Tree 234' from DER, 214' right of centerline, 24' AGL/1133' MSL. Light standard 64' from DER, 68' left of centerline, 39' AGL/1125' MSL. ASDE-X equipment 897' from DER, 413' right of centerline, 35' AGL/1141' MSL.

PHOENIX-MESA GATEWAY

TAKE-OFF MINIMUMS: **Rwys 30L,30C,30R,** CAT C,D,E 2000-2 or std. with a min. climb of 230' per NM to 3900.

DEPARTURE PROCEDURE: **Rwys 12L,12C,12R,** climb to 2500 via IWA R-122 then climbing right turn direct PXR VORTAC. **Rwys 30L,30C,30R,** climbing right turn to 4000 via IWA R-122 then climbing right turn direct PXR VORTAC.

PRESCOTT, AZ

ERNEST A. LOVE FIELD

TAKE-OFF MINIMUMS: **Rwy 12,** 2700-2 or std. with a min. climb of 460' per NM to 8100. **Rwy 21L,** 2700-2 or std. with a min. climb of 500' per NM to 8100. **Rwy 30,** 300-1 or std. with a min. climb of 300' per NM to 5200. **Rwy 3L, 21R,** NA.

DEPARTURE PROCEDURE: **Rwy 3R,** turn left heading 250° to intercept DRK R-305. **Rwy 12,** turn right direct DRK VORTAC. **Rwy 21L,** turn right heading 335° to intercept DRK R-305. **Rwy 30,** climb direct DRK VORTAC. **All aircraft** continue climb via DRK R-305 to 9000. Aircraft departing via DRK R-305 continue climb on course. All other aircraft turn right direct DRK VORTAC then climb on course.

PRICE, UT

CARBON COUNTY RGNL/BUCK DAVIS FLD (PUC)

AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - per flight check **Rwy 32,** std. w/ min. climb of 425' per NM to 7000, or 3400-3 for climb in visual conditions. **Rwy 36,** std. w/ min. climb of 400' per NM to 7200, or 3400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climb on a heading between 126° CW to 193°, thence...**Rwy 18**, climb on a heading between 192° CCW to 125°, thence...**Rwy 25,** climb on a heading between 176° CCW to 124°, thence... **Rwy 32,** climb to 7000 then climbing left turn on a heading between 175° CCW to 145°,thence...**Rwy 36,** climb to 6400 then climbing right turn on a heading between 141° CW to 184°, maintain 210K until completion of turn, thence...

...continue climb to assigned altitude for direction of flight. **Rwys 32, 36,** for climb in visual conditions cross Carbon County Rgnl / Buck Davis Field at or above 9200 before proceeding on course.

NOTE: **Rwy 14,** multiple trees beginning 121' from DER, 3' left of centerline, up to 40' AGL/5839 ' MSL. **Rwy 25,** trees 515' from DER, 535' right of centerline, up to 40' AGL/5879' MSL. **Rwy 32,** trees 9544' from DER, 1644' left of centerline, up to 40' AGL/6900' MSL. Trees 11332' from DER, 74' right of centerline, up to 40' AGL/6800' MSL. **Rwy 36,** poles 2599' from DER, 615' left of centerline, 40' AGL/6079 ' MSL. Poles 2715 ' from DER, 668' right of centerline, 59' AGL/6098' MSL.

PROVO, UT

PROVO MUNI

DEPARTURE PROCEDURE: Use PROVO DEPARTURE.

RENO, NV

RENO/STEAD (RTS)

AMDT 3A 09183 (FAA)

TAKE-OFF MINIMUMS: CAT A,B only, CAT C,D NA. **Rwys 8,14,** 1300-2 or std. with a min. climb of 400' per NM to 6500. **Rwy 26,** 1900-2 or std. with a min. climb of 410' per NM to 7200. **Rwy 32,** 2300-2 or std. with a min. climb of 420' per NM to 7200.

DEPARTURE PROCEDURE: **Rwys 8,32,** climbing right turn heading 100° and FMG VORTAC R-314 to FMG VORTAC. **Rwy 14,** left turn climb direct FMG VORTAC. **Rwy 26,** climbing right turn heading 050° and FMG VORTAC R-314 to FMG VORTAC. **All aircraft** climb in FMG VORTAC holding pattern (NE, right turns, 221° inbound) to depart FMG VORTAC; R-260 CW R-170 at or above 10000; R-171 CW R-195 at or above 10500; R-196 CW R-259 at or above 12000.

RENO, NV (CON'T)

RENO/TAHOE INTL (RNO)
AMDT 4 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, NA-terrain. **Rwy 16L,** std. w/ min. climb of 730' per NM to 8000, or 600-1¼ w/ min. climb of 480' per NM to 8000, or 2700-3 for climb in visual conditions. **Rwy 16R,** std. w/ the following minimum climb requirements: 210 knots or less, 385' per NM to 8000; more than 210 knots, 420' per NM to 8900, or 2700-3 for climb in visual conditions. Resume normal speed after passing FMG VORTAC. **Rwy 25,** std. w/ min. climb of 470' per NM to 7800, or 2700-3 for climb in visual conditions. **Rwy 34L,** std. w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions. **Rwy 34R,** std. w/ min. climb of 480' per NM to 7000, or 500-1½ w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 16L/R,** climb heading 164° to 6600 then climbing left turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . .**Rwy 25,** climb heading 254° to 5000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . . **Rwys 34L/R,** climb heading 344° to 7000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . .

. . .**All aircraft:** continue climb in FMG VORTAC holding pattern (northeast, left turn, 221° inbound) to cross FMG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 16L,** multiple poles, trees, bushes and terrain beginning 618' from departure end of runway, 133' left of centerline, up to 20' AGL/4961' MSL. **Rwy 16R,** multiple trees 2784' from departure end of runway, 171' right of centerline, up to 20' AGL/4510' MSL. Multiple trees and terrain beginning 746' from departure end of runway, 380' left of centerline, up to 20' AGL/4703' MSL. **Rwy 25,** multiple trees and poles beginning 829' from departure end of runway, 201' right of centerline, up to 103' AGL/4523' MSL. Building 6023' from departure end of runway, 456' right of centerline, 152' AGL/4608' MSL. Fence 222' from departure end of runway, 270' right of centerline, up to 5' AGL/4415' MSL. Multiple trees and poles beginning 500' from departure end of runway, 31' left of centerline, up to 20' AGL/4506' MSL. **Rwy 34L,** multiple trees and poles beginning 1229' from departure end of runway, 180' right of centerline, up to 20' AGL/4498' MSL. Multiple trees beginning 1193' from departure end of runway, 331' left of centerline, up to 20' AGL/4489' MSL. **Rwy 34R,** multiple trees and poles beginning 1067' from departure end of runway, 172' right of centerline, up to 20' AGL/4497' MSL. Multiple trees and poles beginning 1230' from departure end of runway, 350' left of centerline, upt o 20' AGL/4498' MSL. Building 1.2 NM from departure end of runway, 1730' right of centerline, 363' AGL/4780' MSL.

RICHFIELD, UT

RICHFIELD MUNI (RIF)
AMDT 1 08157 (FAA)

DEPARTURE PROCEDURE: **Rwy 1,** use RICHFIELD (RNAV) DEPARTURE. **Rwy 19,** use HAMET (RNAV) DEPARTURE.

ROOSEVELT, UT

ROOSEVELT MUNI

TAKE-OFF MINIMUMS: **Rwy 25,** 700-3 or std. with a min. climb of 300' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 7,** turn right. **Rwy 25,** turn left. **All aircraft,** climb direct MTU VORTAC. Aircraft departing MTU VORTAC R-040 CW R-150, climb on course. All others continue climb in MTU holding pattern (NE, right turns, 213° inbound) to cross MTU VORTAC; R-151 CW R-290 at or above 8000; R-291 CW R-039 at or above 10,000. Then climb on course.

SAFFORD, AZ

SAFFORD RGNL

TAKE-OFF MINIMUMS: IFR departure not authorized.

ST. GEORGE, UT

ST. GEORGE MUNI

TAKE-OFF MINIMUMS: **Rwy 34**, 1500-2 or std. with a min. climb of 325' per NM to 4000.

DEPARTURE PROCEDURE: **Rwy 16**, turn left. **Rwy 34**, turn right. Climb in OZN VOR/DME holding pattern (hold SE, right turns, 296 inbound) to depart OZN VOR/DME at or above MEA for direction of flight.

ST. JOHNS, AZ

ST. JOHNS INDUSTRIAL AIR PARK (SJN)
AMDT 1A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 21**, 400-2 or std. with a min. climb of 205' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 3, 32,** climbing right turn, **Rwys 14, 21,** climbing left turn. **All aircraft,** climb direct SJN VORTAC. Aircraft departing SJN VORTAC R-240 CW R-080 climb on course. All others continue climb in SJN VORTAC holding pattern (Hold NE,right turns,239° inbound) to cross SJN VORTAC at or above 9000.

NOTE: **Rwy 14,** 5790' tower 350' right abeam departure end of runway.

SALT LAKE CITY, UT

SALT LAKE CITY INTL (SLC)
AMDT 10 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 32,** NA, operational.
DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 10000 via heading 161° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwy 17,** climb to 10000 via heading 166° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwys 34L, 34R,** climb to 9000 via heading 341° and OGD R-153 to OGD VORTAC before proceeding on course. **Rwy 35,** climb to 9000 via heading 336° and OGD R-153 to OGD VORTAC before proceeding on course.
NOTE: **Rwy 16L,** vehicle 124' from DER, 14' right of centerline, 15' AGL/4239' MSL. Light pole 988' from DER, 726' right of centerline, 34' AGL/4254' MSL. Pole 1024' from DER, 689' right of centerline, 34' AGL/4254' MSL. **Rwy 17,** vehicles beginning 335' from DER, on centerline, up to 17' AGL/4241' MSL. **Rwy 34R,** post 13' from DER, 349' right of centerline, 3' AGL/4227' MSL. **Rwy 35,** post 56' from DER, 249' left of centerline, 2' AGL/4220' MSL.

SOUTH VALLEY RGNL AIRPORT (U42)
AMDT 4A 09155 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, 2400-3 or std. with a min. climb of 295' per NM to 7700. **Rwy 34,** std. with a min. climb of 353' per NM to 9500.
DEPARTURE PROCEDURE: **Rwy 16,** climbing left turn to 9600 via heading 136° and V21 (TCH R-161 FFU R-341) to FFU VORTAC. Aircraft departing FFU R-156 CW R-263 and R-308 CW R-359 climb on course. All others continue climb in FFU VORTAC holding pattern (S, right turns, 008° inbound) to cross FFU VORTAC at or above: R-360 CW R-093 12400; R-094 CW R-138 10600; R-139 CW R-155 11300; R-264 CW R-307 11500. **Rwy 34,** climbing right turn to 9500 via heading 026° and V21 (TCH R-161) to TCH VORTAC. Aircraft departing TCH R-144 CW R-176 and R-217 CW R-355 climb on course. All others continue climb in TCH VORTAC holding pattern (NW, right turns, 116° inbound) to cross TCH VORTAC at or above: R-356 CW R-116 10700; R-117 CW R-143 11600; R-177 CW R-216 10100.

SCOTTSDALE, AZ

SCOTTSDALE (SDL)
AMDT 7 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min climb of 440' per NM to 4000, or 3100-3 for climb in visual conditions. **Rwy 21,** std. w/ min. climb of 215' per NM to 4000, or 3100-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 3,** climbing left turn to 4000 via heading 220° and PXR VORTAC R-336 southeast bound to PXR VORTAC. Thence...
Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course. **Rwy 21,** climbing right turn to 4000 via heading 300° and PXR VORTAC R-336 northwest bound then left turn direct PXR VORTAC. Thence...
Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course.
...continue climb on course.
NOTE: **Rwy 3,** multiple light standards beginning 63' from departure end of runway, 445' left of centerline, up to 44' AGL/1554' MSL. Hoist on dike 878' from departure end of runway, 735' left of centerline, 51' AGL/1561' MSL. Dike beginning 1066' from departure end of runway, 316' left of centerline, 38' AGL/1548' MSL. Day marker on dike 1230' from departure end of runway, 5' left of centerline, 39' AGL/1549' MSL. Tree, 269' from departure end of runway, 490' left of centerline, 13' AGL/1523' MSL. Tree 51' from departure end of runway, 279' left of centerline, 6' AGL/1516' MSL. Tree 765' from departure end of runway, 115' left of centerline, 22' AGL/1532' MSL. Road beginning 647' from departure end of runway, 296' left of centerline, 19' AGL/1529' MSL. Tree 227' from departure end of runway, 97' left of centerline, 6' AGL/1516' MSL. Fence beginning 5' from departure end of runway, 338' right of centerline, 6' AGL/1511' MSL. Light standard, 1013' from departure end of runway, 430' right of centerline, 44' AGL/1552' MSL. **Rwy 21,** tree 1072' from departure end of runway, 426' right of centerline, 53' AGL/1497' MSL. Building 316' from departure end of runway, 537' right of centerline, 23' AGL/1467' MSL. Tree 2087' from departure end of runway, 418' left of centerline, 61' AGL/1505' MSL. Tree 1432' from departure end of runway, 438' right of centerline, 38' MSL/1482' MSL. Tree 2234' from departure end of runway, 559' left of centerline, 58' AGL/1502' MSL.

SEDONA, AZ

SEDONA (SEZ)
AMDT 1 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 21,** Use OATES RNAV DEPARTURE.

SHOW LOW, AZ

SHOW LOW RGNL

DEPARTURE PROCEDURE: **Rwys 3,6**, turn left. **Rwys 21,24**, turn right. All aircraft climb via 345 bearing from SOW NDB to DEHOG INT then climb on course.

SPRINGERVILLE, AZ

SPRINGERVILLE MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 1000-2 or std. with a min. climb of 360' per NM to 8400.

DEPARTURE PROCEDURE: **Rwys 3, 11,** climbing left turn to 8400 via heading 360° before proceeding on course. **Rwys 21, 29,** climbing right turn to 8400 via 360° before proceeding on course.

TAYLOR, AZ

TAYLOR MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 300-1 or std. with a min. climb of 248' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 3/21,** climb on runway heading to 8000 before turning on course.

TONOPAH, NV

TONOPAH

TAKE-OFF MINIMUMS: **Rwys 11,29**, NA. **Rwys 15,33**, 2600-2 or std. with a min. climb of 260' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 15**, turn left. **Rwy 33**, turn right. Climb direct TPH VORTAC. Continue climb in holding pattern (NE, right turns, 246° inbound) to depart TPH VORTAC at or above 8000. Climb on course to MEA or assigned altitude.

TOOELE, UT

BOLINDER FIELD-TOOELE VALLEY

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 490' per NM to 11000. **Rwy 35,** std. with a min. climb of 360' per NM to 9000.

DEPARTURE PROCEDURE: Use STACO DEPARTURE.

NOTE: **Rwy 17,** tree 794' from departure end of runway, 277' right of centerline, 35' AGL/4380' MSL. Tree 967' from departure end of runway, 432' right of centerline, 35' AGL/4394' MSL. Tree 1023' from departure end of runway, 313' right of centerline, 35' AGL/4395' MSL.

TUCSON, AZ

MARANA RGNL

TAKE-OFF MINIMUMS: **Rwys 3, 12,** N/A-Obstacles

DEPARTURE PROCEDURE: **Rwy 21,** climb to 6500 via heading 360° and TUS R-308 to TOTEC Int/TUS 57 DME, then as filed. **Rwy 30,** climb to 6500 via heading 303° intercept TUS R-308 above 3500, to TOTEC INT/TUS 57 DME, then as filed.

NOTE: **Rwy 21,** road 192' from departure end of runway, 527' left of centerline 15' AGL/2034' MSL.

RYAN FIELD

DEPARTURE PROCEDURE: **Rwy 6R,** turn right; **Rwy 24L**, turn left direct to Ryan NDB. Continue climb in holding pattern (W, right turn 090° inbound) to 5000 before proceeding on course.

TUCSON, AZ (CON'T)

TUCSON INTL (TUS)

AMDT 4A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 300-1¾ or std. w/ min. climb of 228' per NM to 3000.

DEPARTURE PROCEDURE: **Rwys 3, 29L,29R,** climbing right turn direct to TUS VORTAC. **Rwys 11L,11R** climb via runway heading to 4000 then climbing left turn direct TUS VORTAC. **Rwy 21,** climbing left turn direct to TUS VORTAC. **All aircraft** continue climbing in holding pattern (NW, right turns, 128° inbound) to depart TUS VORTAC at or above 9000.

NOTE: **Rwy 3,** tower 9215' from departure end of runway, 1689' left of centerline, 246' AGL/2831' MSL.

VERNAL, UT

VERNAL RGNL

TAKE-OFF MINIMUMS: **Rwy 16**, 1500-2 or std with a min. climb of 250' per NM to 7000'. **Rwy 25**, 1500-2 or std. with a min. climb of 390' per NM to 7000. **Rwy 34**, 1600-2 pr std. with a min. climb of 330' per NM to 7000'.

DEPARTURE PROCEDURE: **Rwys 7,34**, turn right. **Rwys 16,25**, turn left. **All aircraft** climb direct VEL. Aircraft departing V391 S-bound climb on course. All others climb in holding pattern (SE, right turns, 322° inbound). Aircraft SW-bound V208 depart VEL at or above 8400', all others depart VEL at or above 9500'. Continue climb on course to MEA or assigned altitude.

WENDOVER, UT

WENDOVER

TAKE-OFF MINIMUMS: **Rwy 26,** standard wit h a min. climb of 300' per NM to 7000. **Rwy 30**, NA.

DEPARTURE PROCEDURE: **Rwys 8,12, 26,** climbing left turn direct BVL VORTAC. Aircraft departing BVL VORTAC R-330 CW R-150 climb on course. All others continue climb in BVL VORTAC holding pattern (Hold NE right turns, 247° inbound) to cross at or above 7400, then climb on course.

WILLCOX, AZ

COCHISE COUNTY

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. **All aircraft** climb direct CIE VORTAC.

WINDOW ROCK, AZ

WINDOW ROCK

TAKE-OFF MINIMUMS: **Rwy 2**, 700-2 or std. with a min. climb of 500' per NM to 8000. **Rwy 20,** 600-2 or std. with a min. climb of 260' per NM to 8200.

DEPARTURE PROCEDURE: **Rwy 2**, turn right. **Rwy 20,** turn left direct to GUP VORTAC before proceeding on course.

NOTE: **Rwy 2,** terrain 3832' from departure end of runway, 1025' right of centerline, 6926' MSL. Poles 5220' from departure end of runway, 245' right of centerline, 180' AGL/6922' MSL. Tower 7067' from departure end of runway, 3072' left of centerline, 71' AGL/7316' MSL. Terrain 7449' from departure end of runway, 1612' left of centerline, 6991' MSL. Terrain 8776' from departure end of runway, 1851' left of centerline, 7109' MSL. Tree 9665' from departure end of runway, 1326' right of centerline, 7340' MSL. Tree 11326' from departure end of runway, 355' left of centerline, 7351' MSL. **Rwy 20,** trees 1018' from departure end of runway, 620' left of centerline, 30' AGL/6768' MSL.

WINNEMUCCA, NV

WINNEMUCCA MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, 2500-2 or std. with a min. climb of 450' per NM to 6800. **Rwys 14,20**, 3200-2 or std. with a min. climb of 520' per NM to 7500.

DEPARTURE PROCEDURE: **Rwys 14,20**, turn right. **Rwy 2**, turn left. **Rwy 32**, climb straight ahead. All aircraft climb via INA R-326 to 6700 or above within 12 NM, then climbing left turn return to INA VOR/DME via R-326. Continue climb in INA VOR/DME holding pattern (hold NW, right turns, 146° inbound) to depart INA VOR/DME at or above 11000. Southbound aircraft continue via INA R-146 direct Fesko Int. Northbound aircraft continue via INA R-326 and SDO R-144 direct SDO VORTAC.

YUMA MCAS/ YUMA INTL(KNYL)

YUMA, AZ. 08213

Climb direct to BZA VORTAC, thence on course.

APP CRS	Rwy Idg	7299
027°	TDZE	4531
	Apt Elev	4532

RNAV (GPS) RWY 3
BATTLE MOUNTAIN (BAM)

GPS or RNP-0.3 required. DME/DME RNP-0.3.NA

NA

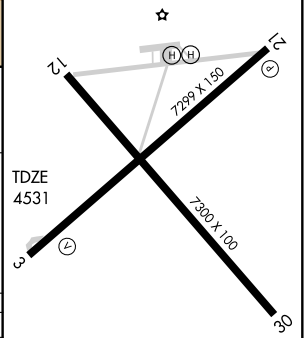
MISSED APPROACH: Climb to 5500 then climbing left turn to 8200 direct DIYLA WP and hold.

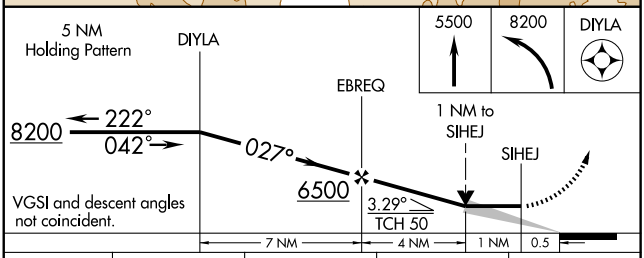
AWOS-3	SALT LAKE CITY CENTER	UNICOM
119.45	132.25 338.35	122.8 (CTAF) L

Procedure NA for arrival via V32 northeastbound.
Procedure NA for arrival at RAJKO via V6 southwestbound.

8540
8232
7430
7465 ±
4560 ±
BATTLE MOUNTAIN
BAM
(MAP)
SIHEJ
9000 to Diyla
206° (10.2)
027°
(FAF)
EBREQ
6500
027°
(7)
(IAF)
RAJKO
8200 NoPT
081°
(10.6)
5 NM
222°
042°
(IF/IAF)
DIYLA
7267
7957
9680
MSA SIHEJ 25 NM
10900
8213

ELEV 4532





CATEGORY	A	B	C	D
LNAV MDA	5040-1	509 (600-1)	5040-1½ 509 (600-1½)	NA
CIRCLING	5040-1	508 (600-1)	5040-1½ 508 (600-1½)	NA

MIRL Rwys 3-21 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC BAM 112.2 Chan 59	APP CRS 031°	Rwy Idg N/A TDZE N/A Apt Elev 4532

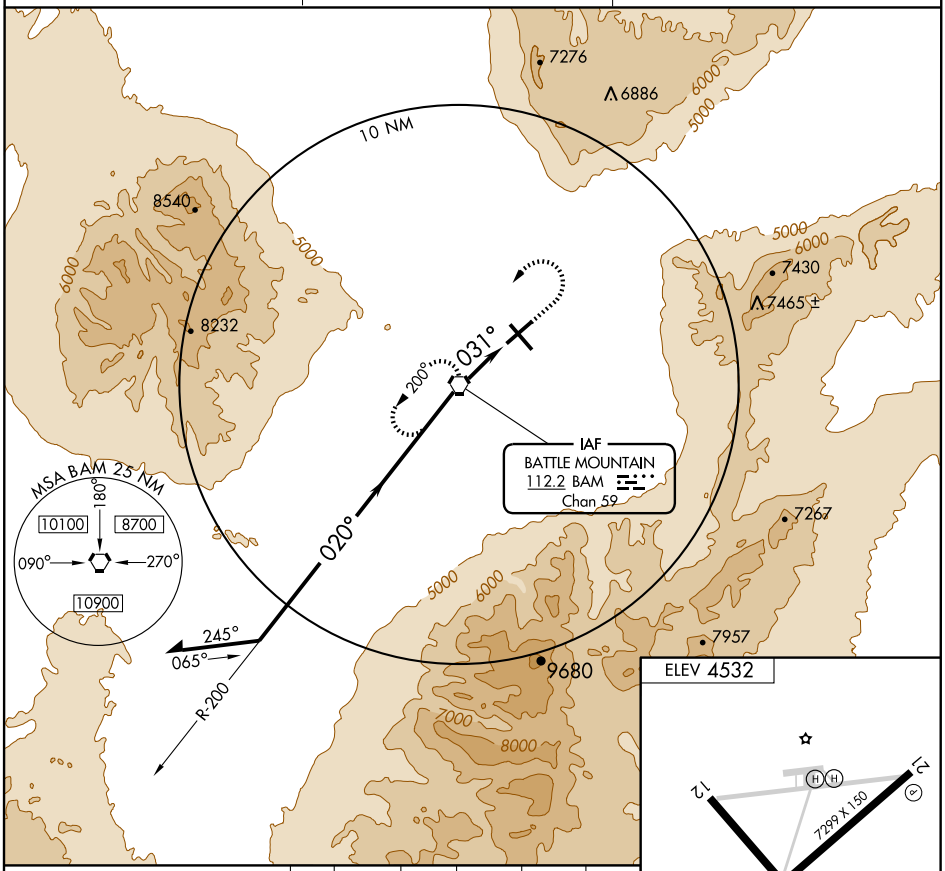
VOR-A

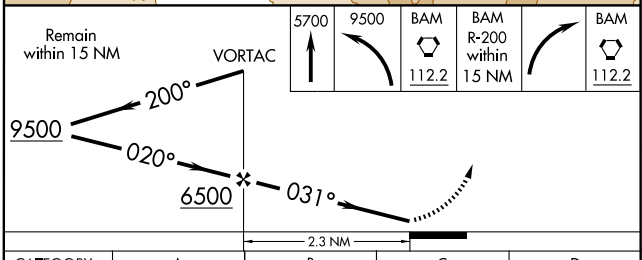
BATTLE MOUNTAIN (BAM)

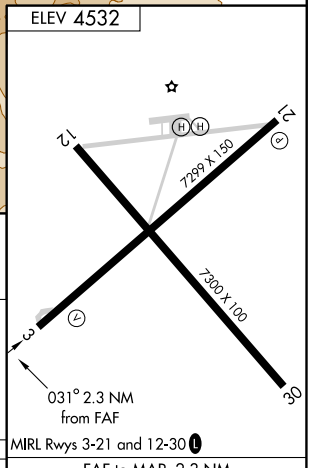
NA

MISSED APPROACH: Climb to 5700, then climbing left turn to 9500 direct BAM VORTAC and BAM R-200 within 15 miles, turn right direct BAM VORTAC and hold.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
119.45	132.25 388.35	122.8 (CTAF) L







MIRL Rwys 3-21 and 12-30 L

CATEGORY	A	B	C	D
CIRCLING	5600-1¼ 1068 (1100-1¼)	5600-1½ 1068 (1100-1½)	NA	

FAF to MAP 2.3 NM

Knots	60	90	120	150	180
Min:Sec	2:18	1:32	1:09	0:55	0:46

SW-4, 22 OCT 2009 to 19 NOV 2009

BATTLE MOUNTAIN, NEVADA

AL-534 (FAA)

VOR/DME RWY 3

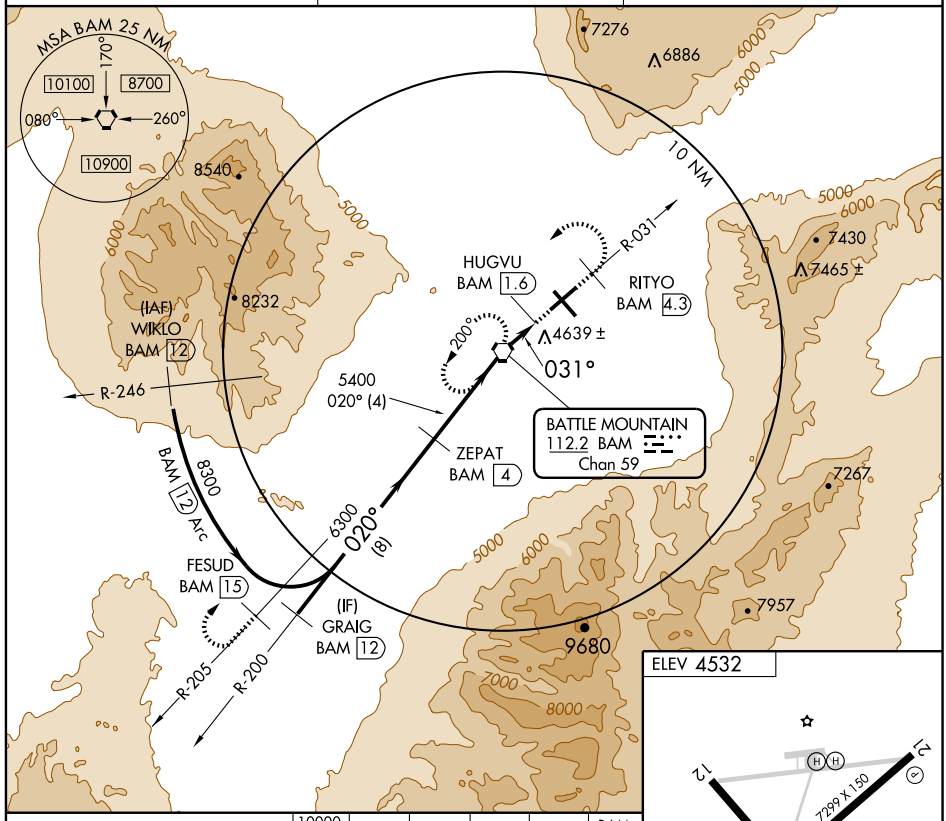
BATTLE MOUNTAIN (BAM)

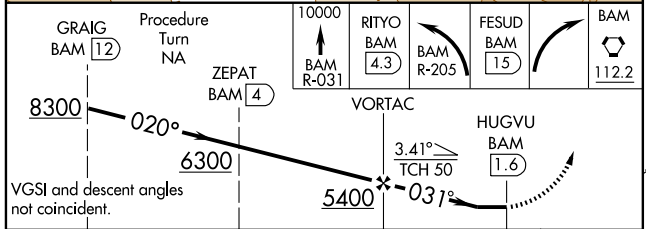
VORTAC BAM 112.2 Chan 59	APP CRS 031°	Rwy Idg 7299 TDZE 4531 Apt Elev 4532

T
NA

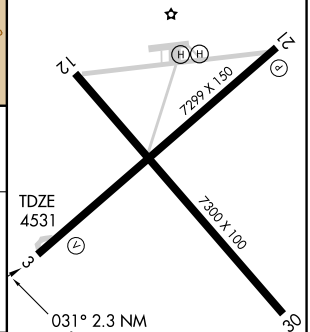
MISSED APPROACH: Climb to 10000 via BAM VORTAC R-031 to RITYO/BAM 4.3 DME and left turn direct BAM VORTAC and via BAM VORTAC R-205 to FESUD/BAM 15 DME and right turn direct BAM VORTAC and hold.

AWOS-3 119.45	SALT LAKE CITY CENTER 132.25 338.35	UNICOM 122.8 (CTAF) L





CATEGORY	A	B	C	D
S-3	4960-1	429 (500-1)	NA	
CIRCLING	4960-1 428 (500-1)	5000-1 468 (500-1)	NA	



MIRL Rwys 3-21 and 12-30 L

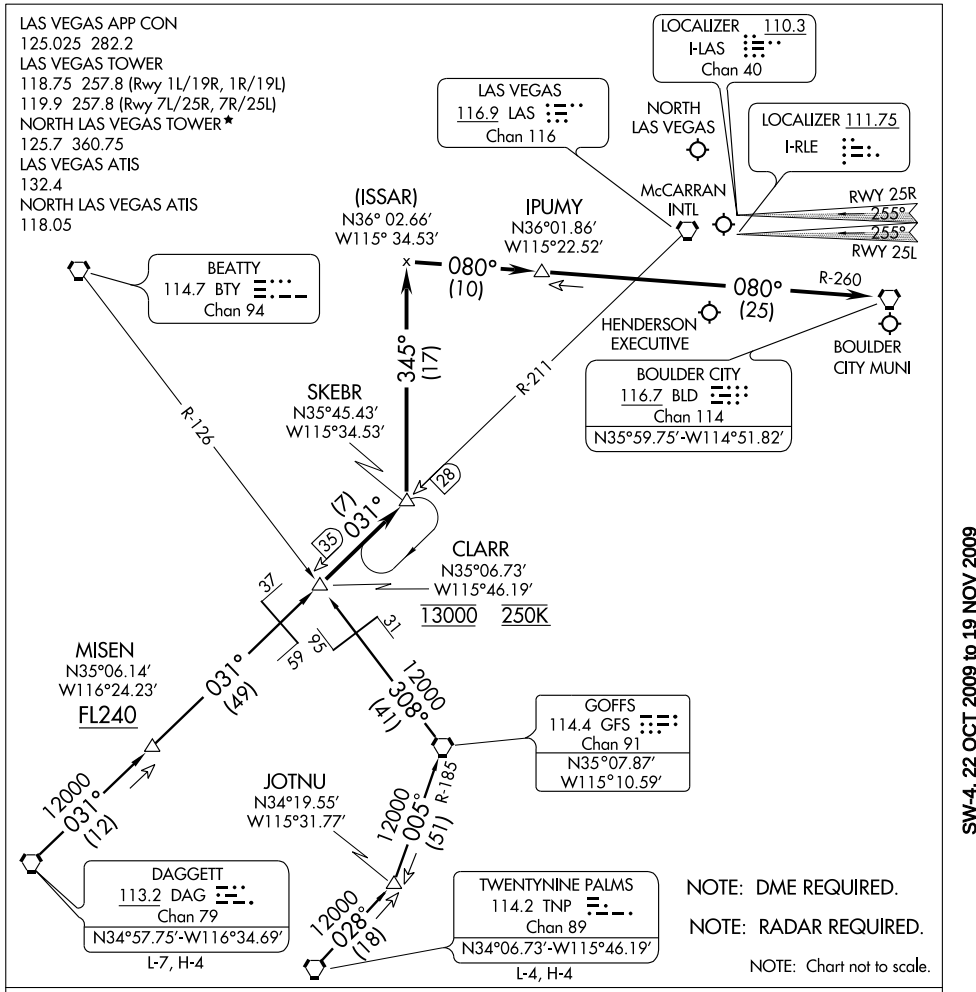
SW-4, 22 OCT 2009 to 19 NOV 2009

(CLARR.CLARR2) 09239

CLARR TWO ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA



DAGGETT TRANSITION (DAG.CLARR2): From over DAG VORTAC via DAG R-031 and LAS R-211 to CLARR INT. Thence. . . .

TWENTYNINE PALMS TRANSITION (TNP.CLARR2): From over TNP VORTAC via TNP R-028 to JOTNU INT, then via GFS R-185 to GFS VORTAC, then via GFS R-308 and BTY R-126 to CLARR INT. Thence. . . .

....From over CLARR INT via LAS R-211 to SKEBR INT. Thence. . . .

LANDING McCARRAN INTL: Via heading 345° to intercept the BLD R-260 to BLD VORTAC. Rwys 1L/R, 7L/R, and 19L/R expect radar vectors for visual approach prior to BLD VORTAC. Rwys 25L/R expect ILS approach procedure.

LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: After SKEBR INT expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

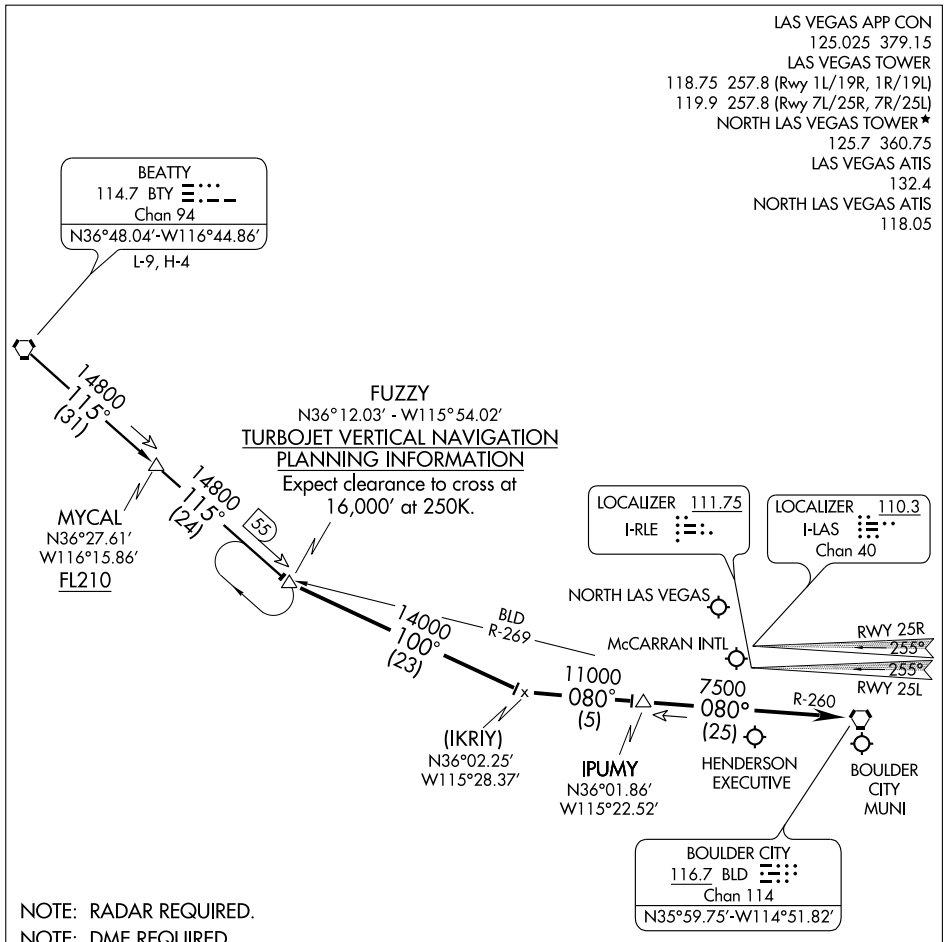
(FUZZY.FUZZY7) 07298

FUZZY SEVEN ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA

LAS VEGAS APP CON
125.025 379.15
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
NORTH LAS VEGAS TOWER★
125.7 360.75
LAS VEGAS ATIS
132.4
NORTH LAS VEGAS ATIS
118.05



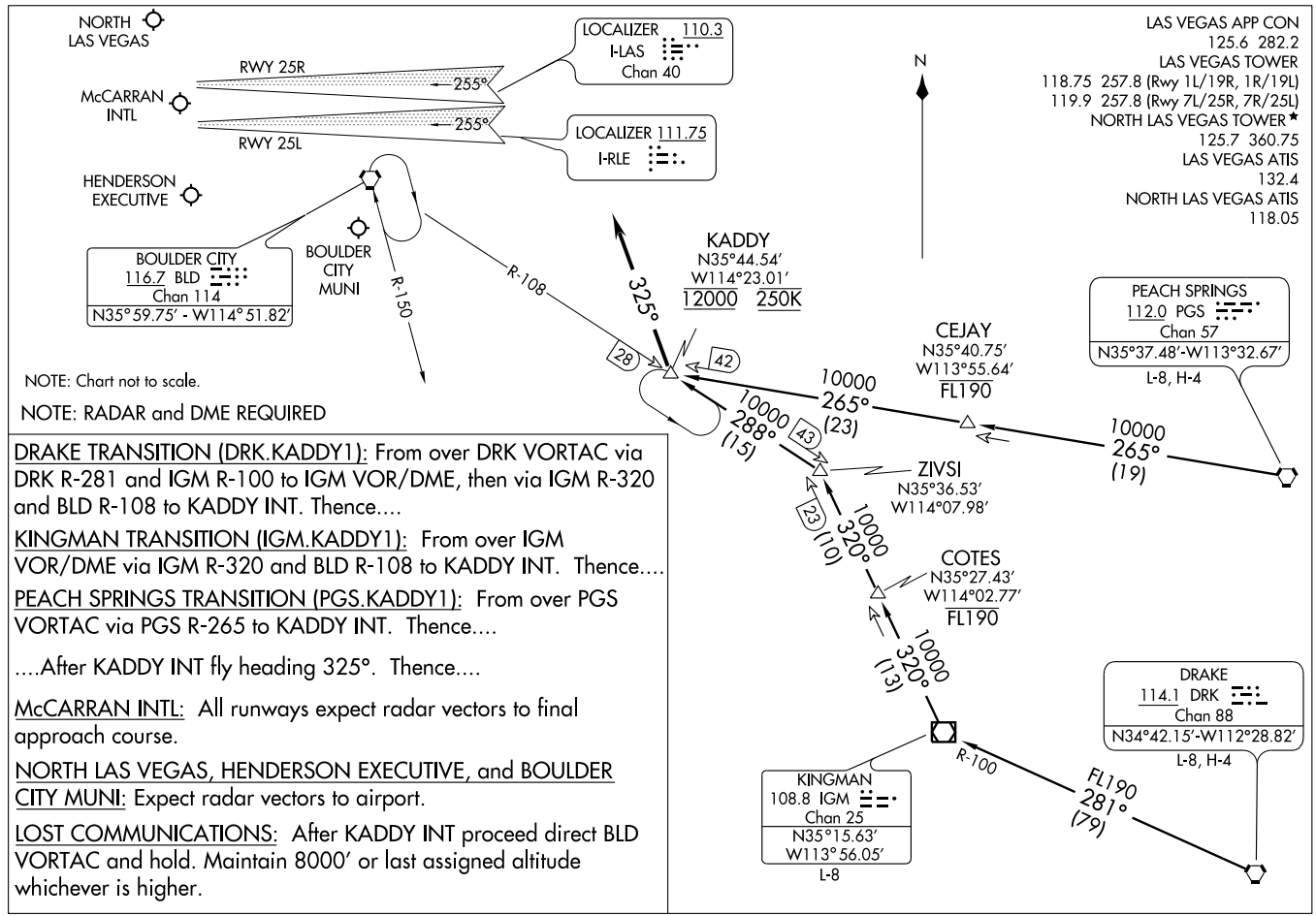
NOTE: RADAR REQUIRED.
NOTE: DME REQUIRED.
NOTE: Chart not to scale.

BEATTY TRANSITION (BTY.FUZZY7): From over BTY VORTAC via BTY R-115 to FUZZY INT. Thence . . .
. . . From over FUZZY via heading 100° to intercept BLD R-260 to BLD VORTAC.

LANDING McCARRAN INTL RWYS 1L/R, 7L/R, and 19L/R: Expect vectors for visual approach prior to BLD VORTAC.
LANDING McCARRAN INTL RWYS 25L/R: Expect ILS approach.
LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI : After IPUMY, expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

KADDY ONE ARRIVAL (KADDY.KADDY1)



NOTE: Chart not to scale.

NOTE: RADAR and DME REQUIRED

DRAKE TRANSITION (DRK.KADDY1): From over DRK VORTAC via DRK R-281 and IGM R-100 to IGM VOR/DME, then via IGM R-320 and BLD R-108 to KADDY INT. Thence....

KINGMAN TRANSITION (IGM.KADDY1): From over IGM VOR/DME via IGM R-320 and BLD R-108 to KADDY INT. Thence....

PEACH SPRINGS TRANSITION (PGS.KADDY1): From over PGS VORTAC via PGS R-265 to KADDY INT. Thence....

....After KADDY INT fly heading 325°. Thence....

McCARRAN INTL: All runways expect radar vectors to final approach course.

NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

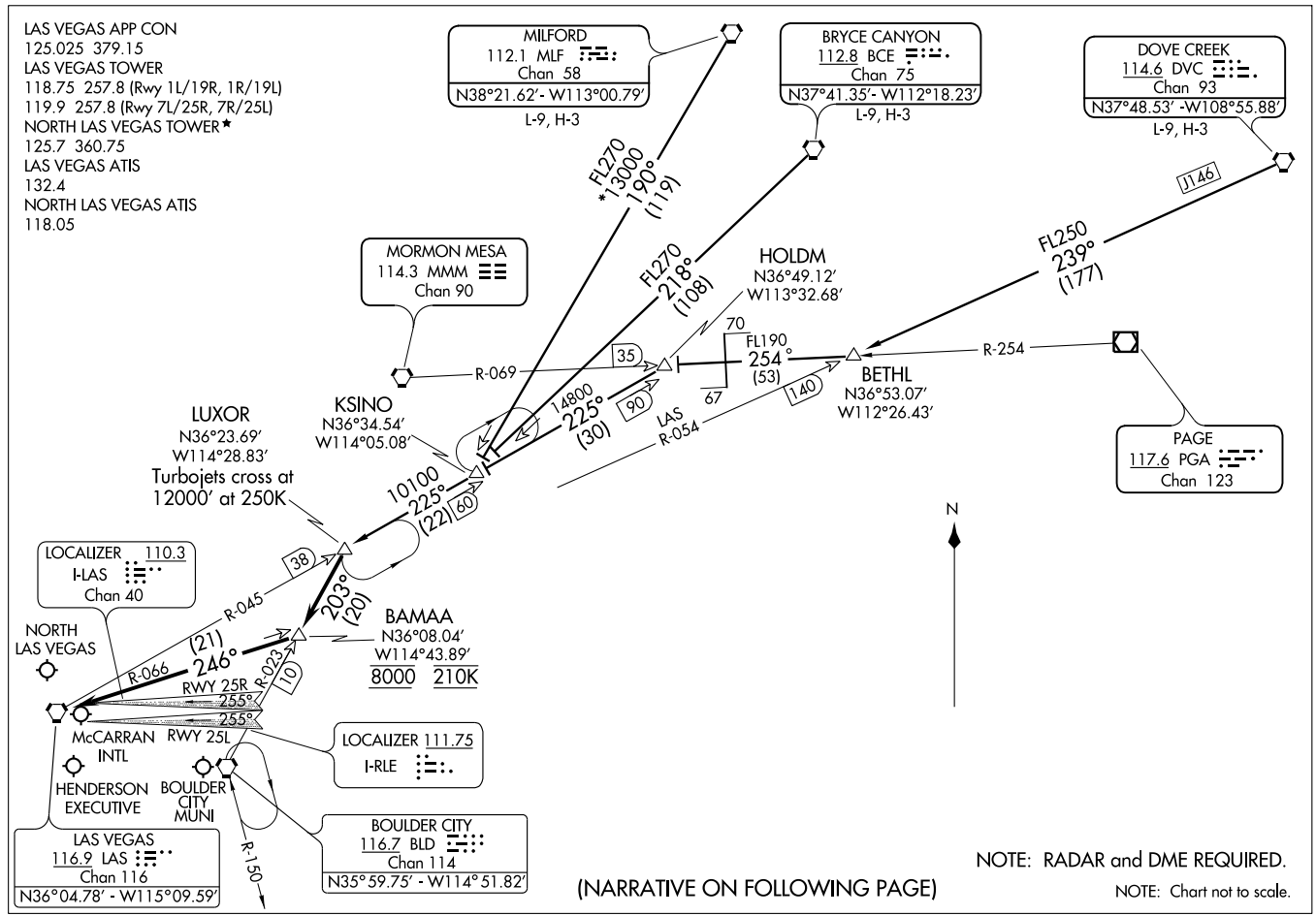
LOST COMMUNICATIONS: After KADDY INT proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

07298

ST-662 (FAA)

LAS VEGAS, NEVADA

LUXOR TWO ARRIVAL



ARRIVAL DESCRIPTION

BETHL TRANSITION (BETHL.LUXOR2): From over BETHL INT via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

BRYCE CANYON TRANSITION (BCE.LUXOR2): From over BCE VORTAC via BCE R-218 and LAS R-045 to LUXOR INT. Thence. . . .

DOVE CREEK TRANSITION (DVC.LUXOR2): From over DVC VORTAC via DVC R-239 and LAS R-054 to BETHL INT, then via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

MILFORD TRANSITION (MLF.LUXOR2): From over MLF VORTAC via MLF R-190 and LAS R-045 to LUXOR INT. Thence. . . .

. . . .From over LUXOR INT via BLD R-023 to BAMAA INT, thence via LAS R-066 to LAS VORTAC. Thence. . . .

LANDING McCARRAN INTL: All runways expect radar vectors to final approach course.

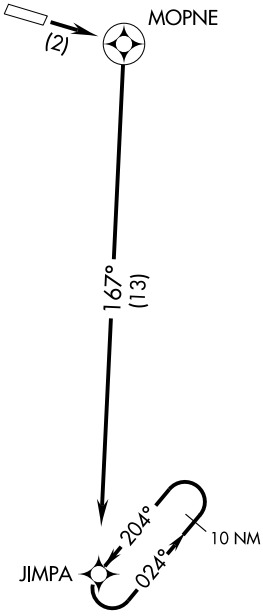
LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

LOST COMMUNICATIONS: After LAS VORTAC proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

SW-4, 22 OCT 2009 to 19 NOV 2009

JIMPA ONE DEPARTURE (RNAV) (OBSTACLE)

AWOS-3
119.925
RENO DEP CON
119.2 279.55



TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 528 feet per NM to 11400 feet.
Rwy 27: NA - Obstacles.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 9: Climb direct MOPNE, then via 167° track to JIMPA. Continue climb-in-hold to 15000 before proceeding on course.

SW-4, 22 OCT 2009 to 19 NOV 2009

CARSON CITY, NEVADA

AL-6515 (FAA)

APP CRS	Rwy Idg	N/A
340°	TDZE	N/A
	Apt Elev	4700

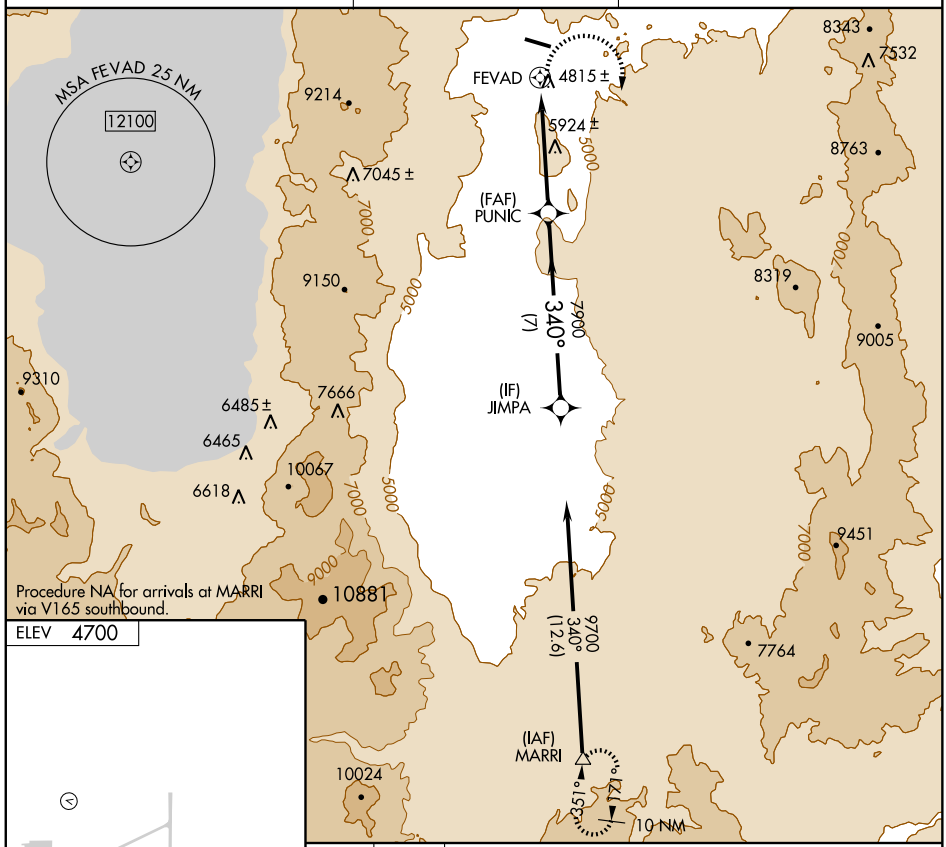
RNAV (GPS)-A

CARSON (CXP)

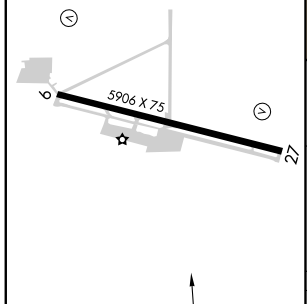
When local altimeter setting not received, use Reno/Tahoe Intl altimeter setting and increase all MDAs 100 feet.
Procedure NA at night.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 13000 direct MARRI and hold, continue climb-in-hold to 13000.

AWOS-3	RENO APP CON	UNICOM
119.925	119.2 279.55	123.0 (CTAF)

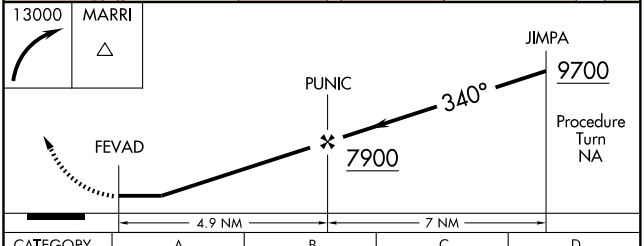


ELEV 4700



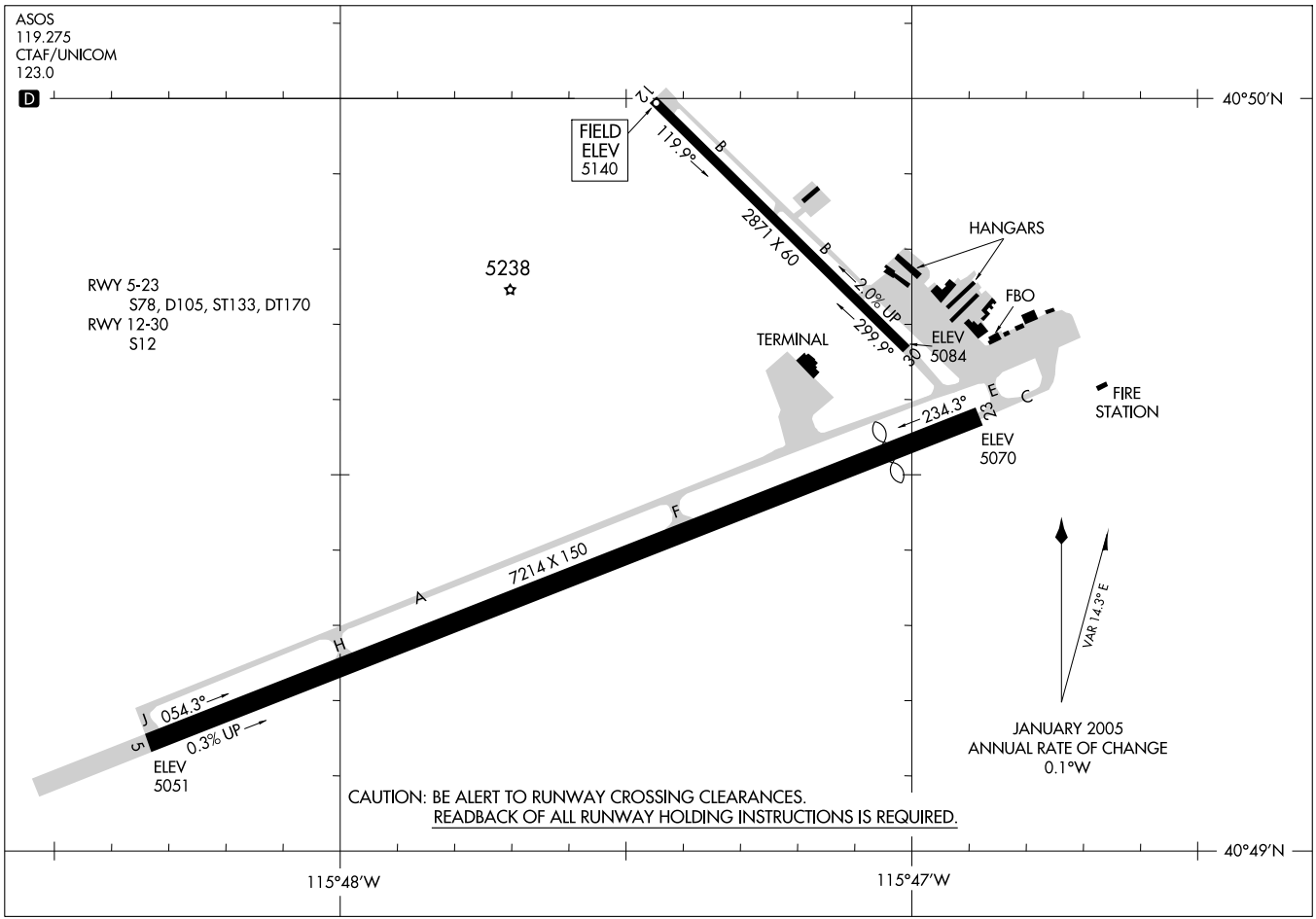
MIRL Rwys 9-27

340° to FEVAD



CATEGORY	A	B	C	D
CIRCLING	6380-1½	1680 (1700-1½)	6380-3 1680 (1700-3)	6420-3 1720 (1800-3)

SW-4, 22 OCT 2009 to 19 NOV 2009



AIRPORT DIAGRAM

AL-129 (FAA)

ELKO RGNL (EKO)

ELKO, NEVADA

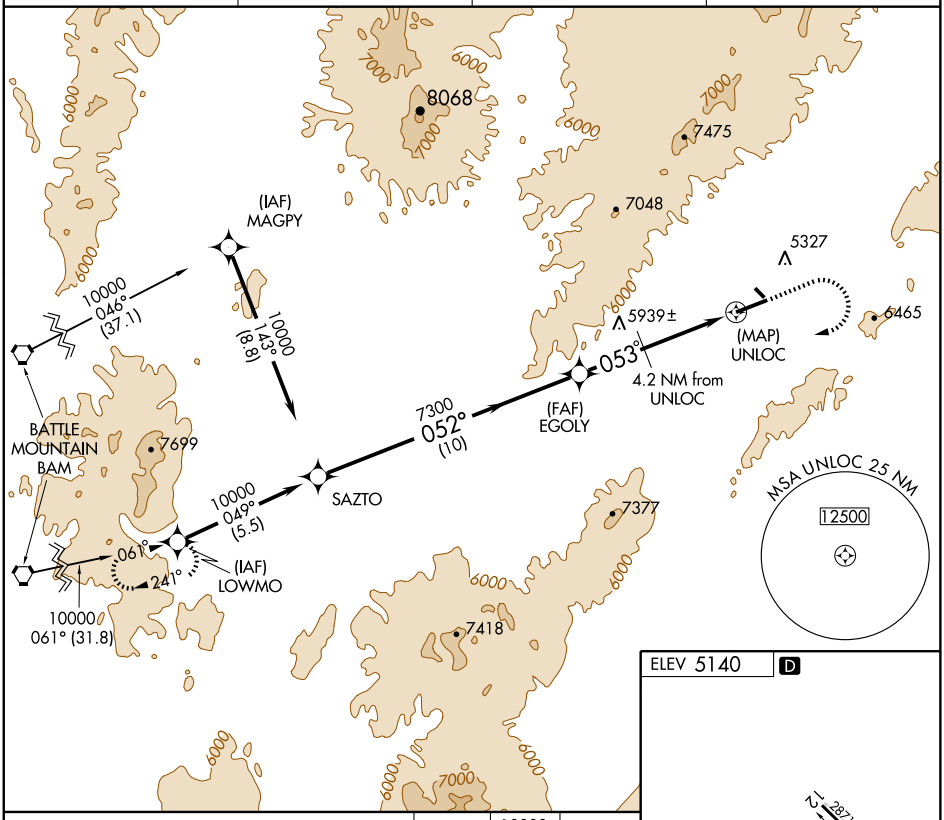
APP CRS	Rwy Idg	7214
053°	TDZE	5047
	Apt Elev	5140

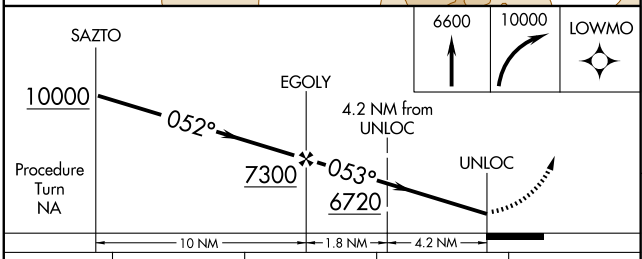
GPS RWY 5
ELKO RGNL (EKO)

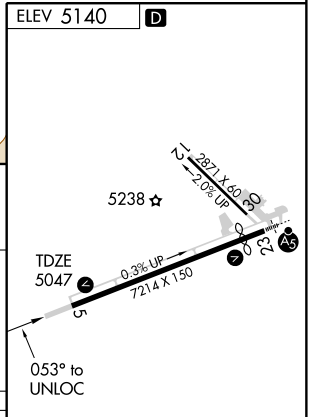
NA

MISSED APPROACH: Climb to 6600, then climbing right turn to 10000 direct LOWMO WP and hold.

ASOS	SALT LAKE CENTER	UNICOM	
119.275	132.25 338.35	123.0 (CTAF)	122.7 L







CATEGORY	A	B	C	D
S-5	6220-1¼ 1173 (1100-1¼)	6220-1½ 1173 (1100-1½)	6220-3 1173 (1100-3)	
CIRCLING	6220-1¼ 1085 (1100-1¼)	6220-1½ 1085 (1100-1½)	6220-3 1085 (1100-3)	

MIRL Rwy 5-23 L

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-EKO	APP CRS	Rwy Idg	6410
108.5	239°	TDZE	5064
Chan 22		Apt Elev	5140

LDA/DME RWY 23

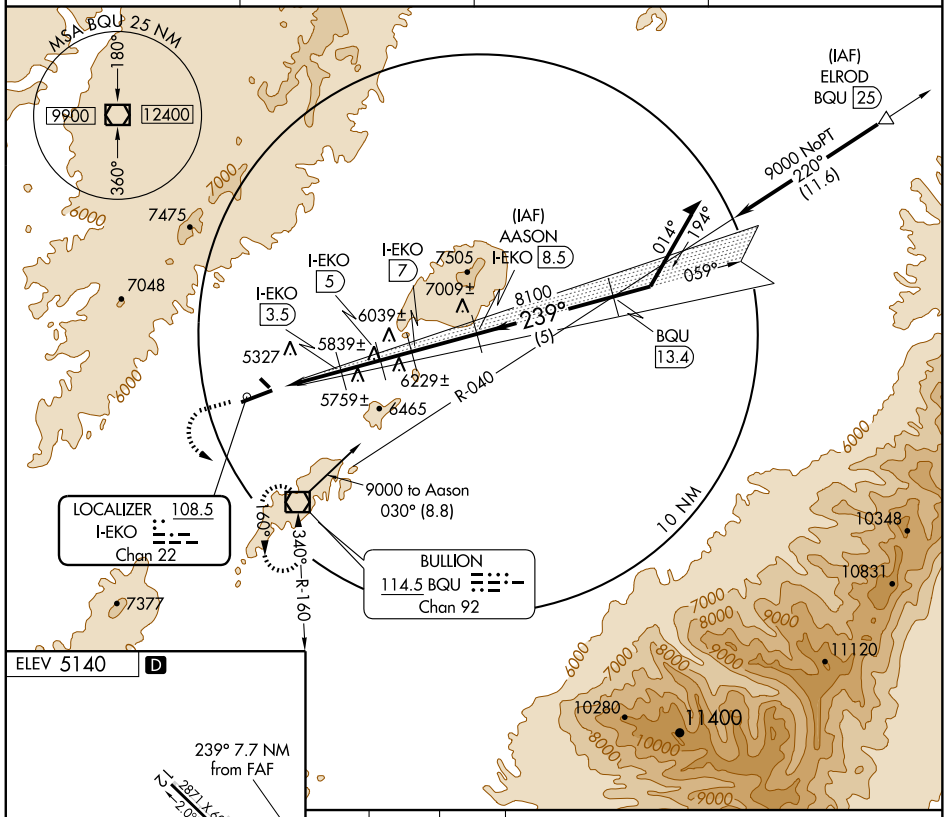
ELKO RGNL (EKO)

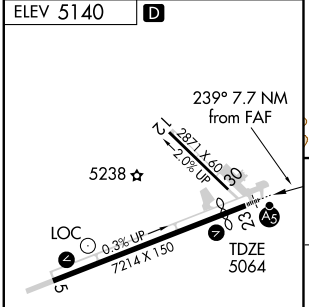
Inoperative table does not apply to Cat. A and B.

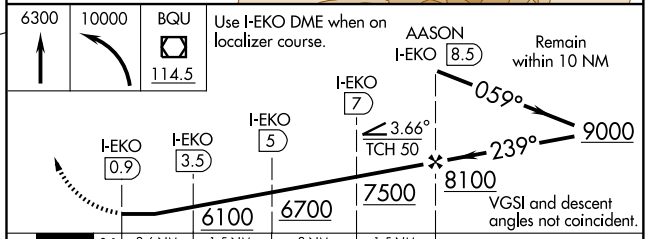
MALSR

MISSED APPROACH: Climb to 6300 then climbing left turn to 10000 direct BQU VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM	
119.275	132.25 338.35	123.0 (CTAF)	122.7 L







CATEGORY	A	B	C	D
S-23	5660-1 596 (600-1)			5660-1¼ 596 (600-1¼)
CIRCLING	6020-1 880 (900-1)	6020-1¼ 880 (900-1¼)	6140-3 1000 (1000-3)	6220-3 1080 (1100-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6410
241°	TDZE	5064
	Apt Elev	5140

RNAV (GPS) RWY 23

ELKO RGNL (EKO)

Inoperative table does not apply.
DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 6600 then climbing left turn to 10000 direct BQU VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM	
119.275	132.25 338.35	123.0 (CTAF)	122.7 L

Procedure NA for arrivals at ARAYI via V6 southwestbound and arrivals at BUCAK via V465 northeastbound.

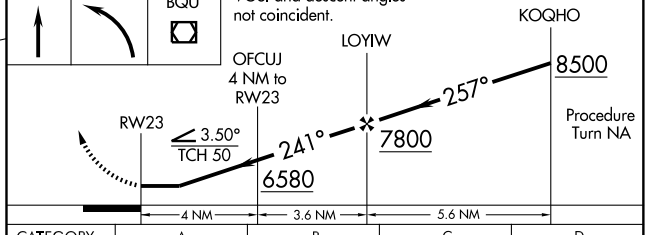
ARAYI
8500
105°
(9.8)
(IAF)
BUCAK
8500
206°
(8.1)
(IF)
KOQHO
7800
257°
(5.6)
OFCUJ
4 NM to
RW23
241°
(FAF)
LOYIW
RW23
5327
6328±
6465
6479±
6900±
7505
7475
7048
7000
6000
9167
10348
10831
11120
10280
11400
BULLION
BQU
090°
340°
6 NM
7377
MSA RW23 25 NM
12600

ELEV 5140 D

5238
2871 X 60
2.0% UP
241° to
RW23
0.3% UP
7214 X 150
TDZE
5064

6600 | 10000 | BQU

VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
LNAV MDA	6500-1¼ 1436 (1400-1¼)	6500-1½ 1436 (1400-1½)	6500-3	1436 (1400-3)
CIRCLING	6500-1¼ 1360 (1400-1¼)	6500-1½ 1360 (1400-1½)	6500-3	1360 (1400-3)

MIRL Rwy 5-23 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME BQU	APP CRS	Rwy Idg	N/A
114.5	324°	TDZE	N/A
Chan 92		Apt Elev	5140

VOR-A

ELKO RGNL (EKO)

MISSED APPROACH: Climbing left turn to 10000 direct BQU VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM	
119.275	132.25 338.35	123.0 (CTAF)	122.7 L

MSA BQU 25 NM
180°
10000 12600
360°

8068 7475 7505 7048 5327 6465 6579± 7377 10280 11400

Descend in BQU VOR/DME holding pattern to 11000 before commencing procedure turn.

IAF
BULLION
114.5 BQU
Chan 92

340° R-160 324° 10 NM 189° 600 R-144

ELEV 5140 D

5238

2871 X 60 20% UP
7214 X 150 0.3% UP
5 23

324° 4 NM from FAF

MIRL Rwy 5-23 L

10000 BQU 114.5

VOR/DME

144° 8900 324° 7500

Remain within 10 NM

4 NM

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

CATEGORY	A	B	C	D
CIRCLING	6580-1¼ 1440 (1500-1¼)	6580-1½ 1440 (1500-1½)	6580-3 1440 (1500-3)	

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME BQU	APP CRS	Rwy Idg	N/A
114.5	324°	TDZE	N/A
Chan 92		Apt Elev	5140

VOR/DME-B
ELKO RGNL (EKO)

MISSED APPROACH: Climbing left turn to 10000 direct BQU VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM	122.7 L
119.275	132.25 338.35	123.0 (CTAF)	

MSA BQU 25 NM
180° 10000 12600 360°

(IAF) OLGAA BQU 10
(IAF) MUNGO BQU 10
(IAF) SIKEE BQU 25
BAGKA BQU 4
ATACI BQU 2
PEPIY BQU 10
BUTTA BQU 10
DUCAY BQU 17
IAF BULLION 114.5 BQU Chan 92

R-241 R-040 R-160 R-115 R-137 R-144
324° 340° 189° 009°
10 NM
12000 NoPT to PEPIY BQU 10 Arc
9500 NoPT BQU 10 Arc
13000 NoPT 37° (8)

7048 7505 5327 6465 5919± 6529± 7377 7418 7172 10280 11400 10922 11080 10941 10680

7500 324° (10)

9500 to BUTTA 288° (3.5) and 324° (4)

Descend in BQU VOR/DME holding pattern to 11000 before commencing procedure turn.

ELEV 5140 D
5238
2871 X 60 2.0% UP
7214 X 150 0.3% UP
5 23

324° 4 NM from FAF

MIRL Rwy 5-23 L

10000 BQU 114.5 VOR/DME Remain within 10 NM
ATACI BQU 2
BAGKA BQU 4
144° 324° 9500 7500 6860
2 NM 2 NM

CATEGORY	A	B	C	D
CIRCLING	6260-1¼ 1120 (1200-1¼)	6260-1½ 1120 (1200-1½)	6260-3 1120 (1200-3)	

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6018
177°	TDZE	6242
	Apt Elev	6259

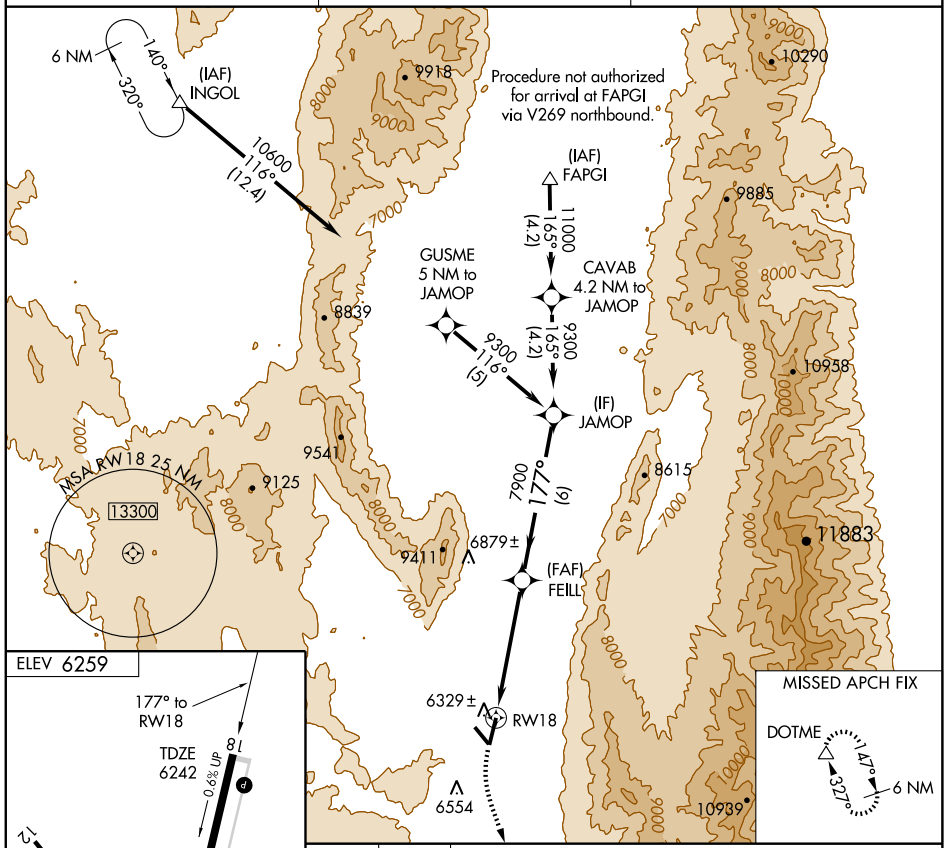
RNAV (GPS) RWY 18

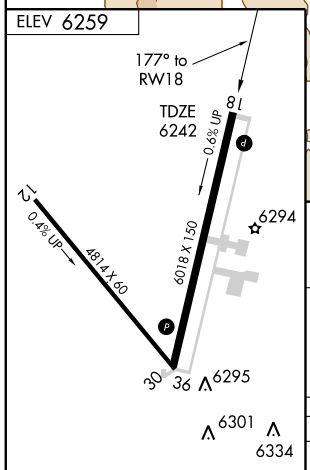
ELY AIRPORT-YELLAND FIELD (ELY)

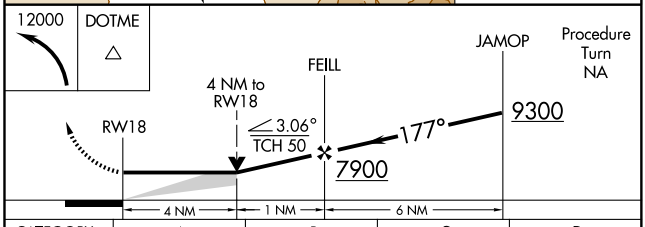
T DME/DME RNP- 0.3 NA.
NA Circling NA southwest of Rwys 12 and 36.
Straight in minimums NA at night.

MISSED APPROACH: Climbing left turn to 12000 direct DOTME WP and hold.

ASOS	SALT LAKE CENTER	UNICOM
120.625	133.45 317.625	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7540-1¼ 1298 (1300-1¼)	7540-1½ 1298 (1300-1½)	7540-3	1298 (1300-3)
CIRCLING	7540-1¼ 1281 (1300-1¼)	7540-1½ 1281 (1300-1½)	7540-3	1281 (1300-3)

REIL Rwy 18-36 L
MIRL Rwys 12-30 and 18-36 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME ELY	APP CRS	Rwy Idg	N/A
110.6	109°	TDZE	N/A
Chan 43		Apt Elev	6259

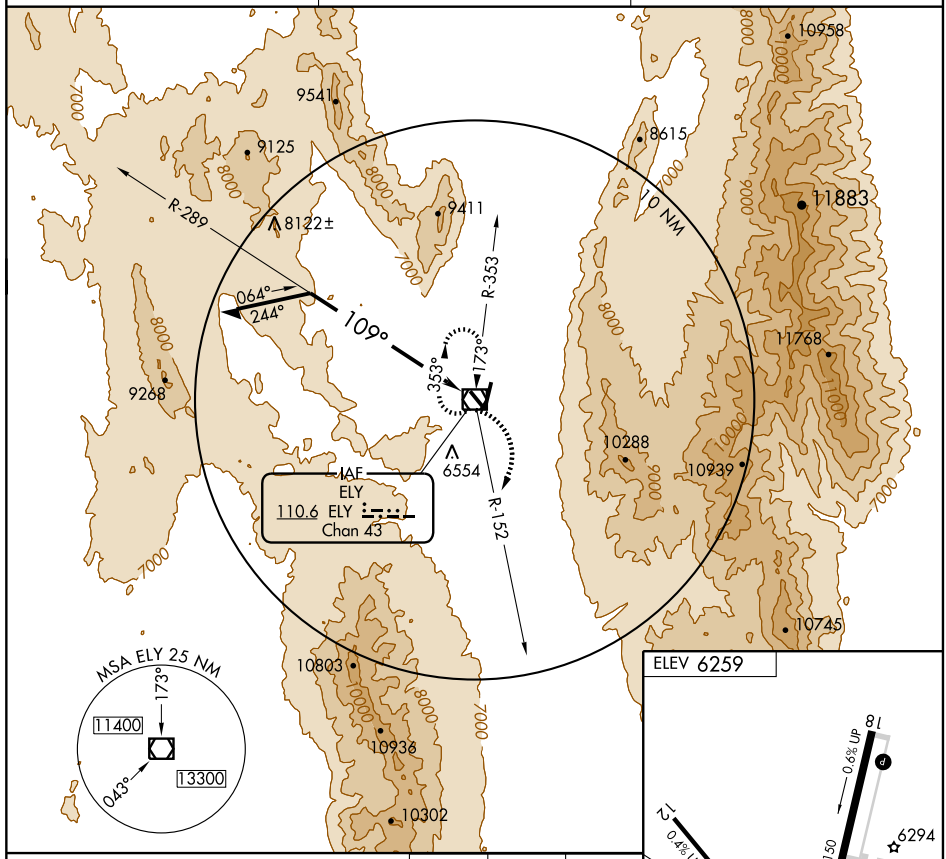
VOR-A

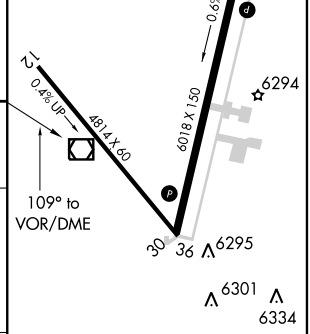
ELY AIRPORT-YELLAND FIELD (ELY)

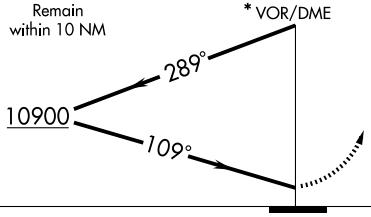
NA

MISSED APPROACH: Climbing right turn to 10800 via ELY R-152, then climbing left turn to 12000 direct ELY VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
120.625	133.45 317.625	122.8 (CTAF) L







10800	12000	ELY
ELY R-152		110.6

* Maintain 12000 or above until established outbound for procedure turn.

CATEGORY	A	B	C	D
CIRCLING	9400-1¼ 3141 (3200-1¼)	9400-1½ 3141 (3200-1½)	9400-3 3141 (3200-3)	

REIL Rwys 18-36 L
MIRL Rwys 12-30 and 18-36 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME ELY	APP CRS	Rwy Idg	N/A
110.6	179°	TDZE	N/A
Chan 43		Apt Elev	6259

VOR/DME-C

ELY AIRPORT-YELLAND FIELD (ELY)

T
NA Circling not authorized southwest of Rwys 12 and 36.

MISSED APPROACH: Climb to 7900 then climbing left turn to 12000 via R-147 to DOTME/ELY 29 DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
120.625	133.45 317.625	122.8 (CTAF) L

MSA ELY 25 NM
173°
11400
13300
043°

VIANT ELY 16
JAMKI ELY 16
(IAF) HARRV ELY 16
13000 to JAMKI ELY 16 Arc
11200 ELY 16 Arc
R-359
R-343
R-321
10400 179° (3.5)
9100 179° (5.7)
JASIS ELY 12.5
MCGIL ELY 6.8
BIVNE ELY 0.8
ELY 110.6 ELY Chan 43
10 NM
6554
9885
10958
8839
9541
9125
9411
8615
11883
11768
9268
10939
10803
R-147
MISSED APCH FIX
110.6 ELY Chan 43
DOTME ELY 29
147°
327°

ELEV 6259
179° 6 NM from FAF
18
0.6% UP
12
0.4% UP
4814 X 60
6018 X 150
6294
30
36
6295
6301
6334

7900	12000 ELY R-147	DOTME

JASIS ELY 12.5
VIANT ELY 16
MCGIL ELY 6.8
11200
BIVNE ELY 0.8
179°
10400
9100
Procedure Turn NA
6 NM
5.7 NM
3.5 NM

CATEGORY	A	B	C	D
CIRCLING	7620-1¼ 1361 (1400-1¼)	7620-1½ 1361 (1400-1½)	7620-3 1361 (1400-3)	

REIL Rwy 18-36 L
MIRL Rwys 12-30 and 18-36 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC HZN	APP CRS	Rwy Idg	N/A
114.1	078°	TDZE	N/A
Chan 88		Apt Elev	3966

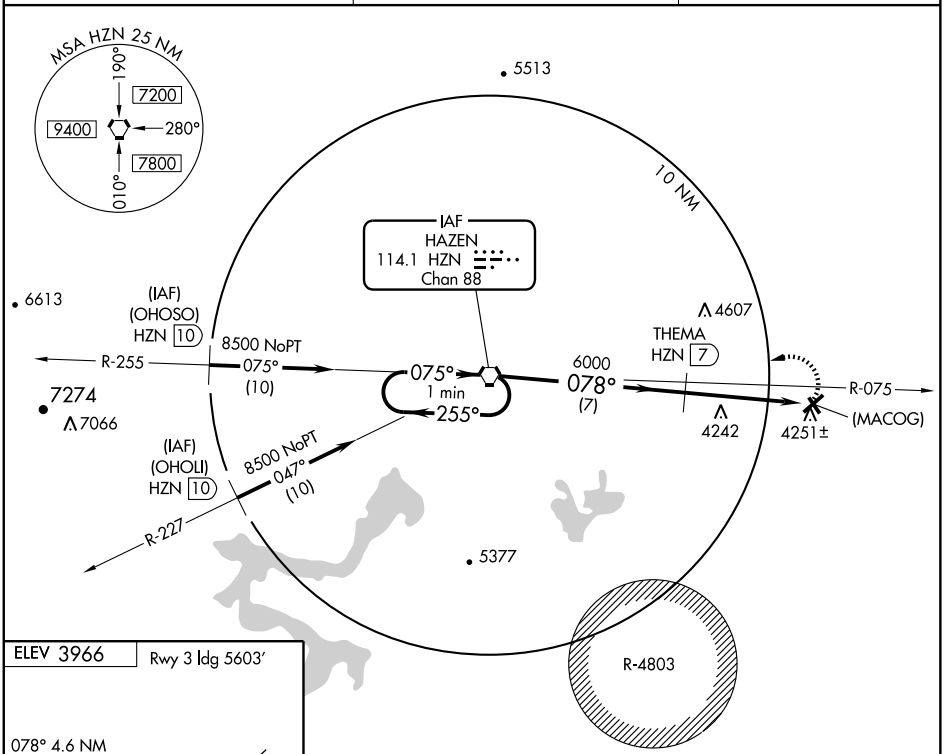
VOR/DME or GPS-B

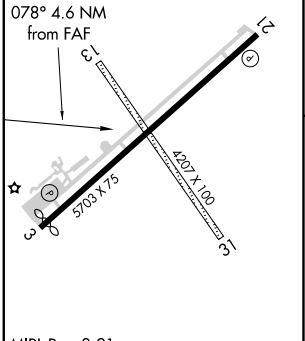
FALLON MUNI (FLX)

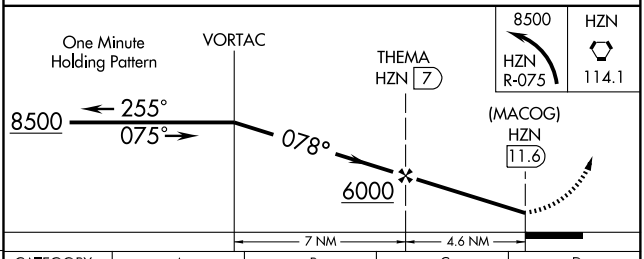
Use NAS Fallon altimeter setting; when not available, procedure not authorized.
NA Contact Fallon Approach Control for approach clearance, if unable contact Oakland ARTCC.

MISSED APPROACH: Climbing left turn to 8500 via R-075 to HZN VORTAC and hold, continue climb-in-hold to 8500.

NAVY FALLON APP CON★	OAKLAND CENTER	UNICOM
120.85 360.2	128.8 285.5	122.8 (CTAF)



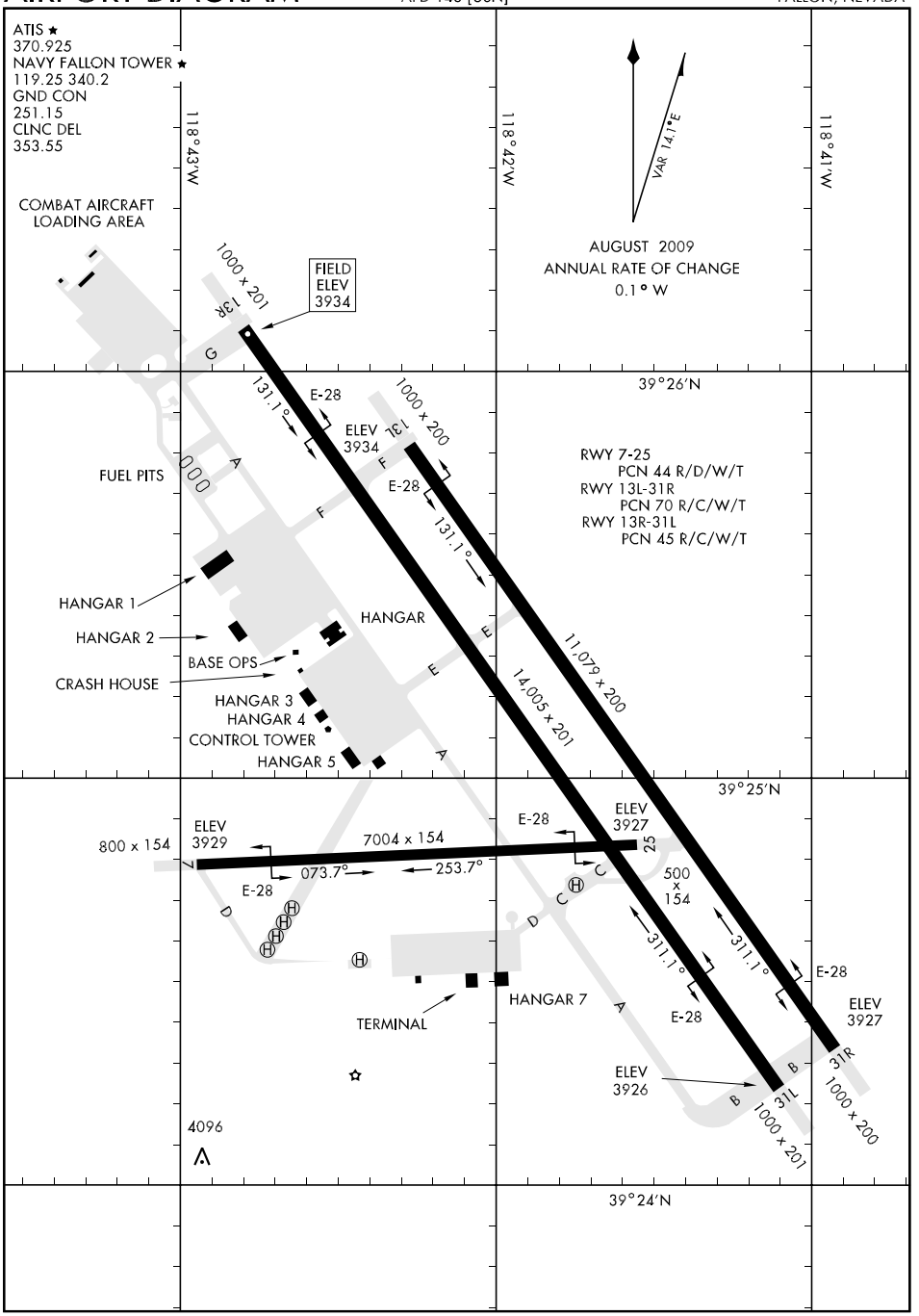




Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	4580-1 614 (700-1)		4580-1¾ 614 (700-1¾)	4580-2 614 (700-2)

SW-4, 22 OCT 2009 to 19 NOV 2009



SW-4, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 13R

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
NFL Chan 82	139°	14,005	3934	3934

JAL-143 [USN]

FALLON NAS (VAN VOORHIS FLD) (KNFL)

* MISSED APPROACH: Turn left, climb to 9000 on NFL TACAN R-115 to 20 DME (MUFIT).

ATIS *	NAVY FALLON APP CON	NAVY FALLON TOWER*	GND CON	CLNC DEL	ASR/PAR
370.925	120.85 360.2	119.25 340.2	251.15	353.55	

CAUTION:
Fallon Muni Airport (uncontrolled) 5 NM NW.
PATTERN alt 800' AGL.

* CAUTION: Missed Approach Minimum Climb Rate to 9000

Knots	120	180	240	300	360
V/V(fpm)	436	654	872	1090	1308

ATC Minimum Climb Rate

R-4813 R-4803 R-4804 R-4812 R-4810

FALLON Chan 82 NFL

FALLON MUNI

LR-329 R-319 NFL 12 Arc R-040 NFL 18 240° R-060 NFL 33

(IAF) CALAI NFL 25 8785

4655 139° 4010 NFL 5 5487 6217 8312

MUFIT NFL 20

6404 8303

MSA NFL 2.5 NM 195° 20 NM 025° 295° 115° R-115 NFL 25

8200 9800 8500

6084

Max holding alt 10,000
Min holding alt 9000

EMERG SAFE ALT 100 NM 15,600

CALAI R-060 25 R-060 18 R-060 12 R-040 12 R-319 12 240° FL200 13,000 9000 7400 7100 139° Arc 12 5400 TACAN 5 2 1.8 3.2

9000 NFL R-115 MUFIT NFL 20

ELEV 3934

139° to TACAN

TDZE 3934

4024 7004 x 154 14,005 x 200 11,079 x 200 13R 31L 7 25

4096 3984

HIRL all Rwy

CATEGORY	C	D	E
S-13R	4360-1¼ 426 (500-1¼)		4360-1½ 426 (500-1½)
CIRCLING	4400-1½ 466 (500-1½)	4520-2 586 (600-2)	4980-3 1046 (1100-3)
S-PAR 13R	4134-¾ 200 (200-¾) GS 3.0		

SW-4, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 31 L/R

TACAN	APCH CRS	Rwy Idg	31L 14,005	31R 11,079
NFL Chan 82	295°	TDZE	31L 3926	31R 3928
		Arpt Elev 3934		

JAL-143 [USN] FALLON NAS (VAN VOORHIS FLD) (KNFL)

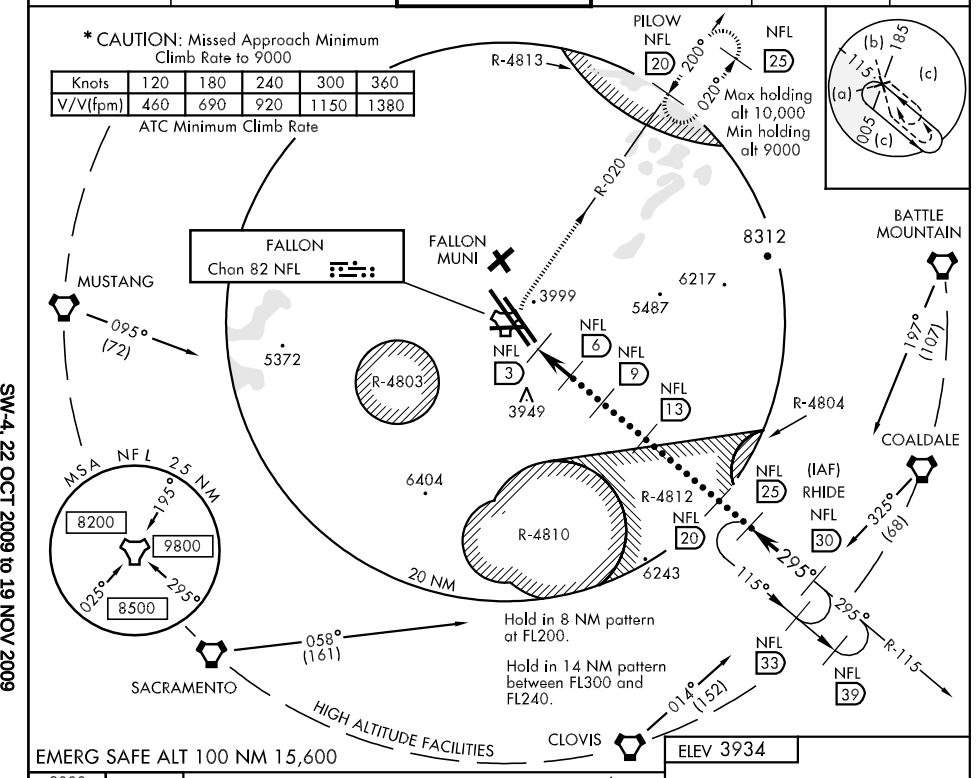
* MISSED APPROACH: Climbing right turn to 9000 on NFL TACAN R-020 to 20 DME (PILOW).

ATIS ★	NAVY FALLON APP CON	NAVY FALLON TOWER★	GND CON	CLNC DEL	ASR/PAR
370.925	120.85 360.2	119.25 340.2	251.15	353.55	

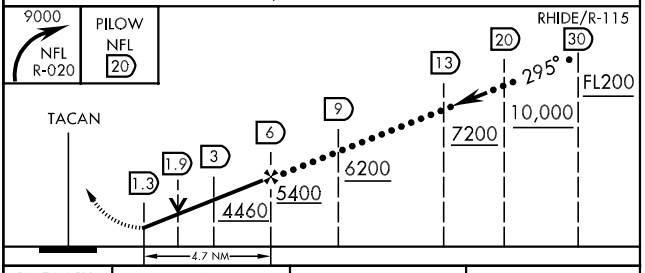
* CAUTION: Missed Approach Minimum Climb Rate to 9000

Knots	120	180	240	300	360
V/V(fpm)	460	690	920	1150	1380

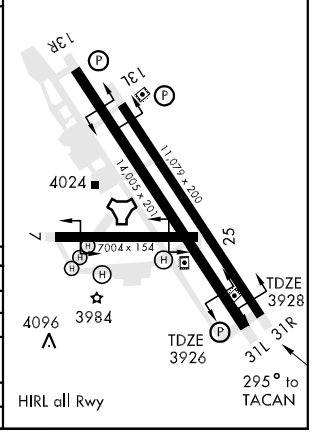
ATC Minimum Climb Rate



EMERG SAFE ALT 100 NM 15,600



CATEGORY	C	D	E
S-31L	4200-1	274 (300-1)	
S-31R	4200-1	272 (300-1)	
CIRCLING	4400-1½ 466 (500-1½)	4520-2 586 (600-2)	4980-3 1046 (1100-3)
S-PAR 31L	4126-¾	200 (200-¾)	GS 3.5°
S-PAR 31R	4128-¾	200 (200-¾)	GS 3.5°



SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 13R

TACAN NFL Chan 82	APCH CRS 139°	Rwy Idg 14,005 TDZE 3934 Arpt Elev 3934

AL-143 [USN] FALLON NAS (VAN VORRHIS FLD) (KNFL)

* MISSED APPROACH: Turn left, climb to 9000 on NFL TACAN R-115 20 DME (MUFIT).

ATIS ★	NAVY FALLON APP CON	NAVY FALLON TOWER★	GND CON	CLNC DEL	ASR/PAR
370.925	120.85 360.2	119.25 340.2	251.15	353.55	

CAUTION: Fallon Muni Airport (uncontrolled) 5 NM NW. PATTERN alt 800' AGL.

LOVELOCK Crosses R-4813

MUSTANG Crosses R-4813

Crosses R-4803N R-4813

HAZEN

YERIN

Crosses R-4813

Crosses R-4813

Crosses R-4812 R-4813

Crosses R-4812

(IAF) PILOW NFL 20

MUFIT NFL 20

FALLON MUNI

FALLON Chan 82 NFL

R-4803

R-020

R-115

R-319

LR-329

Arc

10 NM

ENROUTE FACILITIES

Max holding alt 10,000 Min holding alt 9000

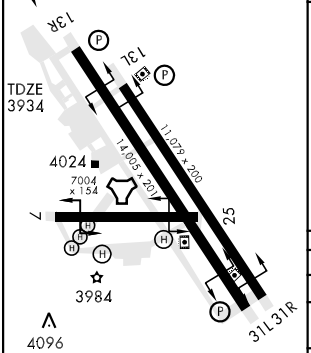
EMERG SAFE ALT 100 NM 15,600

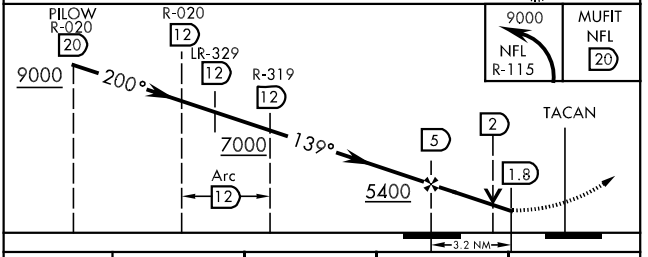
MSA NFL 25 NM 195° 8200 9800 025° 295° 8500

* CAUTION: Missed Approach Minimum Climb Rate to 9000

Knots	60	120	180	240
V/V(fpm)	218	436	654	872

ATC Minimum Climb Rate





CATEGORY	A		B		C		D	
S-13R	4360-1	426	(500-1)		4360-1¼	426	(500-1¼)	
CIRCLING	4400-1	466	(500-1)		4400-1½	466 (500-1½)	4520-2	586 (600-2)
S-PAR 13R	4134- ¾	200	(200- ¾)	GS 3.0°				

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN Y RWY 31L/R

TACAN	APCH CRS	Rwy Idg	31L 14,005	31R 11,079
NFL Chan 82	295°	TDZE	31L 3926	31R 3928
		Arpt Elev 3934		

AL-143 [USN] FALLON NAS (VAN VOORHIS FLD) (KNFL)

* MISSED APPROACH: Climbing right turn to 9000 on NFL TACAN R-020 to 20 DME (PILOW)

ATIS *	NAVY FALLON APP CON	NAVY FALLON TOWER *	GND CON	CLNC DEL	ASR/PAR
370.925	120.85 360.2	119.25 340.2	251.15	353.55	

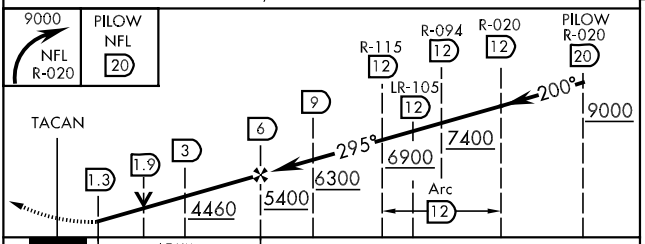
LOVELOCK
9000
151°
(26.9)
Crosses R-4813
NFL 25
200°
020°
Crosses R-4813
(IAF)
PILOW
NFL 20
200°
MUSTANG
10,000
064°
(56.6)
Crosses R-4813
FALLON MUNI
4242
HAZEN
9000
051°
(27.3)
Crosses R-4803N R-4813
FALLON
Chan 82 NFL
R-020
3999
10 NM
ENROUTE FACILITIES
NFL 12 Arc
3949
NFL 3
R-094
NFL 12
LR-105
295°
NFL 6
4885
NFL 9
R-4803
MSA NFL 25 NM
195°
8200
9800
025°
295°
8500
Crosses R-4813
YERIN
10,000
014°
(48.6)
* CAUTION: Missed Approach Minimum Climb Rate to 9000
Crosses R-4812
NFL 12
10,000
339°
(29.5)
MUFIT
NFL 20
Crosses R-4812 R-4813
R-115

Knots	60	120	180	240
V/V(fpm)	230	460	690	920

ATC Minimum Climb Rate

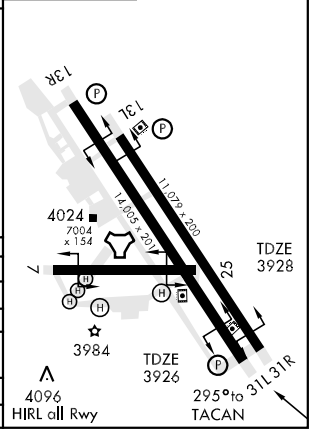
EMERG SAFE ALT 100 NM 15,600

9000
NFL R-020
PILOW NFL 20



CATEGORY	A	B	C	D
S-31L	4200-1	274	(300-1)	
S-31R	4200-1	272	(300-1)	
CIRCLING	4400-1 466 (500-1)		4400-1½ 466 (500-1½)	4520-2 586 (600-2)
S-PAR 31L	4126-¾	200	(200-¾)	GS 3.5°
S-PAR 31R	4128-¾	200	(200-¾)	GS 3.5°

ELEV 3934



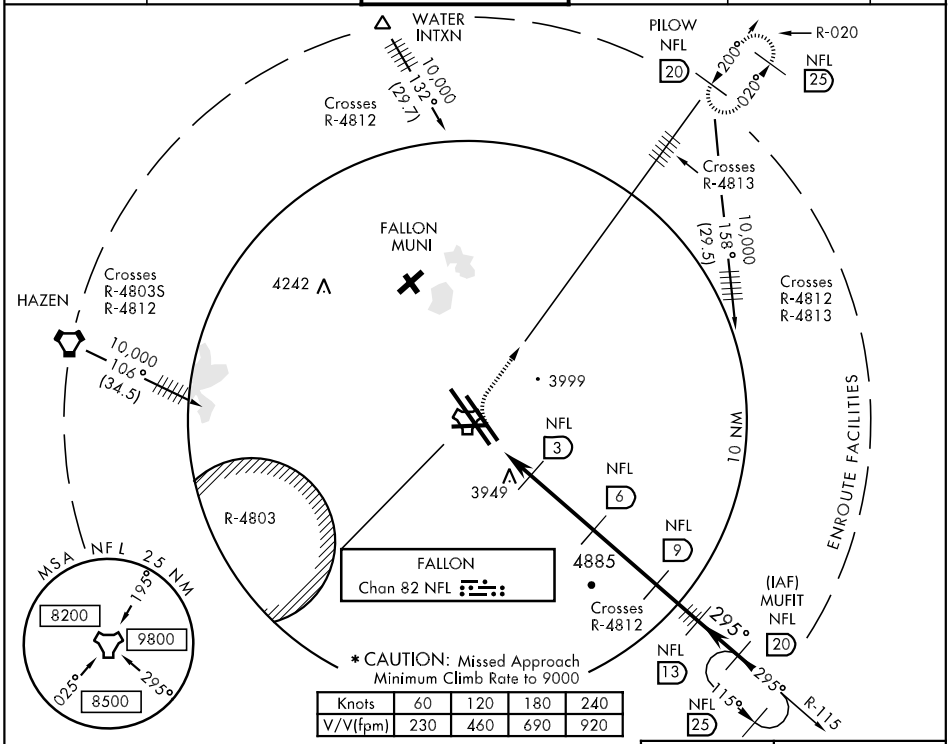
SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN Z RWY 31L/R

TACAN	APCH CRS	Rwy Idg				
NFL Chan 82	295°	TDZE	31L 14,005	31R 11,079	AL-143 [USN] FALLON NAS (VAN VOORHIS FLD)	(KNFL)
		Arpt Elev 3934	31L 3926	31R 3928		

* MISSED APPROACH: Climbing right turn to 9000 on NFL TACAN R-020 to 20 DME (PILOW).

ATIS *	NAVY FALLON APP CON	NAVY FALLON TOWER *	GND CON	CLNC DEL	ASR/PAR
370.925	120.85 360.2	119.25 340.2	251.15	353.55	

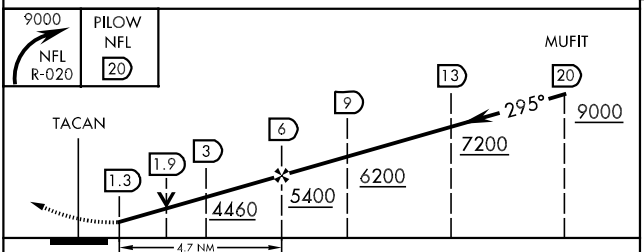


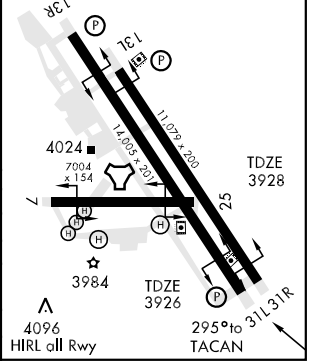
Knots	60	120	180	240
V/V(fpm)	230	460	690	920

ATC Minimum Climb Rate

EMERG SAFE ALT 100 NM 15,600

ELEV 3934





CATEGORY	A	B	C	D
S-31L	4200-1	274	(300-1)	
S-31R	4200-1	272	(300-1)	
CIRCLING	4400-1 466 (500-1)		4400-1½ 466 (500-1½)	4520-2 586 (600-2)
S-PAR 31L	4126- ¾	200	(200-¾)	GS 3.5°
S-PAR 31R	4128- ¾	200	(200-¾)	GS 3.5°

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME or TACAN-A

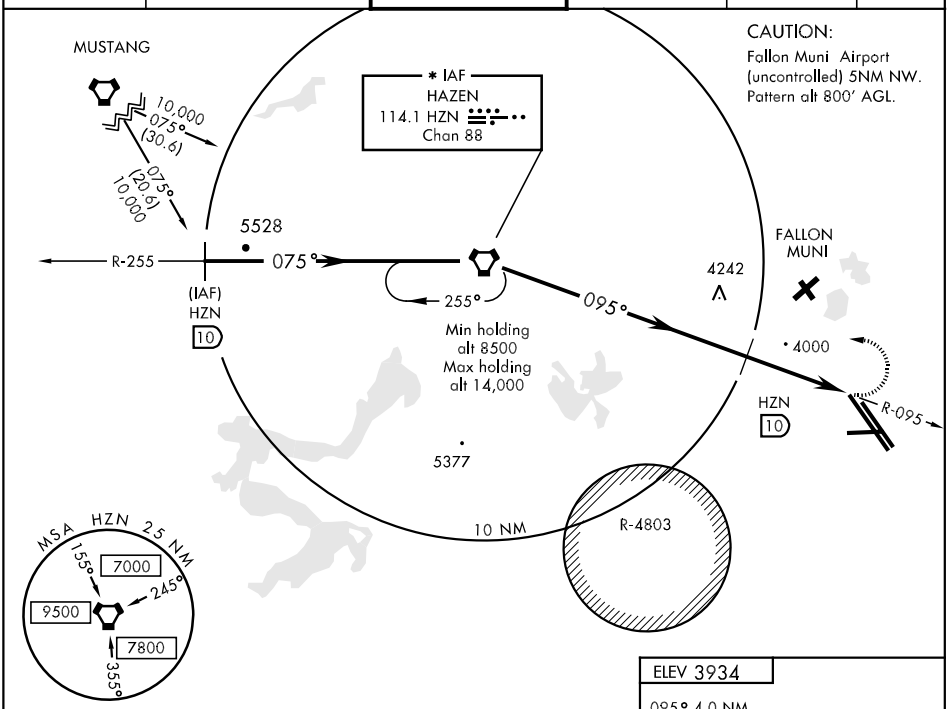
VORTAC HZN	APCH CRS	Rwy Idg	N/A
114.1	095°	TDZE	N/A
Chan 88		Arpt Elev	3934

AL-143 [USN] FALLON NAS (VAN VOORHIS FLD) (KNFL)

* IAF at "HZN" VORTAC at MEA when commencing approach from holding pattern. Descend to cross HZN at 8500 min.

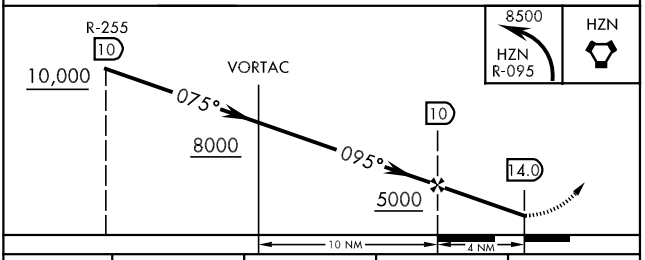
MISSED APPROACH: Turn left, climb to 8500 on HZN VORTAC R-095 to HZN.

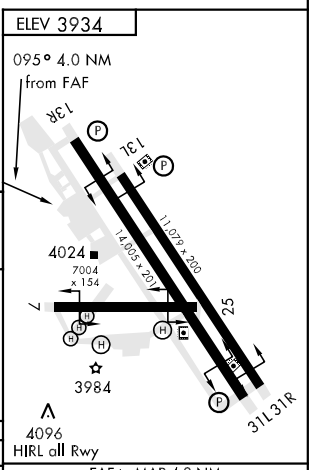
ATIS *	NAVY FALLON APP CON	NAVY FALLON TOWER *	GND CON	CLNC DEL	ASR/PAR
370.925	120.85 360.2	119.25 340.2	251.15	353.55	



Holding not available for TACAN-ONLY aircraft

EMERG SAFE ALT 100 NM 15,600



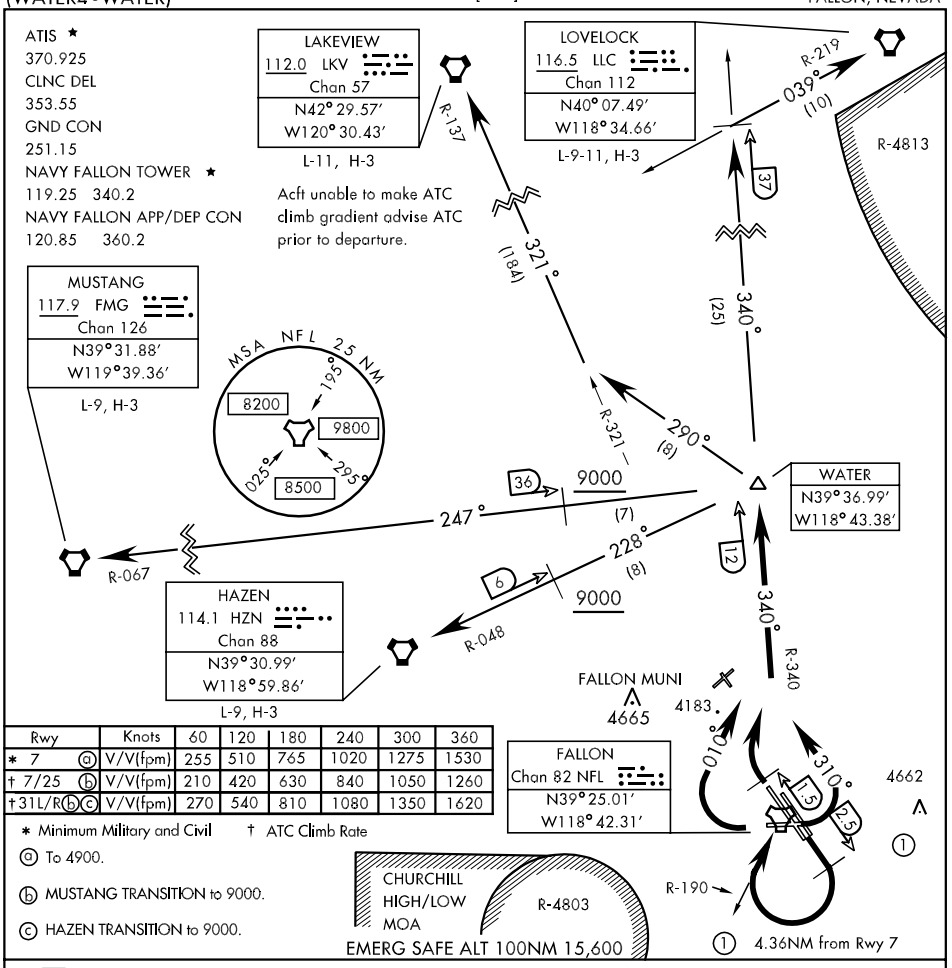


CATEGORY	A	B	C	D
CIRCLING*	4400-1 466 (500-1)		4400-1½ 466 (500-1½)	4520-2 586 (600-2)

FAF to MAP 4.0 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

SW-4, 22 OCT 2009 to 19 NOV 2009



Rwy	Knots	60	120	180	240	300	360
* 7 ⓒ	V/V(fpm)	255	510	765	1020	1275	1530
† 7/25 ⓑ	V/V(fpm)	210	420	630	840	1050	1260
†31L/R ⓑⓒ	V/V(fpm)	270	540	810	1080	1350	1620

* Minimum Military and Civil † ATC Climb Rate

ⓞ To 4900.

ⓑ MUSTANG TRANSITION to 9000.

ⓒ HAZEN TRANSITION to 9000.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 7: Turn left heading 310° to join and fly NFL R-340 to WATER. (Right turn-out not authorized)

TAKE-OFF RWY 13L/R: Climb on runway heading to NFL 2.5 DME, turn right to join and fly NFL R-190 to NFL, NFL R-340 to WATER.

TAKE-OFF RWY 25: Turn right heading 010° to join and fly NFL R-340 to WATER. (Left turn-out not authorized.)

TAKE-OFF RWY 31L/R: Climb on runway heading to NFL 1.5 DME, turn right to join and fly NFL R-340 to WATER.

(CONTINUED NEXT PAGE)

(CONTINUED FROM PRECEEDING PAGE)

DEPARTURE ROUTE DESCRIPTION

HAZEN TRANSITION (WATER4·HZN): Fly HZN R-048 to HZN. Cross HZN R-048/6 DME at or above 9000.

LAKEVIEW TRANSITION (WATER4·LKV): Turn left heading 290° to join and fly NFL R-321/LKV R-137 to LKV. (Jet route structure only).

LOVELOCK TRANSITION (WATER4·LLC): Fly NFL R-340 and LLC R-219 to LLC.

MUSTANG TRANSITION (WATER4·FMG): Fly FMG R-067 to FMG. Cross the FMG R-067/36 DME at or above 9000.

SW-4, 22 OCT 2009 to 19 NOV 2009

Rwy	Knots	60	120	180	240	300	360
* 7 ⓐ	V/V(fpm)	255	510	765	1020	1275	1530
† 7 ⓑ	V/V(fpm)	360	720	1080	1440	1800	2160
*13L/R ⓐ	V/V(fpm)	245	490	735	980	1225	1470
†13L/R ⓑ	V/V(fpm)	485	970	1455	1940	2425	2910
*25 ⓐ	V/V(fpm)	250	500	750	1000	1250	1500
†25 ⓑ	V/V(fpm)	355	710	1065	1420	1775	2130
†31L/R ⓑ	V/V(fpm)	235	470	705	940	1175	1410

* Minimum Military and Civil † ATC Climb Rate

ATIS ★
370.925
CLNC DEL
353.55
GND CON
251.15
NAVY FALLON TOWER ★
119.25 340.2
NAVY FALLON APP/DEP CON
120.85 360.2

ⓐ To 7200.

ⓑ To 9500.

FALLON MUNI 4183

5200

4662

R-065

1.5

2.5

160°

R-189

210°

220°

9

R-4803

CHURCHILL HIGH MOA

CHURCHILL LOW MOA

6406

9500

FALLON
Chan 82 NFL
N39°25.01′
W118°42.31′

MUSTANG
117.9 FMG
Chan 126
N39°31.88′
W119°39.36′

RANCH HIGH MOA

R-4810

189°

(20)

R-119

Acft unable to make ATC climb gradient advise ATC prior to departure.

YERIN
N38°58.78′
W118°57.70′
L-9, H-2

RANCH MOA

29

MSA NFL 25 NM
195°
8200
9800
025°
295°
8500

EMERG SAFE ALT 100NM 15,600

① 4.4NM from Rwy 7.
② 13.3NM from Rwy 25.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 7: Turn right heading 220° to join and fly NFL R-189 to YERIN. Cross 9 DME at or above 9500. (Left turn-out not authorized).

TAKE-OFF RWY 13L/R: Climb on runway heading to NFL 2.5 DME, turn right heading 210° to join and fdly NFL R-189 to YERIN. Cross 9 DME at or above 9500.

TAKE-OFF RWY 25: Turn left heading 160° to join and fly NFL R-189 to YERIN. Cross 9 DME at or above 9500. (Right turn-out not authorized.

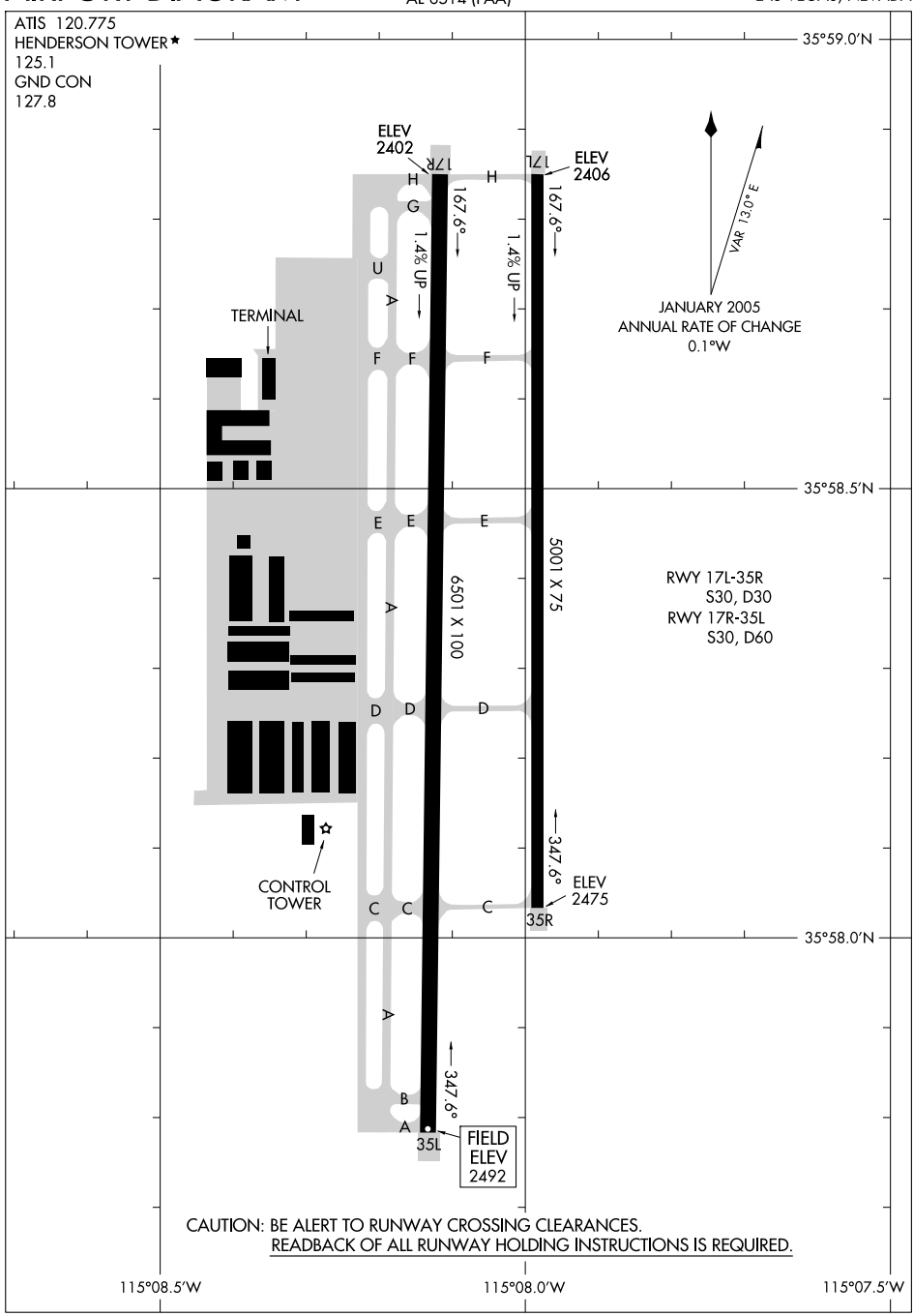
TAKE-OFF RWY 31L/R: Climb on runway heading to NFL 1.5 DME, turn right heading 210° to join and fly NFL R-189 to YERIN. Cross NFL R-065 at or above 5200. Cross 9 DME at or above 9500.

08325

AIRPORT DIAGRAM

AL-6514 (FAA)

LAS VEGAS/HENDERSON EXECUTIVE (HND)
LAS VEGAS, NEVADA



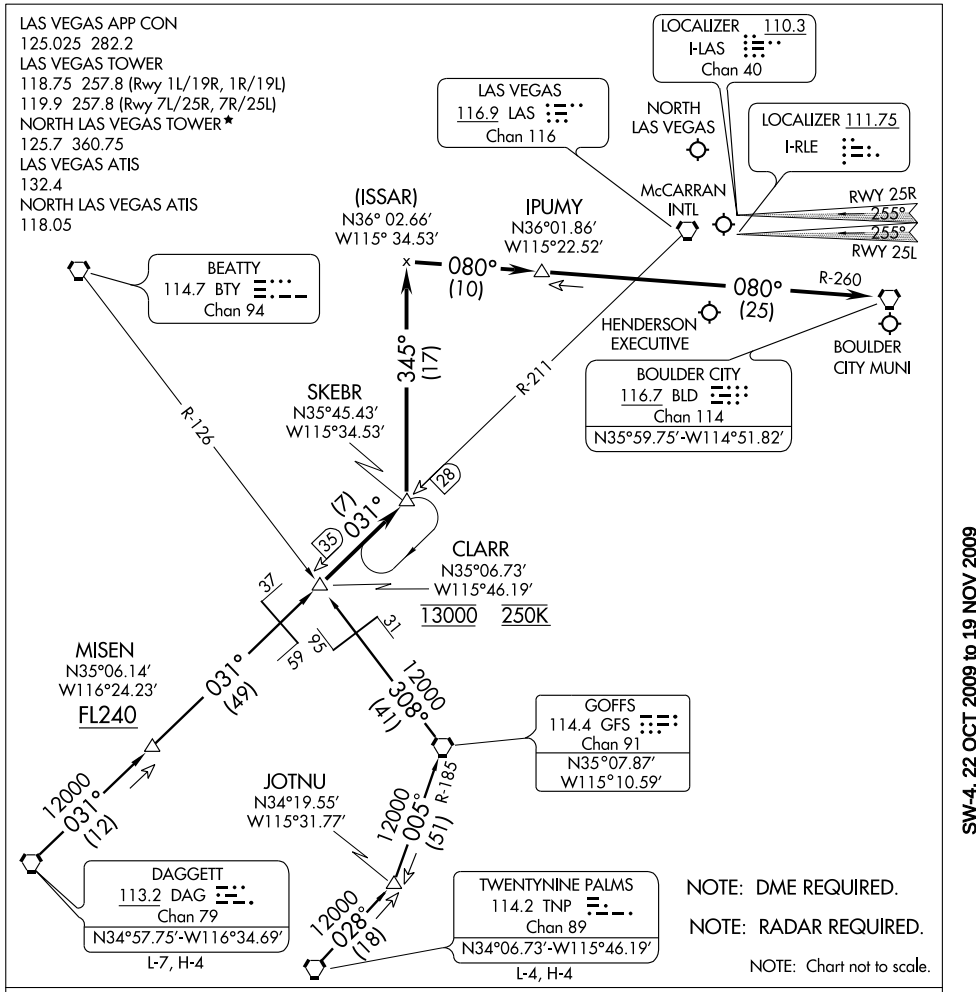
SW-4, 22 OCT 2009 to 19 NOV 2009

(CLARR.CLARR2) 09239

CLARR TWO ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA



DAGGETT TRANSITION (DAG.CLARR2): From over DAG VORTAC via DAG R-031 and LAS R-211 to CLARR INT. Thence. . . .

TWENTYNINE PALMS TRANSITION (TNP.CLARR2): From over TNP VORTAC via TNP R-028 to JOTNU INT, then via GFS R-185 to GFS VORTAC, then via GFS R-308 and BTY R-126 to CLARR INT. Thence. . . .

....From over CLARR INT via LAS R-211 to SKEBR INT. Thence. . . .

LANDING McCARRAN INTL: Via heading 345° to intercept the BLD R-260 to BLD VORTAC. Rwys 1L/R, 7L/R, and 19L/R expect radar vectors for visual approach prior to BLD VORTAC. Rwys 25L/R expect ILS approach procedure.

LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: After SKEBR INT expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

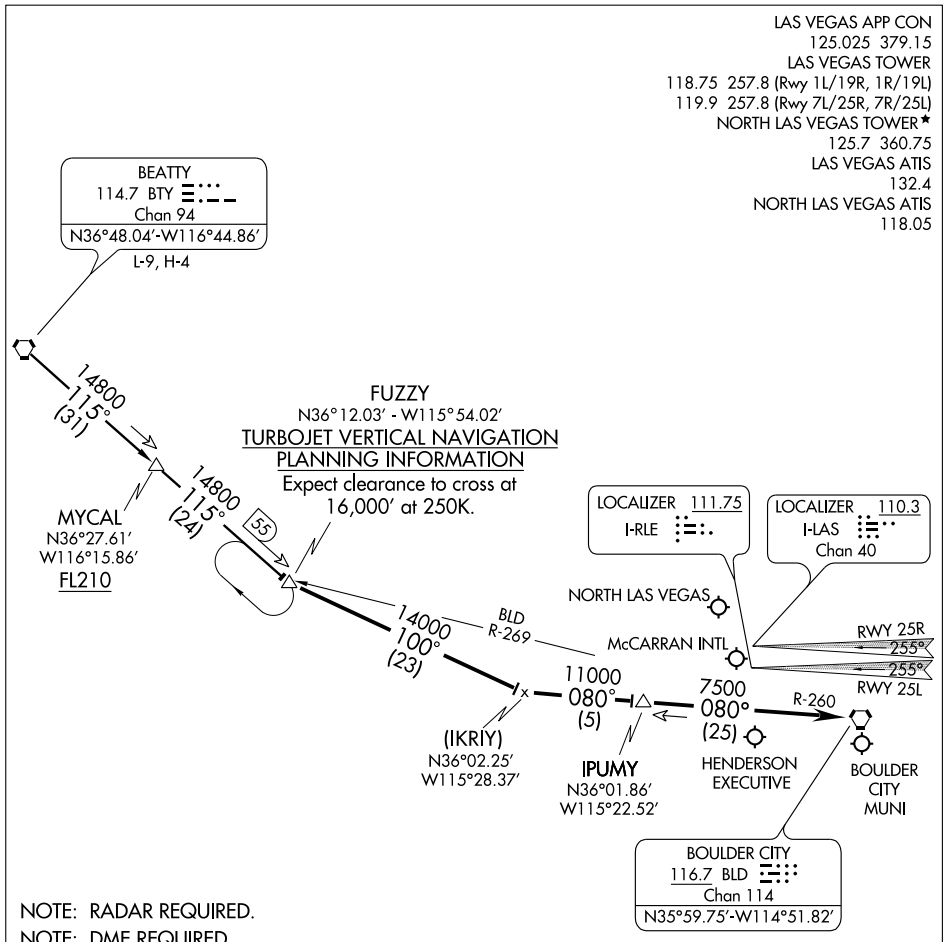
(FUZZY.FUZZY7) 07298

FUZZY SEVEN ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA

LAS VEGAS APP CON
125.025 379.15
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
NORTH LAS VEGAS TOWER★
125.7 360.75
LAS VEGAS ATIS
132.4
NORTH LAS VEGAS ATIS
118.05



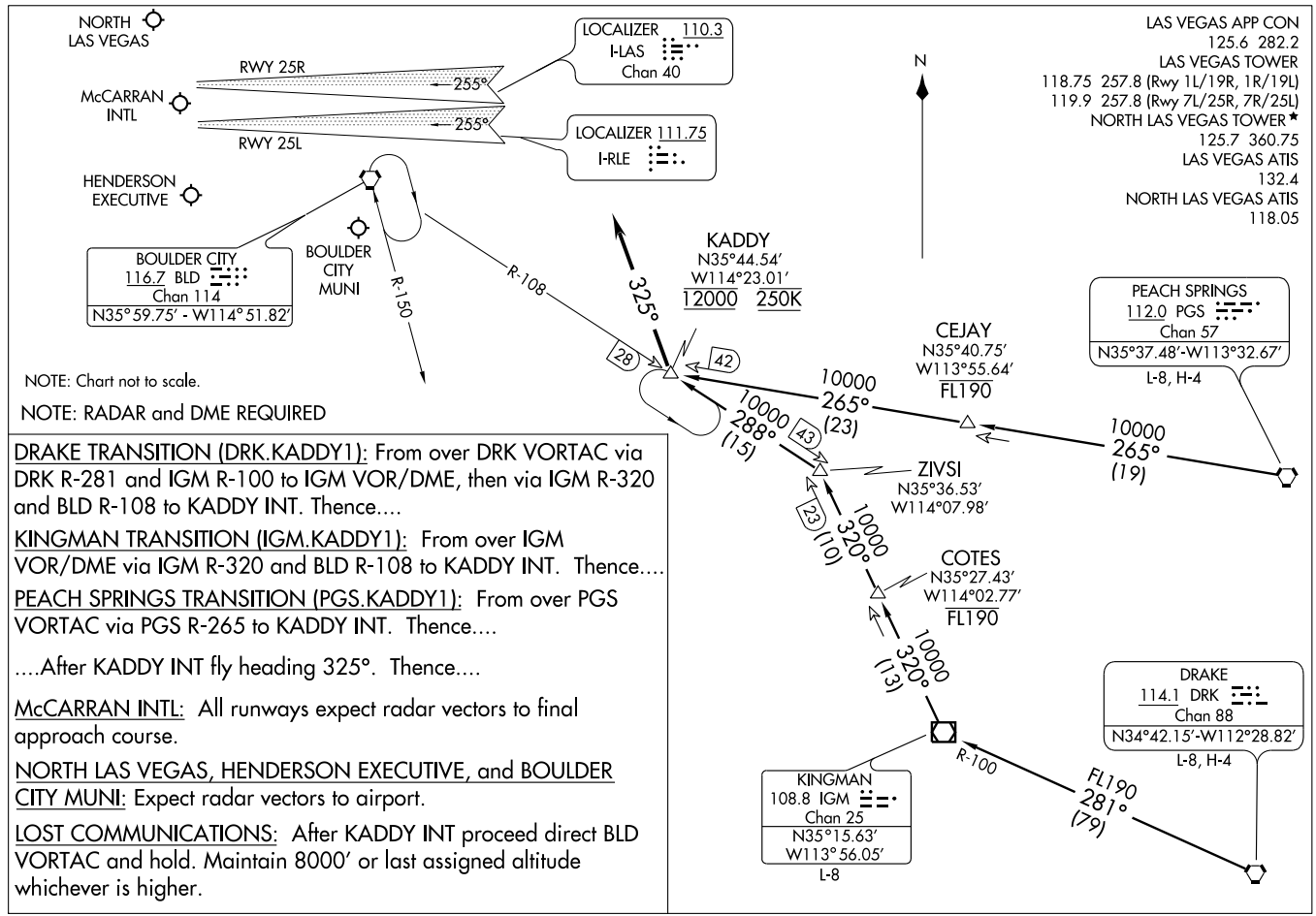
NOTE: RADAR REQUIRED.
NOTE: DME REQUIRED.
NOTE: Chart not to scale.

BEATTY TRANSITION (BTY.FUZZY7): From over BTY VORTAC via BTY R-115 to FUZZY INT. Thence . . .
. . . From over FUZZY via heading 100° to intercept BLD R-260 to BLD VORTAC.

LANDING McCARRAN INTL RWYS 1L/R, 7L/R, and 19L/R: Expect vectors for visual approach prior to BLD VORTAC.
LANDING McCARRAN INTL RWYS 25L/R: Expect ILS approach.
LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI : After IPUMY, expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

KADDY ONE ARRIVAL (KADDY.KADDY1)



NOTE: Chart not to scale.

NOTE: RADAR and DME REQUIRED

DRAKE TRANSITION (DRK.KADDY1): From over DRK VORTAC via DRK R-281 and IGM R-100 to IGM VOR/DME, then via IGM R-320 and BLD R-108 to KADDY INT. Thence....

KINGMAN TRANSITION (IGM.KADDY1): From over IGM VOR/DME via IGM R-320 and BLD R-108 to KADDY INT. Thence....

PEACH SPRINGS TRANSITION (PGS.KADDY1): From over PGS VORTAC via PGS R-265 to KADDY INT. Thence....

....After KADDY INT fly heading 325°. Thence....

McCARRAN INTL: All runways expect radar vectors to final approach course.

NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

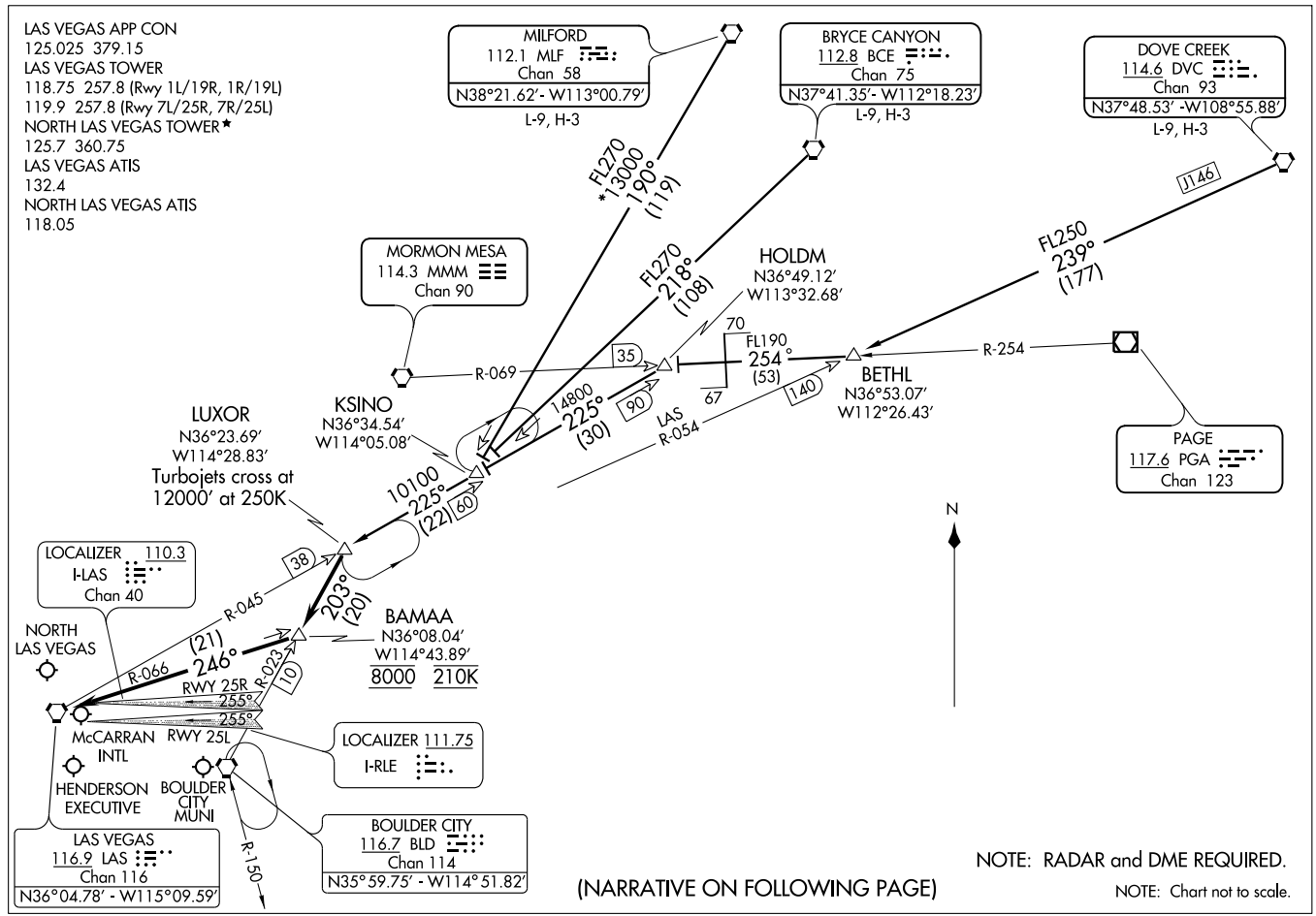
LOST COMMUNICATIONS: After KADDY INT proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

07298

ST-662 (FAA)

LAS VEGAS, NEVADA

LUXOR TWO ARRIVAL



ARRIVAL DESCRIPTION

BETHL TRANSITION (BETHL.LUXOR2): From over BETHL INT via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

BRYCE CANYON TRANSITION (BCE.LUXOR2): From over BCE VORTAC via BCE R-218 and LAS R-045 to LUXOR INT. Thence. . . .

DOVE CREEK TRANSITION (DVC.LUXOR2): From over DVC VORTAC via DVC R-239 and LAS R-054 to BETHL INT, then via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

MILFORD TRANSITION (MLF.LUXOR2): From over MLF VORTAC via MLF R-190 and LAS R-045 to LUXOR INT. Thence. . . .

. . . .From over LUXOR INT via BLD R-023 to BAMAA INT, thence via LAS R-066 to LAS VORTAC. Thence. . . .

LANDING McCARRAN INTL: All runways expect radar vectors to final approach course.

LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

LOST COMMUNICATIONS: After LAS VORTAC proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

SW-4, 22 OCT 2009 to 19 NOV 2009

LAS VEGAS, NEVADA

AL-6514 (FAA)

RNAV (GPS)-B

LAS VEGAS/HENDERSON EXECUTIVE (HND)

APP CRS	Rwy Idg	N/A
347°	TDZE	N/A
	Apt Elev	2497

If local altimeter setting not received, use McCarran Intl altimeter setting.
DME/DME RNP- 0.3 NA.

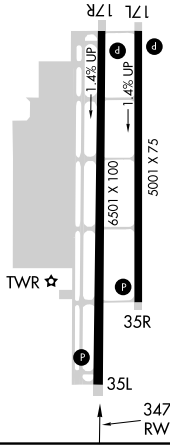
MISSED APPROACH: Climb to 6000 direct LAMVE and via 091° track to BLD VORTAC and hold.

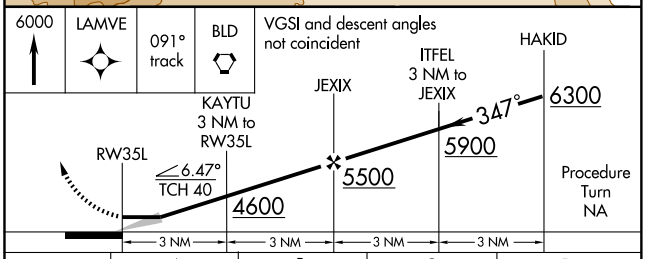
ATIS	LAS VEGAS APP CON	HENDERSON TOWER★	GND CON	UNICOM
120.775	118.4 307.25	125.1 (CTAF) L	127.8	122.95

Procedure NA for arrivals at SKEBR via V394 southwestbound.

LAMVE
091°
(13.6)
3585
BOULDER CITY
BLD
3789
150°
330°
5 NM
4142
2998 ± ∧
RW35L
KAYTU
3 NM to
RW35L
∧ 2939±
3219±
∧ 4280±
5092
4553
5695
4113
(FAF)
JEXIX
5500
347°
(3)
4240
ITFEL
3 NM to
JEXIX
4292
5900
347°
(3)
(IAF)
JERAR
SKEBR
8100
076°
(15.4)
4184
6300
076°
(6)
(IF)
HAKID
MSA RW35L 25 NM
11300
4622
∧ 4977 ±
4879
7026
5043

ELEV 2497
REIL all Rwys L
MIRL Rwys 17L-35R and 17R-35L L





CATEGORY	A	B	C	D
CIRCLING	3400-1¼ 903 (1000-1¼)		NA	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

VORTAC BLD 116.7 Chan 114	APP CRS 247°	Rwy Idg N/A TDZE N/A Apt Elev 2497

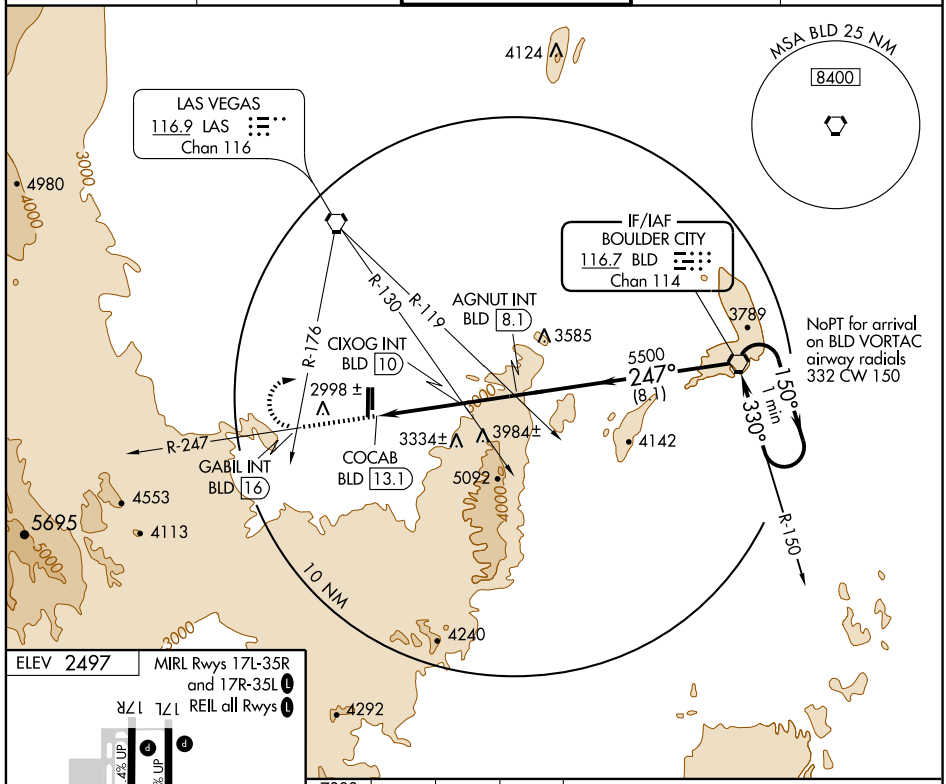
VOR-C

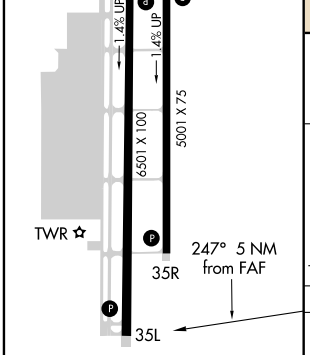
LAS VEGAS/HENDERSON EXECUTIVE (HND)

If local altimeter setting not received use McCarran Intl altimeter setting and increase all MDAs 60 feet. Circling to Rwy 35L and 35R NA at night.

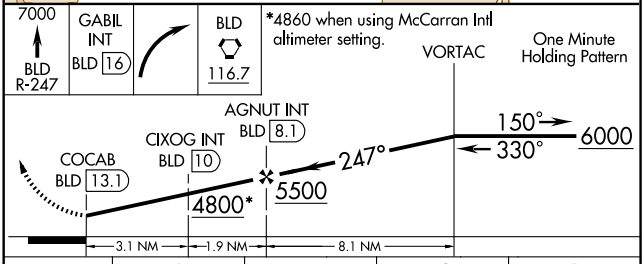
MISSED APPROACH: Climb to 7000 via BLD R-247 to GABIL Int/ BLD 16 DME, and a right turn direct BLD VORTAC and hold.

ATIS	LAS VEGAS APP CON	HENDERSON TOWER ★	GND CON	UNICOM
120.775	118.4 307.25	125.1 (CTAF) L	127.8	122.95





FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

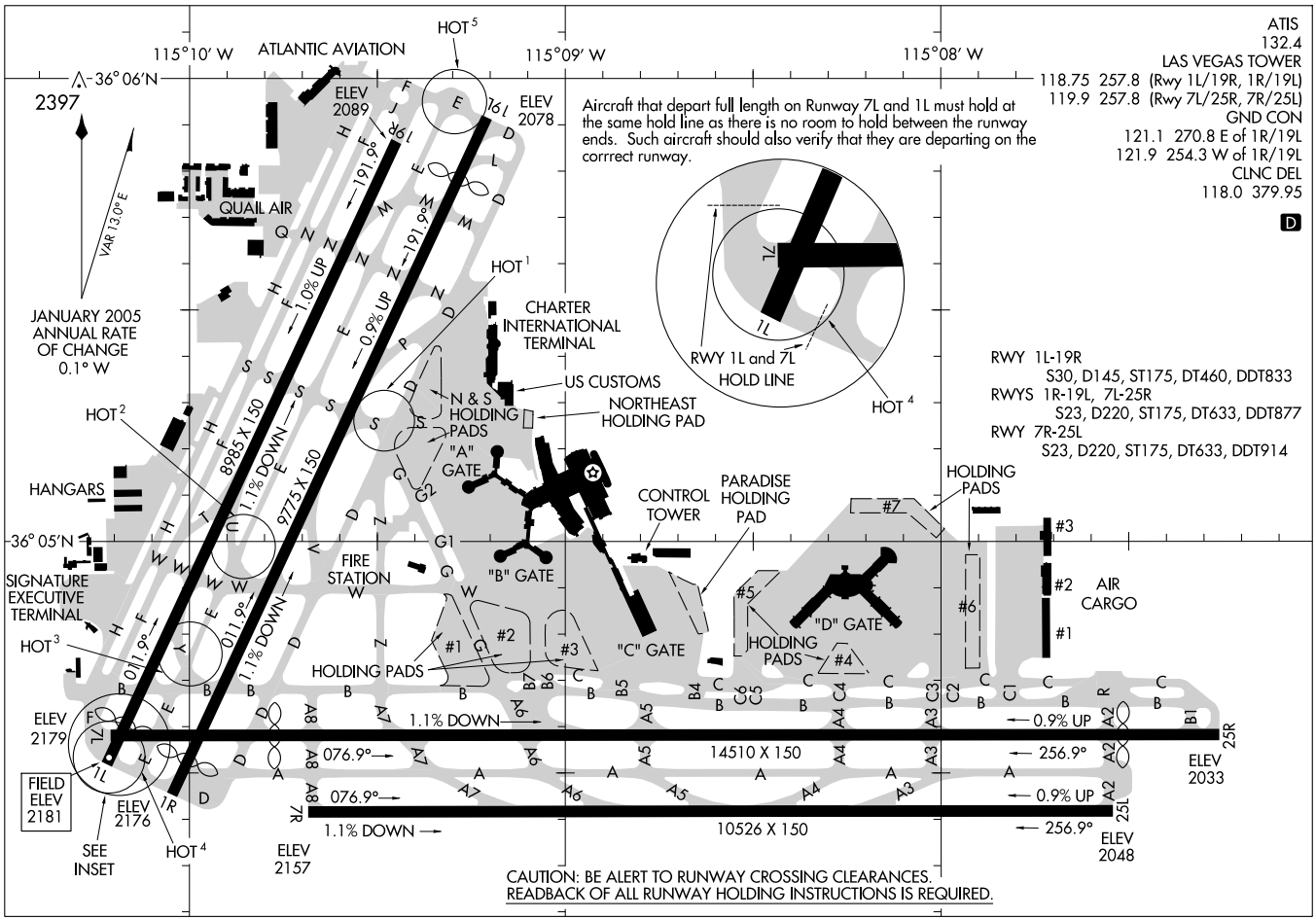


CATEGORY	A	B	C	D
CIRCLING	4800-1¼ 2303 (2400-1¼)	4800-1½ 2303 (2400-1½)	4800-3 2303 (2400-3)	NA

CIXOG FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)

CIRCLING	3620-1¼ 1123 (1200-1¼)	3620-1½ 1123 (1200-1½)	3620-3 1123 (1200-3)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009



AL-662 (FAA)

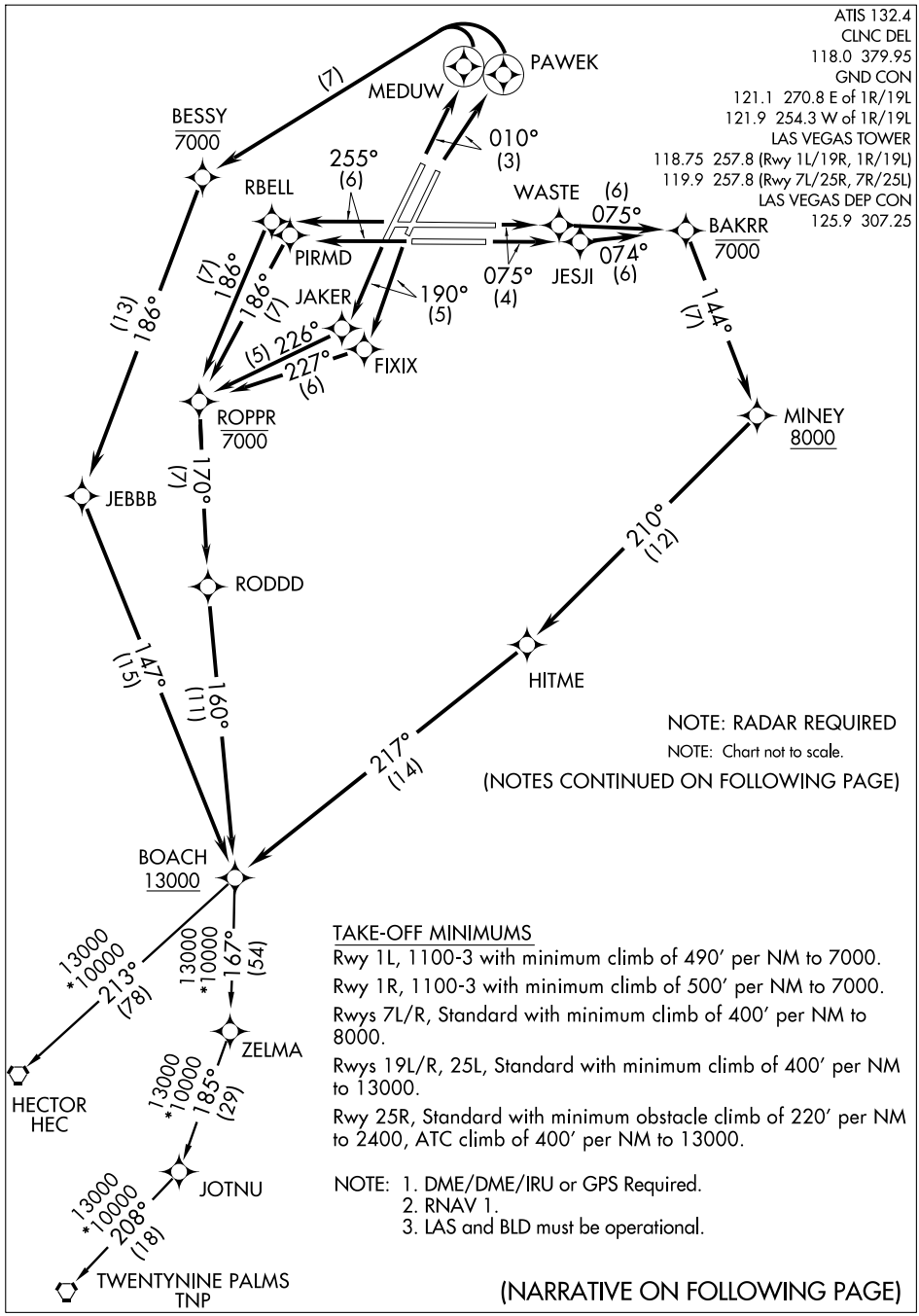
LAS VEGAS/McCARRAN INTL (LAS)
LAS VEGAS, NEVADA

BOACH TWO DEPARTURE (RNAV)

SL-662 (FAA)

LAS VEGAS/McCARRAN INTL (LAS)
LAS VEGAS, NEVADA

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
LAS VEGAS DEP CON
125.9 307.25



NOTE: RADAR REQUIRED

NOTE: Chart not to scale.

(NOTES CONTINUED ON FOLLOWING PAGE)

TAKE-OFF MINIMUMS

Rwy 1L, 1100-3 with minimum climb of 490′ per NM to 7000.

Rwy 1R, 1100-3 with minimum climb of 500′ per NM to 7000.

Rwys 7L/R, Standard with minimum climb of 400′ per NM to 8000.

Rwys 19L/R, 25L, Standard with minimum climb of 400′ per NM to 13000.

Rwy 25R, Standard with minimum obstacle climb of 220′ per NM to 2400, ATC climb of 400′ per NM to 13000.

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.
3. LAS and BLD must be operational.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

BOACH TWO DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L: Climb via 010° course to MEDUW WP, then left turn direct to cross BESSY WP at or below 7000, then via 186° track to JEBBB WP, then via 147° track to cross BOACH WP at or above 13000. Thence....

TAKE-OFF RUNWAY 1R: Climb via 010° course to PAWEK WP, then left turn direct to cross BESSY WP at or below 7000, then via 186° track to JEBBB WP, then via 147° track to cross BOACH WP at or above 13000. Thence....

TAKE-OFF RUNWAY 7L: Climb via 075° course to WASTE WP, then via 075° track to cross BAKRR WP at or below 7000, then via 144° track to cross MINEY WP at or above 8000, then via 210° track to HITME WP, then via 217° track to cross BOACH WP at or above 13000. Thence....

TAKE-OFF RUNWAY 7R: Climb via 075° course to JESJI WP, then via 074° track to cross BAKRR WP at or below 7000, then via 144° track to cross MINEY WP at or above 8000, then via 210° track to HITME WP, then via 217° track to cross BOACH WP at or above 13000. Thence....

TAKE-OFF RUNWAY 19L: Climb via 190° course to FIXIX WP, then via 227° track to cross ROPPR WP at or below 7000, then via 170° track to RODDD WP, then via 160° track to cross BOACH WP at or above 13000. Thence....

TAKE-OFF RUNWAY 19R: Climb via 190° course to JAKER WP, then via 226° track to cross ROPPR WP at or below 7000, then via 170° track to RODDD WP, then via 160° track to cross BOACH WP at or above 13000. Thence....

TAKE-OFF RUNWAY 25L: Climb via 255° course to PIRMD WP, then via 186° track to cross ROPPR WP at or below 7000, then via 170° track to cross RODDD WP then via 160° track to cross BOACH WP at or above 13000, Thence....

TAKE-OFF RUNWAY 25R: Climb via 255° course to RBELL WP, then via 186° track to cross ROPPR WP at or below 7000, then via 170° track to RODDD WP, then via 160° track to cross BOACH WP at or above 13000, Thence....

....via (Transition) maintain FL190, expect filed altitude 10 minutes after departure.

HECTOR TRANSITION (BOACH2.HEC)

TWENTYNINE PALMS TRANSITION (BOACH2.TNP)

TAKE-OFF OBSTACLE NOTES

RWY 1L: Multiple poles, tree, and building 450 feet from departure end of rwy, 283 feet left of centerline, up to 174' AGL/2132' MSL.
OL on windsock 248 feet from departure end of rwy, 224 feet right of centerline, 15' AGL/2104' MSL.

RWY 1R: Multiple signs and building 1331 feet from departure end of rwy, 448 feet right of centerline, up to 100' AGL/2120' MSL.

RWY 7L: Multiple poles and trees 747 feet from departure end of rwy, 442 feet right of centerline, up to 62' AGL/2062' MSL.
Tree 1257 feet from departure end of rwy, 789 feet left of centerline, 65' AGL/2077' MSL.

RWY 7R: Lighted windsock 126 feet from departure end of rwy, 290 feet right of centerline, 25' AGL/2051' MSL.

RWY 19L: Multiple poles, sign, and building 1394 feet from departure end of rwy, 320 feet right of centerline, up to 51' AGL/2256' MSL.

RWY 19R: Multiple poles, sign, and building 197 feet from departure end of rwy, 125 feet right of centerline, up to 51' AGL/2256' MSL.
Multiple poles and building 1396 feet from departure end of rwy, 356 feet left of centerline, up to 47' AGL/2262' MSL.

RWY 25L: Multiple poles, sign, and building 1003 feet from departure end of rwy, 251 feet left of centerline, up to 63' AGL/2256' MSL.

RWY 25R: Multiple poles and road 675 feet from departure end of rwy, 17 feet right of centerline, up to 100' AGL/2301' MSL.
Multiple poles and buildings 533 feet from departure end of rwy, 1 foot left of centerline, up to 150' AGL/2469' MSL.

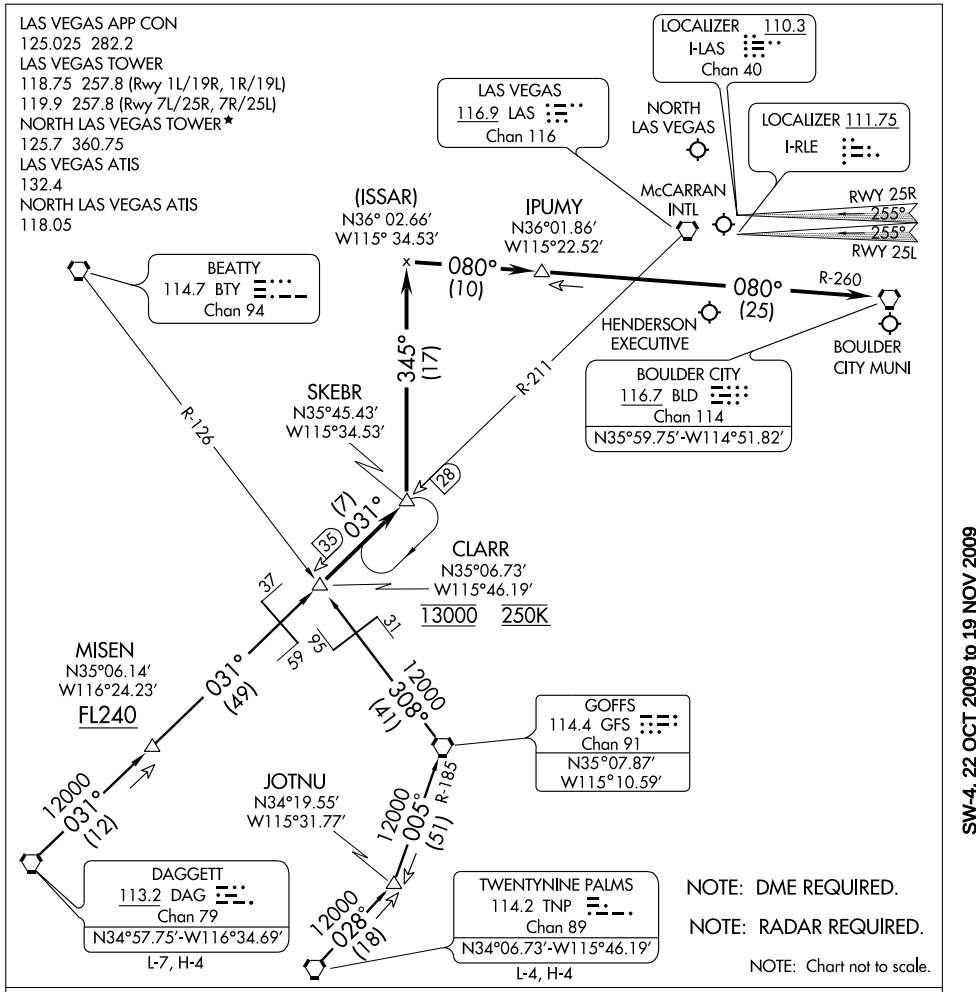
SW-4, 22 OCT 2009 to 19 NOV 2009

(CLARR.CLARR2) 09239

CLARR TWO ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA



DAGGETT TRANSITION (DAG.CLARR2): From over DAG VORTAC via DAG R-031 and LAS R-211 to CLARR INT. Thence. . . .

TWENTYNINE PALMS TRANSITION (TNP.CLARR2): From over TNP VORTAC via TNP R-028 to JOTNU INT, then via GFS R-185 to GFS VORTAC, then via GFS R-308 and BTY R-126 to CLARR INT. Thence. . . .

....From over CLARR INT via LAS R-211 to SKEBR INT. Thence. . . .

LANDING McCARRAN INTL: Via heading 345° to intercept the BLD R-260 to BLD VORTAC. Rwys 1L/R, 7L/R, and 19L/R expect radar vectors for visual approach prior to BLD VORTAC. Rwys 25L/R expect ILS approach procedure.

LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: After SKEBR INT expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

COWBY TWO DEPARTURE (RNAV)

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
LAS VEGAS DEP CON
125.9 307.25
(Rwy 19R/L, 25R/L)
133.95 353.7
(Rwy 1R/L, 7R/L)

TAKE-OFF MINIMUMS

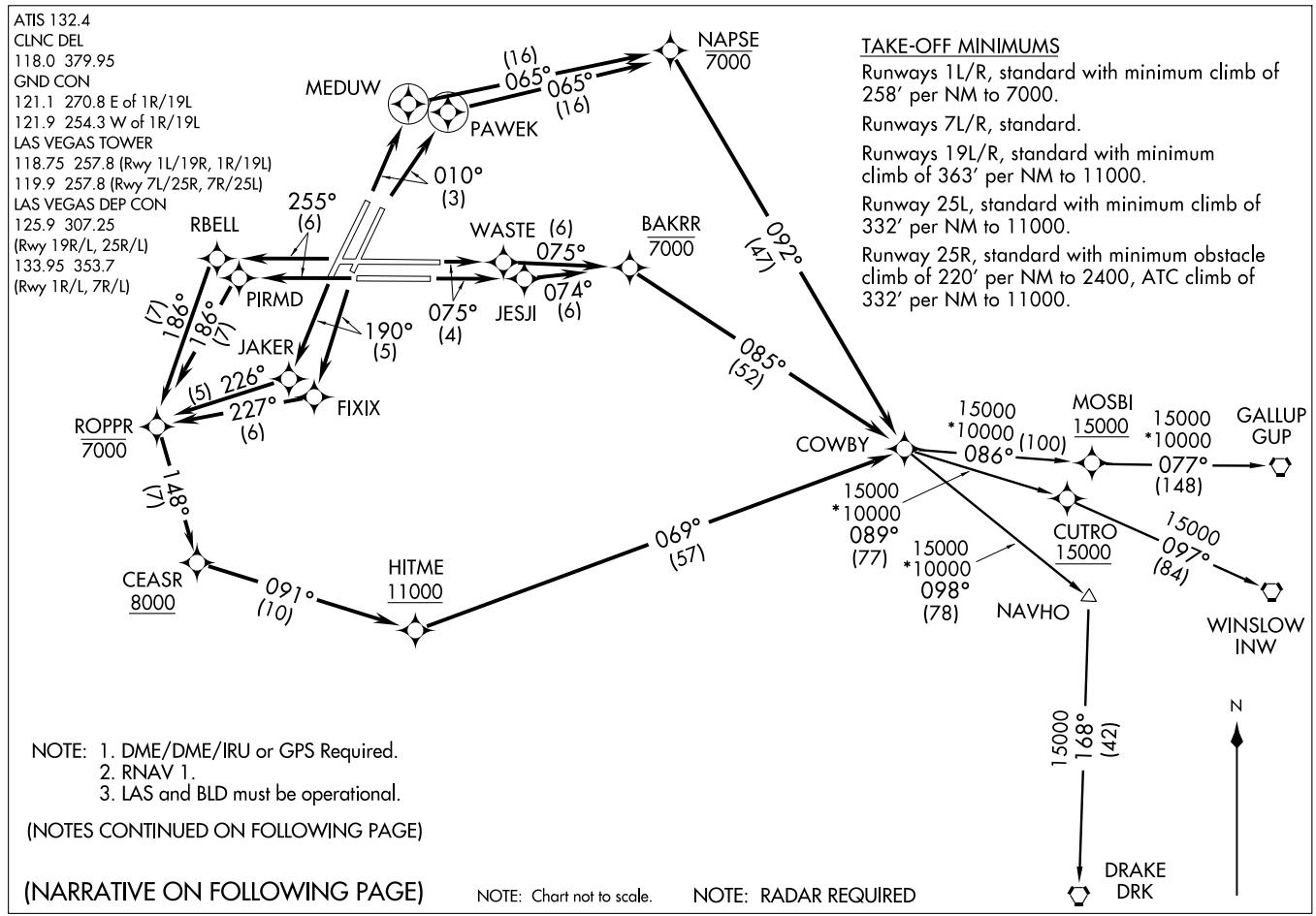
Runways 1L/R, standard with minimum climb of 258' per NM to 7000.

Runways 7L/R, standard.

Runways 19L/R, standard with minimum climb of 363' per NM to 11000.

Runway 25L, standard with minimum climb of 332' per NM to 11000.

Runway 25R, standard with minimum obstacle climb of 220' per NM to 2400, ATC climb of 332' per NM to 11000.



NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.
3. LAS and BLD must be operational.

(NOTES CONTINUED ON FOLLOWING PAGE)

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

NOTE: RADAR REQUIRED

COWBY TWO DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L: Climb via 010° course to MEDUW WP, then via 065° track to cross NAPSE WP at or below 7000, then via 092° track to COWBY WP. Thence. . . .

TAKE-OFF RUNWAY 1R: Climb via 010° course to PAWEK WP, then via 065° track to cross NAPSE WP at or below 7000, then via 092° track to COWBY WP. Thence. . . .

TAKE-OFF RUNWAY 7L: Climb via 075° course to WASTE WP, then via 075° track to cross BAKRR WP at or below 7000, then via 085° track to COWBY WP. Thence. . . .

TAKE-OFF RUNWAY 7R: Climb via 075° course to JESJI WP, then via 074° track to cross BAKRR WP at or below 7000, then via 085° track to COWBY WP. Thence. . . .

TAKE-OFF RUNWAY 19L: Climb via 190° course to FIXIX WP, then via 227° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 069° track to COWBY WP. Thence....

TAKE-OFF RUNWAY 19R: Climb via 190° course to JAKER WP, then via 226° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 069° track to COWBY WP. Thence....

TAKE-OFF RUNWAY 25L: Climb via 255° course to PIRMD WP, then via 186° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 069° track to COWBY WP. Thence....

TAKE-OFF RUNWAY 25R: Climb via 255° course to RBELL WP, then via 186° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 069° track to COWBY WP. Thence...

....via (Transition) maintain FL190, expect filed altitude 10 minutes after departure.

DRAKE TRANSITION (COWBY2.DRK)

GALLUP TRANSITION (COWBY2.GUP)

WINSLOW TRANSITION (COWBY2.INW)

TAKE-OFF OBSTACLE NOTES

RWY 1L: Multiple poles, tree, and building 450 feet from departure end of rwy, 283 feet left of centerline, up to 174' AGL/2132' MSL.
OL on windsock 248 feet from departure end of rwy, 224 feet right of centerline, 15' AGL/2104' MSL.

RWY 1R: Multiple signs and building 1331 feet from departure end of rwy, 448 feet right of centerline, up to 100' AGL/2120' MSL.

RWY 7L: Multiple poles and trees 747 feet from departure end of rwy, 442 feet right of centerline, up to 62' AGL/2062' MSL.
Tree 1257 feet from departure end of rwy, 789 feet left of centerline, 65' AGL/2077' MSL.

RWY 7R: Lighted windsock 126 feet from departure end of rwy, 290 feet right of centerline, 25' AGL/2051' MSL.

RWY 19L: Multiple poles, sign, and building 1394 feet from departure end of rwy, 320 feet right of centerline, up to 51' AGL/2256' MSL.

RWY 19R: Multiple poles, sign, and building 197 feet from departure end of rwy, 125 feet right of centerline, up to 51' AGL/2256' MSL.
Multiple poles and building 1396 feet from departure end of rwy, 356 feet left of centerline, up to 47' AGL/2262' MSL.

RWY 25L: Multiple poles, sign, and building 1003 feet from departure end of rwy, 251 feet left of centerline, up to 63' AGL/2256' MSL.

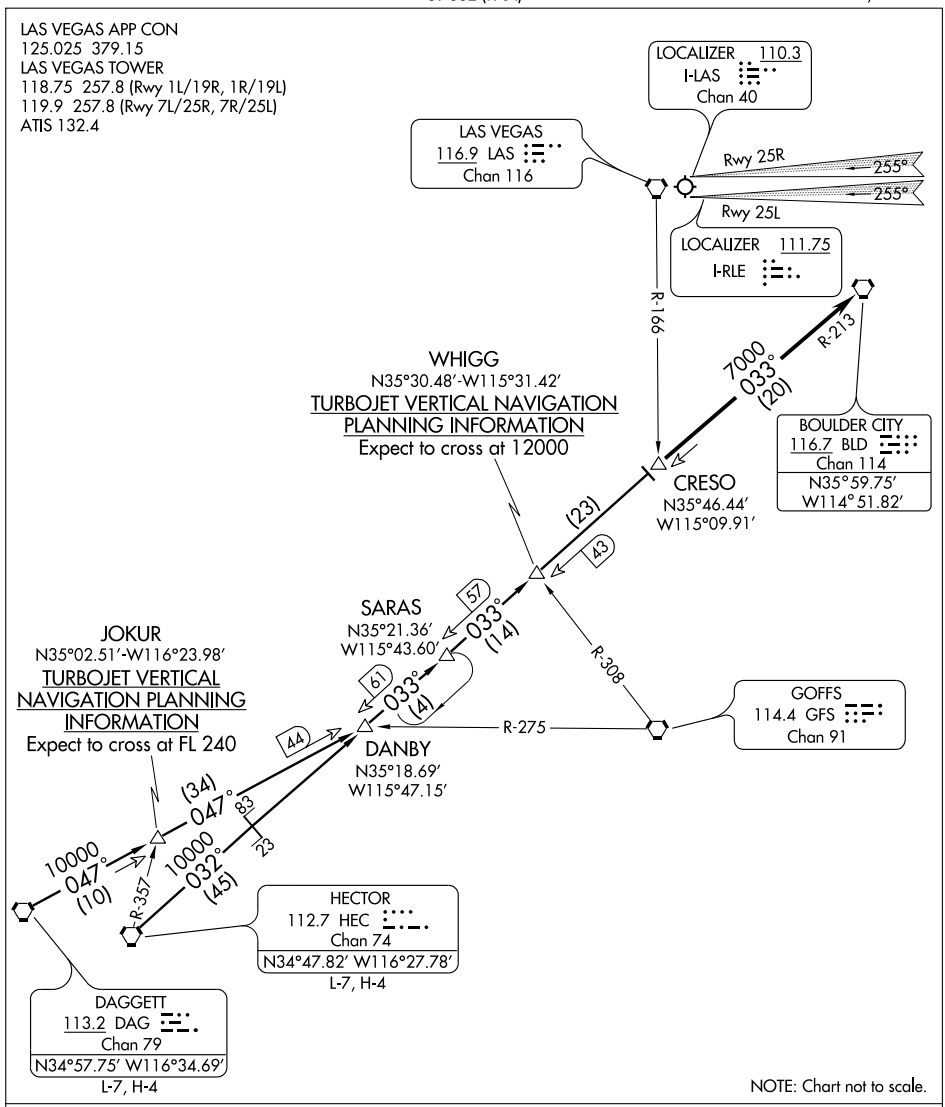
RWY 25R: Multiple poles and road 675 feet from departure end of rwy, 17 feet right of centerline, up to 100' AGL/2301' MSL.
Multiple poles and buildings 533 feet from departure end of rwy, 1 foot left of centerline, up to 150' AGL/2469' MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

CRESO THREE ARRIVAL

ST-662 (FAA)

McCARRAN INTL
LAS VEGAS, NEVADA



DAGGETT TRANSITION (DAG.CRESO3): From over DAG VORTAC via DAG R-047 and BLD R-213 to CRESO INT/DME, thence....

HECTOR TRANSITION (HEC.CRESO3): From over HEC VORTAC via HEC R-032 and BLD R-213 to CRESO INT/DME, Thence....

....From over CRESO INT/DME via BLD R-213 to BLD VORTAC. Runways 1, 7 and 19 expect vectors to final approach course. From BLD VORTAC, expect ILS approach Runway 25L.

SW-4, 22 OCT 2009 to 19 NOV 2009

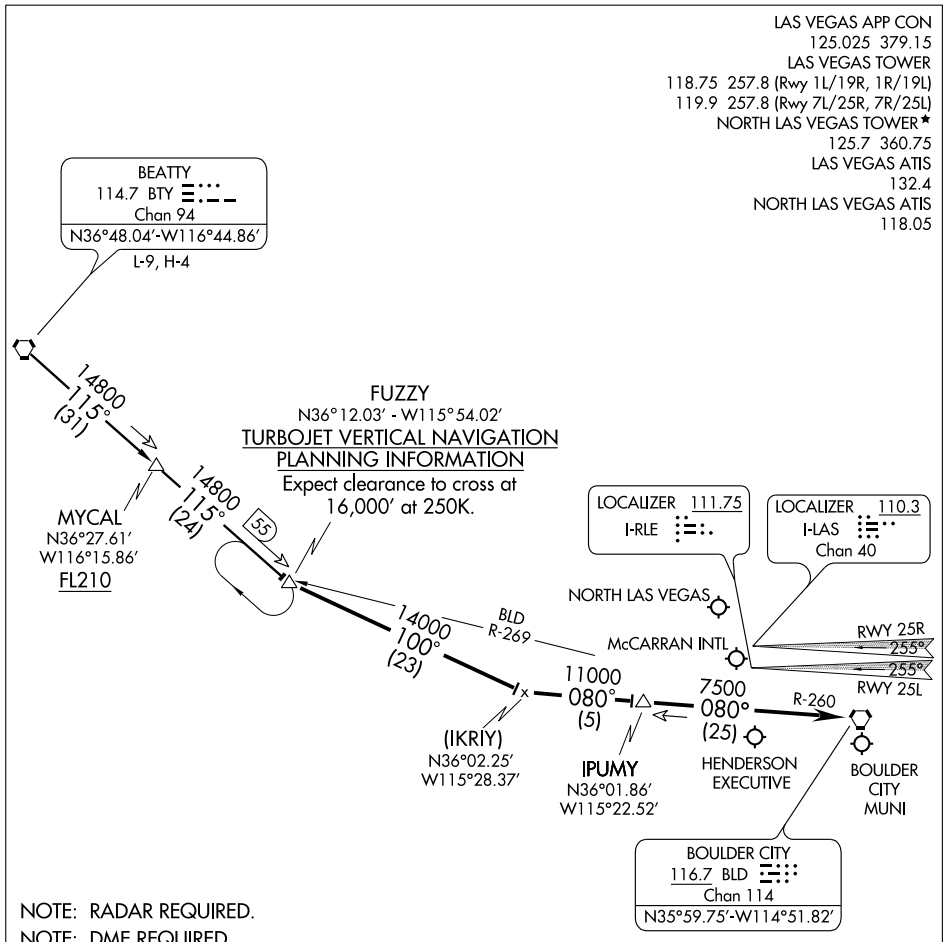
(FUZZY.FUZZY7) 07298

FUZZY SEVEN ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA

LAS VEGAS APP CON
125.025 379.15
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
NORTH LAS VEGAS TOWER★
125.7 360.75
LAS VEGAS ATIS
132.4
NORTH LAS VEGAS ATIS
118.05



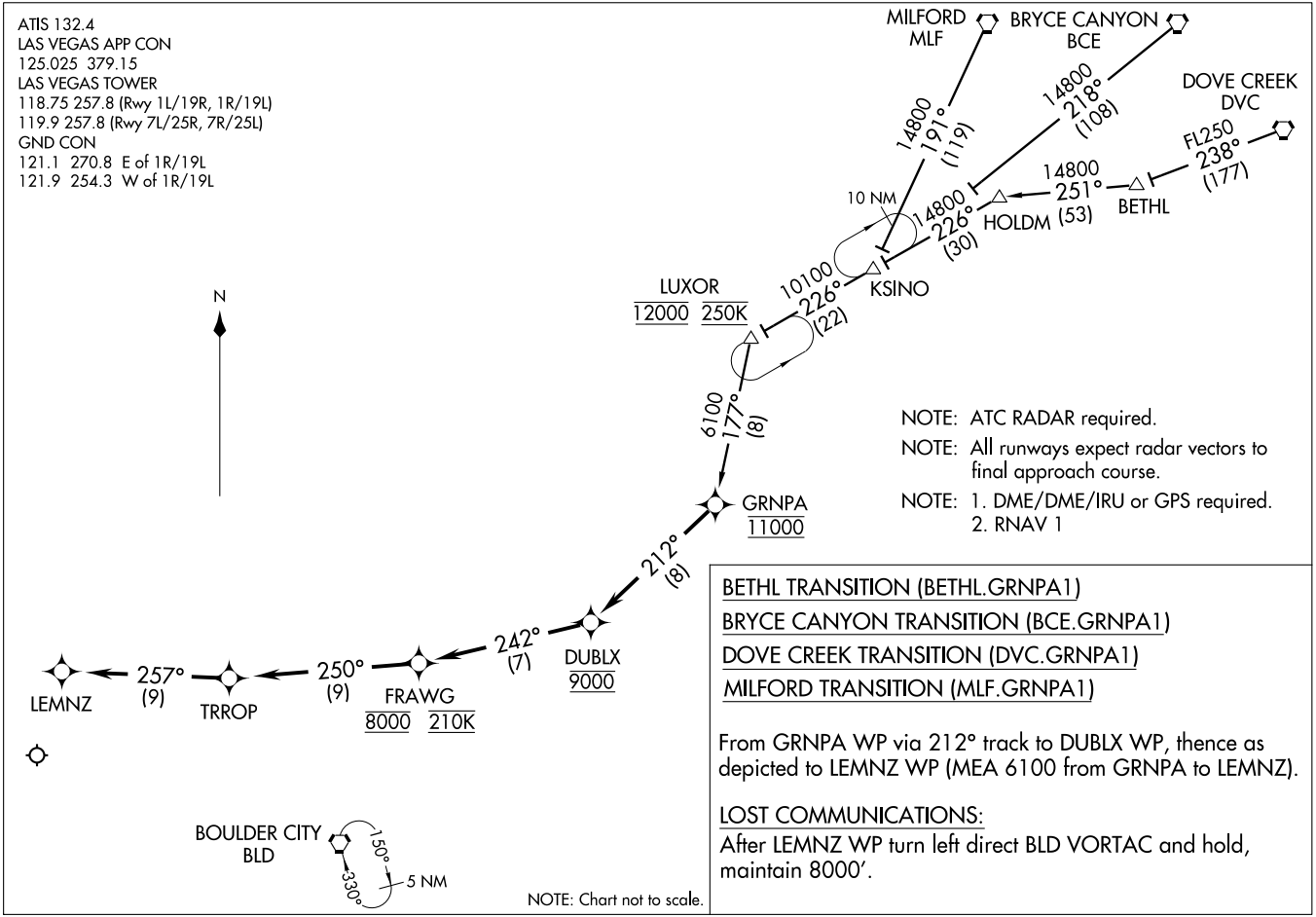
NOTE: RADAR REQUIRED.
NOTE: DME REQUIRED.
NOTE: Chart not to scale.

BEATTY TRANSITION (BTY.FUZZY7): From over BTY VORTAC via BTY R-115 to FUZZY INT. Thence . . .
. . . From over FUZZY via heading 100° to intercept BLD R-260 to BLD VORTAC.

LANDING McCARRAN INTL RWYS 1L/R, 7L/R, and 19L/R: Expect vectors for visual approach prior to BLD VORTAC.
LANDING McCARRAN INTL RWYS 25L/R: Expect ILS approach.
LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI : After IPUMY, expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

GRNPA ONE ARRIVAL (RNAV)

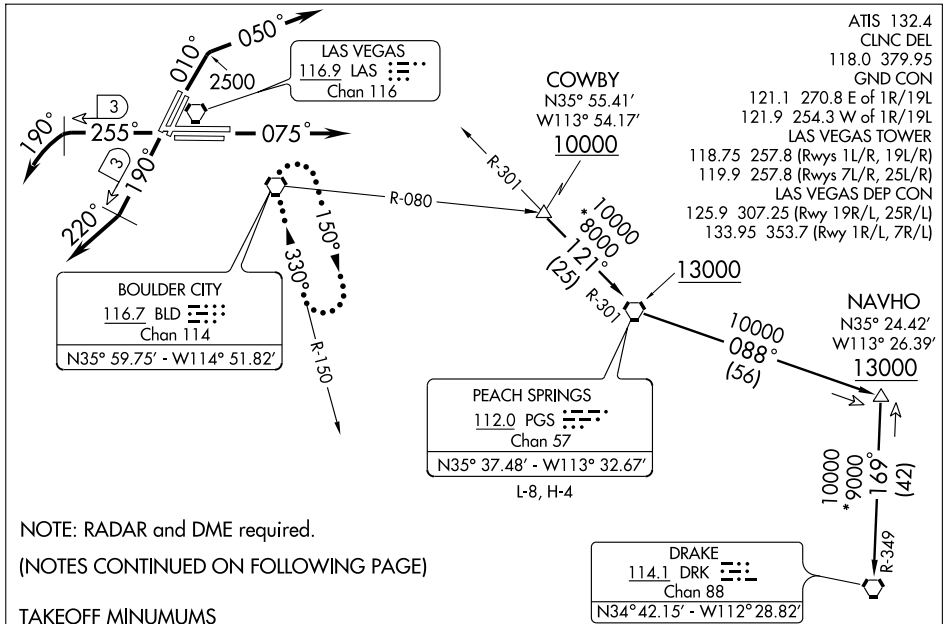


ST-662 (FAA)

McCARRAN INTL
LAS VEGAS, NEVADA

HOOVER THREE DEPARTURE

LAS VEGAS/McCARRAN INTL (LAS)
LAS VEGAS, NEVADA



NOTE: RADAR and DME required.

(NOTES CONTINUED ON FOLLOWING PAGE)

TAKEOFF MINUMUMS

Rwys 7L/R: Standard.

Rwys 1L/R: Standard with minimum obstacle climb of 328' per NM to 5000', ATC climb of 400 feet per NM to 5200'.

Rwys 25L/R: Standard with minimum obstacle climb of 324 feet per NM to 7100, ATC climb of 360 feet per NM to 7000'.

Rwys 19L/R: Standard with minimum climb of 360 feet per NM to 7000'.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via heading 010° to 2500, then climbing right turn via heading 050°, thence ....

TAKE-OFF RUNWAYS 7L/R: Climb via heading 075°, thence ....

TAKE-OFF RUNWAYS 19L/R: Climb via heading 190° until LAS VORTAC 3 DME, then right turn via heading 220°, thence ....

TAKE-OFF RUNWAYS 25L/R: Climb via heading 255° until LAS VORTAC 3 DME, then left turn via heading 190°, thence ....

.... via radar vector to transition or assigned route, maintain 7000, expect clearance to filed altitude two minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC upon reaching 7000', proceed direct BLD VORTAC then climb in BLD VORTAC holding pattern to appropriate MEA for route of flight.

DRAKE TRANSITION (HOOVR3.DRK): From over COWBY INT via PGS R-301 to PGS VORTAC then PGS R-088 and DRK R-349 to DRK VORTAC.

PEACH SPRINGS TRANSITION (HOOVR3.PGS): From over COWBY INT via PGS R-301 to PGS VORTAC.

HOOVER THREE DEPARTURE

TAKE-OFF OBSTACLE NOTES

RWY 1L: Multiple buildings 3954′ from DER, 1 NM left of centerline, up to 283′ AGL/2409′ MSL.
Pole 450′ from DER, 283′ left of centerline, 38′ AGL/2118′ MSL.
Obstacle light on wind sock 248′ from DER, 224′ right of centerline, 50′ AGL/2104′ MSL.
Pole 1029′ from DER, 715′ left of centerline, 85′ AGL/2124′ MSL.
Tree 1536′ from DER, 502′ left of centerline, 100′ AGL/2132′ MSL.

RWY 1R: Sign 1331′ from DER, 448′ right of centerline, 60′ AGL/2120′ MSL
Building 599′ from DER, 541′ right of centerline, 70′ AGL/2096′ MSL
Multiple buildings 4878′ from DER, 1.2 NM left of centerline, up to 283′ AGL/2409′ MSL.

RWY 25R: Light pole 3115′ from DER, 1033′ right of centerline, 109′ AGL/2301′ MSL.
Light on pole 1.5 NM from DER, 2836′ left of centerline, 124′ AGL/2457′ MSL.
Road 1.7 NM from DER, 2965′ left of centerline, 139′ AGL/2469′ MSL.
Light on pole 1100′ from DER, 508′ left of centerline, 47′ AGL/2226′ MSL.
Building 1822′ from DER, 652′ left of centerline, 46′ AGL/2238′ MSL.
Building 2202′ from DER, 596′ left of centerline, 44′ AGL/2246′ MSL.
Rod on building 534′ from DER, 369′ left of centerline, 33′ AGL/2202′ MSL.
Road 678′ from DER, 16′ right of centerline, 35′ AGL/2201′ MSL.
Light on localizer antenna 533′ from DER, 32′ AGL/2195′ MSL.

RWY 25L: Pole 2860′ from DER, 813′ left of centerline, 57′ AGL/2236′ MSL.
Sign 3672′ from DER, 1302′ left of centerline, 57′ AGL/2256′ MSL.
Antenna on building 1002′ from DER, 251′ left of centerline, 34′ AGL/2183′ MSL.
Pole 3677′ from DER, 145′ left of centerline, 67′ AGL/2249′ MSL.

RWY 7L: Tree 1257′ from DER, 789′ left of centerline, 85′ AGL/2077′ MSL.
Light pole 747′ from DER, 441′ right of centerline, 62′ AGL/2057′ MSL.
Tree 1007′ from DER, 557′ right of centerline, 70′ AGL/2062′ MSL.

RWY 7R: Light on wind sock 102′ from DER, 300′ right of centerline, 30′ AGL/2051′ MSL.

RWY 19L: Pole 1394′ from DER, 533′ right of centerline, 36′ AGL/2236′ MSL.
Sign 2181′ from DER, 1062′ right of centerline, 50′ AGL/2256′ MSL.
Rod on building 2921′ from DER, 581′ right of centerline, 50′ AGL/2262′ MSL.
Pole 2633′ from DER, 319′ right of centerline, 40′ AGL/2246′ MSL.

RWY 19R: Pole 1135′ from DER, 619′ right of centerline, 65′ AGL/2249′ MSL.
Pole 756′ from DER, 618′ right of centerline, 50′ AGL/2231′ MSL.
Sign 2182′ from DER, 125′ right of centerline, 50′ AGL/2256′ MSL.
Pole 1396′ from DER, 403′ left of centerline, 55′ AGL/2236′ MSL.
Rod on building 197′ from DER, 441′ right of centerline, 30′ AGL/2202′ MSL.
Rod on building 2922′ from DER, 356′ left of centerline, 50′ AGL/2262′ MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-CUA	APP CRS	Rwy Idg 1L	8401
110.1	010°	TDZE	2176
Chan 38		Apt Elev	2181

ILS or LOC/DME RWY 1L

LAS VEGAS/McCARRAN INTL (LAS)

Inoperative table does not apply to S-LOC 1L Cat C.

MALSF

MISSED APPROACH: Climb to 3200, then climbing right turn to 6000 via 070° heading and BLD R-295 to BLD VORTAC and hold.

ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95

DME REQUIRED

To remain within controlled airspace pilots should not exceed LAS 15 DME.

Procedure NA for arrivals at DICSA via V21-283-587 northeastbound.

LOCALIZER 110.1 I-CUA Chan 38

LAS VEGAS 116.9 LAS Chan 116

BOULDER CITY 116.7 BLD Chan 114

ZABES I-CUA 5.1

SOSOY I-CUA 7.2

NODIY I-CUA 9.3

CODNO I-CUA 12.5

HETAX I-CUA 15.2

(IAF) DICSA LAS 14

R-295 R-140 R-150 150° 330° 010° (3.1) 190° LR-183 6800 LAS 14 Arc 6000 010° (2.7) 5100 10 NM

MSA LAS 25 NM: 10200 (120°–210°), 13200 (210°–300°), 6700 (300°–030°), 8400 (030°–120°)

2931 2816 3189 2725± 2332 2713 2720± 2433± 2713 2295 2461 2317 2456± 2500± 2608 2998 ± 3585 3789 4142 5092 4980 7070 6641 8671± 4553 4113 5695 4240 5152 4292 4184 3000 4000 5000 6000 7000

ELEV 2181 D

TDZE 2176

19L 19R 1L 1R 7L 7R 25L 25R 2313 14510 X 150 10526 X 150 8995 X 150 9725 X 150 1.1% DOWN 0.9% UP

010° 7.8 NM from FAF

Use I-CUA DME when on the localizer course.

VGSI and ILS glidepath not coincident.

ILS unusable within 0.2 NM from threshold.

3200	6000	BLD	BLD
↑	070°	R-295	VORTAC
		116.7	116.7

Procedure Turn NA

6800 010° 6000

GS 3.40° TCH 58

5100 *LOC only *4300 *3600

HETAX I-CUA 15.2 — CODNO I-CUA 12.5 — NODIY I-CUA 9.3 — SOSOY I-CUA 7.2 — ZABES I-CUA 5.1 — I-CUA 3 — I-CUA 1.8

2.7 NM 3.1 NM 2.1 NM 2.1 NM 2.1 NM 1.3 0.2

CATEGORY	A	B	C	D
S-ILS 1L	2460-1 284 (300-1)			NA
S-LOC 1L	2720-1 544 (600-1)		2720-1½ 544 (600-1½)	NA
CIRCLING	3020-1 839 (900-1)	3020-1¼ 839 (900-1¼)	3020-2½ 839 (900-2½)	NA

REIL Rwys 1L, 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwys 1L-19R, 7L-25R and 7R-25L

SW-4, 22 OCT 2009 to 19 NOV 2009

LAS VEGAS, NEVADA AL-662 (FAA)

LOC I-RLE	APP CRS				
111.75	255°	Rwy Idg 25L	10526	Rwy Idg 25R	12755
		TDZE	2069	TDZE	2067
		Apt Elev	2181	Apt Elev	2181

ILS or LOC RWY 25L

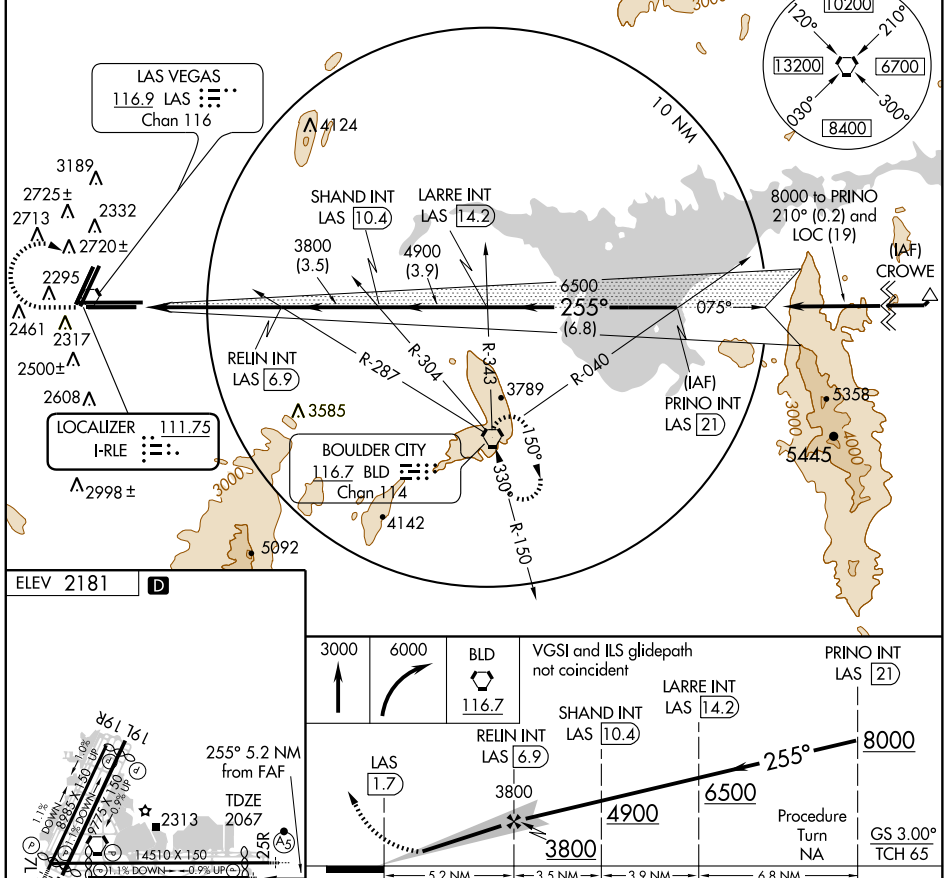
LAS VEGAS/McCARRAN INTL (LAS)

Inoperative table does not apply to S-LOC 25L Cat C and Sidestep 25R Cats A and B.

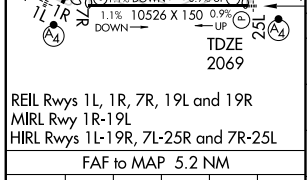
MALSF Rwy 25L (A4) MALSR Rwy 25R (A5)

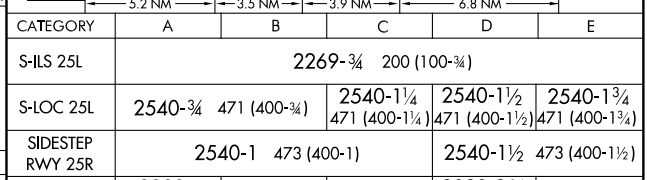
MISSED APPROACH: Climb to 3000 then climbing right turn to 6000 direct BLD VORTAC and hold.

ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95



ELEV 2181 D





REIL Rwys 1L, 1R, 7R, 19L and 19R
MIRL Rwys 1R-19L
HIRL Rwys 1L-19R, 7L-25R and 7R-25L

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

CATEGORY	A	B	C	D	E
S-ILS 25L	2269-¾ 200 (100-¾)				
S-LOC 25L	2540-¾ 471 (400-¾)		2540-1¼ 471 (400-1¼)	2540-1½ 471 (400-1½)	2540-1¾ 471 (400-1¾)
SIDESTEP RWY 25R	2540-1 473 (400-1)			2540-1½ 473 (400-1½)	
CIRCLING	3020-1 839 (900-1)	3020-1¼ 839 (900-1¼)	3020-2½ 839 (900-2½)	3020-2¾ 839 (900-2¾)	3540-3 1359 (1400-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

LAS VEGAS, NEVADA — AL-662 (FAA)

LOC/DME I-LAS	APP CRS	Rwy Idg 25R	TDZE	Apt Elev	Rwy Idg 25L	TDZE	Apt Elev
110.3 Chan 40	255°	12755	2067	2181	10526	2069	2181

ILS or LOC RWY 25R

LAS VEGAS/ McCARRAN INTL (LAS)

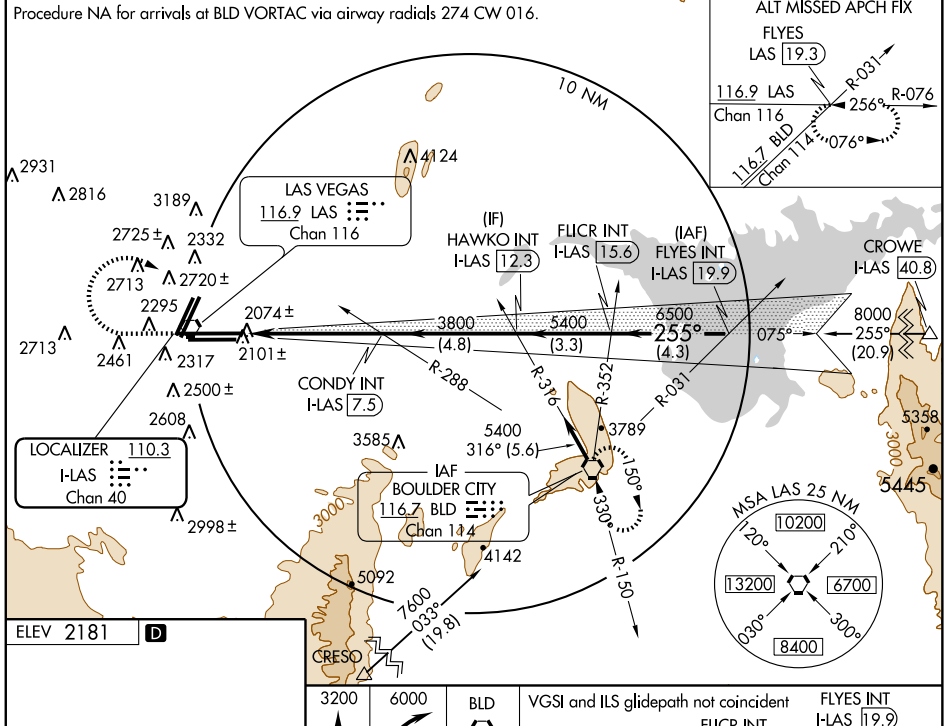
Inoperative table does not apply to Sidestep 25L. For inoperative MALSR, increase S-ILS Cat E visibility ¼ mile, and S-LOC Cat E visibility ½ mile.

MALSR Rwy 25R (A5) — MALSF Rwy 25L (A4)

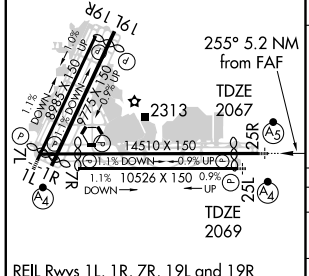
MISSED APPROACH: Climb to 3200, then climbing right turn to 6000 direct BLD VORTAC and hold.

ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95

Procedure NA for arrivals at BLD VORTAC via airway radials 274 CW 016.

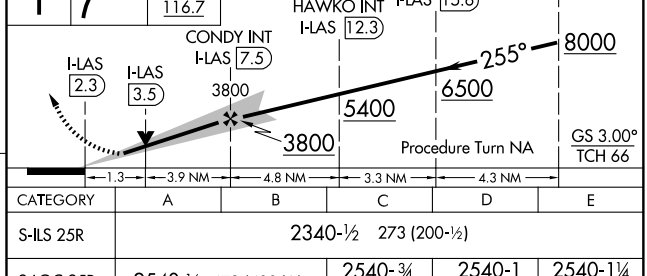


ELEV 2181 D



REIL Rwys 1L, 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwys 1L-19R, 7L-25R and 7R-25L

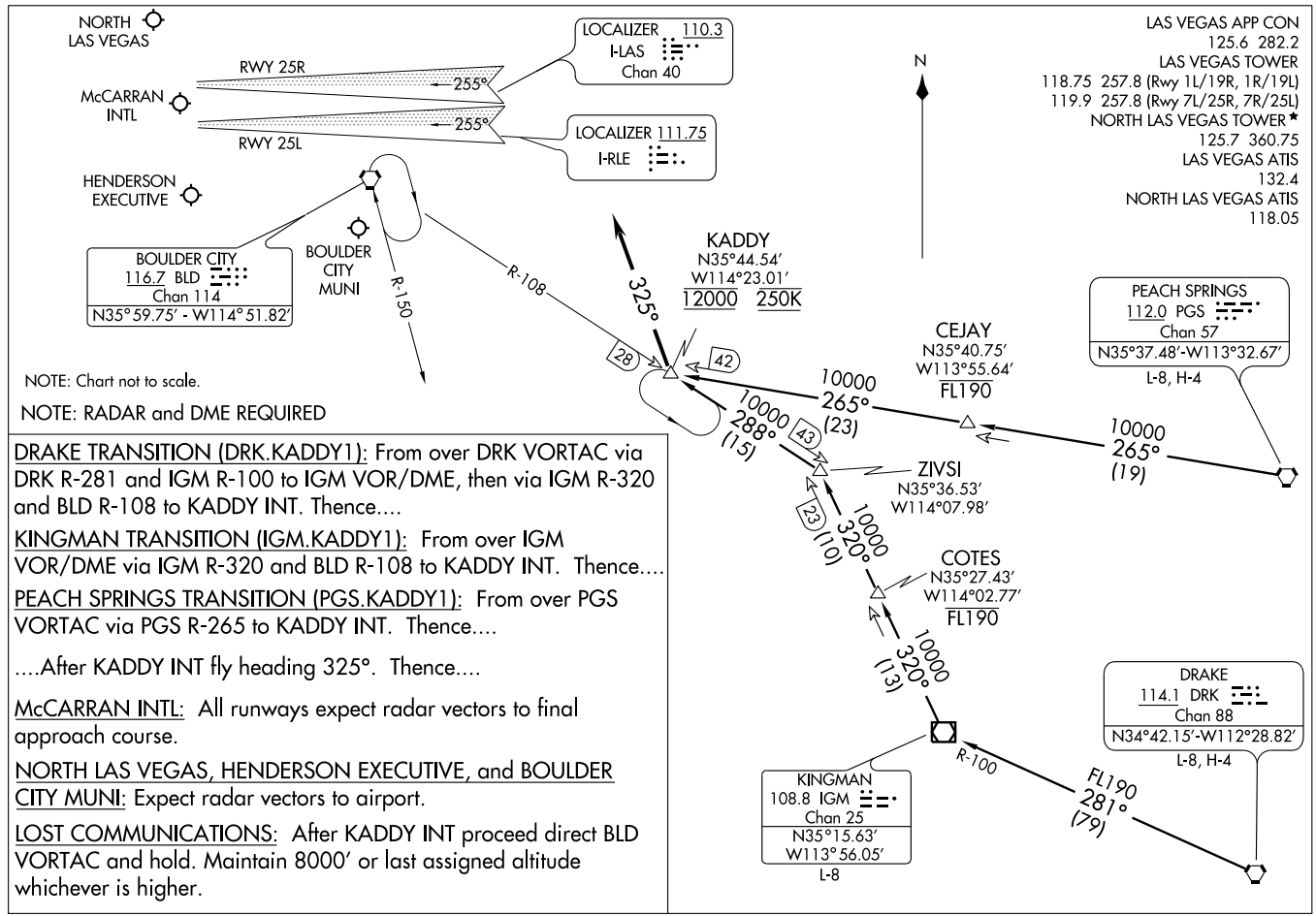
FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42



CATEGORY	A	B	C	D	E
S-ILS 25R	2340-½ 273 (200-½)				
S-LOC 25R	2540-½ 473 (400-½)		2540-¾ 473 (400-¾)	2540-1 473 (400-1)	2540-1¼ 473 (400-1¼)
SIDESTEP RWY 25L	2540-1 471 (400-1)		2540-1½ 471 (400-1½)	2540-2 471 (400-2)	
CIRCLING	3020-1 839 (900-1)	3020-1¼ 839 (900-1¼)	3020-2½ 839 (900-2½)	3040-2¾ 859 (900-2¾)	3540-3 1359 (1400-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

KADDY ONE ARRIVAL (KADDY.KADDY1)



NOTE: Chart not to scale.

NOTE: RADAR and DME REQUIRED

DRAKE TRANSITION (DRK.KADDY1): From over DRK VORTAC via DRK R-281 and IGM R-100 to IGM VOR/DME, then via IGM R-320 and BLD R-108 to KADDY INT. Thence....

KINGMAN TRANSITION (IGM.KADDY1): From over IGM VOR/DME via IGM R-320 and BLD R-108 to KADDY INT. Thence....

PEACH SPRINGS TRANSITION (PGS.KADDY1): From over PGS VORTAC via PGS R-265 to KADDY INT. Thence....

....After KADDY INT fly heading 325°. Thence....

McCARRAN INTL: All runways expect radar vectors to final approach course.

NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

LOST COMMUNICATIONS: After KADDY INT proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

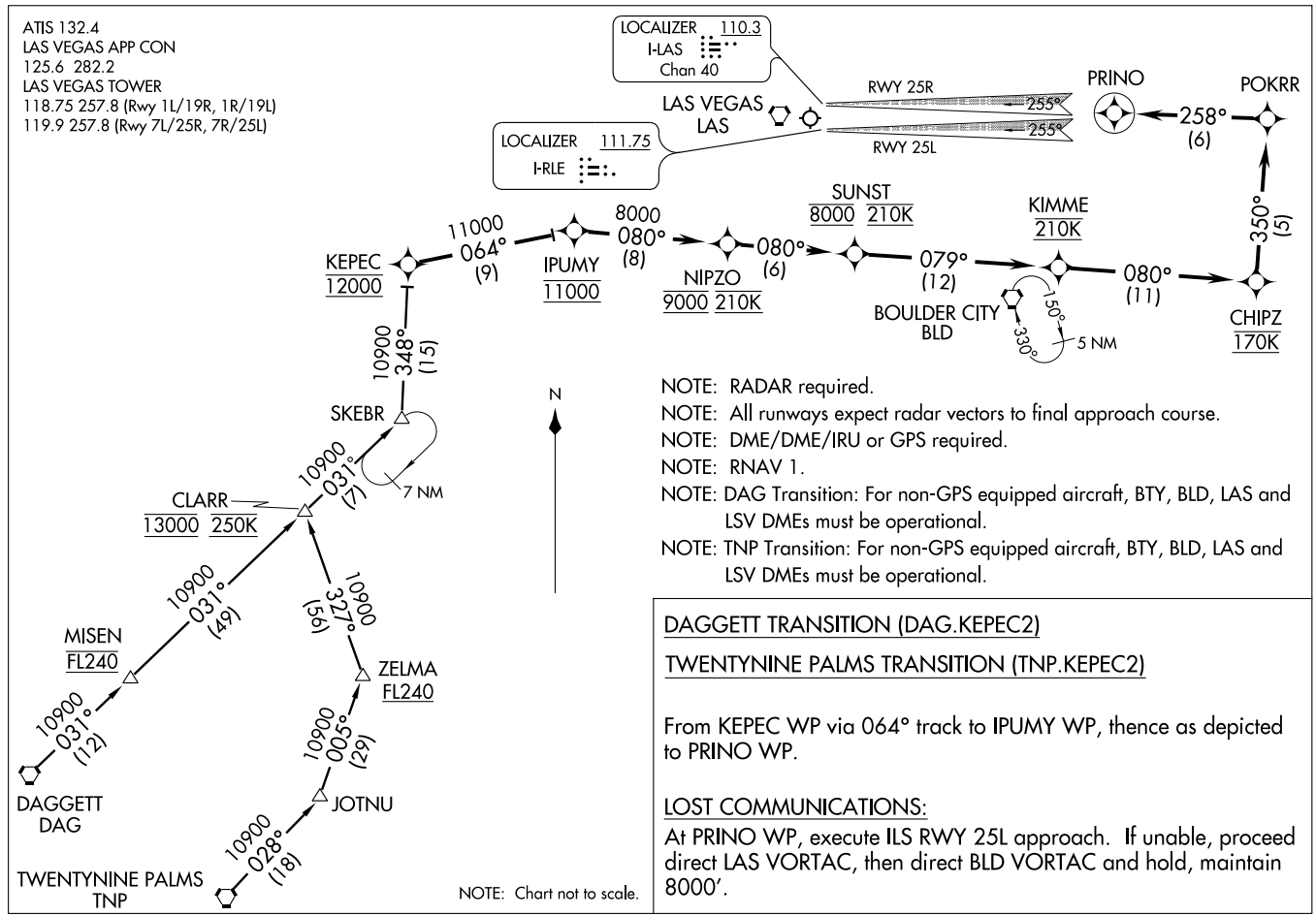
07298

ST-662 (FAA)

LAS VEGAS, NEVADA

KEPEC TWO ARRIVAL (RNAV)

ATIS 132.4
LAS VEGAS APP CON
125.6 282.2
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)



NOTE: Chart not to scale.

NOTE: RADAR required.

NOTE: All runways expect radar vectors to final approach course.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: DAG Transition: For non-GPS equipped aircraft, BTY, BLD, LAS and LSV DMEs must be operational.

NOTE: TNP Transition: For non-GPS equipped aircraft, BTY, BLD, LAS and LSV DMEs must be operational.

DAGGETT TRANSITION (DAG.KEPEC2)

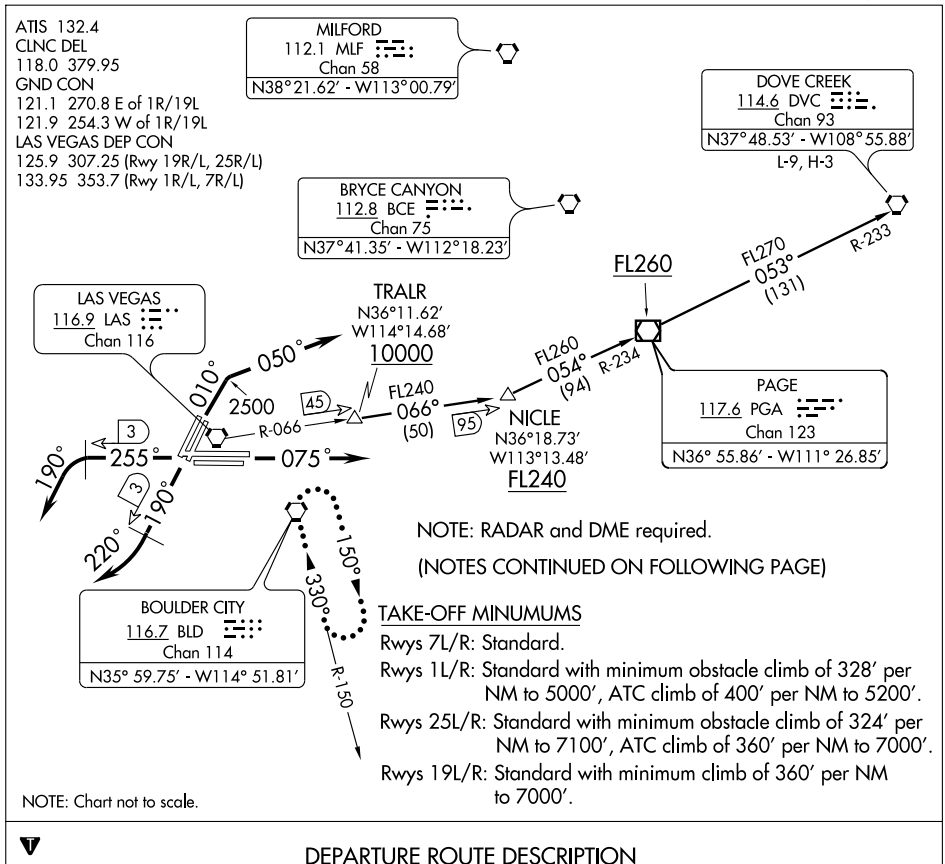
TWENTYNINE PALMS TRANSITION (TNP.KEPEC2)

From KEPEC WP via 064° track to IPUMY WP, thence as depicted to PRINO WP.

LOST COMMUNICATIONS:

At PRINO WP, execute ILS RWY 25L approach. If unable, proceed direct LAS VORTAC, then direct BLD VORTAC and hold, maintain 8000′.

LAS VEGAS THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via heading 010° to 2500, then climbing right turn via heading 050°, thence ....

TAKE-OFF RUNWAYS 7L/R: Climb via heading 075°, thence ....

TAKE-OFF RUNWAYS 19L/R: Climb via heading 190° until LAS VORTAC 3 DME, then right turn via heading 220°, thence ....

TAKE-OFF RUNWAYS 25L/R: Climb via heading 255° until LAS VORTAC 3 DME, then left turn via heading 190°, thence ....

.... via radar vector to transition or assigned route, maintain 7000', expect clearance to filed altitude two minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC upon reaching 7000', proceed direct BLD VORTAC then climb in BLD VORTAC holding pattern to appropriate MEA for route of flight.

DOVE CREEK TRANSITION (LAS3.DVC): From over TRALR INT via LAS R-066 to NICLE INT, then via PGA R-234 to PGA VOR/DME, then via PGA R-053 and DVC R-233 to DVC VORTAC.

LAS VEGAS THREE DEPARTURE

TAKE-OFF OBSTACLE NOTES

RWY 1L: Multiple buildings 3954′ from DER, 1 NM left of centerline, up to 283′ AGL/2409′ MSL.
Pole 450′ from DER, 283′ left of centerline, 38′ AGL/2118′ MSL.
Obstacle light on wind sock 248′ from DER, 224′ right of centerline, 50′ AGL/2104′ MSL.
Pole 1029′ from DER, 715′ left of centerline, 85′ AGL/2124′ MSL.
Tree 1536′ from DER, 502′ left of centerline, 100′ AGL/2132′ MSL.

RWY 1R: Sign 1331′ from DER, 448′ right of centerline, 60′ AGL/2120′ MSL
Building 599′ from DER, 541′ right of centerline, 70′ AGL/2096′ MSL
Multiple buildings 4878′ from DER, 1.2 NM left of centerline, up to 283′ AGL/2409′ MSL.

RWY 25R: Light pole 3115′ from DER, 1033′ right of centerline, 109′ AGL/2301′ MSL.
Light on pole 1.5 NM from DER, 2836′ left of centerline, 124′ AGL/2457′ MSL.
Road 1.7 NM from DER, 2965′ left of centerline, 139′ AGL/2469′ MSL.
Light on pole 1100′ from DER, 508′ left of centerline, 47′ AGL/2226′ MSL.
Building 1822′ from DER, 652′ left of centerline, 46′ AGL/2238′ MSL.
Building 2202′ from DER, 596′ left of centerline, 44′ AGL/2246′ MSL.
Rod on building 534′ from DER, 369′ left of centerline, 33′ AGL/2202′ MSL.
Road 678′ from DER, 16′ right of centerline, 35′ AGL/2201′ MSL.
Light on localizer antenna 533′ from DER, 32′ AGL/2195′ MSL.

RWY 25L: Pole 2860′ from DER, 813′ left of centerline, 57′ AGL/2236′ MSL.
Sign 3672′ from DER, 1302′ left of centerline, 57′ AGL/2256′ MSL.
Antenna on building 1002′ from DER, 251′ left of centerline, 34′ AGL/2183′ MSL.
Pole 3677′ from DER, 145′ left of centerline, 67′ AGL/2249′ MSL.

RWY 7L: Tree 1257′ from DER, 789′ left of centerline, 85′ AGL/2077′ MSL.
Light pole 747′ from DER, 441′ right of centerline, 62′ AGL/2057′ MSL.
Tree 1007′ from DER, 557′ right of centerline, 70′ AGL/2062′ MSL.

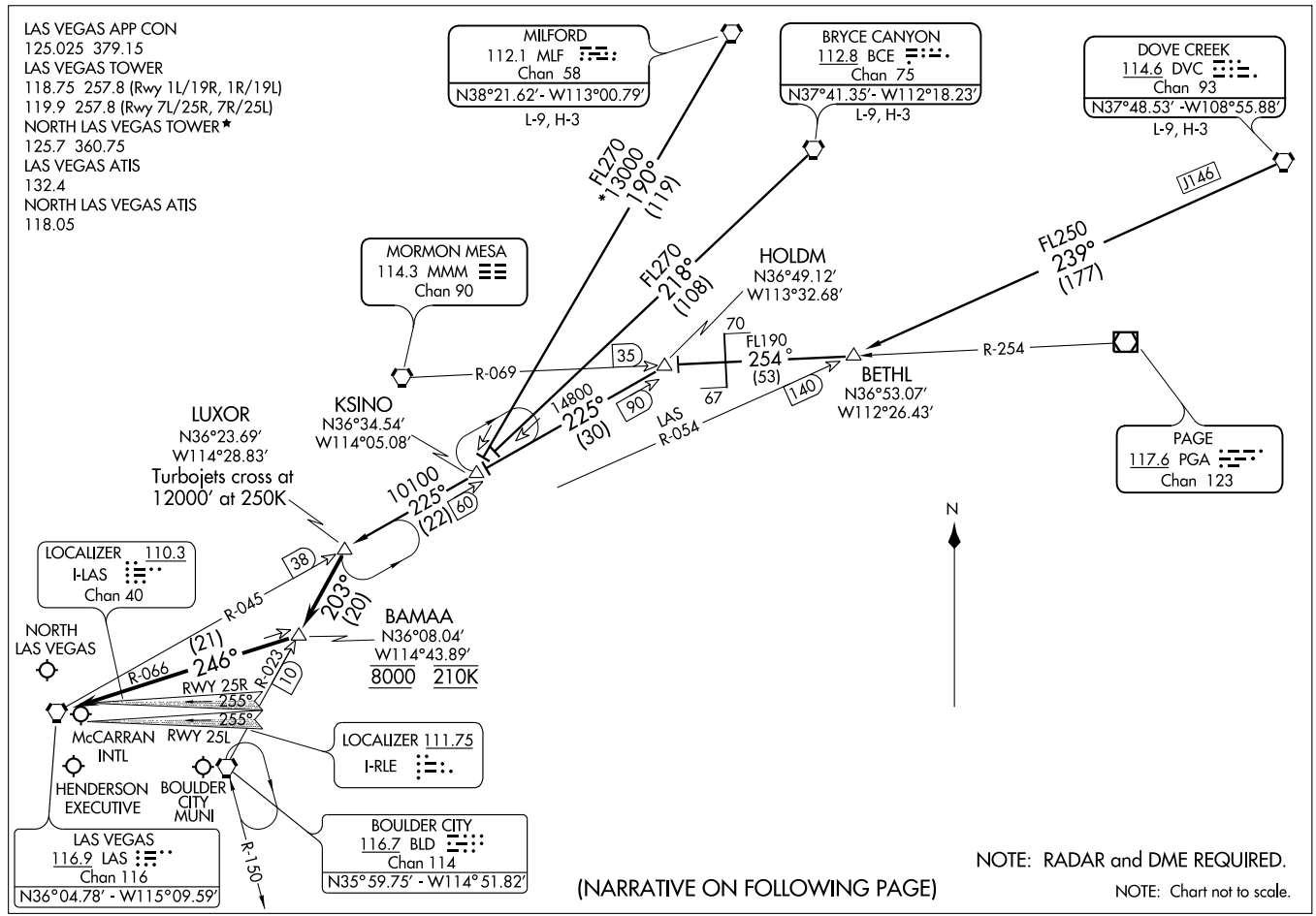
RWY 7R: Light on wind sock 102′ from DER, 300′ right of centerline, 30′ AGL/2051′ MSL.

RWY 19L: Pole 1394′ from DER, 533′ right of centerline, 36′ AGL/2236′ MSL.
Sign 2181′ from DER, 1062′ right of centerline, 50′ AGL/2256′ MSL.
Rod on building 2921′ from DER, 581′ right of centerline, 50′ AGL/2262′ MSL.
Pole 2633′ from DER, 319′ right of centerline, 40′ AGL/2246′ MSL.

RWY 19R: Pole 1135′ from DER, 619′ right of centerline, 65′ AGL/2249′ MSL.
Pole 756′ from DER, 618′ right of centerline, 50′ AGL/2231′ MSL.
Sign 2182′ from DER, 125′ right of centerline, 50′ AGL/2256′ MSL.
Pole 1396′ from DER, 403′ left of centerline, 55′ AGL/2236′ MSL.
Rod on building 197′ from DER, 441′ right of centerline, 30′ AGL/2202′ MSL.
Rod on building 2922′ from DER, 356′ left of centerline, 50′ AGL/2262′ MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

LUXOR TWO ARRIVAL



ARRIVAL DESCRIPTION

BETHL TRANSITION (BETHL.LUXOR2): From over BETHL INT via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

BRYCE CANYON TRANSITION (BCE.LUXOR2): From over BCE VORTAC via BCE R-218 and LAS R-045 to LUXOR INT. Thence. . . .

DOVE CREEK TRANSITION (DVC.LUXOR2): From over DVC VORTAC via DVC R-239 and LAS R-054 to BETHL INT, then via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

MILFORD TRANSITION (MLF.LUXOR2): From over MLF VORTAC via MLF R-190 and LAS R-045 to LUXOR INT. Thence. . . .

. . . .From over LUXOR INT via BLD R-023 to BAMAA INT, thence via LAS R-066 to LAS VORTAC. Thence. . . .

LANDING McCARRAN INTL: All runways expect radar vectors to final approach course.

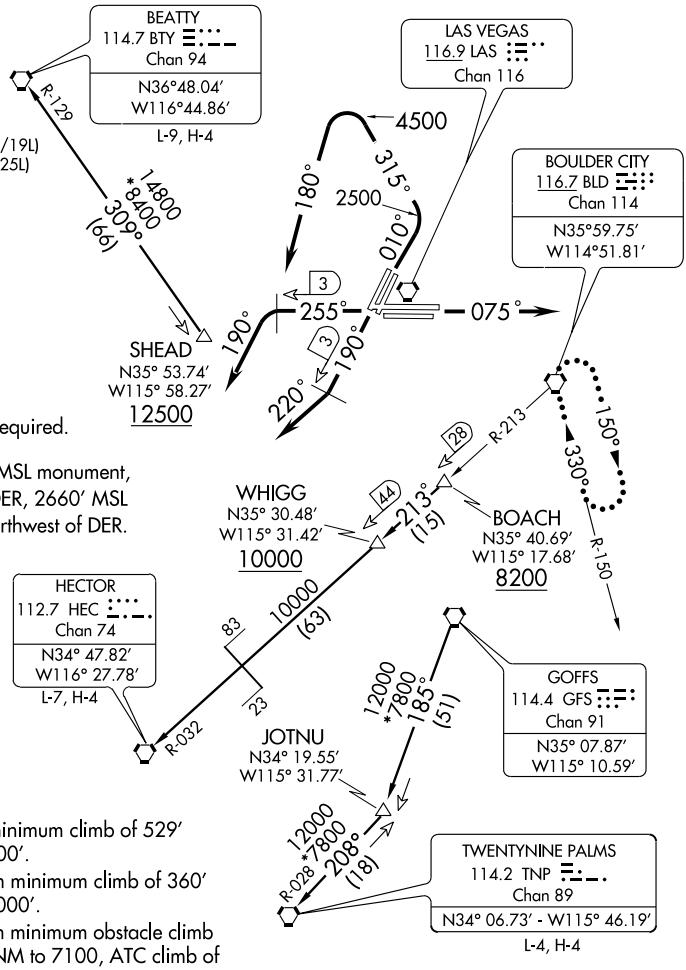
LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

LOST COMMUNICATIONS: After LAS VORTAC proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

SW-4, 22 OCT 2009 to 19 NOV 2009

MCCARRAN THREE DEPARTURE

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
LAS VEGAS DEP CON
125.9 307.25



NOTE: RADAR and DME required.

NOTE: Rwys 1L/R 3189′ MSL monument, 2.7 NM north of DER, 2660′ MSL building, 1 NM northwest of DER.

TAKE-OFF MINUMUMS

Rwys 1L/R: 1100-3 with minimum climb of 529′ per NM to 7000′.

Rwys 19L/R: Standard with minimum climb of 360′ per NM to 7000′.

Rwys 25L/R: Standard with minimum obstacle climb of 324′ per NM to 7100, ATC climb of 360′ per NM to 7000.

Rwys 7L/R: Standard with minimum ATC climb of 440′ per NM to 7000′.

TAKE-OFF OBSTACLE NOTES

RWY 1L: Pole 450′ from DER, 283′ left of centerline, 38′ AGL/2118′ MSL.
Obstacle light on wind sock 248′ from DER, 224′ right of centerline, 50′ AGL/2104′ MSL.
Pole 1029′ from DER, 715′ left of centerline, 85′ AGL/2124′ MSL.
Tree 1536′ from DER, 502′ left of centerline, 100′ AGL/2132′ MSL.

RWY 1R: Sign 1331′ from DER, 448′ right of centerline, 60′ AGL/2120′ MSL
Building 599′ from DER, 541′ right of centerline, 70′ AGL/2096′ MSL

(NOTES CONTINUED ON FOLLOWING PAGE)

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

MCCARRAN THREE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb via heading 010° to 2500', then climbing left turn via heading 315° to 4500', then climbing left turn heading 180°, thence ....

TAKE-OFF RUNWAYS 7L/R: Climb via heading 075°, thence ....

TAKE-OFF RUNWAYS 19L/R: Climb via heading 190° until LAS VORTAC 3 DME, then right turn via heading 220°, thence ....

TAKE-OFF RUNWAYS 25L/R: Climb via heading 255° until LAS VORTAC 3 DME, then left turn via heading 190°, thence ....

....via radar vectors to transition or assigned route, maintain 7000', expect clearance to filed altitude 2 minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC upon reaching 7000', proceed direct BLD VORTAC, then climb in BLD VORTAC holding pattern to the appropriate MEA for route of flight.

BEATTY TRANSITION (MCCRN3.BTY): From over SHEAD INT via BTY R-129 to BTY VORTAC.

HECTOR TRANSITION (MCCRN3.HEC): From over BOACH INT via BLD R-213 and HEC R-032 to HEC VORTAC.

TWENTY NINE PALMS TRANSITION (MCCRN3.TNP): From over GFS VORTAC via GFS R-185 to JOTNU INT, then via TNP R-028 to TNP VORTAC.

TAKE-OFF OBSTACLE NOTES (CONTINUED)

RWY 25R: Light pole 3115' from DER, 1033' right of centerline, 109' AGL/2301' MSL.
Light on pole 1.5 NM from DER, 2836' left of centerline, 124' AGL/2457' MSL.
Light pole 1.7 NM from DER, 2965' left of centerline, 139' AGL/2469' MSL.
Light on pole 1100' from DER, 508' left of centerline, 47' AGL/2226' MSL.
Building 1822' from DER, 652' left of centerline, 46' AGL/2238' MSL.
Building 2202' from DER, 596' left of centerline, 44' AGL/2246' MSL.
Rod on building 534' from DER, 369' left of centerline, 33' AGL/2202' MSL.
Road 678' from DER, 16' right of centerline, 35' AGL/2201' MSL.
Light on localizer antenna 533' from DER, 32' AGL/2195' MSL.

RWY 25L: Pole 2860' from DER, 813' left of centerline, 57' AGL/2236' MSL.
Sign 3672' from DER, 1302' left of centerline, 57' AGL/2256' MSL.
Antenna on building 1002' from DER, 251' left of centerline, 34' AGL/2183' MSL.
Pole 3677' from DER, 145' left of centerline, 67' AGL/2249' MSL.

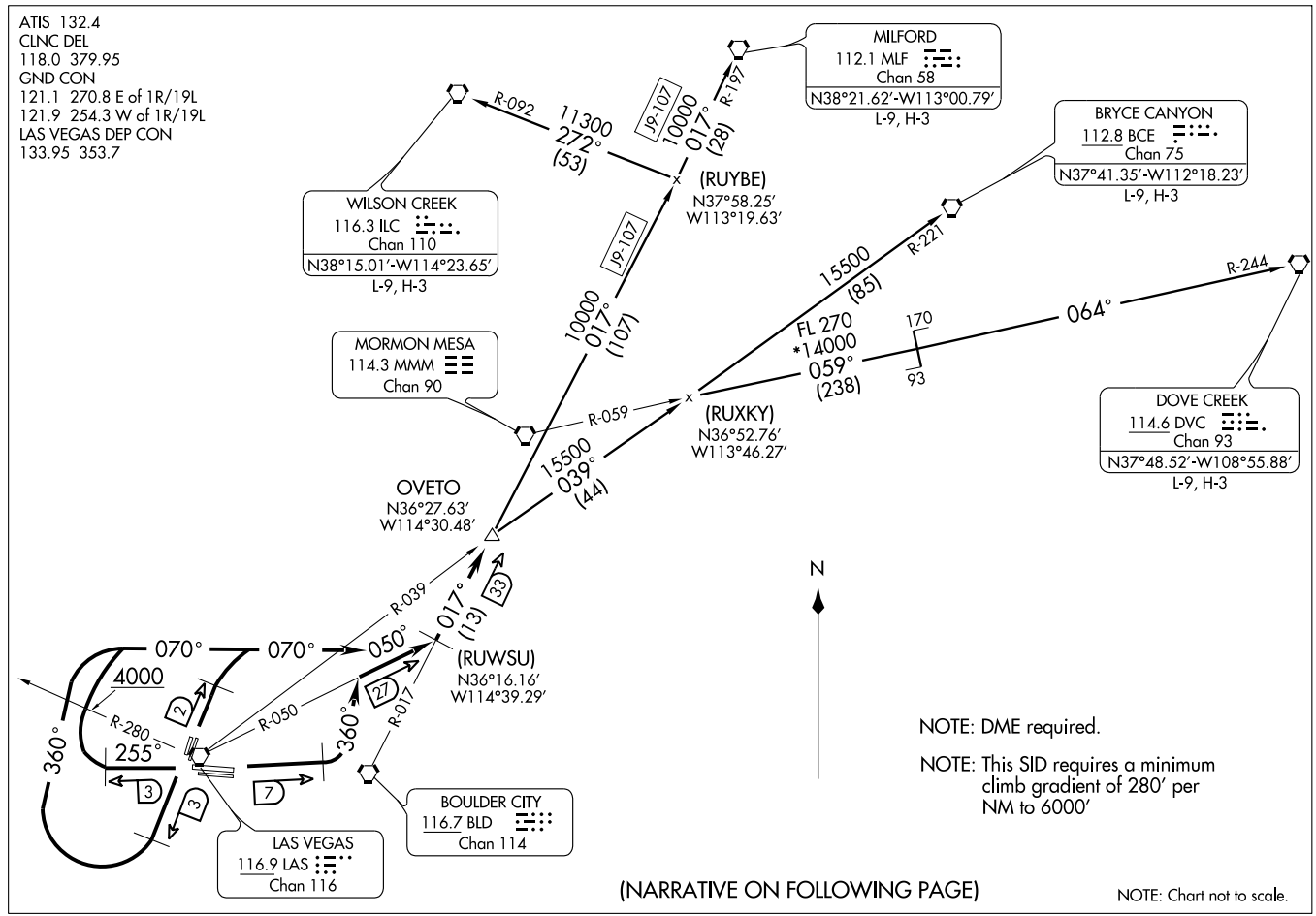
RWY 7L: Tree 1257' from DER, 789' left of centerline, 85' AGL/2077' MSL.
Light pole 747' from DER, 441' right of centerline, 62' AGL/2057' MSL.
Tree 1007' from DER, 557' right of centerline, 70' AGL/2062' MSL.

RWY 7R: Light on wind sock 102' from DER, 300' right of centerline, 30' AGL/2051' MSL.

RWY 19L: Pole 1394' from DER, 533' right of centerline, 36' AGL/2236' MSL.
Sign 2181' from DER, 1062' right of centerline, 50' AGL/2256' MSL.
Rod on building 2921' from DER, 581' right of centerline, 50' AGL/2262' MSL.
Pole 2633' from DER, 319' right of centerline, 40' AGL/2246' MSL.

RWY 19R: Pole 1135' from DER, 619' right of centerline, 65' AGL/2249' MSL.
Pole 756' from DER, 618' right of centerline, 50' AGL/2231' MSL.
Sign 2182' from DER, 125' right of centerline, 50' AGL/2256' MSL.
Pole 1396' from DER, 403' left of centerline, 55' AGL/2236' MSL.
Rod on building 197' from DER, 441' right of centerline, 30' AGL/2202' MSL.
Rod on building 2922' from DER, 356' left of centerline, 50' AGL/2262' MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009



(OVETO3.OVETO) 09015

OVETO THREE DEPARTURE

SI-662 (FAA)

LAS VEGAS/McCARRAN INTL (LAS)
LAS VEGAS, NEVADA

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1L/R: Climb on runway heading until reaching LAS 2 DME then turn right heading 070° to intercept LAS R-050 to 27 DME; intercept BLD R-017 to OVETO 33 DME; then via (transition) or (assigned route). Aircraft filing 17000′ or above expect filed altitude/flight level ten minutes after departure.
TAKE-OFF RUNWAYS 7L/R: Climb on runway heading until reaching LAS 7 DME then turn left heading 360° to intercept LAS R-050 to 27 DME; maintain 8000′. Intercept BLD R-017 to OVETO 33 DME, then via (transition) or (assigned route). Aircraft filing 17000′ or above expect filed altitude/flight level ten minutes after departure.
TAKE-OFF RUNWAYS 19L/R: Climb on runway heading until reaching LAS 3 DME then turn right heading 360° until crossing LAS R-280, then climbing right turn heading 070° to intercept LAS R-050 to 27 DME; intercept BLD R-017 to OVETO 33 DME, then via (transition) or (assigned route). Aircraft filing 17000′ or above expect filed altitude/flight level ten minutes after departure.
TAKE-OFF RUNWAYS 25L/R: Climb on runway heading 255° until LAS 3 DME, then turn right heading 070° to cross LAS R-280 at or above 4000′, continue heading 070° to intercept LAS R-050 to 27 DME; intercept BLD R-017 to OVETO 33 DME, then via (transition) or (assigned route). Aircraft filing 17000′ or above, expect filed altitude/flight level ten minutes after departure.
BRYCE CANYON TRANSITION (OVETO3.BCE): From over OVETO INT via LAS R-039 and BCE R-221 to BCE VORTAC.
DOVE CREEK TRANSITION (OVETO3.DVC): From over OVETO INT via LAS R-039 to intercept MMM R-059, then via MMM R-059 and DVC R-244 to DVC VORTAC.
MILFORD TRANSITION (OVETO3.MLF): From over OVETO INT via BLD R-017 and MLF R-197 to MLF VORTAC.
WILSON CREEK TRANSITION (OVETO3.ILC): From over OVETO INT via BLD R-017 and MLF R-197 to ILC R-092, then via ILC R-092 to ILC VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

PRFUM TWO DEPARTURE (RNAV)

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
LAS VEGAS DEP CON
125.9 307.25

TAKE-OFF MINIMUMS

Runways 1L/R, 7L/R, NA- air traffic.

Runways 19L/R, standard with minimum climb of 335′ per NM to 15500.

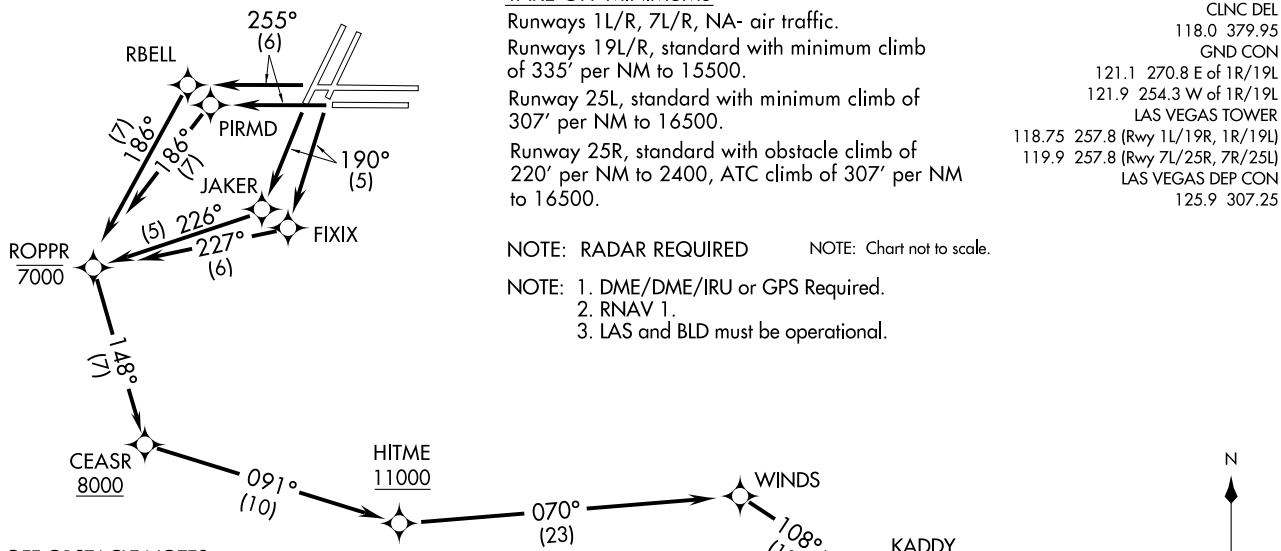
Runway 25L, standard with minimum climb of 307′ per NM to 16500.

Runway 25R, standard with obstacle climb of 220′ per NM to 2400, ATC climb of 307′ per NM to 16500.

NOTE: RADAR REQUIRED

NOTE: Chart not to scale.

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.
3. LAS and BLD must be operational.



TAKE-OFF OBSTACLE NOTES

RWY 19L: Multiple poles, sign, and building 1394 feet from departure end of rwy, 320 feet right of centerline, up to 51′ AGL/2256′ MSL.

RWY 19R: Multiple poles, sign, and building 197 feet from departure end of rwy, 125 feet right of centerline, up to 51′ AGL/2256′ MSL.
Multiple poles and building 1396 feet from departure end of rwy, 356 feet left of centerline, up to 47′ AGL/2262′ MSL.

RWY 25L: Multiple poles, sign, and building 1003 feet from departure end of rwy, 251 feet left of centerline, up to 63′ AGL/2256′ MSL.

RWY 25R: Multiple poles and road 675 feet from departure end of rwy, 17 feet right of centerline, up to 100′ AGL/2301′ MSL.
Multiple poles and buildings 533 feet from departure end of rwy, 1 foot left of centerline, up to 150′ AGL/2469′ MSL.

(NARRATIVE ON FOLLOWING PAGE)

PRFUM TWO DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 19L: Climb via 190° course to FIXIX WP, then via 227° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 070° track to WINDS WP, then via 108° track to cross KADDY WP at or above FL200, then via 108° track to PRFUM WP. Thence....

TAKE-OFF RUNWAY 19R: Climb via 190° course to JAKER WP, then via 226° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 070° track to WINDS WP, then via 108° track to cross KADDY WP at or above FL200, then via 108° track to PRFUM WP. Thence....

TAKE-OFF RUNWAY 25L: Climb via 255° course to PIRMD WP, then via 186° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 070° track to WINDS WP, then via 108° track to cross KADDY WP at or above FL200, then via 108° track to PRFUM WP. Thence....

TAKE-OFF RUNWAY 25R: Climb via 255° course to RBELL WP, then via 186° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 091° track to cross HITME WP at or above 11000, then via 070° track to WINDS WP, then via 108° track to cross KADDY WP at or above FL200, then via 108° track to PRFUM WP. Thence....

....via (Transition) maintain FL190, expect filed altitude 10 minutes after departure.

DRAKE TRANSITION (PRFUM2.DRK)

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 42800 W01A	APP CRS 010°	Rwy Idg 8681 TDZE 2170 Apt Elev 2181

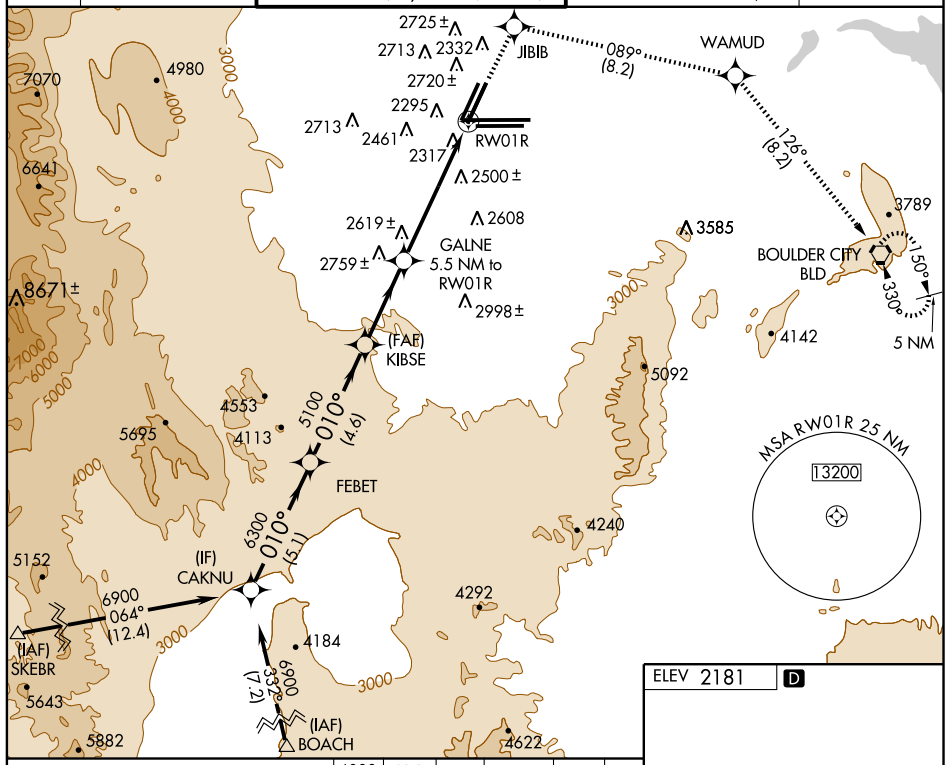
RNAV (GPS) RWY 1R

LAS VEGAS/McCARRAN INTL (LAS)

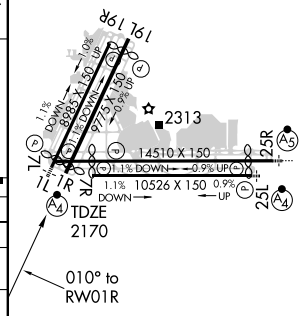
DME/DME RNP-0.3 NA.

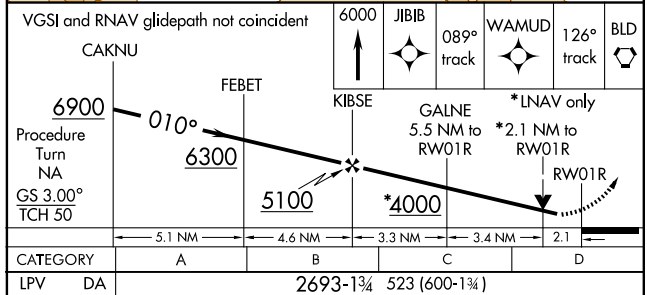
MISSED APPROACH: Climb to 6000 direct JIBIB and via 089° track to WAMUD and via 126° track to BLD VORTAC and hold.

ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95



ELEV 2181 D





CATEGORY	A	B	C	D
LPV DA	2693-1¾ 523 (600-1¾)			
LNAV/VNAV DA	NA			
LNAV MDA	2920-1 750 (800-1)	2920-1¼ 750 (800-1¼)	2920-2¼ 750 (800-2¼)	2920-2½ 750 (800-2½)
CIRCLING	3020-1¾ 839 (900-1¾)		3020-2½ 839 (900-2½)	3020-2¾ 839 (900-2¾)

REIL Rwys 1L, 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwys 1L-19R, 7L-25R and 7R-25L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8745
200°	TDZE	2113
	Apt Elev	2181

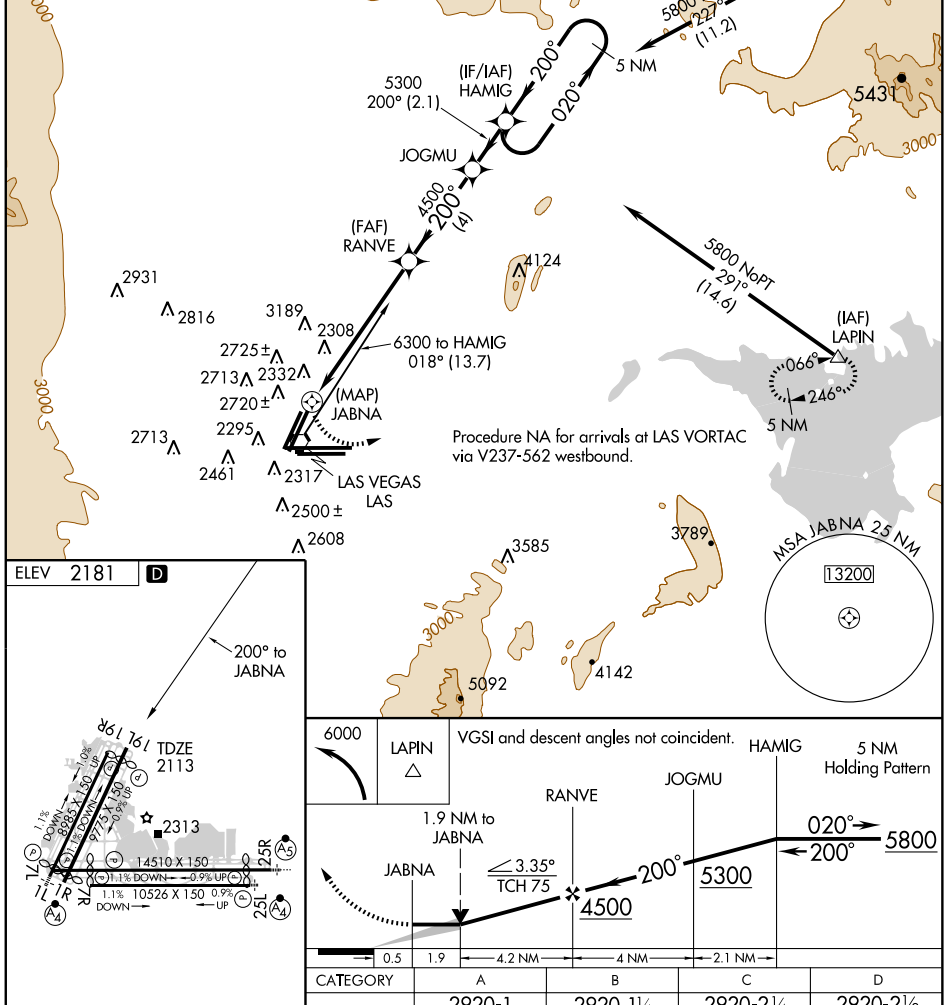
RNAV (GPS) RWY 19L

LAS VEGAS/McCARRAN INTL (LAS)

If local altimeter setting not received, use North Las Vegas altimeter setting and increase all MDAs 40 feet.
DME/DME RNP- 0.3 NA.
VDP NA when using North Las Vegas altimeter setting.

MISSED APPROACH: Climbing left turn to 6000 direct LAPIN and hold.

ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95



CATEGORY	A	B	C	D
LNAV MDA	2920-1 807 (800-1)	2920-1¼ 807 (800-1¼)	2920-2¼ 807 (800-2¼)	2920-2½ 807 (800-2½)
CIRCLING	3020-1 839 (900-1)	3020-1¼ 839 (900-1¼)	3080-2¾ 899 (900-2¾)	3080-3 899 (900-3)

REIL Rwys 1L, 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwys 1L-19R, 7L-25R and 7R-25L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8397
201°	TDZE	2117
	Apt Elev	2181

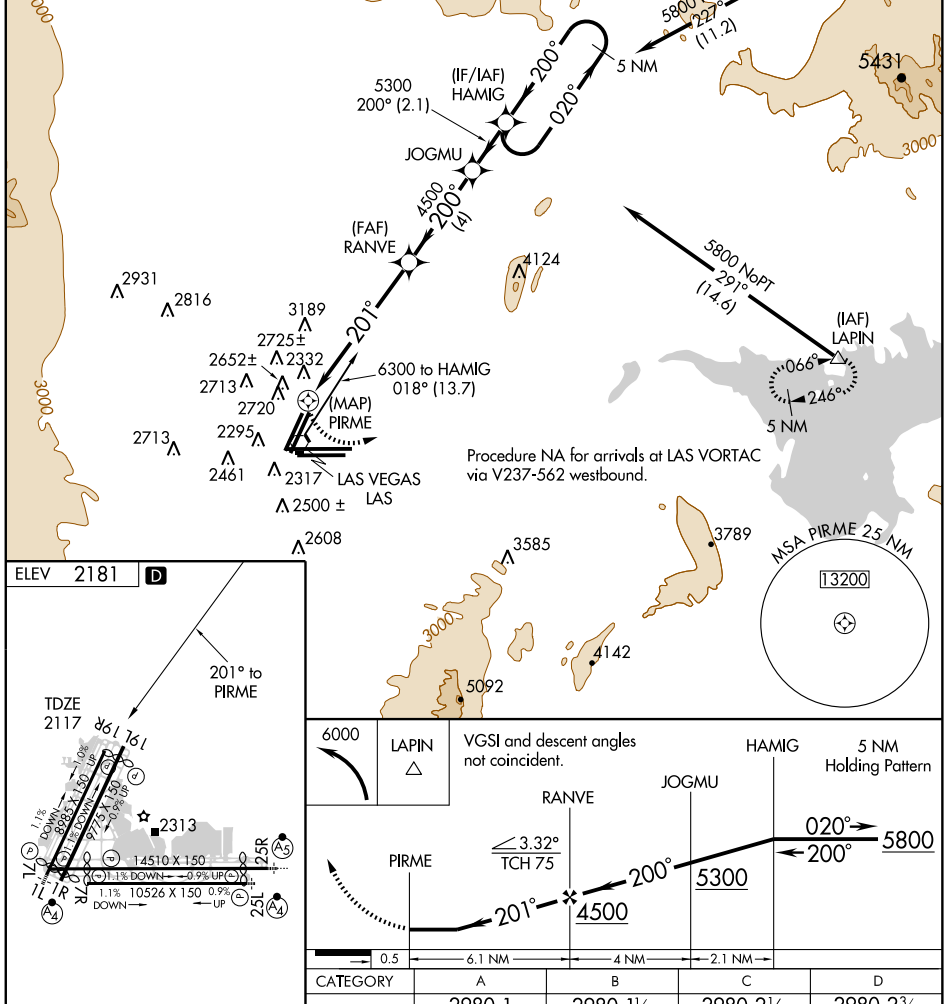
RNAV (GPS) RWY 19R

LAS VEGAS/McCARRAN INTL (LAS)

If local altimeter setting not received, use North Las Vegas altimeter setting and increase all MDAs 40 feet.
DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 6000 direct LAPIN and hold.

ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95



REIL Rwys 1L, 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwys 1L-19R, 7L-25R and 7R-25L

CATEGORY	A	B	C	D
LNAV MDA	2980-1 863 (800-1)	2980-1¼ 863 (800-1¼)	2980-2½ 863 (800-2½)	2980-2¾ 863 (800-2¾)
CIRCLING	3020-1 839 (900-1)	3020-1¼ 839 (900-1¼)	3080-2¾ 899 (900-2¾)	3080-3 899 (900-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

SHEAD FIVE DEPARTURE (RNAV)

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
LAS VEGAS DEP CON
125.9 307.25

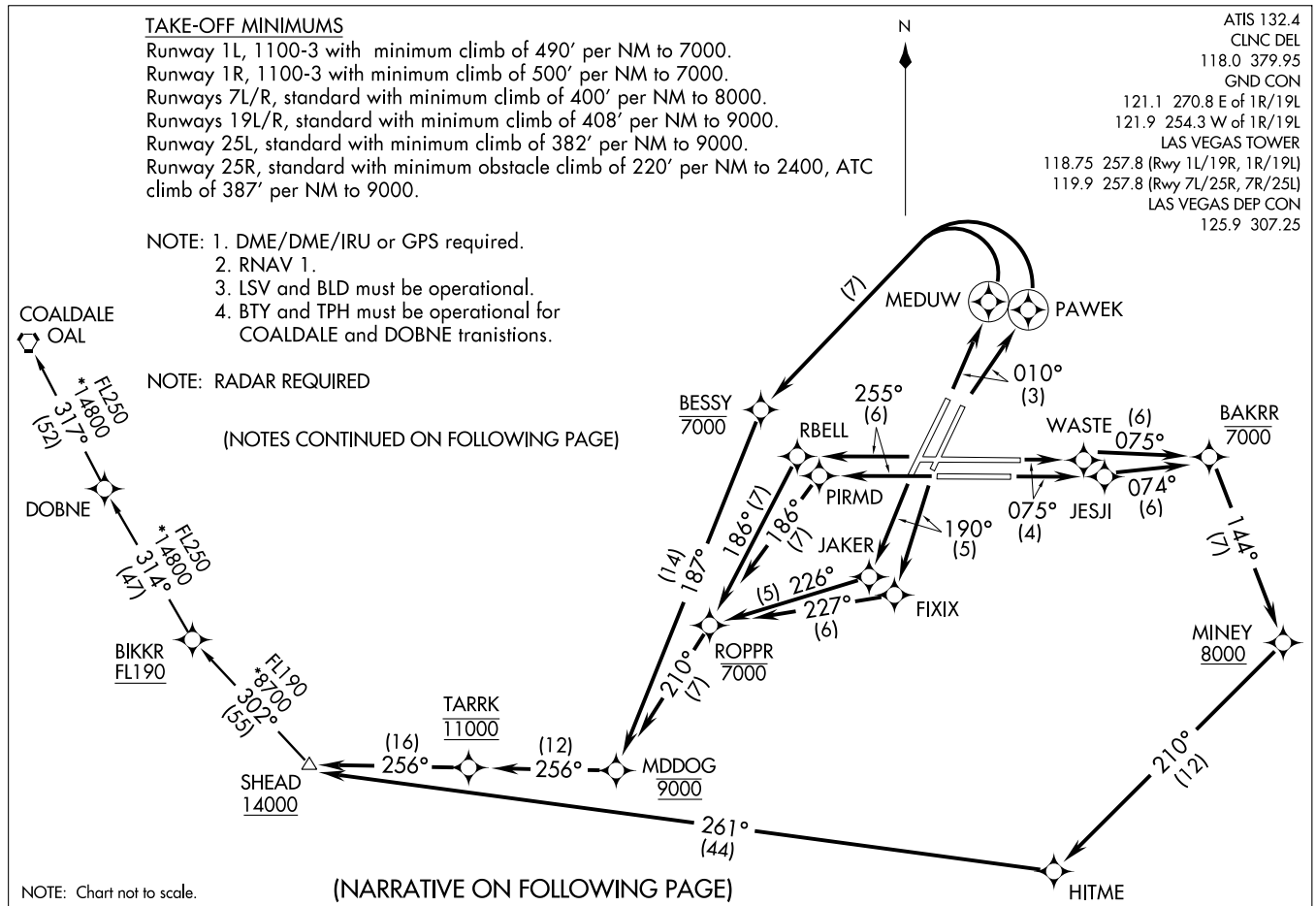
TAKE-OFF MINIMUMS

Runway 1L, 1100-3 with minimum climb of 490′ per NM to 7000.
Runway 1R, 1100-3 with minimum climb of 500′ per NM to 7000.
Runways 7L/R, standard with minimum climb of 400′ per NM to 8000.
Runways 19L/R, standard with minimum climb of 408′ per NM to 9000.
Runway 25L, standard with minimum climb of 382′ per NM to 9000.
Runway 25R, standard with minimum obstacle climb of 220′ per NM to 2400, ATC climb of 387′ per NM to 9000.

NOTE: 1. DME/DME/IRU or GPS required.
2. RNAV 1.
3. LSV and BLD must be operational.
4. BTY and TPH must be operational for COALDALE and DOBNE tranistions.

NOTE: RADAR REQUIRED

(NOTES CONTINUED ON FOLLOWING PAGE)



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L: Climb via 010° course to MEDUW, then left turn direct to cross BESSY at or below 7000, then via 187° track to cross MDDOG at 9000, then via 256° track to cross TARRK at 11000, then via 256° track to cross SHEAD at or above 14000. Thence. . . .

TAKE-OFF RUNWAY 1R: Climb via 010° course to PAWEK, then left turn direct to cross BESSY at or below 7000, then via 187° track to cross MDDOG at 9000, then via 256° track to cross TARRK at 11000, then via 256° track to cross SHEAD at or above 14000. Thence. . . .

TAKE-OFF RUNWAY 7L: Climb via 075° course to WASTE, then via 075° track to cross BAKRR at or below 7000, then via 144° track to cross MINEY at or above 8000, then via 210° track to HITME, then via 261° track to cross SHEAD at or above 14000. Thence. . . .

TAKE-OFF RUNWAY 7R: Climb via 075° course to JESJI, then via 074° track to cross BAKRR at or below 7000, then via 144° track to cross MINEY at or above 8000, then via 210° track to HITME, then via 261° track to cross SHEAD at or above 14000. Thence. . . .

TAKE-OFF RUNWAY 19L: Climb via 190° course to FIXIX, then via 227° track to cross ROPPR at or below 7000, then via 210° track to cross MDDOG at 9000, then via 256° track to cross TARRK at 11000, then via 256° track to cross SHEAD at or above 14000. Thence. . . .

TAKE-OFF RUNWAY 19R: Climb via 190° course to JAKER, then via 226° track to cross ROPPR at or below 7000, then via 210° track to cross MDDOG at 9000, then via 256° track to cross TARRK at 11000, then via 256° track to cross SHEAD at or above 14000. Thence. . . .

TAKE-OFF RUNWAY 25L: Climb via 255° course to PIRMD, then via 186° track to cross ROPPR at or below 7000, then via 210° track to cross MDDOG at 9000, then via 256° track to cross TARRK at 11000, then via 256° track to cross SHEAD at or above 14000. Thence. . . .

TAKE-OFF RUNWAY 25R: Climb via 255° course to RBELL, then via 186° track to cross ROPPR at or below 7000, then via 210° track to cross MDDOG at 9000, then via 256° track to cross TARRK at 11000, then via 256° track to cross SHEAD at or above 14000. Thence. . . .

....via (Transition) maintain FL190, expect filed altitude 10 minutes after departure

COALDALE TRANSITION (SHEAD5.OAL)

DOBNE TRANSITION (SHEAD5.DOBNE)

TAKE-OFF OBSTACLE NOTES

RWY 1L: Multiple poles, tree, and building 450 feet from DER, 283 feet left of centerline, up to 174' AGL/2132' MSL.
OL on windsock 248 feet from DER, 224 feet right of centerline, 15' AGL/2104' MSL.

RWY 1R: Multiple signs and building 1331 feet from DER, 448 feet right of centerline, up to 100' AGL/2120' MSL.

RWY 7L: Multiple poles and trees 747 feet from DER, 442 feet right of centerline, up to 62' AGL/2062' MSL.
Tree 1257 feet from DER, 789 feet left of centerline, 65' AGL/2077' MSL.

RWY 7R: Lighted windsock 126 feet from DER, 290 feet right of centerline, 25' AGL/2051' MSL.

RWY 19L: Multiple poles, sign, and building 1394 feet from DER, 320 feet right of centerline, up to 51' AGL/2256' MSL.

RWY 19R: Multiple poles, sign, and building 197 feet from DER, 125 feet right of centerline, up to 51' AGL/2256' MSL.
Multiple poles and building 1396 feet from DER, 356 feet left of centerline, up to 47' AGL/2262' MSL.

RWY 25L: Multiple poles, sign, and building 1003 feet from DER, 251 feet left of centerline, up to 63' AGL/2256' MSL.

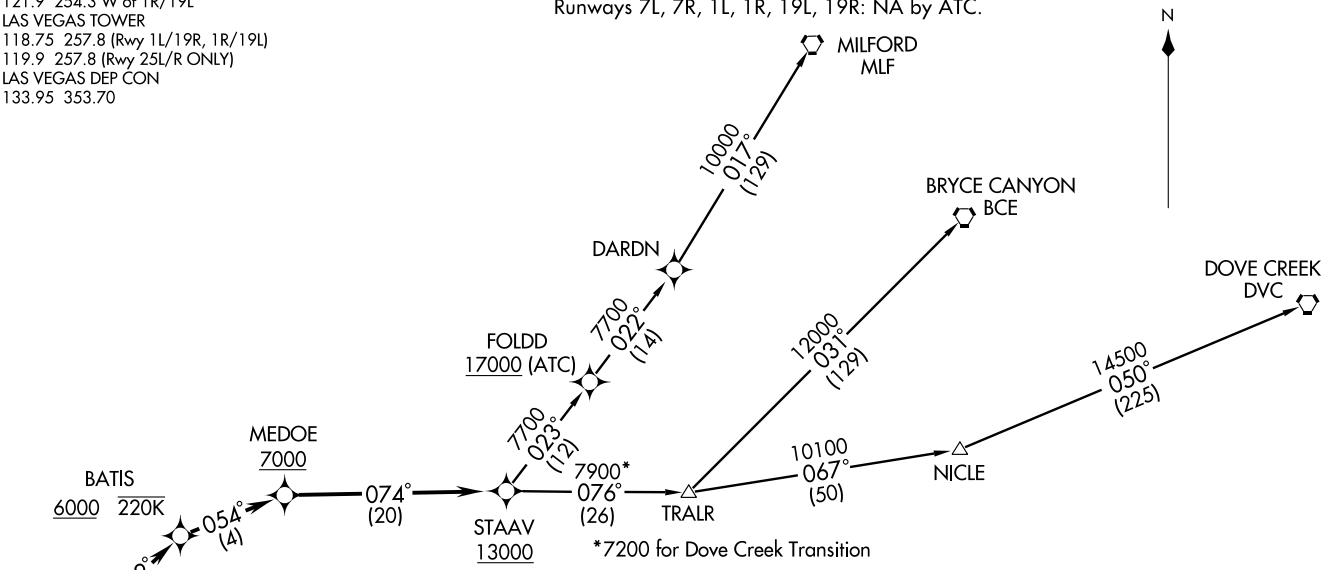
RWY 25R: Multiple poles and road 675 feet from DER, 17 feet right of centerline, up to 100' AGL/2301' MSL.
Multiple poles and buildings 533 feet from DER, 1 foot left of centerline, up to 150' AGL/2469' MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

STAAV FOUR DEPARTURE (RNAV)

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 25L/R ONLY)
LAS VEGAS DEP CON
133.95 353.70

TAKE-OFF MINIMUMS
Runway 25L: Standard. ATC climb of 330' per NM to 13000.
Runway 25R: 300-2 or Standard with minimum climb of 313' per NM to 4500.
ATC climb of 330' per NM to 13000.
Runways 7L, 7R, 1L, 1R, 19L, 19R: NA by ATC.



NOTE: DME/DME/IRU or GPS required.
NOTE: For Non-GPS equipped aircraft, LAS and BLD DME's must be operational.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Takeoff Rwy 25L, 25R, do not exceed 220K until BATIS.

(NOTES CONTINUED ON FOLLOWING PAGE)

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

STAAV FOUR DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 25R: Climb heading 255° to 2680', then direct LEELN, then via 332° track to cross TOMIS at or above 5000', then via 032° track to cross BATIS at or above 6000', then via 054° track to cross MEDOE at or above 7000', then via 074° track to cross STAAV at or above 13000, thence....

TAKE-OFF RUNWAY 25L: Climb heading 255° to 2660', then direct POOLZ, then via 333° track to cross TOMIS at or above 5000', then via 032° track to cross BATIS at or above 6000', then via 054° track to cross MEDOE at or above 7000', then via 074° track to cross STAAV at or above 13000, thence....

... via (transition) maintain FL190, expect filed altitude 10 minutes after departure.

BRYCE CANYON TRANSITION (STAAV4.BCE)
DOVE CREEK TRANSITION (STAAV4.DVC)
MILFORD TRANSITION (STAAV4.MLF)

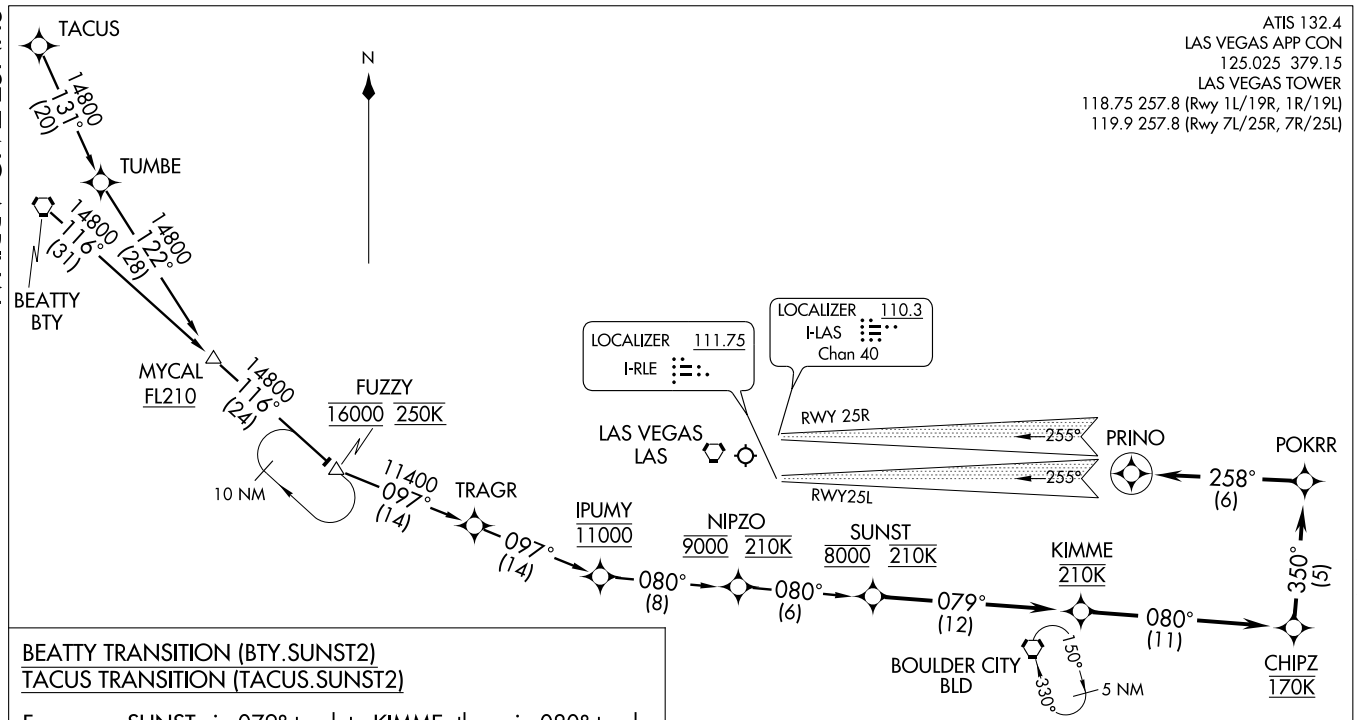
TAKE-OFF OBSTACLE NOTES

Rwy 25R: Lt. pole 3115' from DER, 1033' right of centerline, 92' AGL/2301' MSL.
Multiple Lt. poles beginning 1.6 NM from DER, 2836' left of centerline, up to 130' AGL/2469' MSL.
OL on sign 884' from DER, 710' left of centerline, 34' AGL/2233' MSL.
Multiple trees beginning 953' from DER, 522' right of centerline, up to 44' AGL/2237' MSL.
Multiple trees beginning 954' from DER, 546' left of centerline, up to 40' AGL/2245' MSL.
OL DME 533' from DER, 445' left of centerline, 18' AGL/2207' MSL.
Bldg 1822' from DER, 652' left of centerline, 59' AGL/2238' MSL.
Road 669' from DER, 477' left of centerline, 29' AGL/2208' MSL.
Rod on bldg 534' from DER, 369' left of centerline, 13' AGL/2202' MSL.
Road 678' from DER, 17' right of centerline, 15' AGL/2201' MSL.
OL on LOC 534' from DER, 1' from centerline, 6' AGL/2195' MSL.

Rwy 25L: Pole 2861' from DER, 813' left of centerline, 36' AGL/2236' MSL.
Sign 3672' from DER, 1303' left of centerline, 37' AGL/2256' MSL.
RR 2564' from DER, 773' left of centerline, 17' AGL/2223' MSL.
Tree 2838' from DER, 1008' left of centerline, 21' AGL/2230' MSL.
Ant. on bldg 1003' from DER, 251' left of centerline, 13' AGL/2183' MSL.
Pole 3677' from DER, 145' left of centerline, 40' AGL/2249' MSL.
Bldg 4719' from DER, 1757' left of centerline, 61' AGL/2290' MSL.
Bldg 4953' from DER, 1697' left of centerline, 61' AGL/2291' MSL.
Bldg 4612' from DER, 1400' left of centerline, 54' AGL/2281' MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

SUNST TWO ARRIVAL (RNAV)



BEATTY TRANSITION (BTY.SUNST2)
TACUS TRANSITION (TACUS.SUNST2)

From over SUNST via 079° track to KIMME, then via 080° track to CHIPZ, then left turn via 350° track to POKRR, then left turn via 258° track to PRINO. Expect radar vectors to final approach course.

LOST COMMUNICATIONS

At PRINO execute Rwy 25L ILS approach, if unable proceed direct to LAS VORTAC, then direct BLD VORTAC and hold, maintain 8000′.

NOTE: RADAR required.

NOTE: All runways expect radar vectors to final approach.

NOTE: DME/DME/IRU, or GPS required.

NOTE: RNAV 1

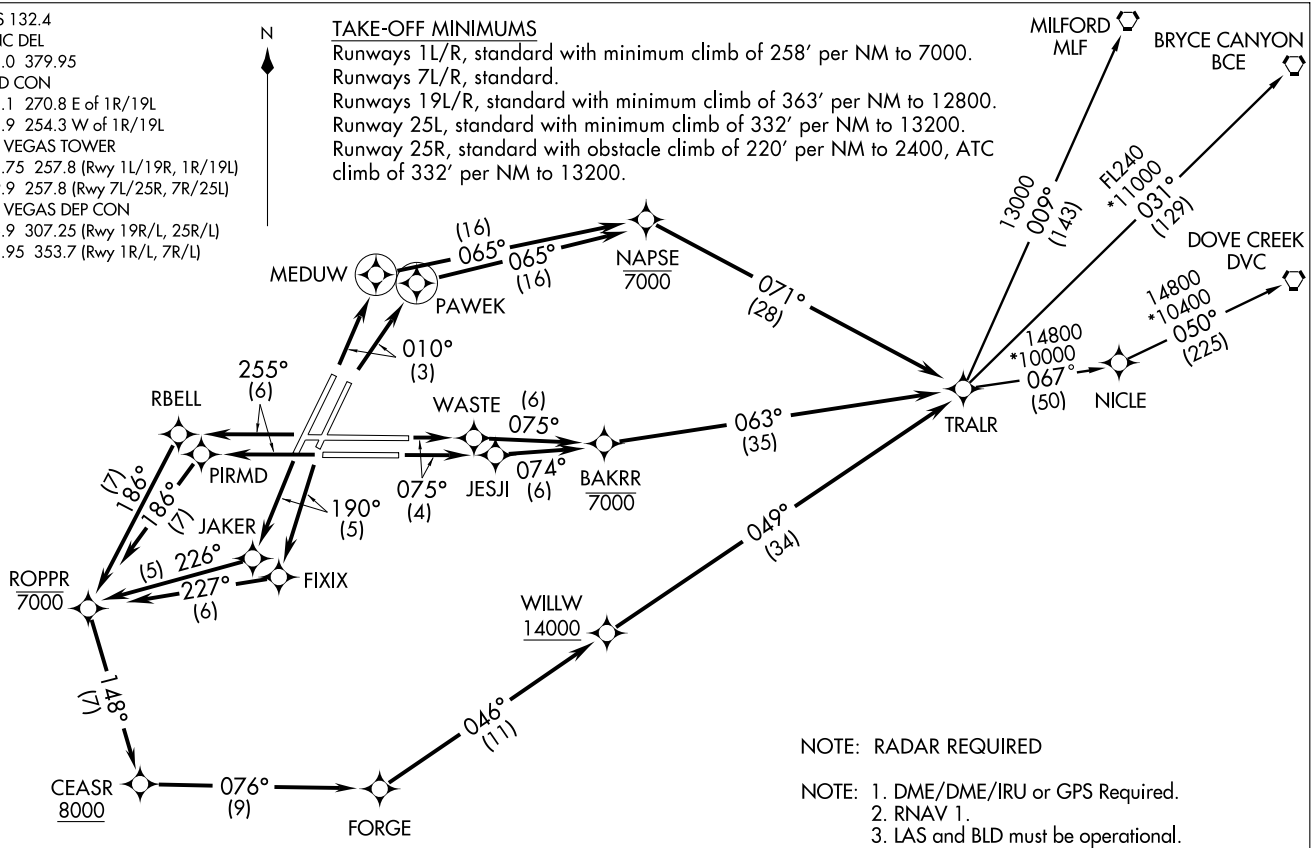
NOTE: Chart not to scale.

TRALR TWO DEPARTURE (RNAV)

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
LAS VEGAS DEP CON
125.9 307.25 (Rwy 19R/L, 25R/L)
133.95 353.7 (Rwy 1R/L, 7R/L)

N

TAKE-OFF MINIMUMS
Runways 1L/R, standard with minimum climb of 258′ per NM to 7000.
Runways 7L/R, standard.
Runways 19L/R, standard with minimum climb of 363′ per NM to 12800.
Runway 25L, standard with minimum climb of 332′ per NM to 13200.
Runway 25R, standard with obstacle climb of 220′ per NM to 2400, ATC climb of 332′ per NM to 13200.



NOTE: RADAR REQUIRED

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.
3. LAS and BLD must be operational.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

(NOTES CONTINUED ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L: Climb via 010° course to MEDUW WP, then via 065° track to cross NAPSE WP at or below 7000, then via 071° track to TRALR WP. Thence. . . .

TAKE-OFF RUNWAY 1R: Climb via 010° course to PAWEK WP, then via 065° track to cross NAPSE WP at or below 7000, then via 071° track to TRALR WP. Thence. . . .

TAKE-OFF RUNWAY 7L: Climb via 075° course to WASTE WP, then via 075° track to cross BAKRR WP at or below 7000, then via 063° track to TRALR WP. Thence. . . .

TAKE-OFF RUNWAY 7R: Climb via 075° course to JESJI WP, then via 074° track to cross BAKRR WP at or below 7000, then via 063° track to TRALR WP. Thence. . . .

TAKE-OFF RUNWAY 19L: Climb via 190° course to FIXIX WP, then via 227° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 076° track to FORGE WP, then via 046° track to cross WILLW WP at or above 14000, then via 049° track to TRALR WP. Thence....

TAKE-OFF RUNWAY 19R: Climb via 190° course to JAKER WP, then via 226° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 076° track to FORGE WP, then via 046° track to cross WILLW WP at or above 14000, then via 049° track to TRALR WP. Thence....

TAKE-OFF RUNWAY 25L: Climb via 255° course to PIRMD WP, then via 186° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 076° track to FORGE WP, then via 046° track to cross WILLW WP at or above 14000, then via 049° track to TRALR WP. Thence....

TAKE-OFF RUNWAY 25R: Climb via 255° course to RBELL WP, then via 186° track to cross ROPPR WP at or below 7000, then via 148° track to cross CEASR WP at or above 8000, then via 076° track to FORGE WP, then via 046° track to cross WILLW WP at or above 14000, then via 049° track to TRALR WP. Thence...

....via (Transition) maintain FL190, expect filed altitude 10 minutes after departure.

BRYCE CANYON TRANSITION (TRALR2.BCE)

DOVE CREEK TRANSITION (TRALR2.DVC)

MILFORD TRANSITION (TRALR2.MLF)

TAKE-OFF OBSTACLE NOTES

RWY 1L: Multiple poles, tree, and building 450 feet from departure end of rwy, 283 feet left of centerline, up to 174' AGL/2132' MSL.
OL on windsock 248 feet from departure end of rwy, 224 feet right of centerline, 15' AGL/2104' MSL.

RWY 1R: Multiple signs and building 1331 feet from departure end of rwy, 448 feet right of centerline, up to 100' AGL/2120' MSL.

RWY 7L: Multiple poles and trees 747 feet from departure end of rwy, 442 feet right of centerline, up to 62' AGL/2062' MSL.
Tree 1257 feet from departure end of rwy, 789 feet left of centerline, 65' AGL/2077' MSL.

RWY 7R: Lighted windsock 126 feet from departure end of rwy, 290 feet right of centerline, 25' AGL/2051' MSL.

RWY 19L: Multiple poles, sign, and building 1394 feet from departure end of rwy, 320 feet right of centerline, up to 51' AGL/2256' MSL.

RWY 19R: Multiple poles, sign, and building 197 feet from departure end of rwy, 125 feet right of centerline, up to 51' AGL/2256' MSL.
Multiple poles and building 1396 feet from departure end of rwy, 356 feet left of centerline, up to 47' AGL/2262' MSL.

RWY 25L: Multiple poles, sign, and building 1003 feet from departure end of rwy, 251 feet left of centerline, up to 63' AGL/2256' MSL.

RWY 25R: Multiple poles and road 675 feet from departure end of rwy, 17 feet right of centerline, up to 100' AGL/2301' MSL.
Multiple poles and buildings 533 feet from departure end of rwy, 1 foot left of centerline, up to 150' AGL/2469' MSL.

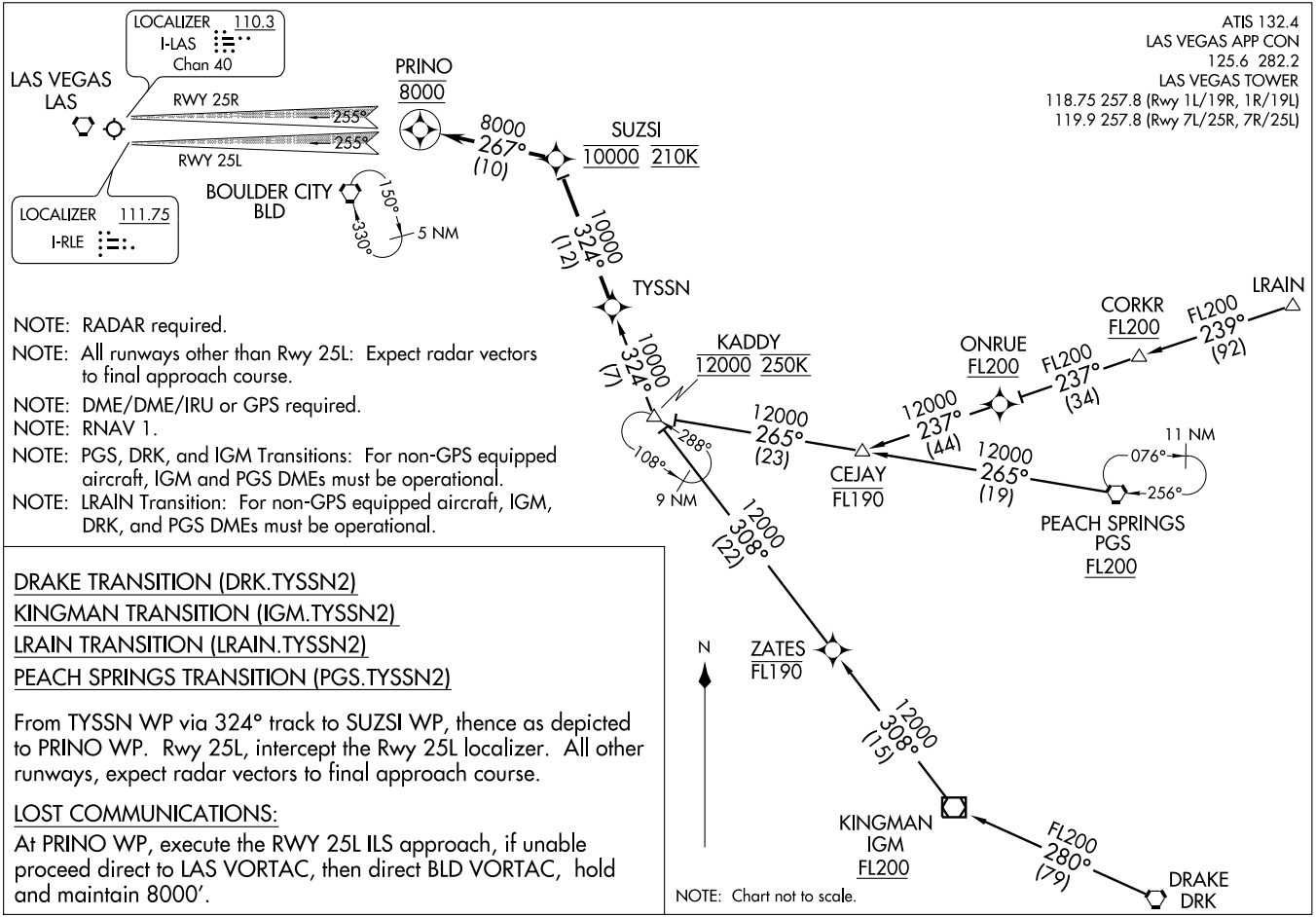
SW-4, 22 OCT 2009 to 19 NOV 2009

TYSSN TWO ARRIVAL (RNAV)

(TYSSN.TYSSN2) 08045

ST-662 (FAA)

McCARRAN INTL
LAS VEGAS, NEVADA



NOTE: RADAR required.

NOTE: All runways other than Rwy 25L: Expect radar vectors to final approach course.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: PGS, DRK, and IGM Transitions: For non-GPS equipped aircraft, IGM and PGS DMEs must be operational.

NOTE: LRAIN Transition: For non-GPS equipped aircraft, IGM, DRK, and PGS DMEs must be operational.

NOTE: Chart not to scale.

DRAKE TRANSITION (DRK.TYSSN2)

KINGMAN TRANSITION (IGM.TYSSN2)

LRAIN TRANSITION (LRAIN.TYSSN2)

PEACH SPRINGS TRANSITION (PGS.TYSSN2)

From TYSSN WP via 324° track to SUZSI WP, thence as depicted to PRINO WP. Rwy 25L, intercept the Rwy 25L localizer. All other runways, expect radar vectors to final approach course.

LOST COMMUNICATIONS:

At PRINO WP, execute the RWY 25L ILS approach, if unable proceed direct to LAS VORTAC, then direct BLD VORTAC, hold and maintain 8000′.

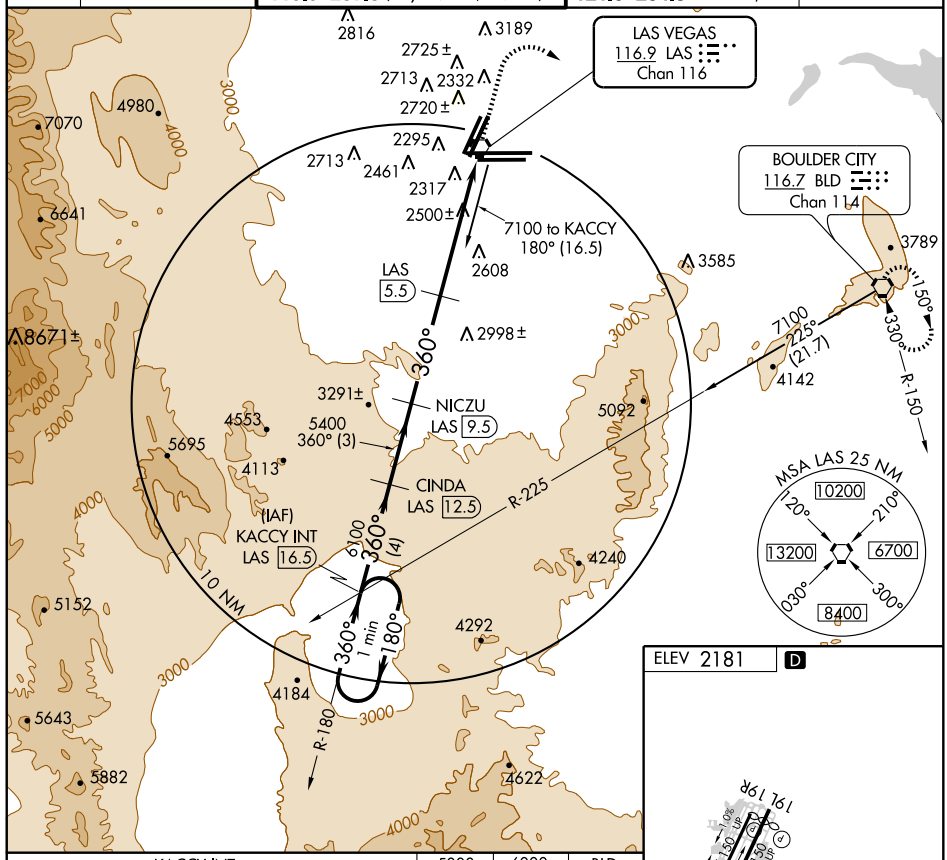
VORTAC LAS 116.9 Chan 116	APP CRS 360°	Rwy Idg N/A TDZE N/A Apt Elev 2181

VOR/DME-A

LAS VEGAS/McCARRAN INTL (LAS)

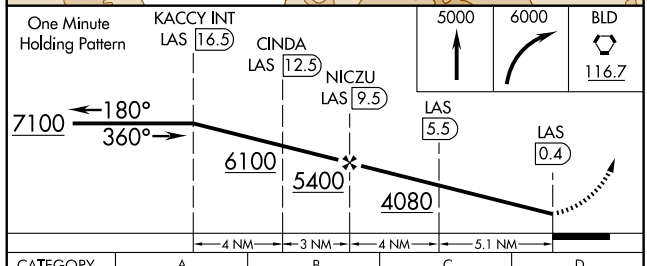
MISSED APPROACH: Climb to 5000 then climbing right turn to 6000 direct BLD VORTAC and hold.

ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95



360° 9.1 NM from FAF

REIL Rwys 1L, 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwys 1L-19R, 7L-25R and 7R-25L



CATEGORY	A	B	C	D
CIRCLING	3020-1 839 (900-1)	3020-1¼ 839 (900-1¼)	3020-2½ 839 (900-2½)	3020-2¾ 839 (900-2¾)

SW-4, 22 OCT 2009 to 19 NOV 2009

LAS VEGAS, NEVADA AL-662 (FAA)

VORTAC LAS	APP CRS	Rwy 25L ldg	10526	Rwy 25R ldg	12755
116.9	262°	TDZE	2069	TDZE	2067
Chan 116		Apt Elev	2181	Apt Elev	2181

VOR RWY 25L/R

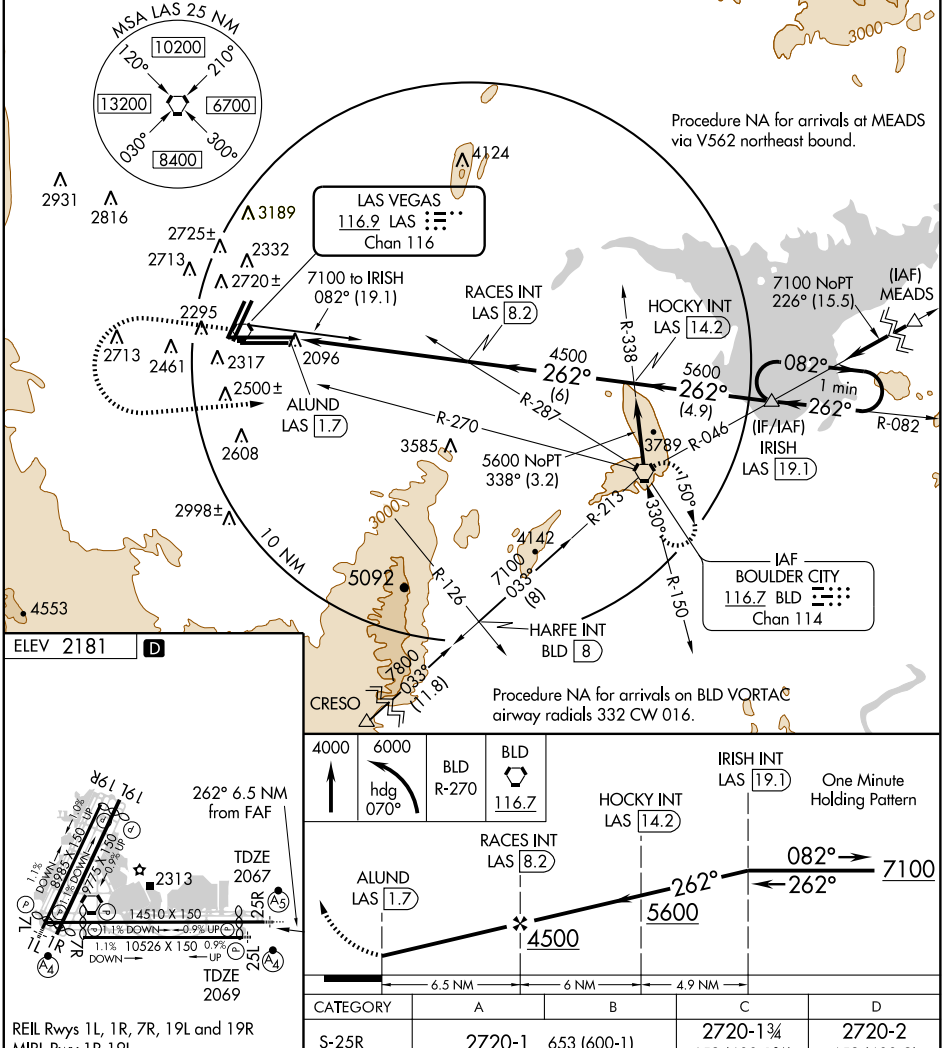
LAS VEGAS/McCARRAN INTL (LAS)

Inoperative table does not apply to MALSR Rwy 25R.
Inoperative table does not apply to MALSF Rwy 25L Cat. C.

MALSF Rwy 25L (A4) MALSR Rwy 25R (A5)

MISSED APPROACH: Climb to 4000 then climbing left turn to 6000 via heading 070° and BLD R-270 to BLD VORTAC and hold.

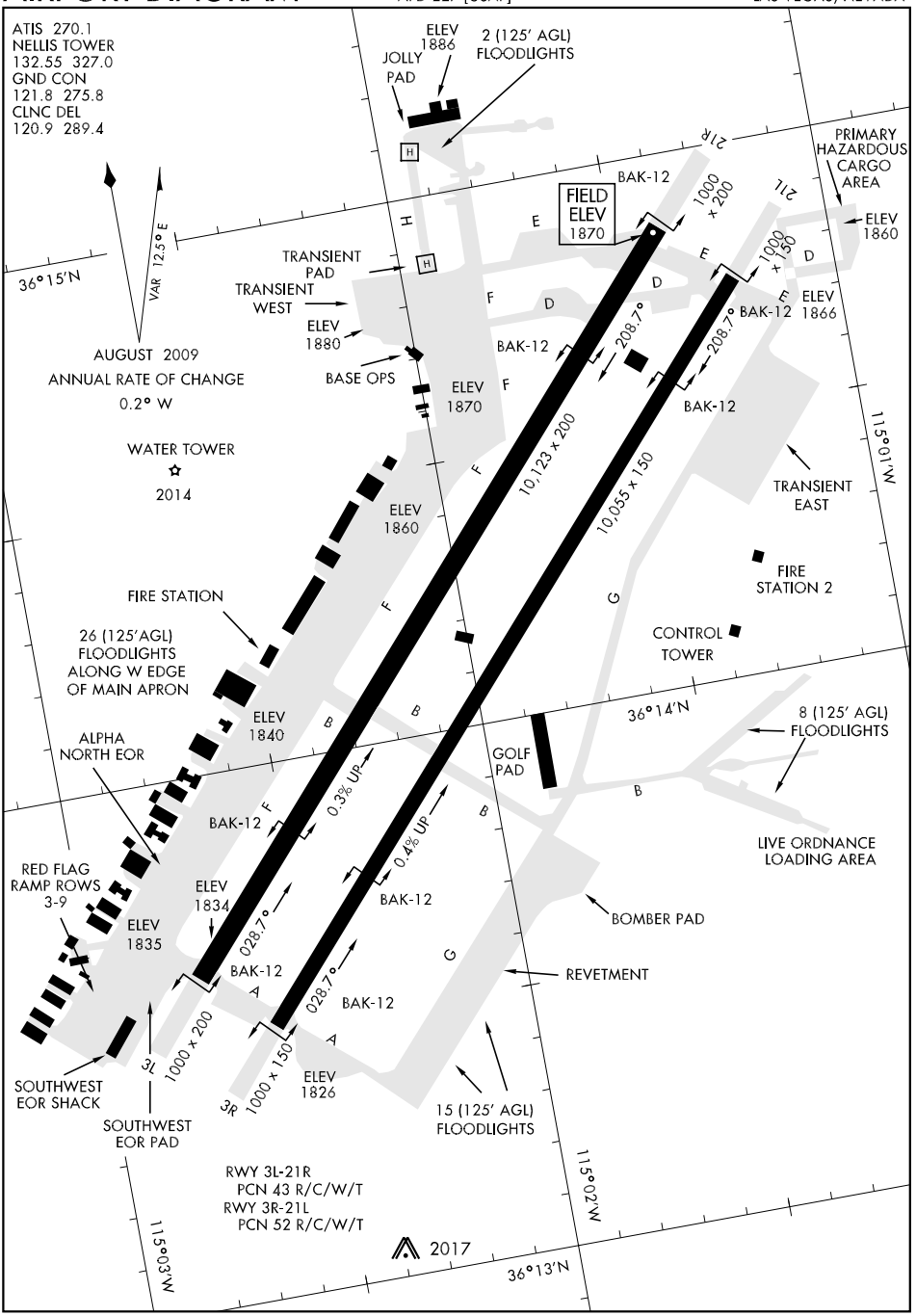
ATIS	LAS VEGAS APP CON	LAS VEGAS TOWER	GND CON	CLNC DEL
132.4	125.025 379.15	118.75 257.8 (Rwy 1L/19R, 1R/19L) 119.9 257.8 (Rwy 7L/25R, 7R/25L)	121.1 270.8 E of 1R/19L 121.9 254.3 W of 1R/19L	118.0 379.95



FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

CATEGORY	A	B	C	D
S-25R	2720-1 653 (600-1)		2720-1¾ 653 (600-1¾)	2720-2 653 (600-2)
S-25L	2720-¾ 651 (600-¾)		2720-1¾ 651 (600-1¾)	2720-2 651 (600-2)
CIRCLING	3020-1 839 (900-1)	3020-1¼ 839 (900-1¼)	3020-2½ 839 (900-2½)	3040-2¾ 859 (900-2¾)

SW-4, 22 OCT 2009 to 19 NOV 2009



SW-4, 22 OCT 2009 to 19 NOV 2009

DREAM TWO DEPARTURE (DREAM 2 • DREAM)

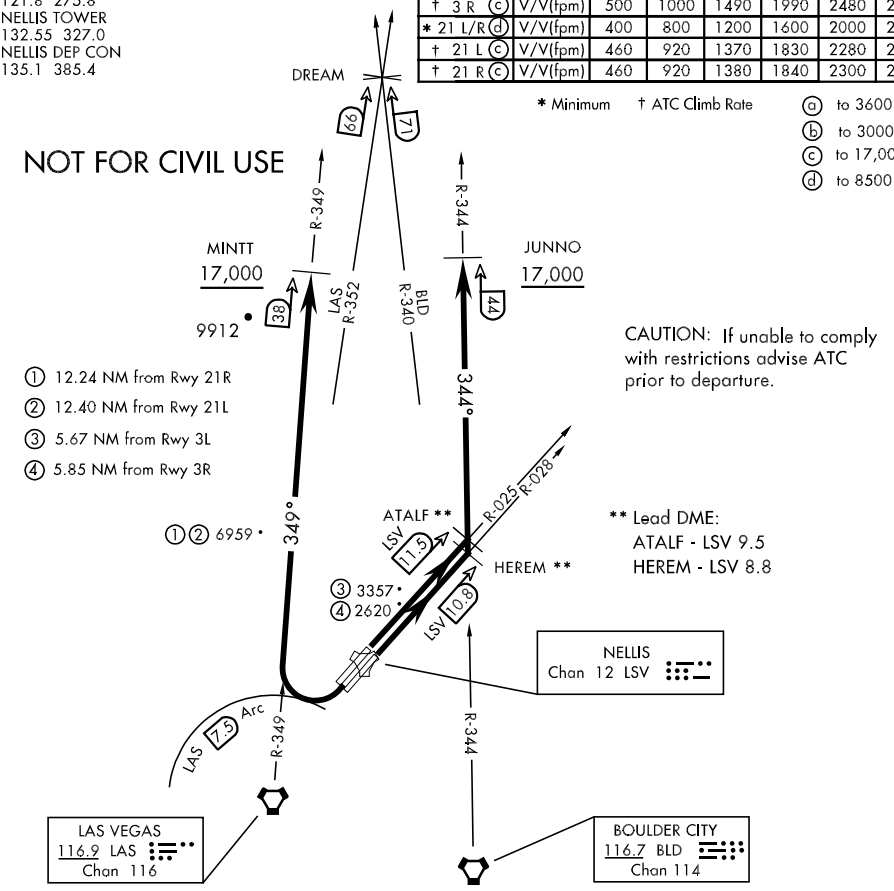
ATIS 270.1
CLNC DEL
120.9 289.4
GND CON
121.8 275.8
NELLIS TOWER
132.55 327.0
NELLIS DEP CON
135.1 385.4

SHL-227 [USAF]

Rwy	Knots	60	120	180	240	300	360
* 3 L (a)	V/V(fpm)	300	600	900	1200	1500	1800
* 3 R (b)	V/V(fpm)	240	480	720	960	1200	1400
† 3 L (c)	V/V(fpm)	500	1000	1500	2000	2490	2990
† 3 R (c)	V/V(fpm)	500	1000	1490	1990	2480	2980
* 21 L/R (d)	V/V(fpm)	400	800	1200	1600	2000	2400
† 21 L (c)	V/V(fpm)	460	920	1370	1830	2280	2740
† 21 R (c)	V/V(fpm)	460	920	1380	1840	2300	2760

* Minimum † ATC Climb Rate

(a) to 3600
(b) to 3000
(c) to 17,000
(d) to 8500



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L: Fly runway heading to intercept the LSV TACAN R-025 then direct ATALF, intercept the BLD VORTAC R-344 then direct JUNNO, cross JUNNO at or above 17,000, then via assigned route.

TAKE-OFF RWY 3R: Fly runway heading to intercept the LSV TACAN R-028 then direct HEREM, intercept the BLD VORTAC R-344 then direct JUNNO, cross JUNNO at or above 17,000. Then via assigned route.

TAKE-OFF RWY 21L/R: Turn right to intercept LAS VORTAC R-349 outbound. Remain North of LAS 7.5 DME turning Northbound. Intercept LAS R-349 between 5000 and 6000, do not proceed West of LAS R-349. Cross MINTT at above 17,000, then via assigned route.

NOISE ABATEMENT PROCEDURES: Fly IAW Nellis Noise Abatement instructions published in AP/1.

DREAM TWO DEPARTURE (DREAM 2 • DREAM)
LAS VEGAS, NEVADA

FYTTR ONE DEPARTURE (FYTTR1 • FYTTR)

SHL-227 [USAF]

LAS VEGAS, NEVADA

ATIS
270.1
CLNC DEL
120.9 289.4
GND CON
121.8 275.8
NELLIS TOWER
132.55 327.0
NELLIS CONTROL
119.35 254.4
NELLIS DEP CON
135.1 385.4

Rwy	Knots	60	120	180	240	300	360
3 L/R ⓐ	V/V(fpm)	400	800	1200	1600	2000	2400
21L/R ⓑ	V/V(fpm)	390	780	1170	1560	1950	2340

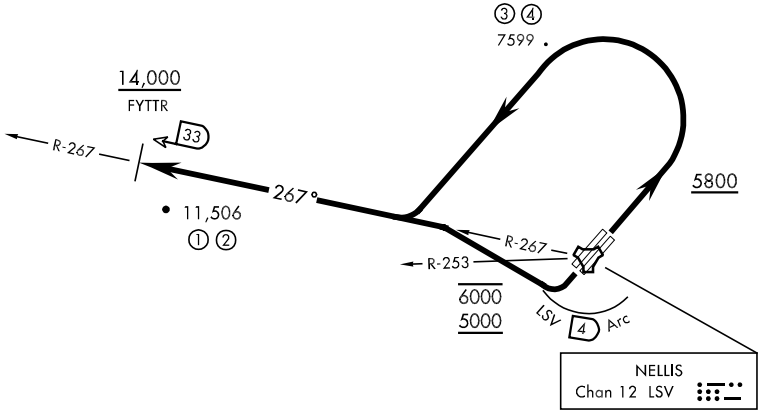
Minimum Climb Rate

ⓐ to 9600
ⓑ to 13,500

① 29.81 NM from Rwy 21L
② 29.67 NM from Rwy 21R
③ 15.43 NM from Rwy 3L
④ 15.57 NM from Rwy 3R

RADAR REQUIRED FOR RWY 3L/R DEPARTURES

CAUTION: If unable to comply with restrictions advise ATC prior to departure.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L/R: Fly runway heading until reaching 5800, then climbing left turn to intercept LSV TACAN R-267 outbound. Cross FYTTR at or above 14,000 or as assigned, then via assigned route.

TAKE-OFF RWY 21L/R: Turn right to intercept LSV TACAN R-267 outbound, remain within LSV 4 DME until joining LSV R-267, cross LSV R-253 between 5000 and 6000. Cross FYTTR at or above 14,000 or as assigned, then via assigned route.

NOISE ABATEMENT PROCEDURES: Fly IAW Nellis Noise Abatement instructions published in AP/1.

HI-ILS or LOC/DME Z RWY 21L

LOC I-DIQ	APCH CRS	Rwy ldg / TDZE / Arpt Elev
109.1	207°	10,055 / 1866 / 1870

JAL-227 [USAF] NELLIS AFB (KLSV)

▼ * When ALS inop, increase CAT CDE RVR to 40, vis to ¾ mile.
** When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.
*** Circling not authorized E of Rwy 3R-21L.

ALSF-1 (A1)

† MISSED APPROACH: Climb to 15,000, heading 209° to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV TACAN R-355 to ARCOE and hold.

ATIS	NELLIS APP CON	NELLIS TOWER	GND CON	CLNC DEL
270.1	124.95 273.55	132.55 327.0	121.8 275.8	120.9 289.4

Knots	60	120	180	240	300	360
V/V(fpm) †	470	940	1410	1880	2350	2820

† CAUTION: Missed Approach Minimum climb rate to 13,200 Controlling obstacle 7599'

NOT FOR CIVIL USE

RADAR OR DME REQUIRED

MISSED APPROACH requires ATC Radar monitoring.

R-355 LSV 39 Max holding alt FL190

Minimum navaid reception at ARCOE 15,000 MSL.

(IAF) ARCOE LSV 30 15,000

RONKY LSV 25 15,000

TROPP LSV 21 7320

QUNTE LSV 21 12,500

R-360 5599

LSV 21 Arc R-021 R-027

KRYSS LSV 21

SHEET LSV 13.2

ROTSE LSV /RADAR 7.2

20 NM

6999 3639 4754 2705 2322 2246

LOCALIZER 109.1 I-DIQ

JELIR LSV 4.1

ROCKX LSV 2.5 4099 3189

NELLIS Chan 12 LSV

MSA LSV 25 NM 11,100 13,000 6700 190° 100° 360°

EMERG SAFE ALT 100 NM 14,000

15,000 hdg 209° ROCKX LSV 2.5 ARCOE LSV 30

Non-precision approach. VGSI and descent angle not coincident.

†† Loc Only

TACAN SESDE .6 JELIR 4.1 ROTSE 7.2 /RADAR SHEET 13.2 Intcp Lczr KRYSS R-027 21

4200 5000 8600 207° 207°

†† 3180 4200

GS 3.00° TCH 50

.5 3.5 NM 3.1 NM

ELEV 1870

207° from FAF

1921 1889 2116 1951 2014

10,128 x 200 0.3% DOWN 0.4% DOWN 10,055 x 150

TDZE 1866

3L 3R 2017

HIRL all Rwy

CATEGORY	C	D	E
S-ILS 21L *	2066/24 200 (200-½)		
S-LOC 21L **	2440/50 574 (600-1)	2440/60 574 (600-1¼)	2440-1½ 574 (600-1½)
CIRCLING ***	2680-2¼ 810 (900-2¼)	2680-2½ 810 (900-2½)	2940-3 1070 (1100-3)

HI-TACAN RWY 3R

TACAN	APCH CRS	Rwy ldg	10,055
Chan 12 LSV	026°	TDZE	1830
		Arpt Elev	1870

JAL-227 [USAF]

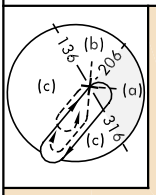
NELLIS AFB (KLSV)

▼ ** When ALS inop, increase CAT C RVR to 60, vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
*** Circling not authorized E of Rwy 3R-21L.

ALSF-1 (A1)

* MISSED APPROACH: Climb to 9000 on LSV R-028 to VETTT and hold.

ATIS	NELLIS APP CON	NELLIS TOWER	GND CON	CLNC DEL
270.1	124.95 273.55	132.55 327.0	121.8 275.8	120.9 289.4



*CAUTION: Minimum Climb Rate to 4600'

Knots	60	120	180	240	300	360
V/V(fpm)	290	580	870	1160	1450	1740

Controlling Obstacle 4098'

7133

6943

4109

2946

5431

11,918

3000

NELLIS
Chan 12 LSV

RADAR REQUIRED

VETTT
LSV
31

208°
028°

LSV
40

Max holding
alt 15,000

R-028

WEBSO
LSV
5.6

2480
3189
2100

ENGLA
LSV
8

HUSTS
LSV
15.6

(IAF)
LUCIL
LSV
21

026°

3786

4509

20 NM

CAUTION:
Large tower (1149') left of course at 8 DME. Numerous buildings with high intensity lighting.

MSA LSV 25 NM
190°
100°
11,100
13,000
6700
360°

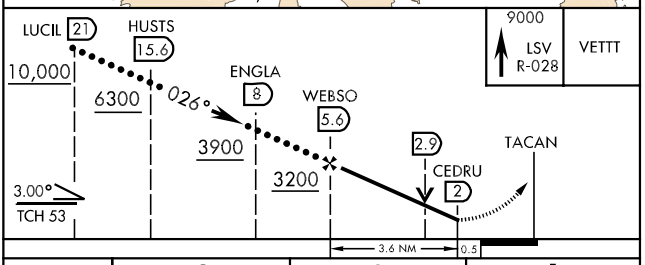
Max holding
265 KIAS
Max holding
alt 16,000

026°
206°
R-206

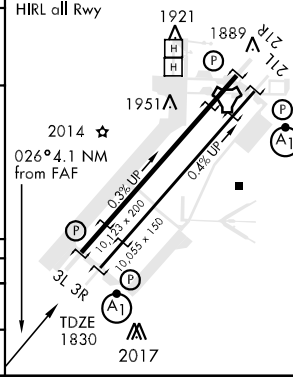
LSV
28

NOT FOR CIVIL USE

EMERG SAFE ALT 100 NM 14,000



ELEV 1870
HIRL all Rwy



CATEGORY	C	D	E
S-3R **	2320/40 490 (500-¾)	2320/50 490 (500-1)	2320/60 490 (500-1¼)
CIRCLING ***	2680-2¼ 810 (900-2¼)	2680-2½ 810 (900-2½)	2940-3 1070 (1100-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
LSV Chan 12	207°	10,055	1866	1870

HI-TACAN Y RWY 21L

JAL-227 [USAF] NELLIS AFB (KLSV)

▼ * When ALS inop, increase CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.

** Circling not authorized E of Rwy 3R-21L.

ALSF-1 (A1)

† MISSED APPROACH: Climb to 15,000, heading 209° to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV TACAN R-355 to ARCOE and hold.

ATIS	NELLIS APP CON	NELLIS TOWER	GND CON	CLNC DEL
270.1	124.95 273.55	132.55 327.0	121.8 275.8	120.9 289.4

NOT FOR CIVIL USE

MISSED APPROACH requires ATC Radar monitoring.

Minimum navaid reception at ARCOE 15,000 MSL

ARCOE LSV 30

Max holding 310 KIAS

LSV 39

8599 7320 5599

R-355 R-018 R-027 R-353

HOKUM LSV 13

(IAF) DUDBE LSV 17

R-280 100° LSV 13 Arc 8800

JENAR LSV 7 207° 3639 4754

HULPU LSV 13

15,000 10,000 (LEAD DME) LSV 15

2322 2639 2882 2246 2178 2705 2116

JOGEV LSV 3.5

NELLIS Chan 12 LSV

ROCKX LSV 2.5 4099 3189

† CAUTION: Missed Approach climb rate to 10,300

Knots	60	120	180	240	300	360
V/V(fpm)	450	900	1350	1800	2250	2700

Controlling Obstacle 7599'

EMERG SAFE ALT 100 NM 14,000

20 NM

MSA LSV 25 NM

11,100 190° 100° 13,000 6700 360°

SW-4, 22 OCT 2009 to 19 NOV 2009

VGSI and descent angle not coincident.

15,000 hdg 209° ROCKX LSV 2.5 ARCOE LSV 30

HULPU 13

TACAN JENAR 7 207° 5300

KITCH .7 JOGEV 3.5 3180 4500

3.54° TCH 54

.5 NM 2.8 NM 3.5 NM

ELEV 1870

207° to TACAN

1921 1889 2.1R 2.1L TDZE 1866

1951 2014

0.3% DOWN 0.4% DOWN

10,173 × 200 10,055 × 150

3L 3R

2017

CATEGORY	C	D	E
S-21L *	2480/60 614 (700-1¼)	2480-1½ 614 (700-1½)	2480-1¾ 614 (700-1¾)
CIRCLING **	2680-2¼ 810 (900-2¼)	2680-2½ 810 (900-2½)	2940-3 1070 (1100-3)

HIRL all Rwy

HI-TACAN Z RWY 21L

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
LSV Chan 12	207°	10,055	1866	1870

JAL-227 [USAF] — NELLIS AFB (KLSV)

▼ * When ALS inop, increase CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.
** Circling not authorized E of Rwy 3R-21L.

ALSF-1 (A1)

† MISSED APPROACH: Climb to 15,000, heading 209° to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV TACAN R-355 to ARCOE and hold.

ATIS	NELLIS APP CON	NELLIS TOWER	GND CON	CLNC DEL
270.1	124.95 273.55	132.55 327.0	121.8 275.8	120.9 289.4

NOT FOR CIVIL USE

Minimum navaid reception at ARCOE 15,000 MSL.

MISSED APPROACH requires ATC Radar monitoring.

R-355 — LSV 39

(IAF) ARCOE LSV 30 — 15,000

175° — 355°

Max holding 310 KIAS
Max holding alt FL190

RONKY LSV 25 — 15,000 — 9912

TROPP LSV 21

OLNIE LSV 21 — 12,500

R-360 — 175°

LR-022 — R-027

LSV 21 Arc

7133

KUTME LSV 21

207°

6943

JENAR LSV 7 — 4109

3000

NELLIS Chan 12 LSV

2946

JOGEV LSV 3.5

5431

2480 — 2100 — 3189

ROCKX LSV 2.5

† CAUTION:
Missed Approach Climb Rate to 10,300.

Knots	60	120	180	240	300	360
V/V(fpm)	450	900	1350	1800	2250	2700

Controlling Obstacle 7599'

EMERG SAFE ALT 100 NM 14,000

20 NM

(c) (c) 245 065 (b) 355 (a)

MSA LSV 25 NM
11,100 — 190° — 100° — 13,000 — 6700 — 360°

SW-4, 22 OCT 2009 to 19 NOV 2009

15,000 hdg 209° — ROCKX LSV 2.5 — ARCOE LSV 30

VGSI and descent angle not coincident.

KUTME R-027 21 — 8800

TACAN — KITCH .7 — JOGEV 3.5 — JENAR 7 — 207° — 4500 — 3180

3.54° TCH 54

0.5 — 6.3 NM

ELEV 1870

207° to TACAN

1921 — 1889 — 21R — 21L — TDZE 1866

1951 — 2014

0.3% DOWN — 0.4% DOWN

10,173 × 200 — 10,055 × 150

3L 3R — 2017

HIRL all Rwy

CATEGORY	C	D	E
S-21L *	2480/60 614 (700-1¼)	2480-1½ 614 (700-1½)	2480-1¾ 614 (700-1¾)
CIRCLING **	2680-2¼ 810 (900-2¼)	2680-2½ 810 (900-2½)	2940-3 1070 (1100-3)

ILS or LOC/DME Z RWY 21L

LOC I-DIQ	APCH CRS	Rwy ldg 10,055 TDZE 1866 Arpt Elev 1870
109.1	207°	

AL-227 [USAF] NELLIS AFB (KLSV)

▼ * When ALS inop, increase CAT ABCDE RVR to 40, vis to ¾ mile. ** When ALS inop, increase CAT AB RVR to 50, vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.

ALSF-1 (A1)

† MISSED APPROACH: Climb to 15,000, heading 209° to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV TACAN R-355 to ARCOE and hold.

ATIS	NELLIS APP CON	NELLIS TOWER	GND CON	CLNC DEL
270.1	124.95 273.55	132.55 327.0	121.8 275.8	120.9 289.4

*** Circling not authorized E of Rwy 3R-21L.

NOT FOR CIVIL USE
RADAR OR
DME REQUIRED

Minimum navaid reception at ARCOE 15,000 MSL.

MISSED APPROACH requires ATC Radar monitoring.

† CAUTION: Missed Approach Minimum climb rate to 18,200

Knots	60	120	180	240	300	360
V/V(fpm)	470	940	1410	1880	2350	2820

Controlling obstacle 7599'

8599 9761 10,079 7599 5599 6959 10,799 11,916

LSV 39 ARCOE LSV 30 (IAF) KRYSS LSV 21 LSV 28 SHEET LSV 13.2 ROTSE LSV /RADAR 7.2 ROCKX LSV 2.5 JELIR LSV 4.1

175° 355° R-355 R-027 207° 027° 20 NM

Max holding alt 14,000
Max holding 265 KIAS

3215 3484 3063 4400 2874 2514 2250 2705

NELLIS Chan 12 LSV

LOCALIZER I09.1 I-DIQ

MSA LSV 25 NM
190° 11,100
100° 13,000
360° 6700

EMERG SAFE ALT 100 NM 14,000

ELEV 1870

15,000 hdg 209° ROCKX LSV 2.5 ARCOE LSV 30

†† Loc Only

ROTSE 7.2 /RADAR SHEET 13.2 Intcp Lczr KRYSS 21

Non-precision approach. VGSI and descent angle not coincident

JELIR 4.1 TACAN SESDE .6

4200 ††3180 5000 8900 207°

GS 3.00° TCH 50

0.5 3.5 NM 3.1 NM

207° to TACAN

1921 1889 2116 1951 2014 1989 TDZE 1866

0.3% DOWN 10,128 × 200 0.4% DOWN 10,055 × 150

3L 3R 2017

HIRL all Rwy

CATEGORY	A	B	C	D	E
S-ILS 21L *	2066/24 200 (200-½)				
S-LOC 21L **	2440/24 574 (600-½)		2440/50 574 (600-1)	2440/60 574 (600-1¼)	2440-1½ 574 (600-1½)
CIRCLING ***	2480-1 610 (700-1)	2680-1¼ 810 (900-1¼)	2680-2¼ 810 (900-2¼)	2680-2½ 810 (900-2½)	2940-3 1070 (1100-3)

LOC/DME Y RWY 21L

LOC I-DIQ	APCH CRS	Rwy ldg / TDZE / Arpt Elev
109.1	207°	10,055 / 1866 / 1870

AL-227 [USAF]

NELLIS AFB (KLSV)

* When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.

** Circling not authorized E of Rwy 3R-21L.

ALSF-1

† MISSED APPROACH: Climb to 8000, track 206° to intercept the LAS VORTAC R-018 to LAS and hold.

ATIS	NELLIS APP CON	NELLIS TOWER	GND CON	CLNC DEL
270.1	124.95 273.55	132.55 327.0	121.8 275.8	120.9 289.4

† CAUTION: Missed Approach Minimum Climb Rate to 8000

Knots	60	120	180	240	300	360
V/V(fpm)	450	950	1350	1800	2250	2700

ATC Minimum Climb Rate

LAS VEGAS VORTAC DME not usable for missed approach holding.

FOR USE BY NELLIS AFB ASSIGNED AIRCRAFT ONLY

8599

LR-348

LR-352

(IAF) ACOSU BLD 34.4

154°

207°

BALBE LAS 24

CARUB LAS 17.4

3000

6000

9000

3588

2322

2246

2116

2928

2705

2813

LATPE LAS 15.3

4124

LOCALIZER 109.1 I-DIQ

3189

018°

198°

R-018

LAS VEGAS VOR/DME LAS Chan 116

MSA LAS 25 NM

10,600

210°

120°

6600

13,000

300°

030°

8800

BOULDER CITY 116.7 BLD Chan 114

3582

3510

3647

8671

4609

20 NM

EMERG SAFE ALT 100 NM 14,000

8000 tr 206°

LAS R-018

LAS

VGSI and descent angle not coincident.

ACOSU BLD R-348 34.4

BLD LR-352

BALBE LAS 24

CARUB LAS 17.4

LATPE LAS 15.3

ENIYO LAS 12.4

LAS VORTAC

207°

154°

7000

6100

4000

3160

3.55°

TCH 54

.6

5.0 NM

ELEV 1870

207° from FAF

1921

1889

2.1°

TDZE 1866

1951

2014

0.3% DOWN

0.4% DOWN

10,123 x 200

10,055 x 150

3L 3R

2017

CATEGORY	C	D	E
S-LOC 21L *	2420/50 554 (600-1)	2420/60 554 (600-1¼)	2420-1½ 554 (600-1½)
CIRCLING **	2680-2¼ 810 (900-2¼)	2680-2½ 810 (900-2½)	2940-3 1070 (1100-3)

HIRL all Rwy

SW-4, 22 OCT 2009 to 19 NOV 2009

MORMON MESA TWO DEPARTURE (MMM 2 • MMM)

SHL-227 [USAF]

ATIS
270.1
CLNC DEL
120.9 289.4
GND CON
121.8 275.8
NELLIS TOWER
132.55 327.0
NELLIS DEP CON
135.1 385.4
LOS ANGELES CENTER
124.2 134.65 307.9 343.6

MORMON MESA
114.3 MMM
Chan 90
L-9, H-3

RADAR REQUIRED
ABOVE FL190

FL190

① 12.24 NM from Rwy 21R
② 12.40 NM from Rwy 21L
③ 5.67 NM from Rwy 3L
④ 5.85 NM from Rwy 3R

CUVAX
RYAAN
ZINAX
** Lead DME
R-221
R-217
R-215
R-025
R-029
R-349
041°
037°
035°
025°
029°
14.5
12.5
12.1
10.1
A7
③ 3356 •
④ 2620 •
① ② • 6959

CAUTION: If unable to comply with restrictions advise ATC prior to departure

Rwy	Knots	60	120	180	240	300	360
* 3R ⓐ	V/V(fpm)	250	500	750	1000	1250	1500
* 3L ⓑ	V/V(fpm)	330	660	990	1320	1650	1980
* 21R ⓒ	V/V(fpm)	540	1080	1620	2160	2700	3240
* 21L ⓒ	V/V(fpm)	530	1060	1590	2120	2650	3180
† 3L/R ⓓ	V/V(fpm)	360	720	1080	1440	1800	2160

* Minimum † ATC Climb Rate

ⓐ To 3100
ⓑ To 3900
ⓒ To 17,000
ⓓ To 19,000

NELLIS
Chan 12 LSV

LAS 7.5 Arc

LAS VEGAS
116.9 LAS
Chan 116

Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L: Fly runway heading to intercept LSV TACAN R-025 then direct CUVAX, intercept the MMM VORTAC R-217 then direct MMM climbing to FL190 or as assigned, then via assigned route.

TAKE-OFF RWY 3R: Fly runway heading to intercept LSV TACAN R-029 then direct ZINAX, intercept the MMM VORTAC R-215 then direct MMM climbing to FL190 or as assigned, then via assigned route.

TAKE-OFF RWY 21L/R: Turn right to intercept MMM VORTAC R-221 prior to MMM 47 DME, remain North of the LAS VORTAC 7.5 DME, remain East of LAS R-349, intercept MMM R-221 then direct MMM, cross MMM at or above FL190 then via assigned route.

NOISE ABATEMENT PROCEDURES: Fly IAW Nellis Noise Abatement instructions published in AP/1.

MORMON MESA TWO DEPARTURE (MMM 2 • MMM)
LAS VEGAS, NEVADA

TACAN RWY 21L

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
LSV Chan 12	207°	10,055	1866	1870

AL-227 [USAF]

NELLIS AFB (KLSV)

▼ * When ALS inop, increase CAT AB RVR to 50, vis to 1 mile, CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.
** Circling not authorized E of Rwy 3R-21L.

ALSF-1

† MISSED APPROACH: Climb to 15,000, heading 209° to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV TACAN R-355 to ARCOE and hold.

ATIS	NELLIS APP CON	NELLIS TOWER	GND CON	CLNC DEL
270.1	124.95 273.55	132.55 327.0	121.8 275.8	120.9 289.4

NOT FOR CIVIL USE

Minimum NAVAID reception at ARCOE 15,000'.

MISSED APPROACH requires ATC Radar monitoring.

ARCOE LSV 30

LSV 39 Max holding 310 KIAS

175° 355° 335°

(IAF) KUTME LSV 21

LSV 28 Max holding alt 14,000

R-027 207° 027°

HULPU LSV 13

JENAR LSV 7

JOGEV LSV 3.5

ROCKX LSV 2.5

NELLIS Chan 12 LSV

8599 5599 7320 8999 3639 4754 2322 2639 2882 2705 2246 2178 2116 4099 3189

† CAUTION: Missed Approach climb rate to 10,300'

Knots	60	120	180	240	300	360
V/V(fpm)	450	900	1350	1800	2250	2700

Controlling Obstacle 7599'

EMERG SAFE ALT 100 NM 14,000

20 NM

MSA LSV 25 NM

11,100 190° 100° 13,000 6700 360°

15,000 hdg 209° ROCKX LSV 2.5 ARCOE LSV 30

VGSI and descent angle not coincident.

KUTME 21 HULPU 13 JENAR 7 JOGEV 3.5 TACAN KITCH .7

207° 8800 5000 4500 3180 3.54° TCH 54

.5 2.8 NM 3.5 NM

ELEV 1870

207° to TACAN

1921 1889 2.1R 2.1L TDZE 1866 1951 2014

0.3% DOWN 0.4% DOWN

10,055 × 200 10,055 × 150

3L 3R

2017

CATEGORY	A	B	C	D	E
S-21L *	2480/50 614 (700-½)		2480/60 614 (700-1¼)	2480-1½ 614 (700-1½)	2480-1¾ 614 (700-1¾)
CIRCLING **	2480-1 610 (700-1)	2680-1¼ 810 (900-1¼)	2680-2¼ 810 (900-2¼)	2680-2½ 810 (900-2½)	2940-3 1070(1100-3)

HIRL all Rwy

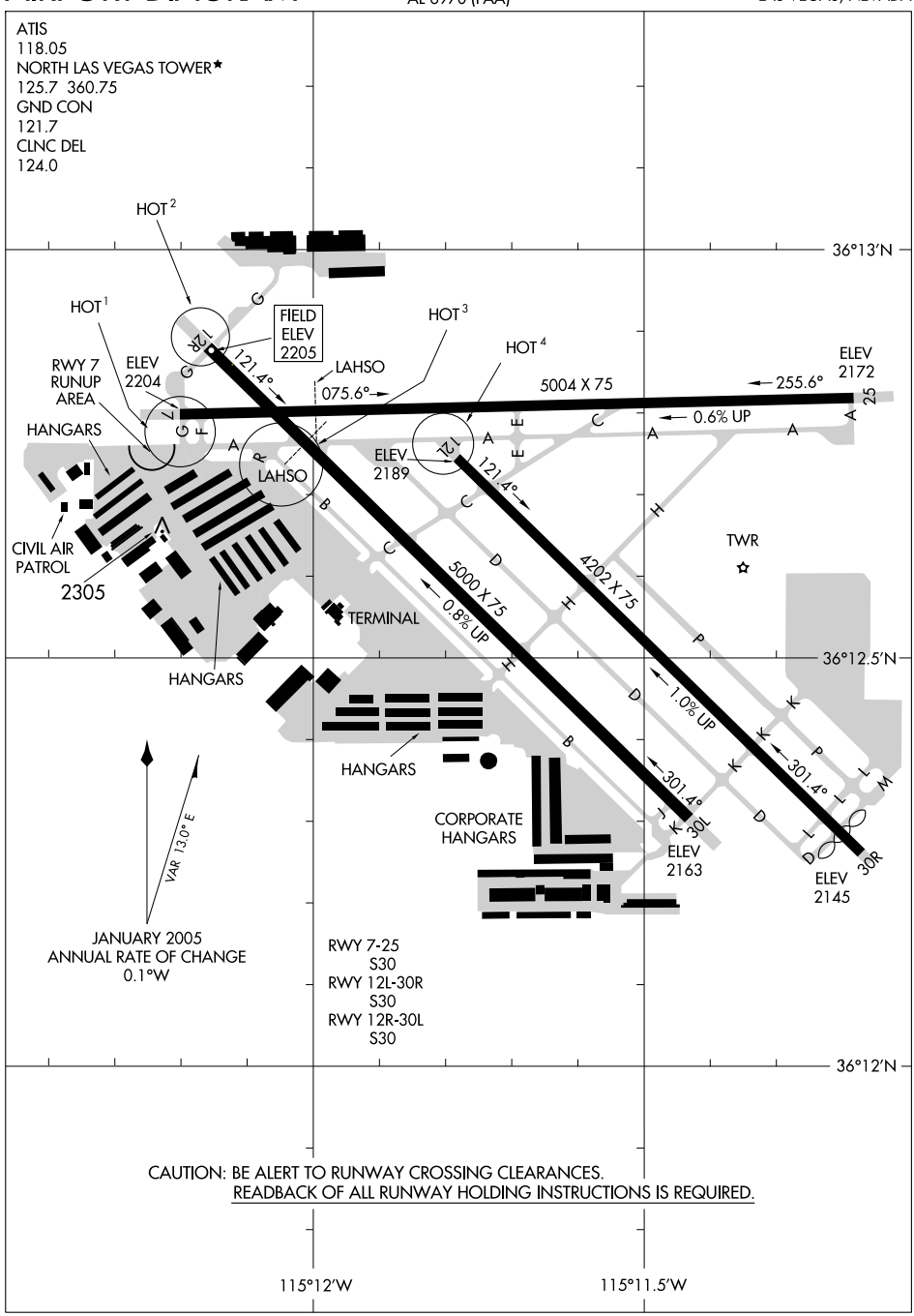
SW-4, 22 OCT 2009 to 19 NOV 2009

09295

AIRPORT DIAGRAM

AL-6970 (FAA)

LAS VEGAS/ NORTH LAS VEGAS (VGT)
LAS VEGAS, NEVADA



SW-4, 22 OCT 2009 to 19 NOV 2009

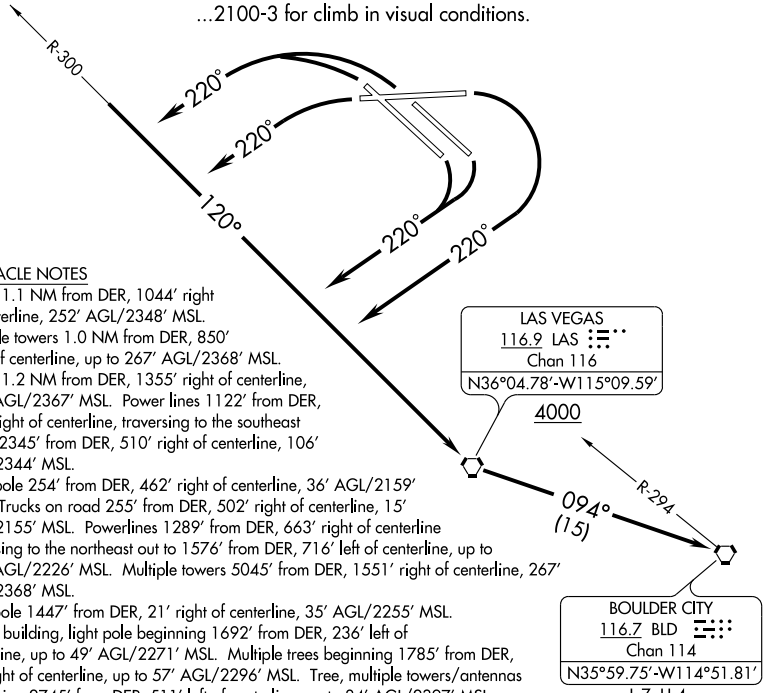
BOULDER CITY ONE DEPARTURE (OBSTACLE)

ATIS 118.05
GND CON 121.7
UNICOM 122.95
CTAF 125.7

TAKE-OFF MINIMUMS

Rwy 7: Standard with minimum climb of 339′ per NM to 3600 or...
Rwy 12L: Standard with minimum climb of 393′ per NM to 3600 or...
Rwy 12R: Standard with minimum climb of 373′ per NM to 3600 or...
Rwy 25: Standard with minimum climb of 257′ per NM to 4500 or...
Rwy 30R: Standard with minimum climb of 354′ per NM to 4700 or...
Rwy 30L: Standard with minimum climb of 367′ per NM to 4700 or...

...2100-3 for climb in visual conditions.



TAKE-OFF OBSTACLE NOTES

Rwy 7: Tower 1.1 NM from DER, 1044′ right of centerline, 252′ AGL/2348′ MSL.

Rwy 12R: Multiple towers 1.0 NM from DER, 850′ right of centerline, up to 267′ AGL/2368′ MSL. Tower 1.2 NM from DER, 1355′ right of centerline, 270′ AGL/2367′ MSL. Power lines 1122′ from DER, 764′ right of centerline, traversing to the southeast out to 2345′ from DER, 510′ right of centerline, 106′ AGL/2344′ MSL.

Rwy 12L: Light pole 254′ from DER, 462′ right of centerline, 36′ AGL/2159′ MSL. Trucks on road 255′ from DER, 502′ right of centerline, 15′ AGL/2155′ MSL. Powerlines 1289′ from DER, 663′ right of centerline traversing to the northeast out to 1576′ from DER, 716′ left of centerline, up to 129′ AGL/2226′ MSL. Multiple towers 5045′ from DER, 1551′ right of centerline, 267′ AGL/2368′ MSL.

Rwy 25: Light pole 1447′ from DER, 21′ right of centerline, 35′ AGL/2255′ MSL.

Rwy 30L: Signs, building, light pole beginning 1692′ from DER, 236′ left of centerline, up to 49′ AGL/2271′ MSL. Multiple trees beginning 1785′ from DER, 78′ right of centerline, up to 57′ AGL/2296′ MSL. Tree, multiple towers/antennas beginning 2745′ from DER, 511′ left of centerline, up to 84′ AGL/2397′ MSL.

Rwy 30R: Antenna tower 4639′ from DER, 1736′ left of centerline, 84′ AGL/2327′ MSL. Anemometer 552′ from DER, 570′ left of centerline, 34′ AGL/2216′ MSL. Vent on building 1632′ from DER, 566′ right of centerline, 58′ AGL/2240′ MSL. Antenna on hangar 2012′ from DER, 195′ right of centerline, 61′ AGL/2247′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7, 12 L/R: Turn right.
TAKE-OFF RUNWAYS 25, 30L/R: Turn left.

All aircraft climb to 6000 via heading 220° and LAS-300 to LAS VORTAC, cross LAS VORTAC at or above 4000. Continue climb via LAS VORTAC R-094 to BLD VORTAC.

RUNWAYS 7, 12L/R, 25, 30L/R: For climb in visual conditions: cross North Las Vegas Airport at or above 4200 then via BLD VORTAC R-294 to BLD VORTAC.

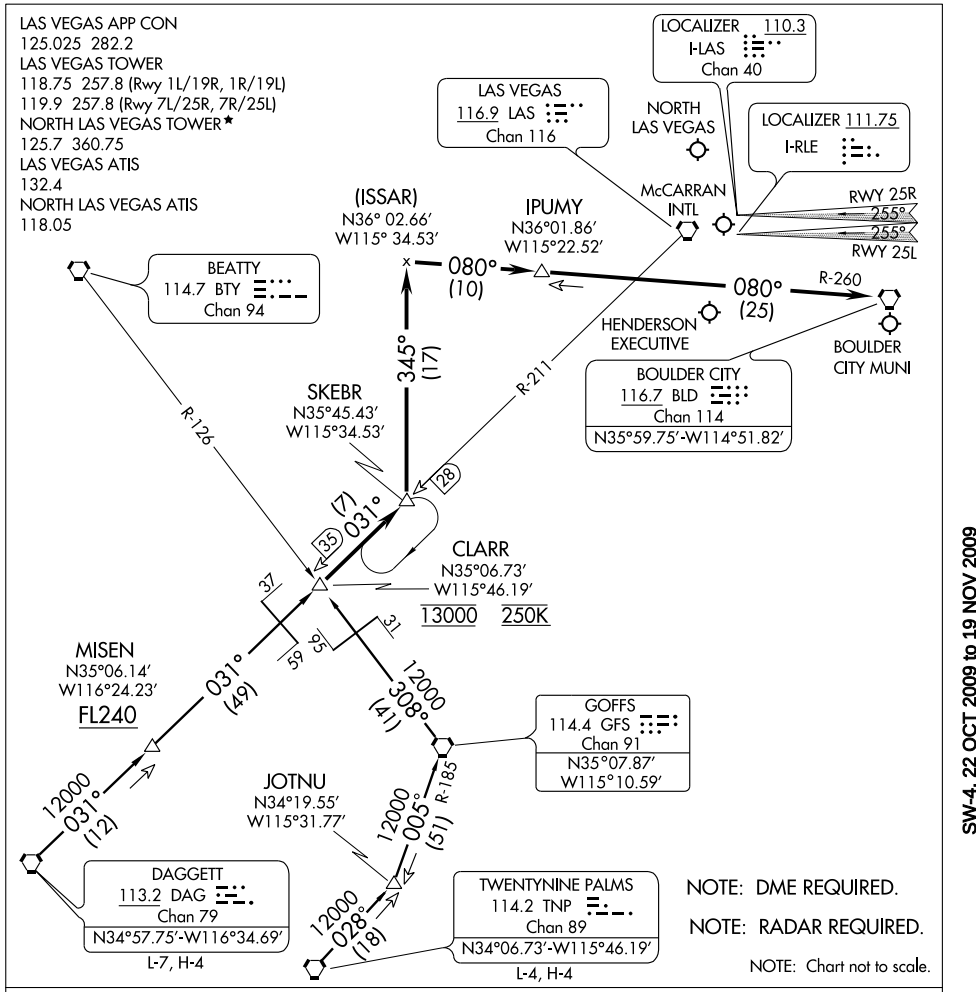
SW-4, 22 OCT 2009 to 19 NOV 2009

(CLARR.CLARR2) 09239

CLARR TWO ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA



DAGGETT TRANSITION (DAG.CLARR2): From over DAG VORTAC via DAG R-031 and LAS R-211 to CLARR INT. Thence. . . .

TWENTYNINE PALMS TRANSITION (TNP.CLARR2): From over TNP VORTAC via TNP R-028 to JOTNU INT, then via GFS R-185 to GFS VORTAC, then via GFS R-308 and BTY R-126 to CLARR INT. Thence. . . .

....From over CLARR INT via LAS R-211 to SKEBR INT. Thence. . . .

LANDING McCARRAN INTL: Via heading 345° to intercept the BLD R-260 to BLD VORTAC. Rwys 1L/R, 7L/R, and 19L/R expect radar vectors for visual approach prior to BLD VORTAC. Rwys 25L/R expect ILS approach procedure.

LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: After SKEBR INT expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

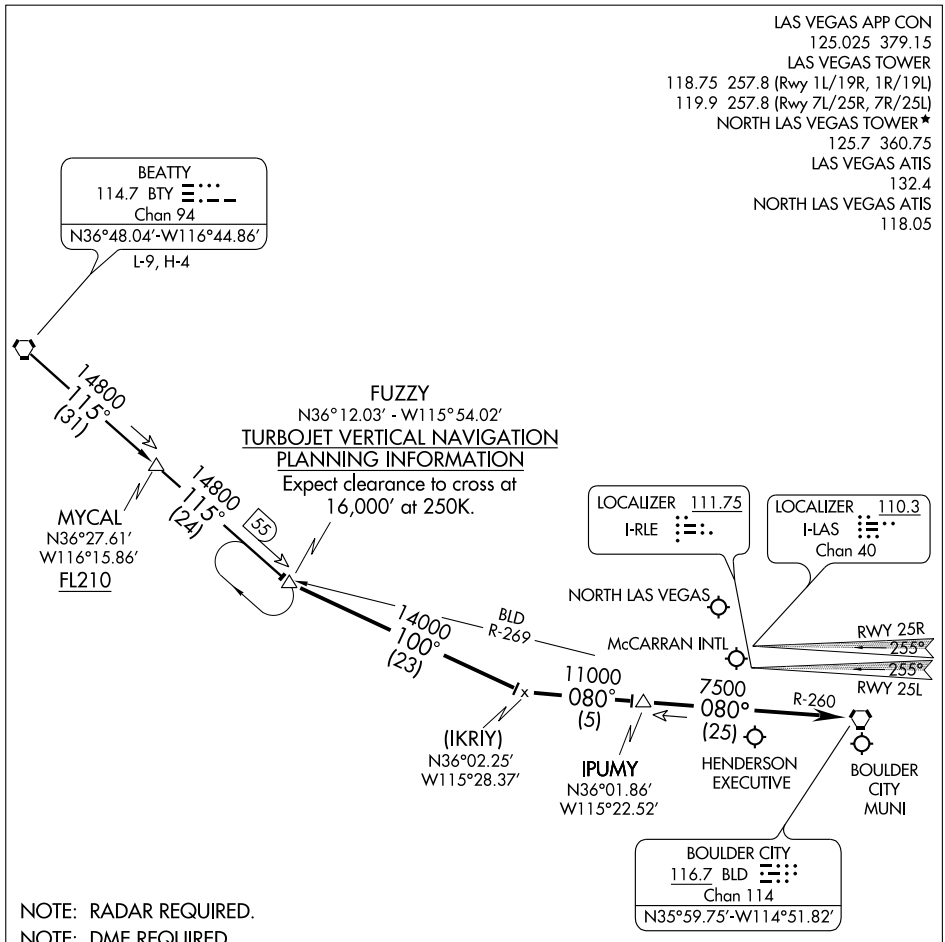
(FUZZY.FUZZY7) 07298

FUZZY SEVEN ARRIVAL

ST-662 (FAA)

LAS VEGAS, NEVADA

LAS VEGAS APP CON
125.025 379.15
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
NORTH LAS VEGAS TOWER★
125.7 360.75
LAS VEGAS ATIS
132.4
NORTH LAS VEGAS ATIS
118.05



NOTE: RADAR REQUIRED.
NOTE: DME REQUIRED.
NOTE: Chart not to scale.

BEATTY TRANSITION (BTY.FUZZY7): From over BTY VORTAC via BTY R-115 to FUZZY INT. Thence . . .
. . . From over FUZZY via heading 100° to intercept BLD R-260 to BLD VORTAC.

LANDING McCARRAN INTL RWYS 1L/R, 7L/R, and 19L/R: Expect vectors for visual approach prior to BLD VORTAC.
LANDING McCARRAN INTL RWYS 25L/R: Expect ILS approach.
LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI : After IPUMY, expect radar vectors to airport.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5000
135°	TDZE	2205
	Apt Elev	2205

GPS RWY 12R

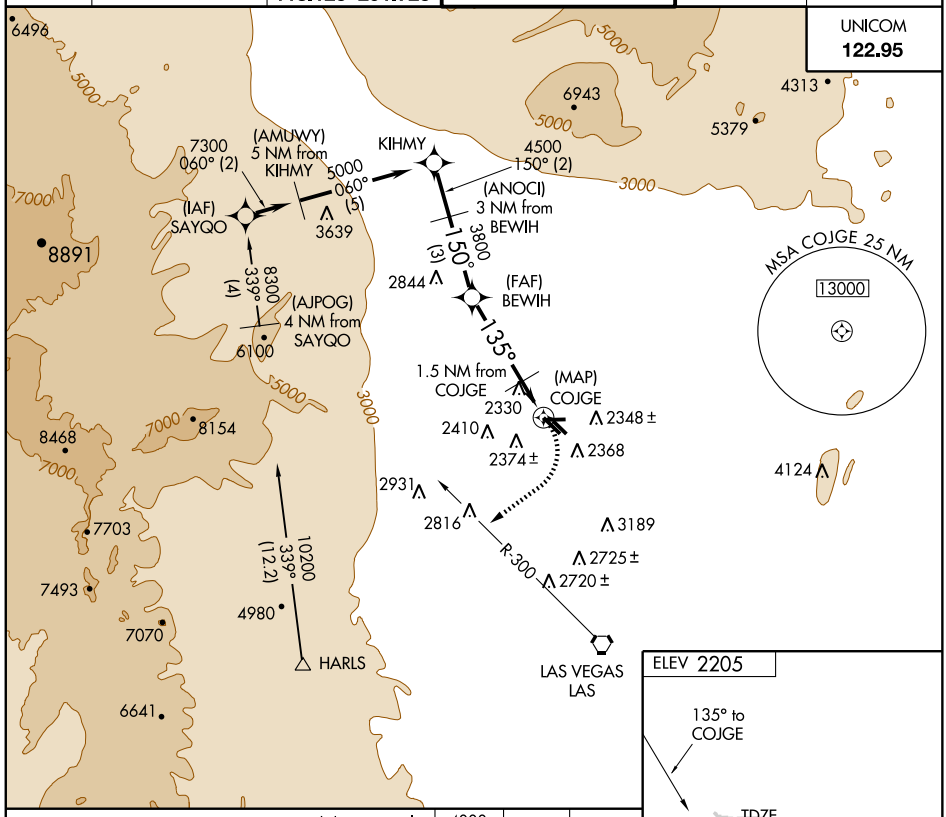
LAS VEGAS/ NORTH LAS VEGAS (VGT)

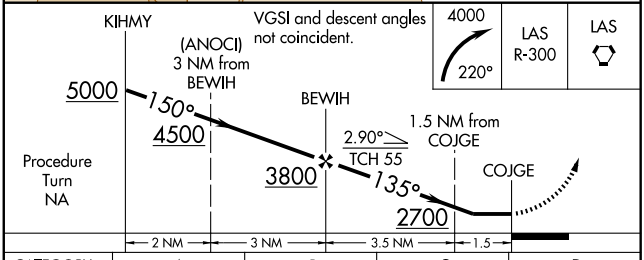
When local altimeter setting not received, use McCarran Intl altimeter setting and increase all MDA 40 feet and S-12R Cat D visibility ¼ mile. Circling to Rwy 12L-30R not authorized.

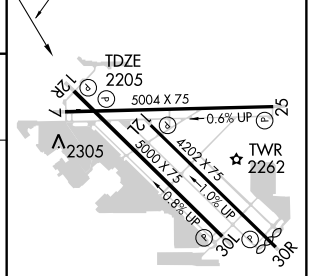
MISSED APPROACH: Climbing right turn to 4000 via heading 220° and LAS R-300 to LAS VORTAC.

ATIS	LAS VEGAS APP CON	NELLIS APP CON	NORTH LAS VEGAS TOWER★	GND CON	CLNC DEL
118.05	Rwy 30 119.4 282.2	Rwy 12 118.125 291.725	125.7 (CTAF) L 360.75	121.7	124.0

UNICOM 122.95







CATEGORY	A	B	C	D
S-12R	2620-1 415 (500-1)		2620-1¼ 415 (500-1¼)	
CIRCLING	2680-1 475 (500-1)		2680-1½ 475 (500-1½)	2760-2 555 (600-2)

MIRL Rwys 7-25, 12R-30L and 12L-30R L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS		
285°	Rwy Idg	5000
	TDZE	2191
	Apt Elev	2205

GPS RWY 30L

LAS VEGAS/NORTH LAS VEGAS (VGT)

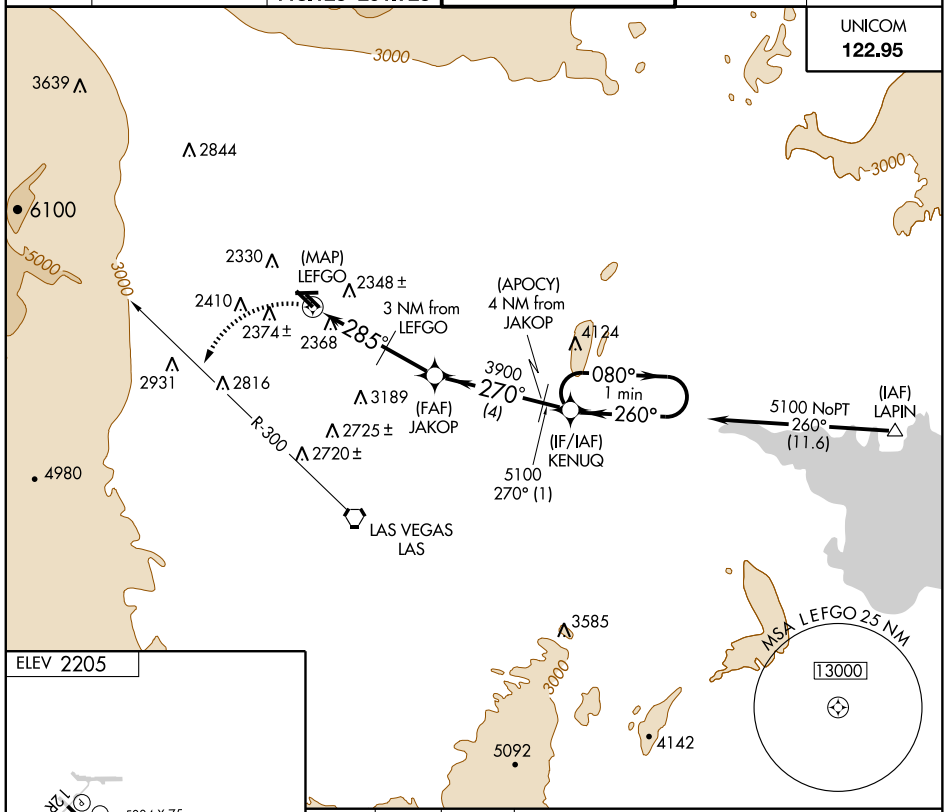
When local altimeter setting not received, use McCarran Intl altimeter setting and increase all MDA 40 feet and S-30L Cats C/D visibility ¼ mile. Circling to Rwy 12L-30R not authorized.

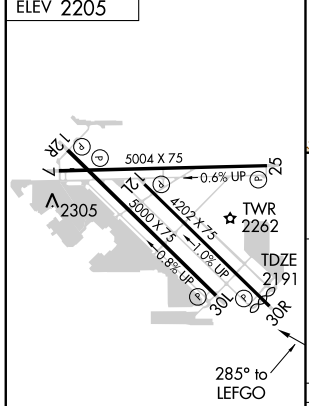
NA

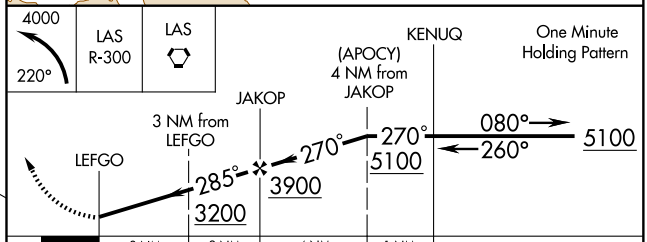
MISSED APPROACH: Climbing left turn to 4000 via heading 220° and LAS R-300 to LAS VORTAC.

ATIS	LAS VEGAS APP CON	NELLIS APP CON	NORTH LAS VEGAS TOWER★	GND CON	CLNC DEL
118.05	Rwy 30 119.4 282.2	Rwy 12 118.125 291.725	125.7 (CTAF) 360.75	121.7	124.0

UNICOM 122.95







CATEGORY	A	B	C	D
S-30L	2680-1	489 (500-1)	2680-1¼ 489 (500-1¼)	2680-1½ 489 (500-1½)
CIRCLING	2720-1	515 (600-1)	2720-1½ 515 (600-1½)	2760-2 555 (600-2)

MIRL Rwys 7-25, 12R-30L and 12L-30R

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-HWG	APP CRS	Rwy Idg	4202
110.7	120°	TDZE	2189
Chan 44		Apt Elev	2205

ILS or LOC RWY 12L

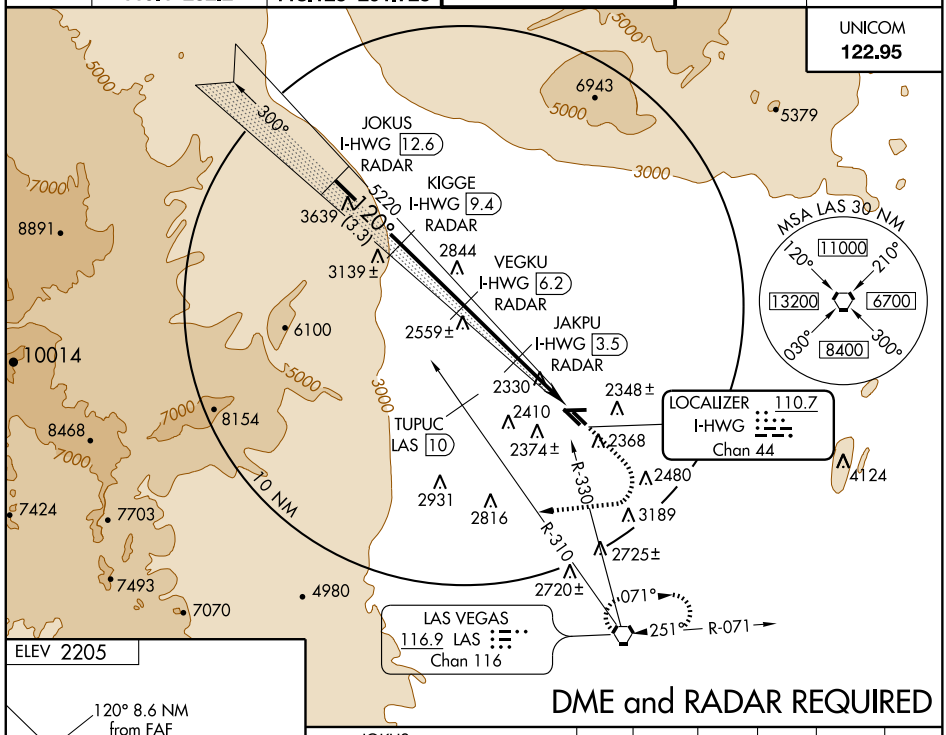
LAS VEGAS/NORTH LAS VEGAS (VGT)

When local altimeter setting not received, use McCarran Intl altimeter setting and increase DA to 2478, and visibility Cats A/B ¼ mile; increase all MDA 40 feet. DME and RADAR required.

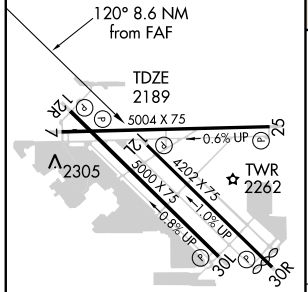
MISSED APPROACH: Climb to 2600, then climbing right turn heading 250° to 6000, intercept LAS R-310 outbound to TUPUC/LAS 10 DME then turn right via LAS R-330 inbound to LAS VORTAC and hold.

ATIS	LAS VEGAS APP CON	NELLIS APP CON	NORTH LAS VEGAS TOWER★	GND CON	CLNC DEL
118.05	Rwy 30 119.4 282.2	Rwy 12 118.125 291.725	125.7 (CTAF) L 360.75	121.7	124.0

UNICOM 122.95

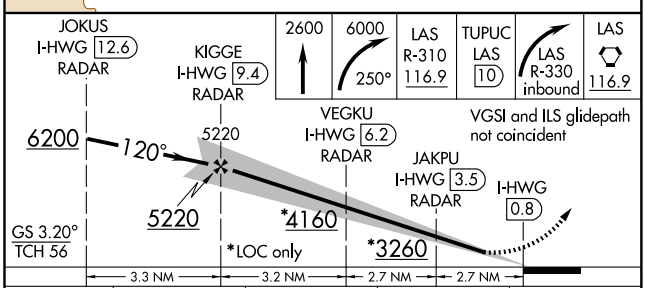


DME and RADAR REQUIRED



MIRL Rwys 7-25, 12R-30L and 12L-30R L

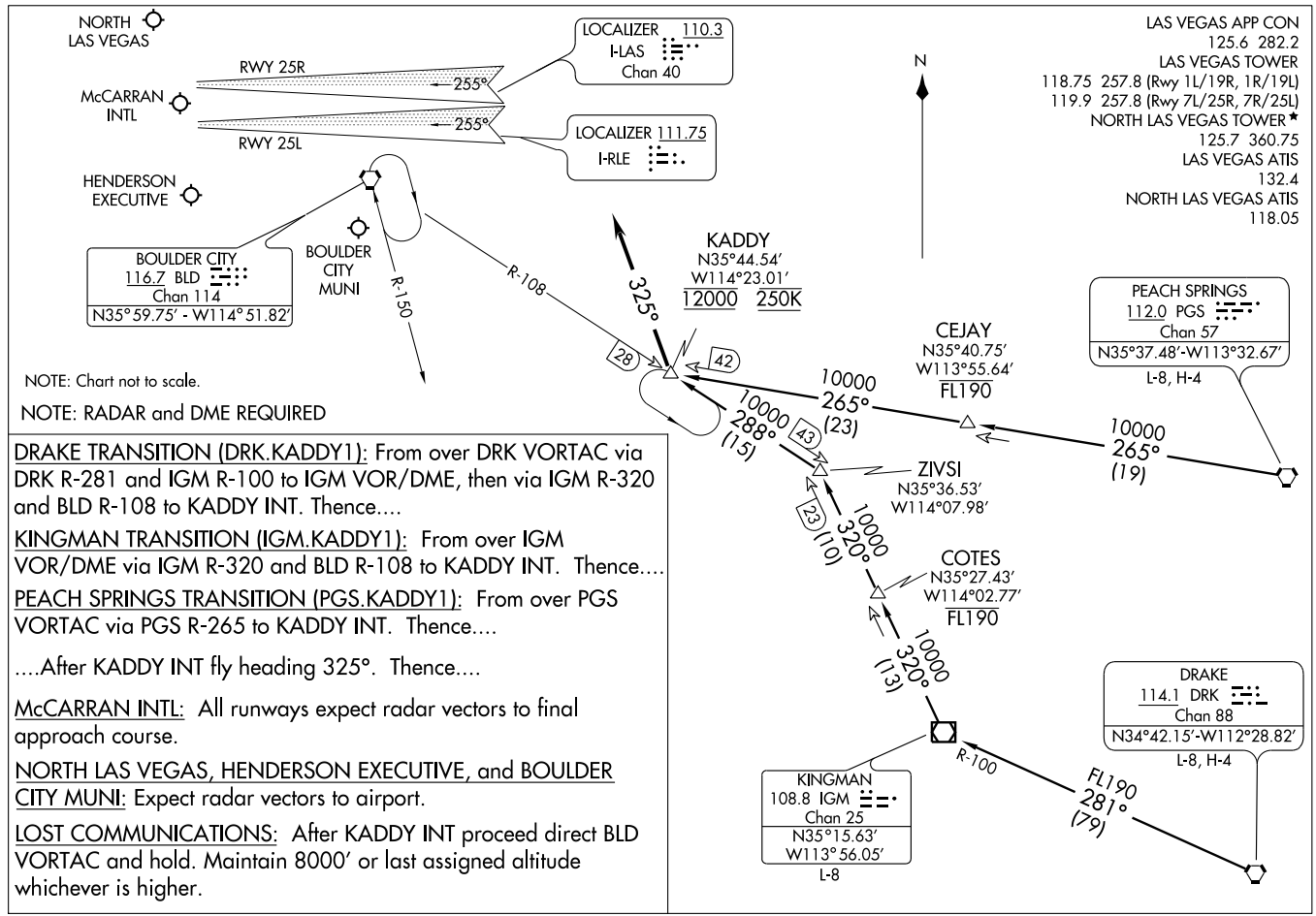
FAF to MAP 8.6 NM					
Knots	60	90	120	150	180
Min:Sec	8:36	5:44	4:18	3:26	2:52



CATEGORY	A	B	C	D
S-ILS 12L	2456-1	267 (300-1)	NA	
S-LOC 12L	2580-1	391 (400-1)	NA	
CIRCLING	2680-1	475 (500-1)	NA	

SW-4, 22 OCT 2009 to 19 NOV 2009

KADDY ONE ARRIVAL (KADDY.KADDY1)



NOTE: Chart not to scale.

NOTE: RADAR and DME REQUIRED

DRAKE TRANSITION (DRK.KADDY1): From over DRK VORTAC via DRK R-281 and IGM R-100 to IGM VOR/DME, then via IGM R-320 and BLD R-108 to KADDY INT. Thence....

KINGMAN TRANSITION (IGM.KADDY1): From over IGM VOR/DME via IGM R-320 and BLD R-108 to KADDY INT. Thence....

PEACH SPRINGS TRANSITION (PGS.KADDY1): From over PGS VORTAC via PGS R-265 to KADDY INT. Thence....

....After KADDY INT fly heading 325°. Thence....

McCARRAN INTL: All runways expect radar vectors to final approach course.

NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

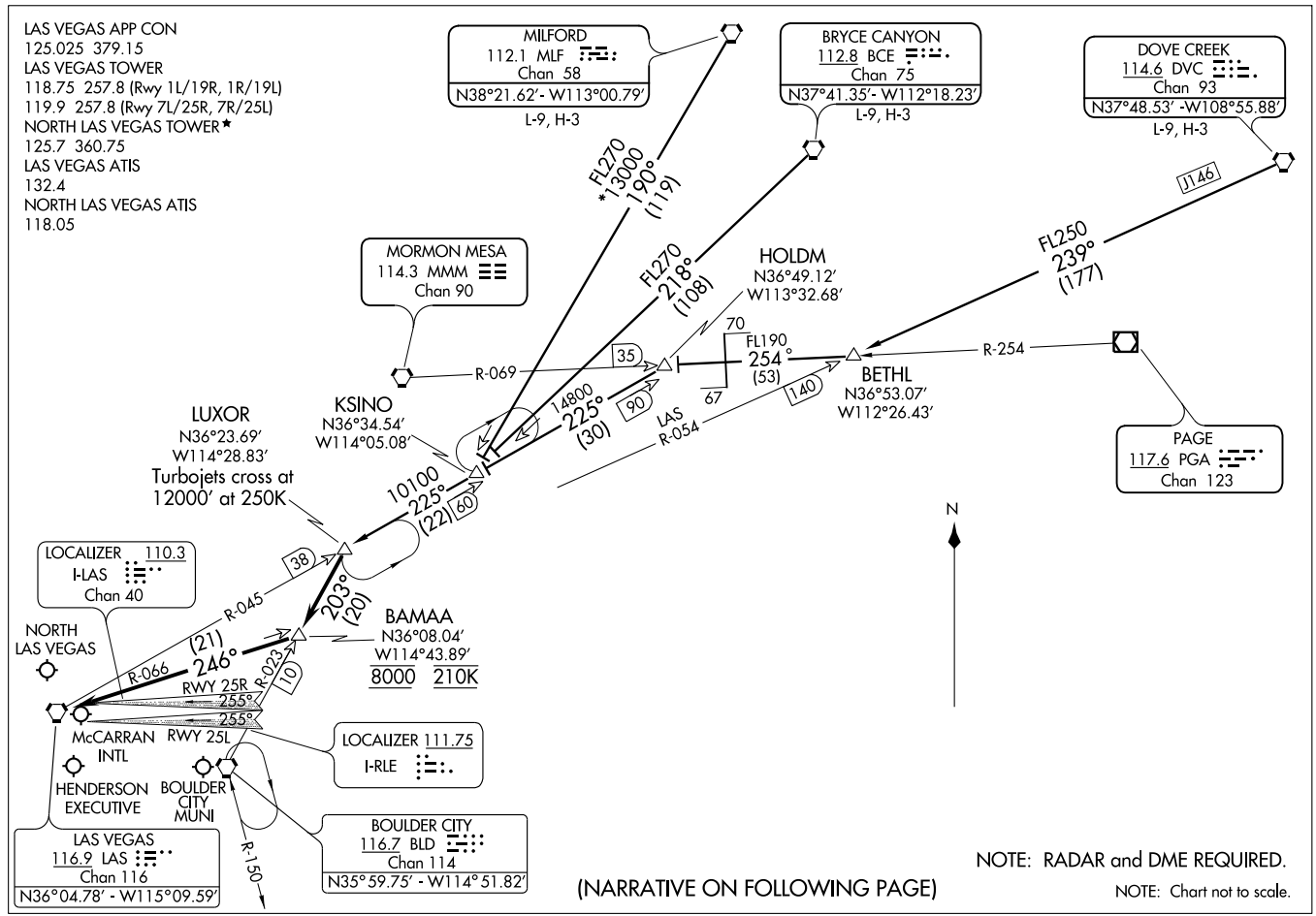
LOST COMMUNICATIONS: After KADDY INT proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

07298

ST-662 (FAA)

LAS VEGAS, NEVADA

LUXOR TWO ARRIVAL



ARRIVAL DESCRIPTION

BETHL TRANSITION (BETHL.LUXOR2): From over BETHL INT via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

BRYCE CANYON TRANSITION (BCE.LUXOR2): From over BCE VORTAC via BCE R-218 and LAS R-045 to LUXOR INT. Thence. . . .

DOVE CREEK TRANSITION (DVC.LUXOR2): From over DVC VORTAC via DVC R-239 and LAS R-054 to BETHL INT, then via PGA R-254 and MMM R-069 to HOLDM INT, then via LAS R-045 to LUXOR INT. Thence. . . .

MILFORD TRANSITION (MLF.LUXOR2): From over MLF VORTAC via MLF R-190 and LAS R-045 to LUXOR INT. Thence. . . .

. . . .From over LUXOR INT via BLD R-023 to BAMAA INT, thence via LAS R-066 to LAS VORTAC. Thence. . . .

LANDING McCARRAN INTL: All runways expect radar vectors to final approach course.

LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI: Expect radar vectors to airport.

LOST COMMUNICATIONS: After LAS VORTAC proceed direct BLD VORTAC and hold. Maintain 8000′ or last assigned altitude whichever is higher.

SW-4, 22 OCT 2009 to 19 NOV 2009

NORTHTOWN TWO DEPARTURE

ATIS 118.05
GND CON 121.7
UNICOM 122.95
CTAF 125.7

TAKE-OFF MINIMUMS

Rwy 7: Standard with minimum climb of 322′ per NM to 5000.
Rwy 12L: Standard with minimum climb of 393′ per NM to 5000.
Rwy 12R: Standard with minimum climb of 373′ per NM to 5000.
Rwy 25: Standard with minimum climb of 341′ per NM to 5000.
Rwy 30L: Standard with minimum climb of 315′ per NM to 5700.
Rwy 30R: Standard with minimum climb of 302′ per NM to 5700.

TAKE-OFF OBSTACLE NOTES

Rwy 7: Tower 1.1 NM from DER, 1044′ right of centerline, 252′ AGL/2348′ MSL.

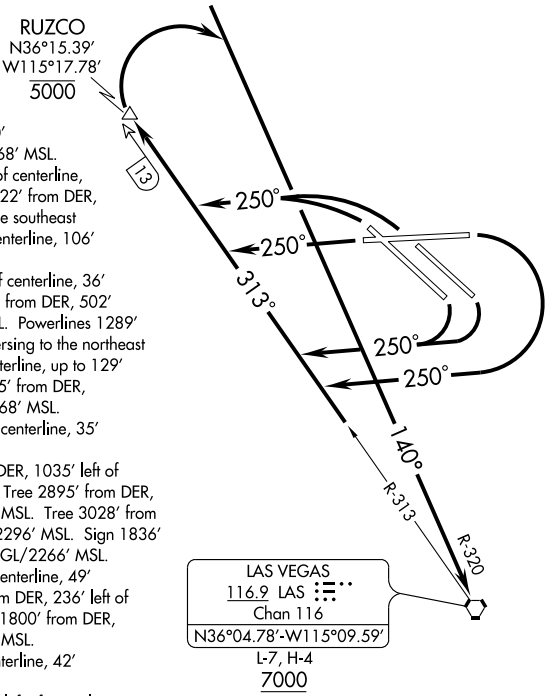
Rwy 12R: Multiple towers 1.0 NM from DER, 850′ right of centerline, up to 267′ AGL/2368′ MSL. Tower 1.2 NM from DER, 1355′ right of centerline, 270′ AGL/2367′ MSL. Power lines 1122′ from DER, 764′ right of centerline, traversing to the southeast out to 2345′ from DER, 510′ right of centerline, 106′ AGL/2344′ MSL.

Rwy 12L: Light pole 254′ from DER, 462′ right of centerline, 36′ AGL/2159′ MSL. Trucks on road 255′ from DER, 502′ right of centerline, 15′ AGL/2155′ MSL. Powerlines 1289′ from DER, 663′ right of centerline traversing to the northeast out to 1576′ from DER, 716′ left of centerline, up to 129′ AGL/2226′ MSL. Multiple towers 5045′ from DER, 1551′ right of centerline, 267′ AGL/2368′ MSL.

Rwy 25: Light pole 1447′ from DER, 21′ right of centerline, 35′ AGL/2255′ MSL.

Rwy 30L: Multiple towers/antennas 2745′ from DER, 1035′ left of centerline, up to 84′ AGL/2327′ MSL. Tree 2895′ from DER, 511′ left of centerline, 59′ AGL/2294′ MSL. Tree 3028′ from DER, 78′ right of centerline, 57′ AGL/2296′ MSL. Sign 1836′ from DER, 379′ left of centerline, 48′ AGL/2266′ MSL. Building 2070′ from DER, 249′ left of centerline, 49′ AGL/2271′ MSL. Light pole 1692′ from DER, 236′ left of centerline, 37′ AGL/2252′ MSL. Sign 1800′ from DER, 561′ left of centerline, 36′ AGL/2254′ MSL. Tree 1785′ from DER, 525′ right of centerline, 42′ AGL/2250′ MSL.

Rwy 30R: Antenna tower 4639′ from DER, 1736′ left of centerline, 84′ AGL/2327′ MSL. Anemometer 552′ from DER, 570′ left of centerline, 34′ AGL/2216′ MSL. Vent on building 1632′ from DER, 566′ right of centerline, 58′ AGL/2240′ MSL. Antenna on hangar 2012′ from DER, 195′ right of centerline, 61′ AGL/2247′ MSL.



NOTE: Do not exceed 240 KIAS until established on LAS R-320 inbound.

NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7 and 12 L/R: Climbing right turn via heading 250° and LAS R-313 outbound. Thence....

TAKE-OFF RUNWAY 25: Climb via heading 250° and LAS R-313 outbound. Thence....

TAKE-OFF RUNWAYS 30L/R: Climbing left turn via heading 250° and LAS R-313 outbound. Thence....

....via LAS R-313 maintain 5000 to RUZCO, then climbing right turn to intercept LAS R-320 to LAS VORTAC. Cross LAS VORTAC at or above 7000′.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5529
026°	TDZE	3902
	Apt Elev	3904

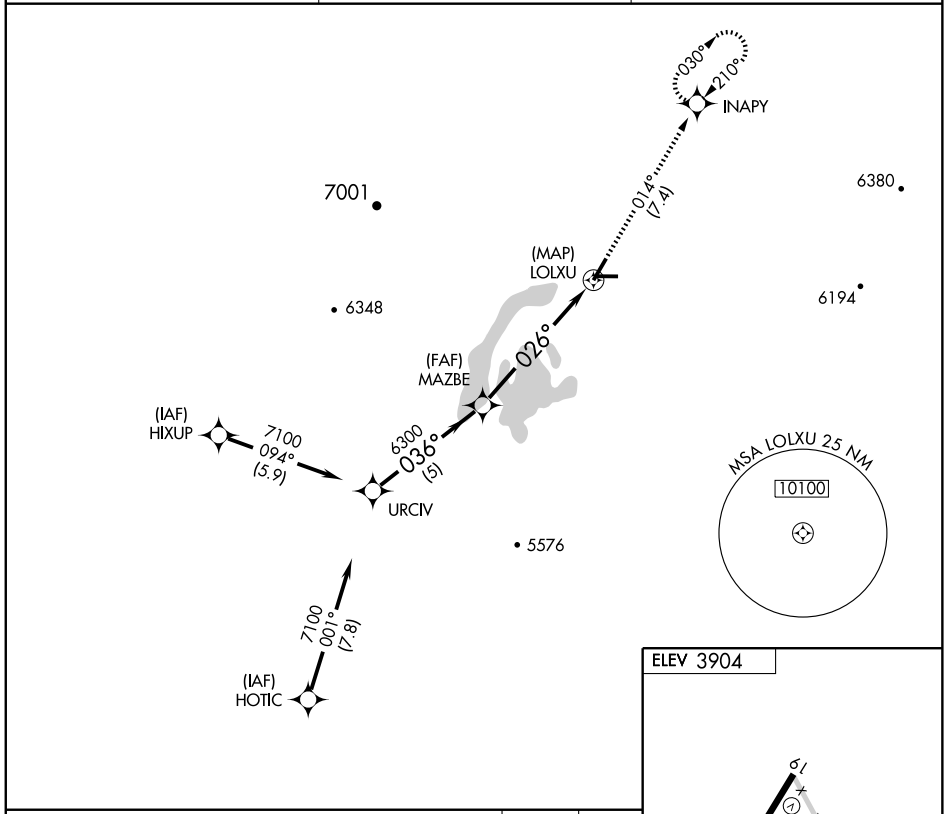
GPS RWY 1

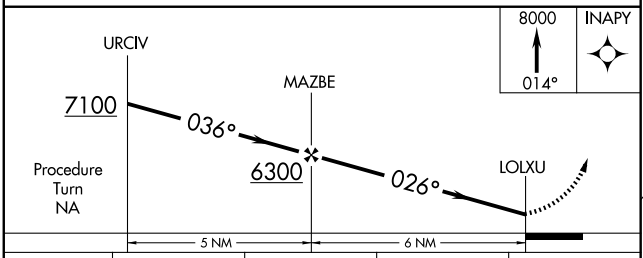
LOVELOCK/ DERBY FIELD (LOL)

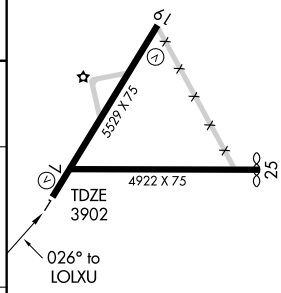
T
NA

MISSED APPROACH: Climb to 8000 via 014° course to INAPY WP and hold.

ASOS	OAKLAND CENTER	UNICOM
120.675	128.8 285.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-1	4280-1 378 (400-1)			4280-1¼ 378 (400-1¼)
CIRCLING	4320-1 416 (500-1)	4360-1 456 (500-1)	4360-1½ 456 (500-1½)	4780-2¾ 876 (900-2¾)

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L

SW-4, 22 OCT 2009 to 19 NOV 2009

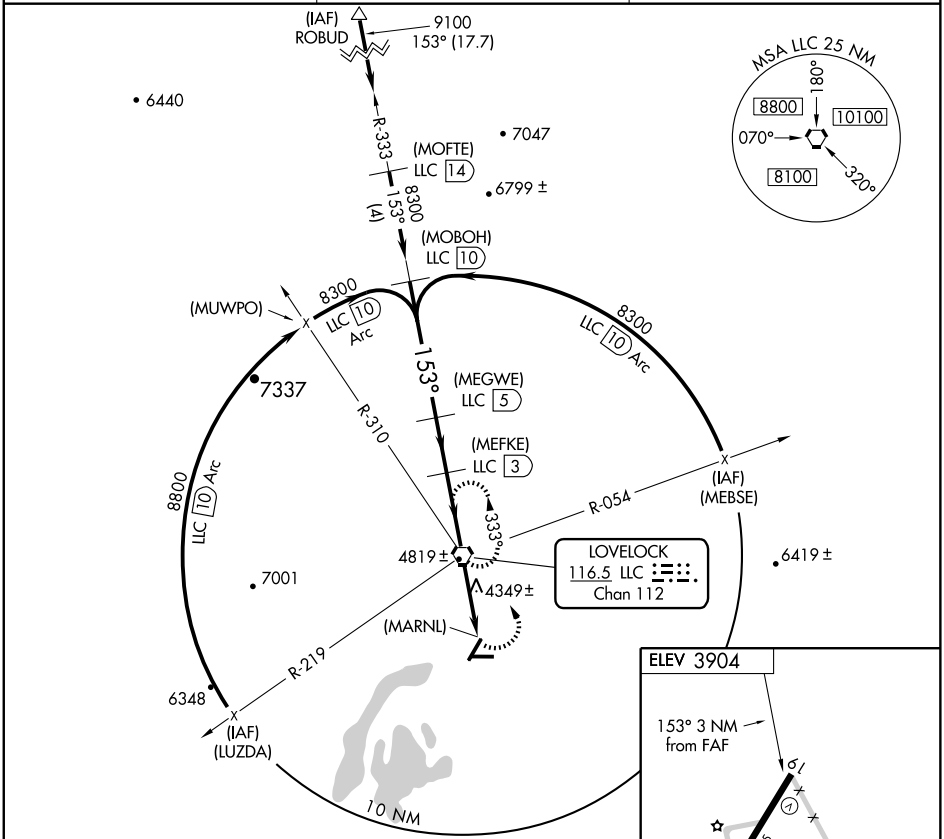
VORTAC LLC 116.5 Chan 112	APP CRS 153°	Rwy Idg N/A TDZE N/A Apt Elev 3904

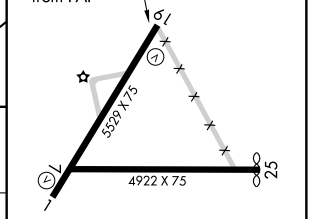
VOR/DME or GPS-A

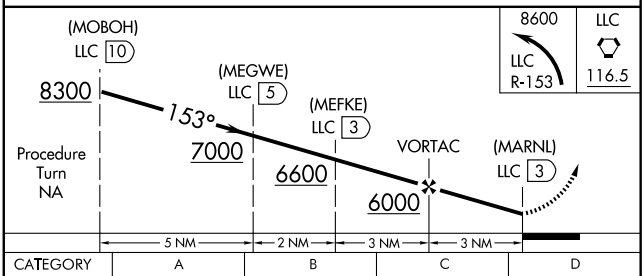
LOVELOCK/ DERBY FIELD (LOL)

MISSED APPROACH: Climbing left turn to 8600 via R-153 to LLC VORTAC and hold, continue climb in hold to 8600.

ASOS	OAKLAND CENTER	UNICOM
120.675	128.8 285.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	4800-1¼ 897 (900-1¼)		4800-2¾ 897 (900-2¾)	4800-3 897 (900-3)

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L

SW-4, 22 OCT 2009 to 19 NOV 2009

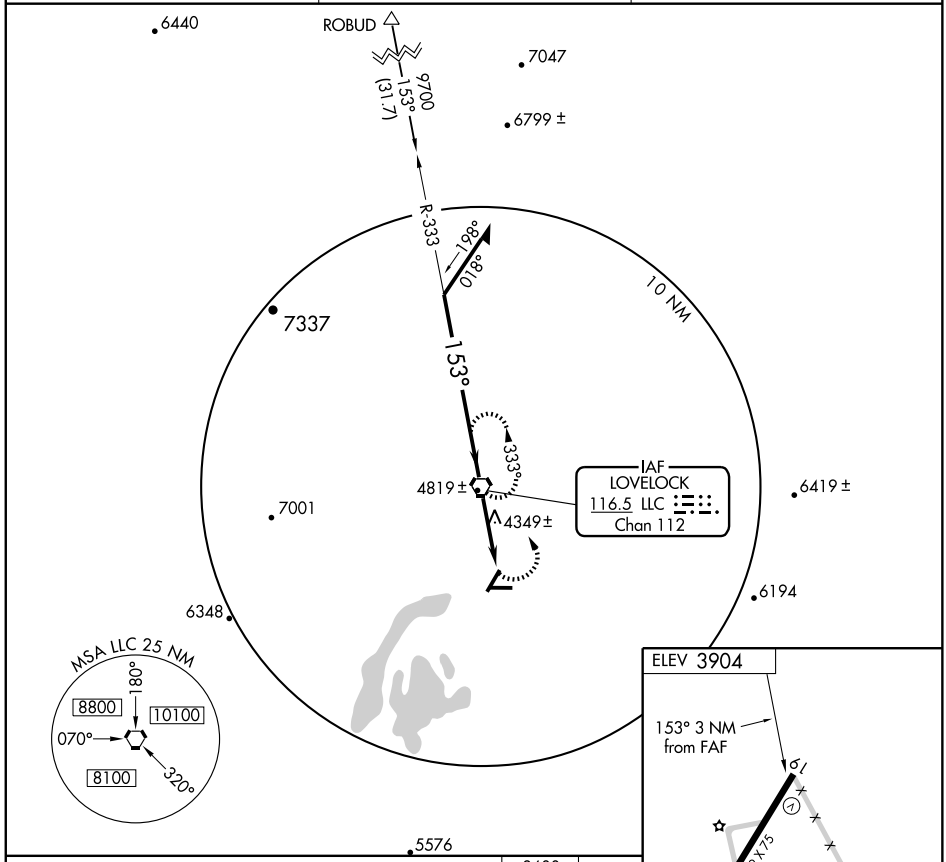
VORTAC LLC 116.5 Chan 112	APP CRS 153°	Rwy Idg N/A TDZE N/A Apt Elev 3904

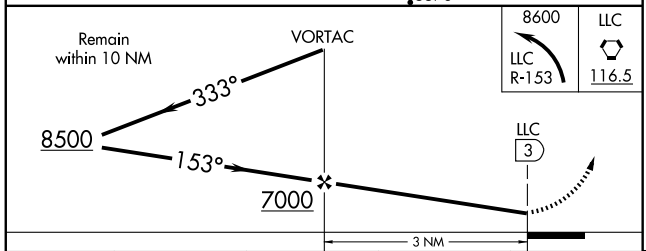
VOR or GPS-C

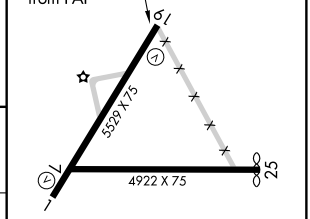
LOVELOCK/ DERBY FIELD (LOL)

MISSED APPROACH: Climbing left turn to 8600 via R-153 to LLC VORTAC and hold, continue climb-in-hold to 8600.

ASOS	OAKLAND CENTER	UNICOM
120.675	128.8 285.5	122.8 (CTAF) L







REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L

CATEGORY	A	B	C	D
CIRCLING	5800-1¼ 1897 (1900-1¼)	5800-1½ 1897 (1900-1½)	5800-3 1897 (1900-3)	

FAF to MAP 3 NM					
Knots	60	90	120	150	180
Min:Sec	3:00	2:00	1:30	1:12	1:00

SW-4, 22 OCT 2009 to 19 NOV 2009

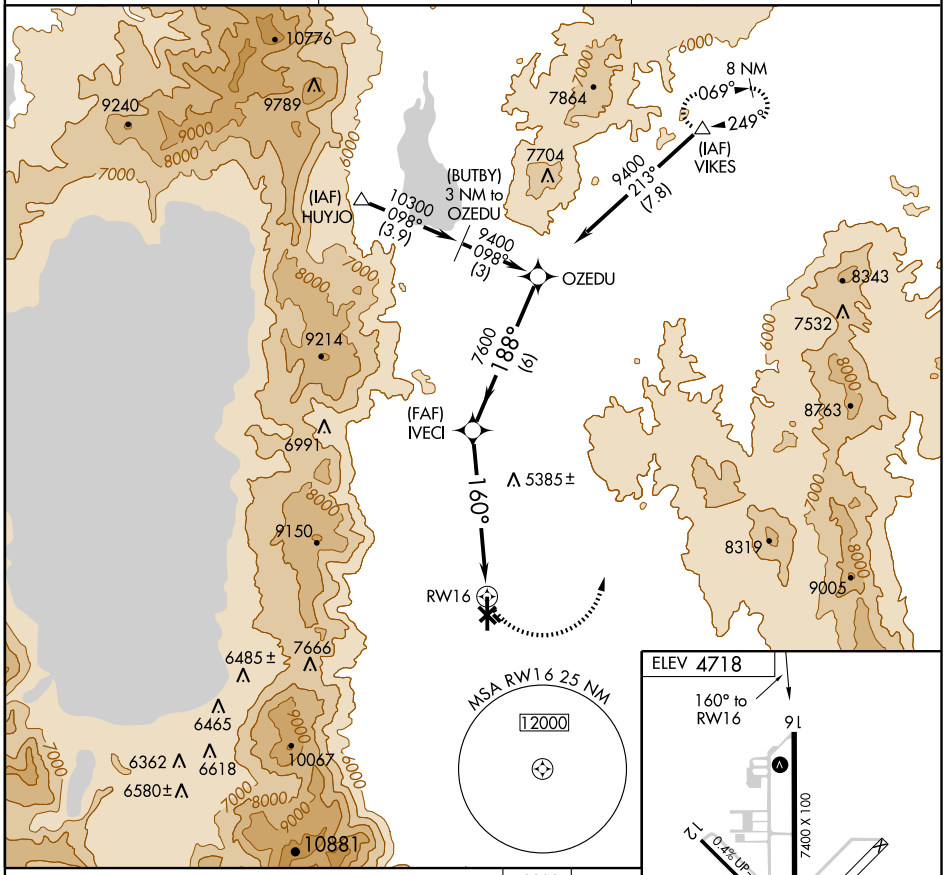
APP CRS	Rwy Idg	N/A
160°	TDZE	N/A
	Apt Elev	4718

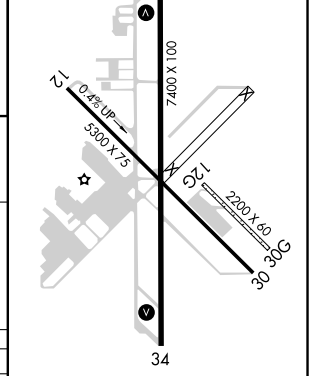
GPS-A
MINDEN-TAHOE (MEV)

NA

MISSED APPROACH: Climbing left turn to 12000 direct VIKES WP and hold.

AWOS-3	RENO APP CON	UNICOM
119.325	119.2 279.55	123.05 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	6220-1¼ 1502 (1600-1¼)	6220-1½ 1502 (1600-1½)	6220-3 1502 (1600-3)	

MIRL Rwy 16-34 L

SW-4, 22 OCT 2009 to 19 NOV 2009

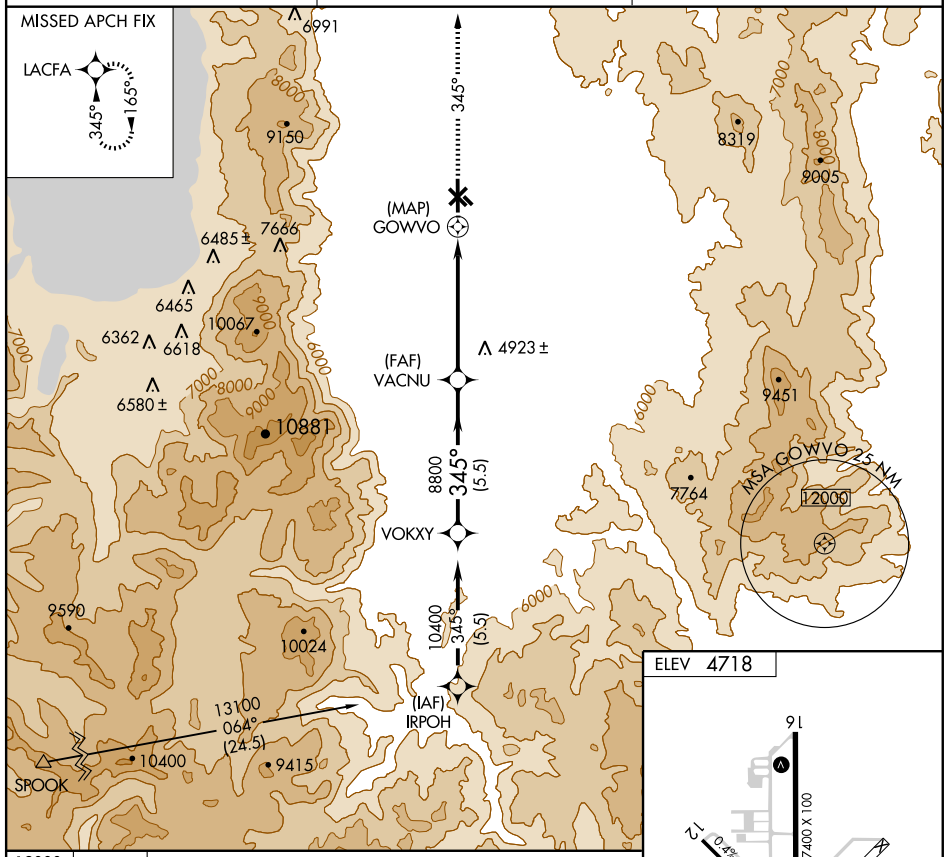
APP CRS	Rwy Idg	N/A
345°	TDZE	N/A
	Apt Elev	4718

GPS-B
MINDEN-TAHOE (MEV)

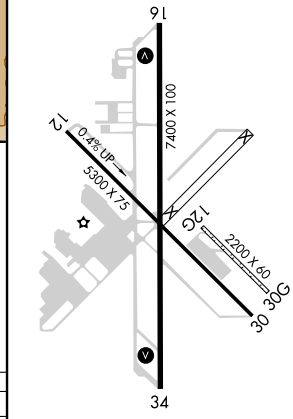
NA

MISSED APPROACH: Climb to 12000 via 345° course to LACFA WP and hold.

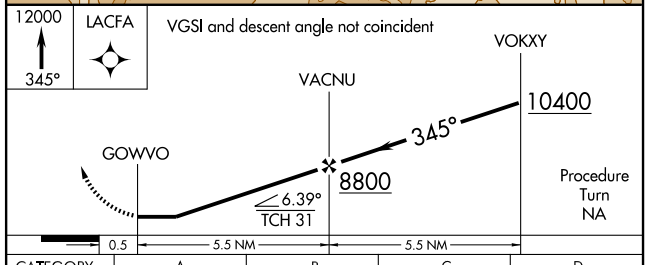
AWOS-3	RENO APP CON	UNICOM
119.325	119.2 279.55	123.05 (CTAF) L



ELEV 4718



MIRL Rwy 16-34 L

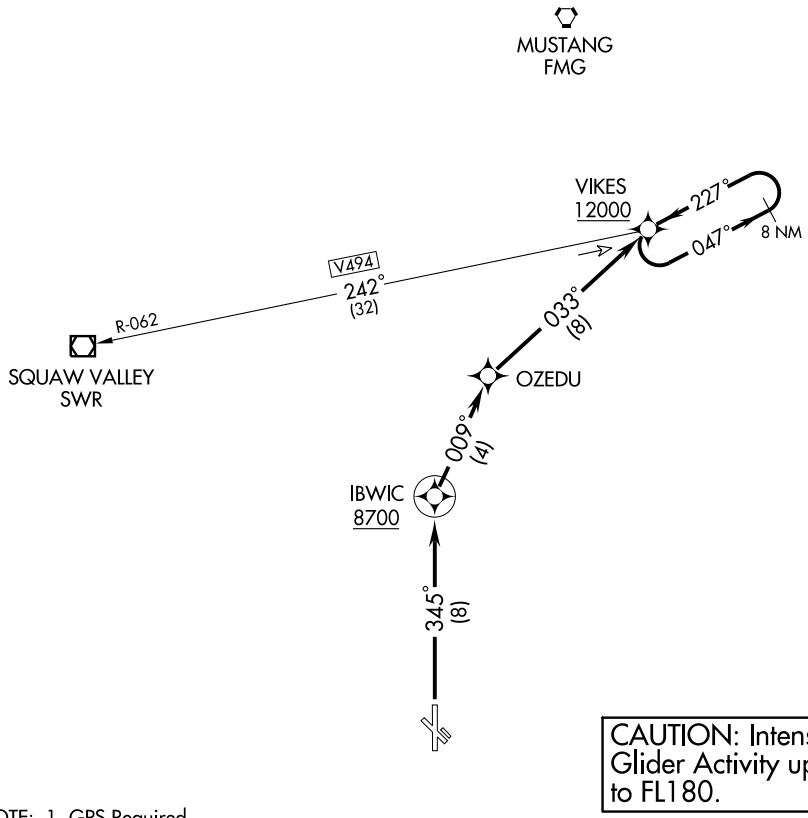


CATEGORY	A	B	C	D
CIRCLING	6600-1¼ 1882 (1900-1¼)	6600-1½ 1882 (1900-1½)	6600-3 1882 (1900-3)	

SW-4, 22 OCT 2009 to 19 NOV 2009

MINDEN ONE DEPARTURE (RNAV) (OBSTACLE)

RENO TOWER
118.7 257.8
RENO DEP CON (SOUTH)
119.2 279.55



CAUTION: Intense Glider Activity up to FL180.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

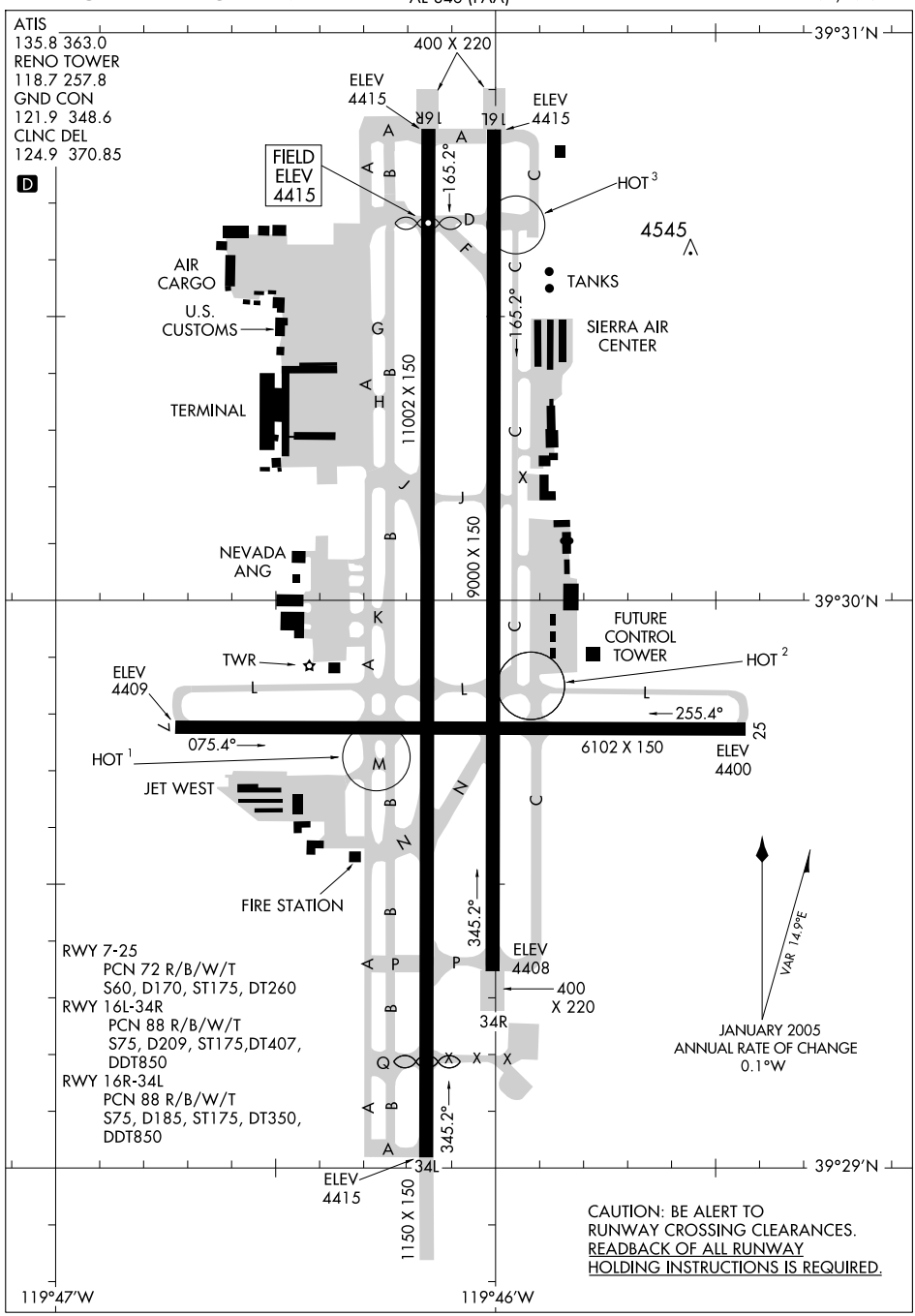
TAKE-OFF RUNWAY 34: Climb via 345° course to IBWIC WP, 009° course to OZEDU WP, and 033° course to VIKES WP, then climb in VIKES WP holding pattern (hold NE, left turns, 227° inbound) to cross VIKES WP at or above 12000 before proceeding on course.

SW-4, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-346 (FAA)

RENO/TAHOE INTL (RNO)
RENO, NEVADA



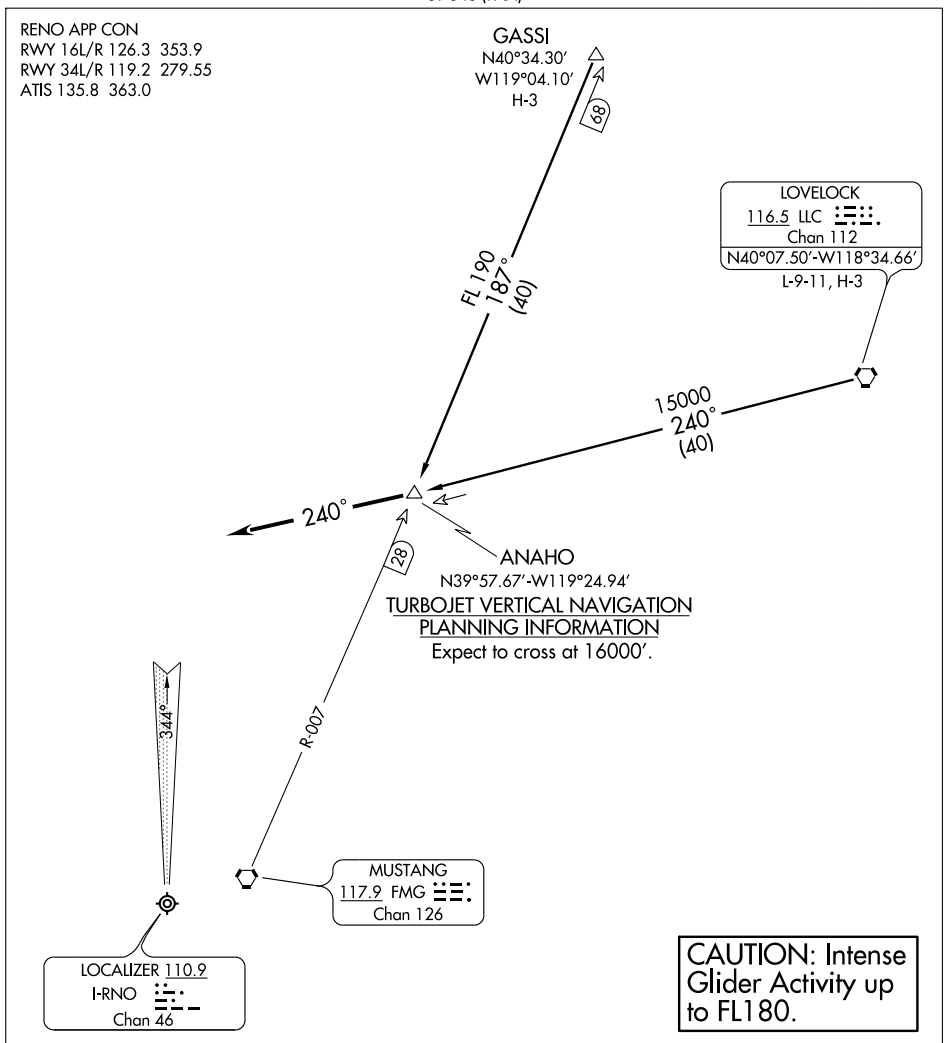
SW-4, 22 OCT 2009 to 19 NOV 2009

(ANAHO.ANAHO2) 08325

ANAHO TWO ARRIVAL

ST-346 (FAA)

RENO/TAHOE INTL
RENO, NEVADA



NOTE: RADAR required.

NOTE: Chart not to scale.

GASSI TRANSITION (GASSI.ANAHO2): From over GASSI via FMG R-007 to ANAHO INT/DME. Thence....

LOVELOCK TRANSITION (LLC.ANAHO2): From over LLC VORTAC via LLC R-240 to ANAHO INT/DME. Thence....

....Depart ANAHO INT/DME heading 240° for vectors to final approach course.

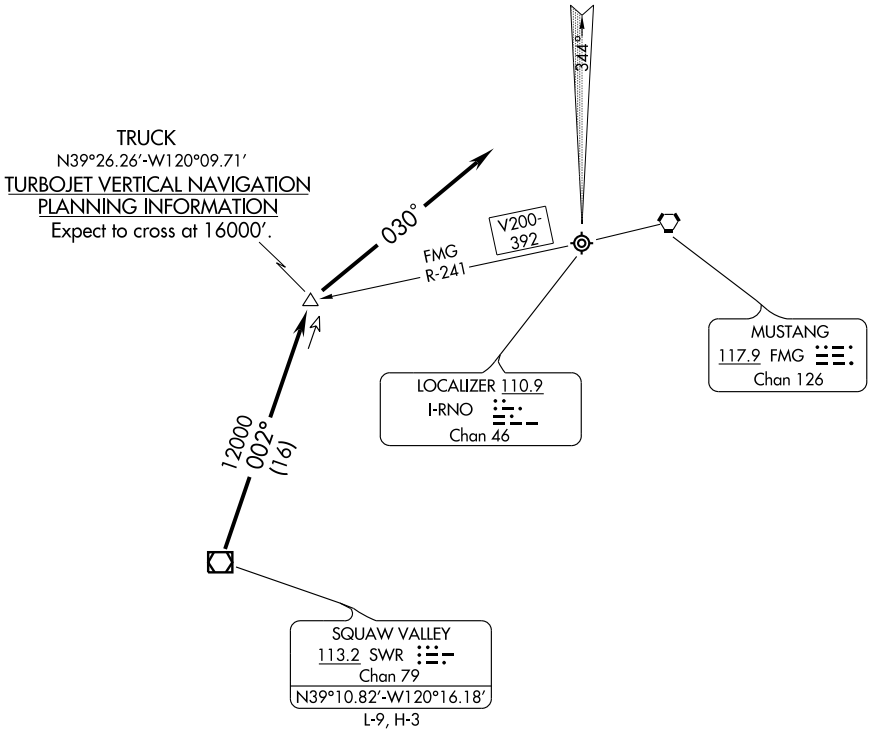
SW-4, 22 OCT 2009 to 19 NOV 2009

CANNON TWO ARRIVAL

ST-346 (FAA)

RENO/TAHOE INTL
RENO, NEVADA

RENO APP CON
RWY 16L/R 126.3 353.9
RWY 34L/R 119.2 279.55
ATIS 135.8 363.0



CAUTION: Intense Glider Activity up to FL180.

NOTE: RADAR Required.

NOTE: Chart not to scale.

From over SWR VOR/DME via SWR R-002 to TRUCK INT/DME. Depart TRUCK INT/DME heading 030° for vectors to final approach.

HI-ILS/DME RWY 16R

LOC I-RNO 110.9 Chan 46	APCH CRS 164°	Rwy ldg 10,000 TDZE 4412 Arpt Elev 4412

JAL-346 [USAF]

RENO/TAHOE INTL (KRNO)

▼ Use I-RNO DME when on LOC course. DME shall not be used to determine aircraft position over LMM, runway threshold, or runway touchdown point.

MALSR

†† ** MISSED APPROACH: Climb to 12,000 via I-RNO south course to 17 DME then turn left to WAGGE 13 DME and hold.

ATIS	RENO APP CON	RENO TOWER	GND CON	CLNC DEL
135.8 277.2	119.2 353.9	118.7 257.8	121.9 348.6	124.9 343.9

†† CAUTION: Missed Approach Minimum Climb Rate to 13,000

Knots	60	120	180	240	300	360
A/V(fpm)	300	600	900	1200	1500	1800

Controlling Obstacle, 8844

** CAUTION: High terrain both sides of missed approach course

(c) (c) 074 254 (a) (b) 324

FMG 44 R-324 (IAF) BUSST R-324 FMG 34 144° 324° 144° 8197 FMG R-324 23 342° 7850 7189 ‡ FMG R-324 15.2 † Change to DME CH 45 when established on LOC crs. 164° 6028 8379 TAKLE I-RNO 13.1 20 NM 6163 R-324 LMM 351 NO 8760 DICEY INT I-RNO 7.7 5640 8266 R-295 7402 MSA FMG 25 NM 11,800 NOT FOR CIVIL USE LOCALIZER 110.9 I-RNO Chan 46 4822 6075 5027 MUSTANG 117.9 FMG Chan 126 9148 5000 WAGGE I-RNO 13 10,776 8844 9240 7705 SQUAW VALLEY 113.2 SWR Chan 79 R-062 I-RNO 17 343° 164° 9214

EMERG SAFE ALT 100 NM 14,600 FROM "FMG" VORTAC

BUSST FMG R-324 34 17,000 144° FMG 23 FMG 15.2 Intcp LOC 10,000 9000 164° TAKLE I-RNO 13.1 DICEY INT I-RNO 7.7 LMM I-RNO 2.4 8256 GS 3.10° TCH 63 *8500 *7200 when authorized by ATC

5.4 NM 5.3 NM 0.5

12,000 I-RNO South Course I-RNO 17 WAGGE I-RNO 13

ELEV 4412 ±4474 164° 11.2 from TAKLE A5 P TDZE 4412 RWY 16R ldg 10,000 Rwy 34L ldg 10,010 11,000 x 150 9000 x 150 TWR 4488 ☆ 4447± 6101 x 150 25 7 4482 REIL Rwy 7, 25, 16L and 34R 34R MIRL Rwy 7-25 HIRL Rwy 16R-34L and 16L 34L

CATEGORY	C	D	E
S-ILS 16R	5012-2	600	(600-2)
S-LOC 16R	NOT AUTHORIZED		
CIRCLING	NOT AUTHORIZED		

HI-TACAN-E

VORTAC FMG 117.9 Chan 126	APCH CRS 239°	Rwy ldg N/A TDZE N/A Arpt Elev 4412	JAL-346 [USN]	RENO/TAHOE INTL (KRNO)

▼ ** Category E circling not authorized to Rwy 7-25. Approaches RADAR monitored by Reno APP CON. Arrivals from East and aircraft on missed approach may be vectored to final.

* MISSED APPROACH: Make climbing right turn to 10,000 heading 060° to R-020, then arc NE on 12 mile arc to join R-059 inbound.

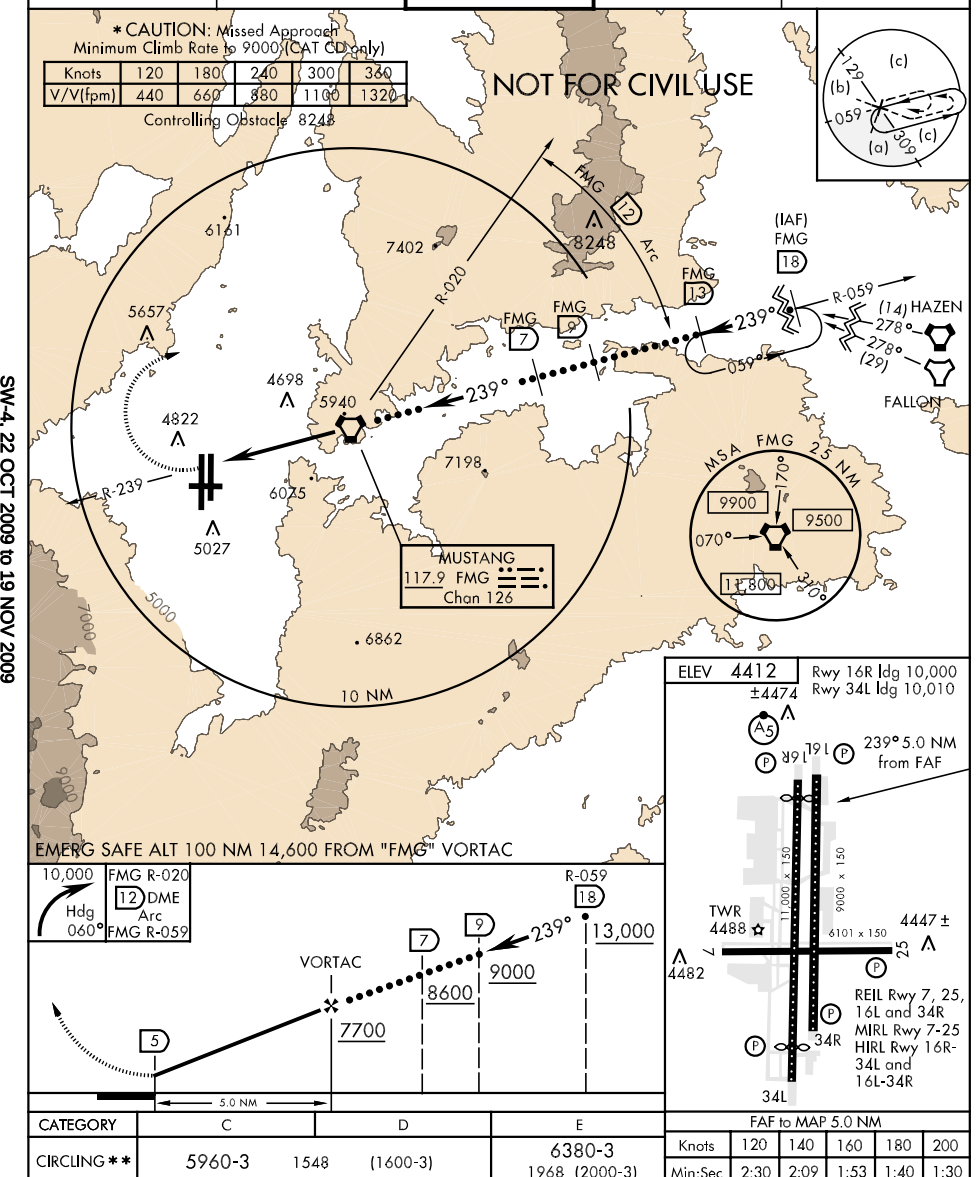
ATIS	RENO APP CON	RENO TOWER	GND CON	CLNC DEL
135.8 277.2	119.2 353.9	118.7 257.8	121.9 348.6	124.9 343.9

* CAUTION: Missed Approach Minimum Climb Rate to 9000 (CAT CD only)

Knots	120	180	240	300	360
V/V(fpm)	440	660	880	1100	1320

Controlling Obstacle 8248

NOT FOR CIVIL USE



EMERG SAFE ALT 100 NM 14,600 FROM "FMG" VORTAC

CATEGORY	C	D	E
CIRCLING **	5960-3 1548	(1600-3)	6380-3 1968 (2000-3)

FAF to MAP 5.0 NM					
Knots	120	140	160	180	200
Min:Sec	2:30	2:09	1:53	1:40	1:30

SW-4, 22 OCT 2009 to 19 NOV 2009

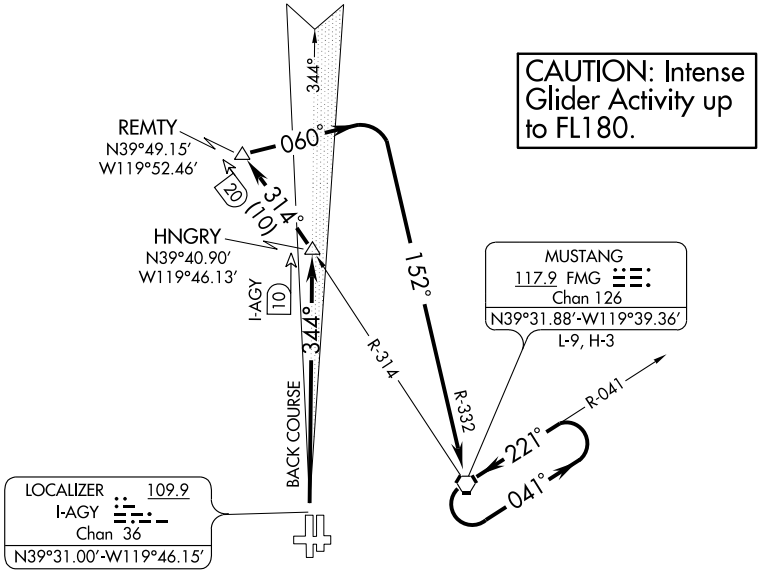
HUNGRY TWO DEPARTURE

ATIS 135.8 363.0
CLNC DEL
124.9 370.85
GND CON
121.9 348.6
RENO TOWER
118.7 257.8
RENO DEP CON
126.3 353.9

TAKE-OFF OBSTACLE NOTES

Rwy 34L: Multiple trees and pole beginning 1229′ from DER, 180′ right of centerline, up to 20′ AGL/4498′ MSL.
Multiple trees beginning 1193′ from DER, 331′ left of centerline, up to 20′ AGL/4489′ MSL.

Rwy 34R: Multiple trees and pole beginning 1067′ from DER, 172′ right of centerline, up to 20′ AGL/4497′ MSL.
Multiple trees and pole beginning 1230′ from DER, 350′ left of centerline, up to 20′ AGL/4498′ MSL.
Building 1.2 NM from DER, 1730′ right of centerline, 363′ AGL/4780′ MSL.



TAKE-OFF MINIMUMS

Rwy 7: NA- obstacles
Rwys 16L, 16R, 25: NA-ATC.
Rwy 34L: Standard with minimum climb of 315′ per NM to 8400.
Rwy 34R: Standard with minimum climb of 480′ per NM to 8400 or, 500-1½ with minimum climb of 315′ per NM to 8400.

NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34L/R: Climb to 10000 or assigned altitude via I-AGY localizer north course to HNGRY INT/I-AGY 10 DME, and intercept FMG R-314 to REMTY/FMG 20 DME, and right turn heading 060° to intercept FMG R-332 to FMG VORTAC. Climb in FMG holding pattern to depart FMG VORTAC at or above MEA/MCA for route of flight. Expect clearance to requested altitude five minutes after departure.

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-AGY	APP CRS	Rwy Idg	10012
109.9	344°	TDZE	4410
Chan 36		Apt Elev	4415

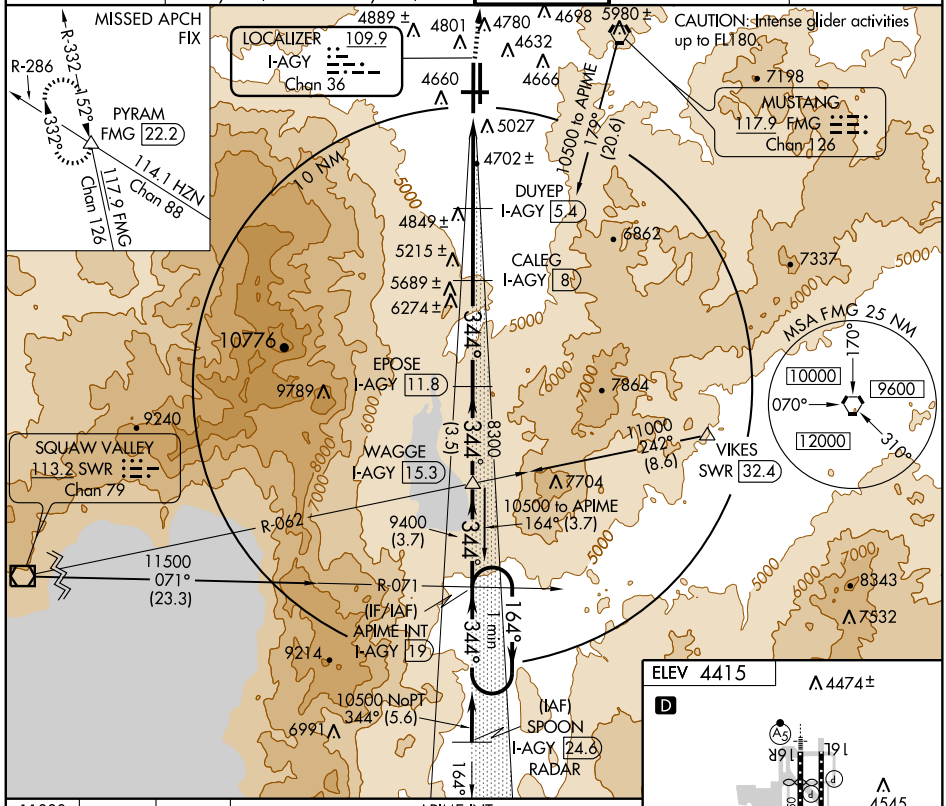
ILS or LOC/DME RWY 34L

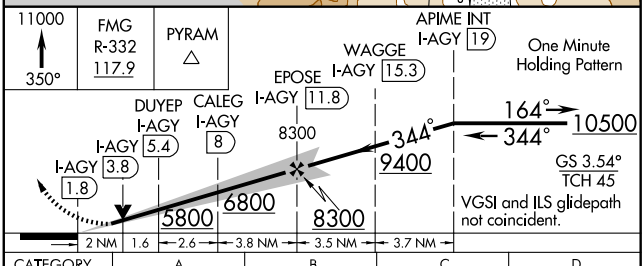
RENO/TAHOE INTL (RNO)

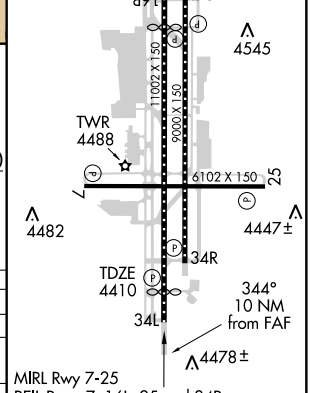
Inoperative table does not apply.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 11000 via heading 350° and FMG VORTAC R-332 to PYRAM INT/FMG 22.2 DME and hold, continue climb-in-hold to 11000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85







CATEGORY	A	B	C	D
S-ILS 34L	4946-1½ 536 (600-1½)			NA
S-LOC 34L	5120-1 710 (800-1)		5120-2 710 (800-2)	NA
CIRCLING	5340-1¼ 925 (1000-1¼)		5340-2¾ 925 (1000-2¾)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-RNO	APP CRS	Rwy Idg	10003
110.9	164°	TDZE	4415
Chan 46		Apt Elev	4415

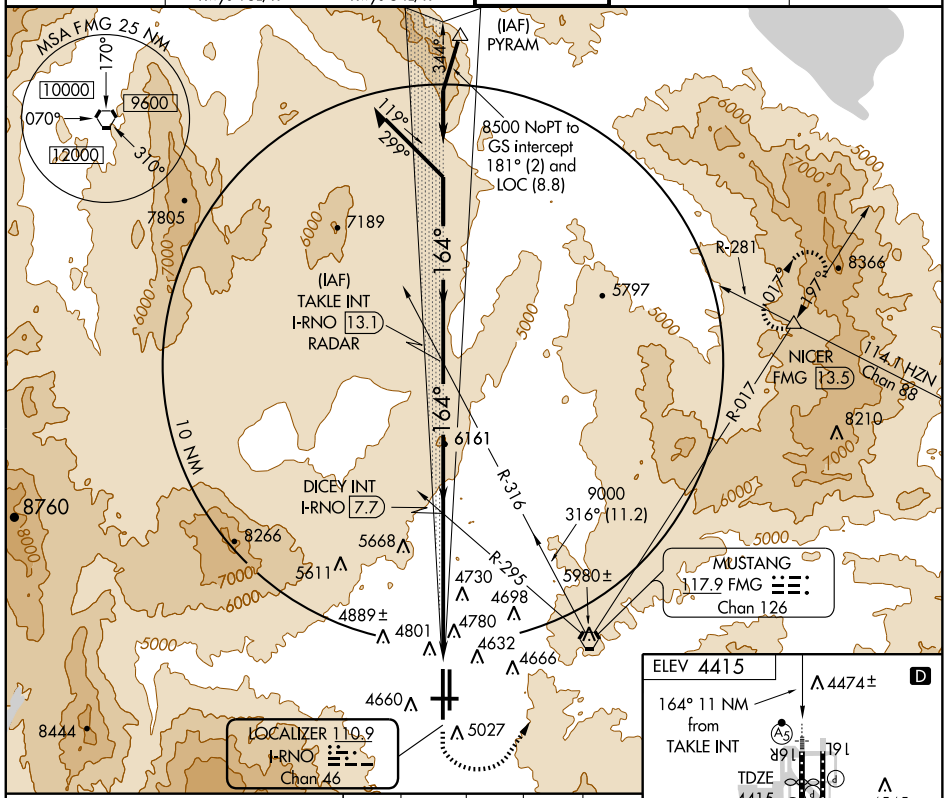
ILS RWY 16R
RENO/TAHOE INTL (RNO)

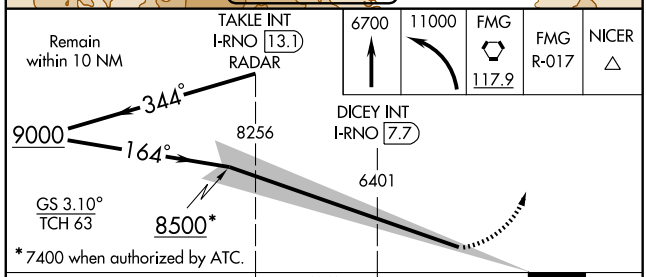
Inoperative table does not apply.
When GS not used, use LOC Rwy 16R procedure.

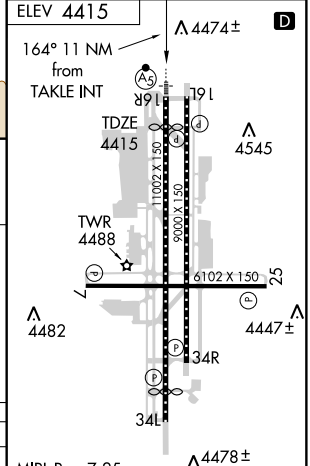
MALSR

MISSED APPROACH: Climb to 6700, then climbing left turn to 11000 direct FMG VORTAC, then via FMG R-017 to NICER INT/FMG 13.5 DME and hold.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85







CATEGORY	A	B	C	D
S-ILS 16R	6446-7 2031 (2100-7)			
S-LOC 16R	NA			
CIRCLING	NA			

MIRL Rwy 7-25
REIL Rwys 7, 16L, 25 and 34R
HIRL Rwys 16R-34L and 16L-34R

SW-4, 22 OCT 2009 to 19 NOV 2009

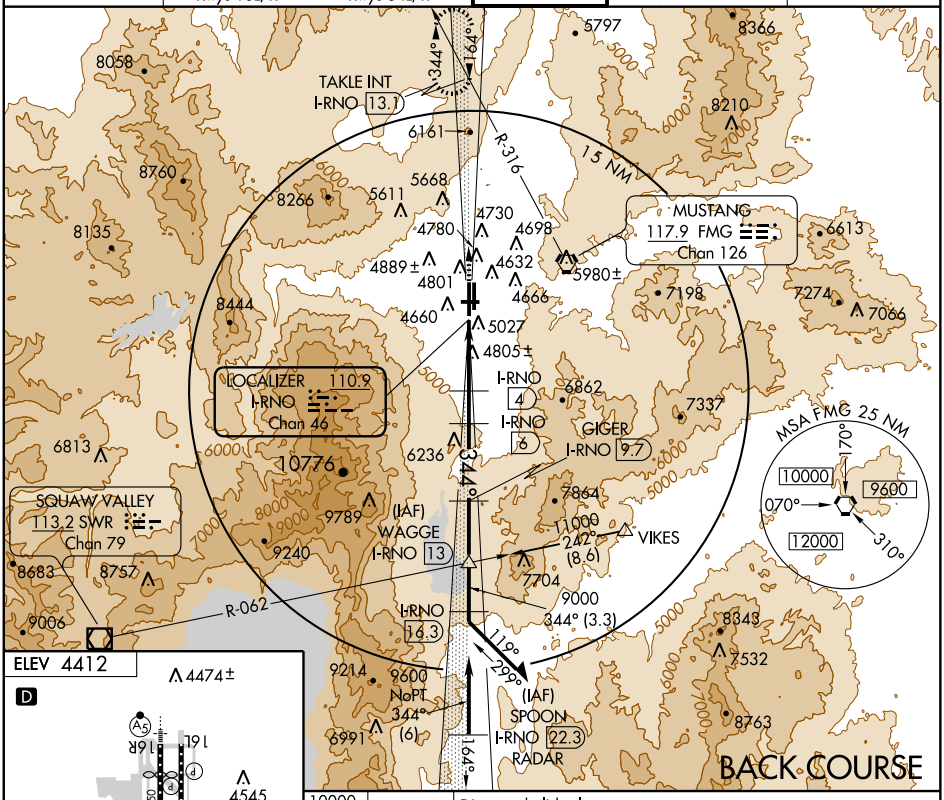
LOC/DME I-RNO	APP CRS	Rwy Idg	10012
110.9	344°	TDZE	4407
Chan 46		Apt Elev	4412

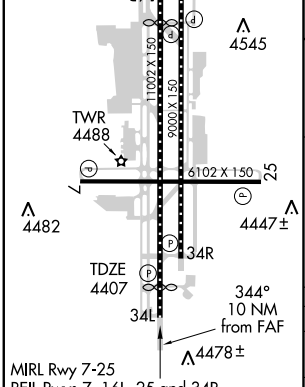
LOC/DME BC RWY 34L

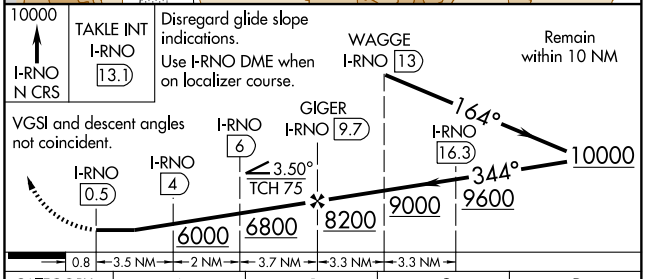
RENO/TAHOE INTL (RNO)

MISSED APPROACH: Climb to 10000 via I-RNO north course to TAKLE/I-RNO 13.1 DME and hold, continue climb-in-hold to 10000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85







CATEGORY	A	B	C	D
S-34L	5060-1 653 (700-1)		5060-1¾ 653 (700-1¾)	5060-2 653 (700-2)
CIRCLING	5340-1¼ 928 (1000-1¼)		5340-2¾ 928 (1000-2¾)	5340-3 928 (1000-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-RNO	APP CRS	Rwy Idg	10003
110.9	164°	TDZE	4415
Chan 46		Apt Elev	4415

LOC RWY 16R

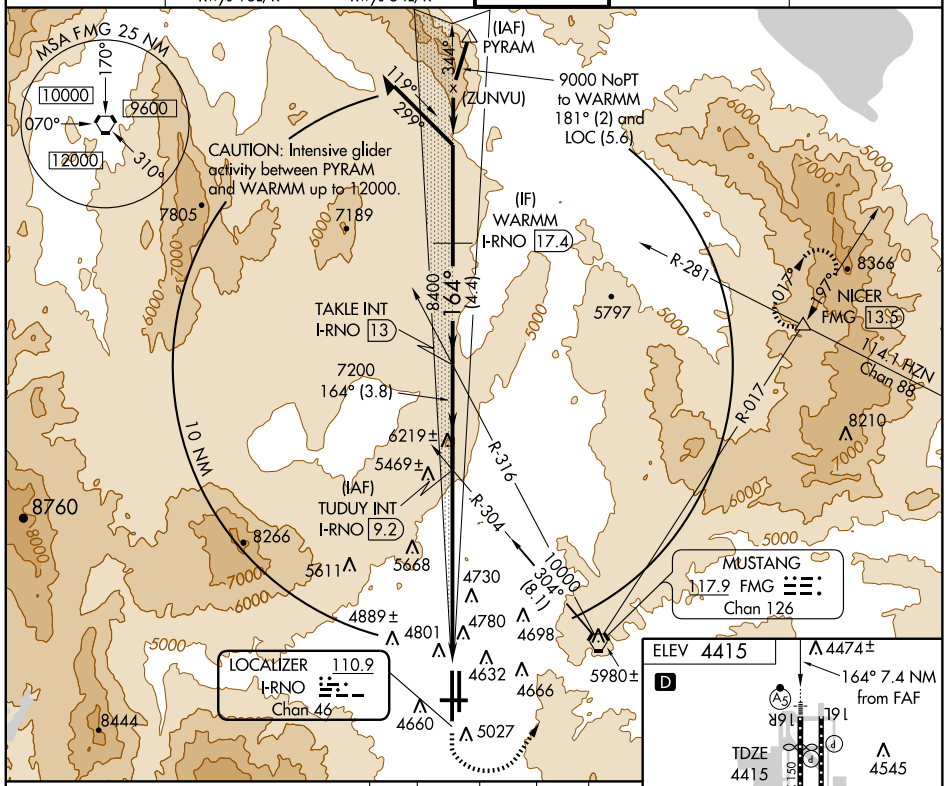
RENO/TAHOE INTL (RNO)

T Inoperative table does not apply to S-16R Cats A and B. For inoperative MALSR; increase S-16R Cat E visibility to 3 miles.
A VDP does not apply to Cat E aircraft.

MALSR

MISSED APPROACH: Climb to 6300, then climbing left turn to 11000 direct FMG VORTAC and via FMG VORTAC R-017 to NICER INT/FMG 13.5 DME and hold, continue climb-in-hold to 11000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85



CATEGORY	A	B	C	D	E
S-16R	5980/60 1565 (1600-1¼)	5980-1½ 1565 (1600-1½)	5980-2½ 1565 (1600-2½)		6100-2½ 1685 (1700-2½)
CIRCLING	5980-1¼ 1565 (1600-1¼)	5980-1½ 1565 (1600-1½)	5980-3 1565 (1600-3)		6780-3 2365 (2400-3)

FAF to MAP 6.8 NM

Knots	60	90	120	150	180
Min:Sec	6:48	4:32	3:24	2:43	2:16

SW-4, 22 OCT 2009 to 19 NOV 2009

MUSTANG SEVEN DEPARTURE

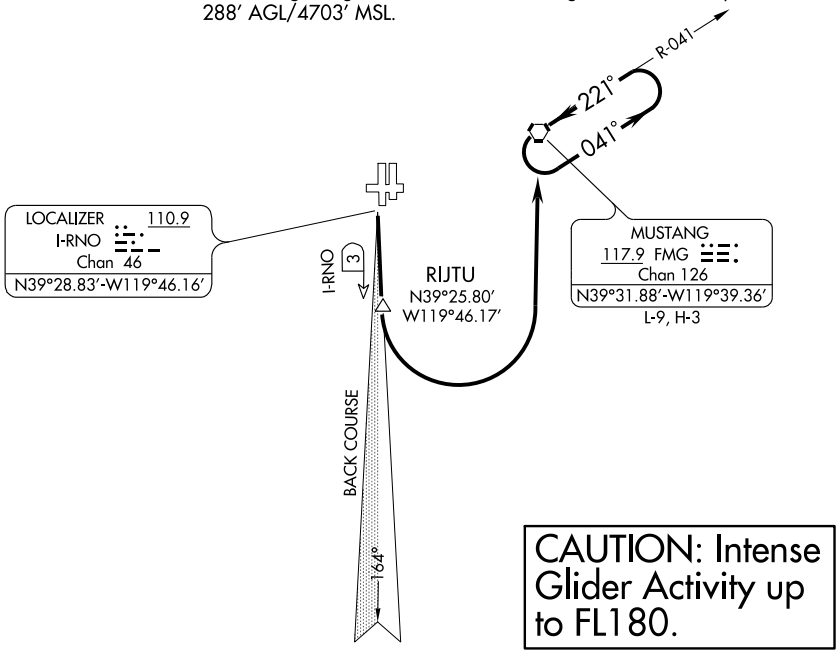
SL-346 (FAA)

RENO/TAHOE INTL (RNO)
RENO, NEVADA

ATIS 135.8 363.0
CLNC DEL
124.9 370.85
GND CON
121.9 348.6
RENO TOWER
118.7 257.8
RENO DEP CON
119.2 325.8

TAKE-OFF OBSTACLE NOTES

Rwy 16L: Multiple antennas, trees, and light poles beginning 618′ from DER, 131′ left of centerline, up to 40′ AGL/4449′ MSL.
Terrain beginning 5189′ from DER, 821′ left of centerline, up to 5027′ MSL.
Rwy 16R: Multiple antennas, trees, and light poles beginning 746′ from DER, 380′ left of centerline, up to 95′ AGL/4510′ MSL.
Terrain beginning 2784′ from DER, 990′ right of centerline, up to 288′ AGL/4703′ MSL.



TAKE-OFF MINIMUMS

Rwy 7: NA- obstacles
Rwys 25, 34L/34R: NA- ATC.
Rwy 16L: Standard with minimum climb of 740′ per NM to 8000 or, 600-1¼ with minimum climb of 525′ per NM to 8000.
Rwy 16R: Standard with minimum climb of 740′ per NM to 8000 or, 600-1¼ with minimum climb of 525′ per NM to 8000.

NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R: Climb to 10000 or assigned altitude, via I-RNO south course to RIJTU/3 DME, then left turn direct FMG VORTAC. Climb in FMG holding pattern to depart FMG VORTAC at or above MEA/MCA for direction of flight. Expect clearance to requested altitude five minutes after departure.

SW-4, 22 OCT 2009 to 19 NOV 2009

RENO FOUR DEPARTURE

SL-346 (FAA)

TAKE-OFF MINIMUMS

Rwy 7: NA- Obstacles.

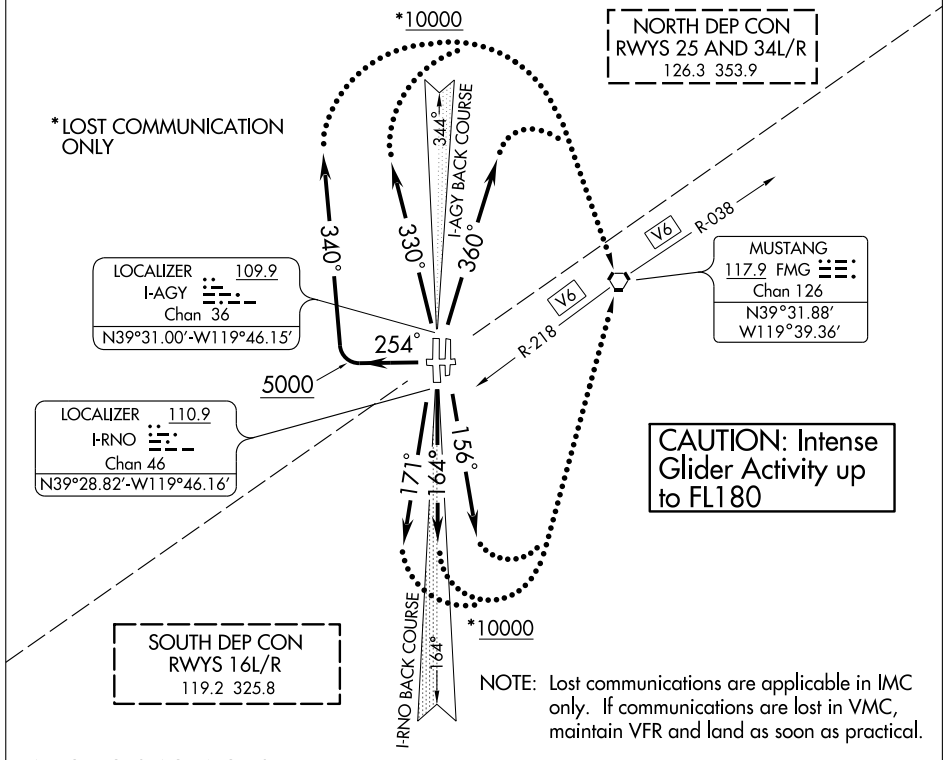
Rwy 16L: Standard with minimum climb of 730′ per NM to 9900, or 600-1¼ with minimum climb of 370′ per NM to 9900.

Rwy 16R: Standard with minimum climb of 460′ per NM to 10800, or 300-1 with minimum climb of 395′ per NM to 10800.

Rwy 25: Standard with minimum climb of 490′ per NM to 8600.

Rwys 34L/R: Standard with mimimum climb of 480′ per NM to 7000, or 500-1½ with minimum climb of 380′ per NM to 7000.

ATIS 135.8 363.0
CLNC DEL
124.9 370.85
GND CON
121.9 348.6
RENO TOWER
118.7 257.8



NOTE: Lost communications are applicable in IMC only. If communications are lost in VMC, maintain VFR and land as soon as practical.

TAKEOFF OBSTACLE NOTES

Rwy 16L: Multiple poles, trees, bushes, and terrain beginning 618′ from DER, 133′ left of centerline, up to 20′ AGL/4961′ MSL.

Rwy 16R: Multiple trees 2784′ from DER, 171′ right of centerline, up to 20′ AGL/4510′ MSL.
Multiple trees and terrain beginning 746′ from DER, 380′ left of centerline, up to 20′ AGL/4703′ MSL.

Rwy 25: Multiple trees and poles beginning 829′ from DER, 201′ right of centerline, up to 103′ AGL/4523′ MSL.
Building 6023′ from DER, 456′ right of centerline, 152′ AGL/4608′ MSL.
Fence 222′ from DER, 270′ right of centerline, up to 5′ AGL/4415′ MSL.
Multiple trees and poles beginning 500′ from DER, 31′ left of centerline, up to 20′ AGL/4506′ MSL.

Rwy 34L: Multiple trees and pole beginning 1229′ from DER, 180′ right of centerline, up to 20′ AGL/4498′ MSL.
Multiple trees beginning 1193′ from DER, 331′ left of centerline, up to 20′ AGL/4489′ MSL.

Rwy 34R: Multiple trees and poles beginning 1067′ from DER, 172′ right of centerline, up to 20′ AGL/4497′ MSL.
Multiple trees and poles beginning 1230′ from DER, 350′ left of centerline, up to 20′ AGL/4498′ MSL.
Building 1.2 NM from DER, 1730′ right of centerline, 363′ AGL/4780′ MSL.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

RENO FOUR DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb via I-RNO localizer South course. Thence....

TAKE-OFF RUNWAY 16R: Climb heading 156° CW 171° as assigned by ATC. Thence...

TAKE-OFF RUNWAY 25: Climb 254° heading to 5000 then climbing right turn heading 340°. Thence....

TAKE-OFF RUNWAYS 34L/R: Climb heading 330° CW 360° as assigned by ATC. Thence....

..... All aircraft maintain 15000 or assigned altitude. Expect clearance to requested altitude five minutes after departure. Expect radar vectors to assigned route/fix.

LOST COMMUNICATIONS: If not in contact with departure control within one minute after take-off, maintain assigned heading until passing 10,000; Thence....

....RUNWAYS 16L/R DEPARTURES: Turn left direct FMG VORTAC, then via assigned route.

....RUNWAYS 25 AND 34L/R DEPARTURES: Turn right direct FMG VORTAC, then via assigned route.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10012
344°	TDZE	4410
	Apt Elev	4415

RNAV (GPS) X RWY 34L

RENO/TAHOE INTL (RNO)

Circling to Rwy 7, 25 NA at night. DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
For inoperative MALSR increase LNAV Cat. A and B visibility to 1¼.

MISSED APPROACH: Climb to 10000 direct TAKLE and hold, continue climb-in-hold to 10000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85

MISSED APCH FIX

8 NM 164° 344° TAKLE

MSA RW34L 25 NM 12000

4889± 4801 4780 4632 4666 5980± 7198 4660 RW34L 5027

5642± FEBAK 6.3 NM to RW34L 6862 7337

6274± 10776 9789 (FAF) KARME 7864 9240

7704 VIKES 11000 176° (6.8)

8100 344° (8.3)

(IF) JUKNU 9600 254° (7) (IAF) NIPME 8343 7532

SQUAW VALLEY SWR 11800 087° (18.8)

9214 9600 from PIDIC 344° (4.2) 9600 from SPOON 344° (4.4)

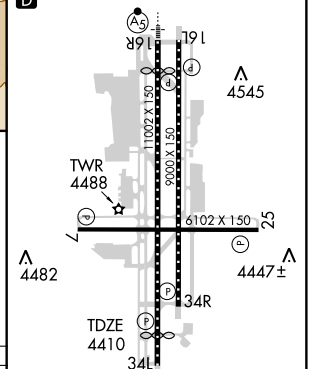
ORUKE 11500 to PIDIC 074° (5) (IAF) PIDIC 6991

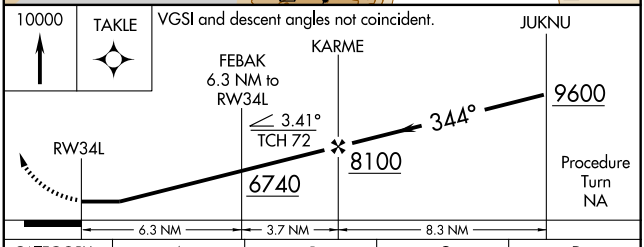
11500 to PIDIC 044° (13.5) (IAF) SPOON 9600 320° (9.6)

RICHY 9150 (IAF) RAMRE

ELEV 4415 4474±

D





CATEGORY	A	B	C	D
LNAV MDA	5300-1 890 (900-1)		5300-2¼ 890 (900-2¼)	5300-2½ 890 (900-2½)
CIRCLING	5340-1¼ 925 (1000-1¼)		5340-2¾ 925 (1000-2¾)	5340-3 925 (1000-3)

REIL Rwys 7, 16L, 25, and 34R
MIRL Rwy 7-25
HIRL Rwys 16R-34L and 16L-34R

4478±

344° to RW34L

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9000
344°	TDZE	4408
	Apt Elev	4415

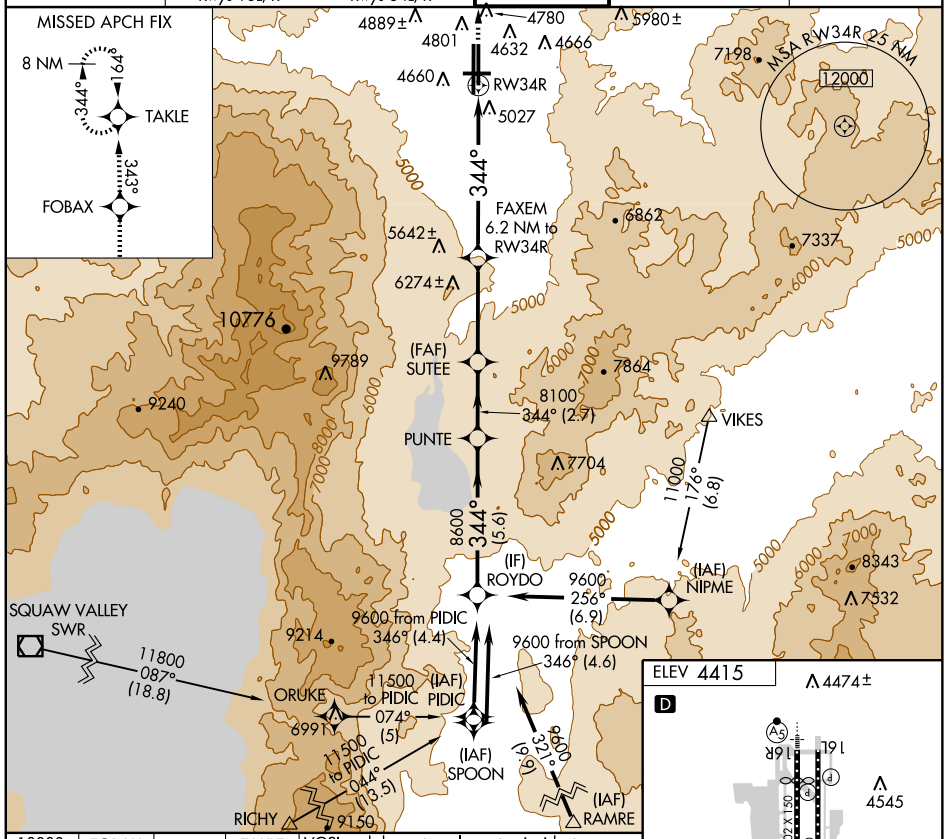
RNAV (GPS) X RWY 34R

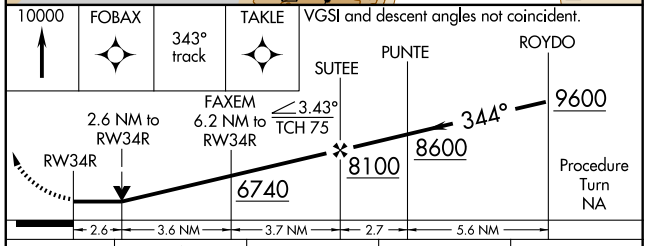
RENO/TAHOE INTL (RNO)

Circling to Rwy 7, 25 NA at night.
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

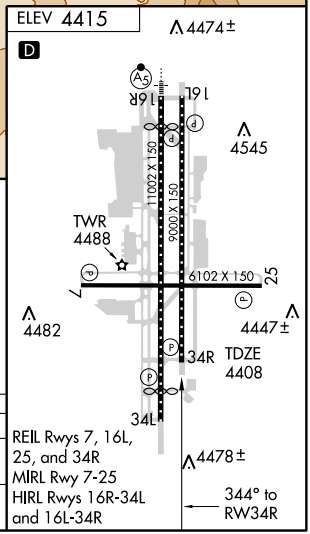
MISSED APPROACH: Climb to 10000 direct FOBAX and via 343° track to TAKLE and hold, continue climb-in-hold to 10000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85





CATEGORY	A	B	C	D
LNAV MDA	5300-1¼ 892 (900-1¼)		5300-2¾ 892 (900-2¾)	5300-3 892 (900-3)
CIRCLING	5340-1¼ 925 (1000-1¼)		5340-2¾ 925 (1000-2¾)	5340-3 925 (1000-3)



SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 72909 W16A	APP CRS 164°	Rwy Idg 9000 TDZE 4415 Apt Elev 4415

RNAV (GPS) Y RWY 16L

RENO/TAHOE INTL (RNO)

Circling to Rwy 7, 25 NA at night.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 13000 direct WEDMO and via 158° track to MARRI and hold.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85

CAUTION: Glider activity in the vicinity of PYRAM/TEBOY up to 12000.

MSA RW16L 25 NM 12000

8197 9700 170° (2.5) (IAF) PYRAM

8600 170° (2.2) ERIDE

(IAF) FITUN 8600 076° (5) (IF) TEBOY 8600 254° (5.9) (IAF) ROXJO

7805 7189 8366 5797 8210

7200 164° (9)

SEKAW 6900 164° (1.9) 6161

(FAF) BADPE 5941 ±

FOBAX 5.3 NM to RW16L 5668

10000 347° (17.1)

8760 11000 014° (26.4) 8266 5611

4730 4698 4889 ± 4801 4780 5980 ± 4632 RW16L 4666 4660 5027

MUSTANG FMG 10000 338° (34.8)

CAXIL

TRUCK

MISSED APCH FIX WEDMO 158° 171° 351° MARRI 10 NM

ELEV 4415 4474 ± 164° to RW16L

D

TDZE 4415 4545

TWR 4488

11002 X 150 9000 X 150 6102 X 150

4482 4447 ±

34R 34L

4478 ±

MIRL Rwy 7-25
REIL Rwys 7, 16L, 25, and 34R
HIRL Rwys 16R-34L and 16L-34R

VGSI and RNAV glidepath not coincident.

13000	WEDMO	158° track	MARRI

TEBOY SEKAW BADPE FOBAX 5.3 NM to RW16L *LNAV only

8600 Procedure Turn NA GS 3.10° TCH 55 164° 7200 6900 *6240 *3.9 NM to RW16L RW16L

9 NM 1.9 1.9 1.4 3.9 NM

CATEGORY	A	B	C	D
LPV DA	5220-2¾ 805 (900-2¾)			
LNAV MDA	5720-1¼ 1305 (1400-1¼)	5720-1½ 1305 (1400-1½)	5720-3	1305 (1400-3)
CIRCLING	5720-1¼ 1305 (1400-1¼)	5720-1½ 1305 (1400-1½)	5720-3	1305 (1400-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10003
CH 78309	164°	TDZE	4415
W16B		Apt Elev	4415

RNAV (GPS) Y RWY 16R

RENO/TAHOE INTL (RNO)

Circling to Rwy 7, 25 NA at night. DME/DME RNP- 0.3 NA. Inoperative table does not apply to LNAV Cats. A and B. For inoperative MALSR increase LPV all Cats. visibility to 2¾.

MALSR

MISSED APPROACH: Climb to 13000 direct ZEXUT and via 158° track to MARRI and hold.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85

CAUTION: Glider activity in the vicinity of PYRAM/ECOLO up to 12000.

MSA RW16R 25 NM 12000

9700 171° (2.8) (IAF) PYRAM

8600 171° (2.2) CEROX

(IAF) FITUN

8600 079° (4.9) (IF) ECOLO

8600 251° (6) (IAF) ROXJO

7805 7189 8360 5797 8210

7200 164° (8.8)

6900 164° (2) ETARE 6161

5941±∧ (FAF) UDADY

8760 8266 5668 5611 4730 4698 4780 4801 4889±∧ 5980± 4632 4666 4660∧ ∧5027

11000 014° 126.4°

10000 347° (17.1)

10000 338° (34.8)

RW16R MUSTANG FMG CAXIL TRUCK

MISSED APCH FIX ZEXUT 158° MARRI 171° 351° 10 NM

ELEV 4415

∧4474± 164° to RW16R

TDZE 4415 ∧4545

TWR 4488

11002 X 150 9000 X 150 6102 X 150

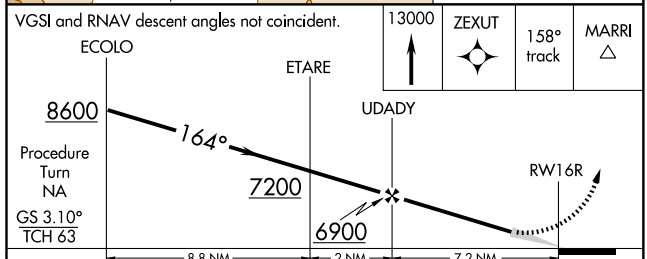
∧4482 ∧4447±

34R 34L

∧4478±

MIRL Rwy 7-25
REIL Rwys 7, 16L, 25, and 34R
HIRL Rwys 16R-34L and 16L-34R

VGSI and RNAV descent angles not coincident.



CATEGORY	A	B	C	D
LPV DA	5239-2¼ 824 (900-2¼)			
LNAV MDA	6200/60 1785 (1800-1¼)	6200-1½ 1785 (1800-1½)	6200-3 1785 (1800-3)	
CIRCLING	6200-1¼ 1785 (1800-1¼)	6200-1½ 1785 (1800-1½)	6200-3 1785 (1800-3)	

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	10012
CH 82609	344°	TDZE	4410
W34A		Apt Elev	4415

RNAV (GPS) Y RWY 34L

RENO/TAHOE INTL (RNO)

Circling to Rwy 7, 25 NA at night. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA. Circling requires descent on glidepath to CMDA. For inoperative MALSR increase LPV all Cats visibility ½ mile.

MISSED APPROACH: Climb to 10000 direct TAKLE and hold, continue climb-in-hold to 10000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85

MISSED APCH FIX

8 NM 164° 344° TAKLE

4889± 4801 4780 4632 4666 5980± 7198 MSA RW34L 25 NM 12000 4660 RW34L 4510± 5027 6862 7337 10776 9789 KARME 7864 9240 VIKES 7704 11000 176° (6.8) 8300 344° (8.3) 8343 7532 (IF) JUKNU 9600 254° (7) (IAF) NIPME SQUAW VALLEY SWR 11800 087° (18.8) 9214 9600 from PIDIC 344° (4.2) 9600 from SPOON 344° (4.4) ORUKE 11500 (IAF) to PIDIC PIDIC 074° (5) 7045± 11500 to PIDIC 044° (13.5) (IAF) SPOON 9600 320° (9.8) (IAF) RAMRE RICHY 9150

ELEV 4415 4474±

D

19L 19R 4545 TWR 4488 11002 X 150 9000 X 150 6102 X 150 25 7 4482 4447± 34R TDZE 4410 34L 4478±

REIL Rwys 7, 16L, 25, and 34R
MIRL Rwy 7-25
HIRL Rwys 16R-34L and 16L-34R

344° to RW34L

10000 TAKLE VGSI and RNAV glidepath not coincident.

JUKNU KARME 9600 344° 8300 RW34L

Procedure Turn NA

GS 3.54° TCH 45

10 NM 8.3 NM

CATEGORY	A	B	C	D
LPV DA	5018-1¼ 608 (700-1¼)			NA
CIRCLING	5340-1¾ 925 (1000-1¾)		5340-3 925 (1000-3)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS CH 40409 W34B	APP CRS 344°	Rwy Idg 9000 TDZE 4408 Apt Elev 4415

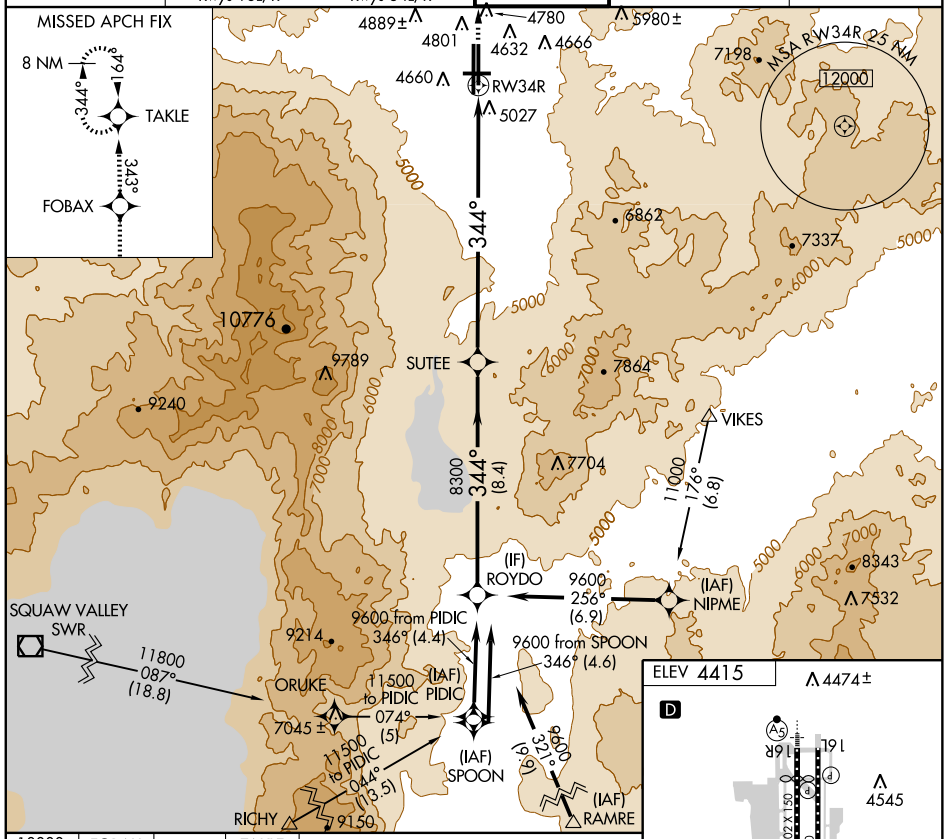
RNAV (GPS) Y RWY 34R

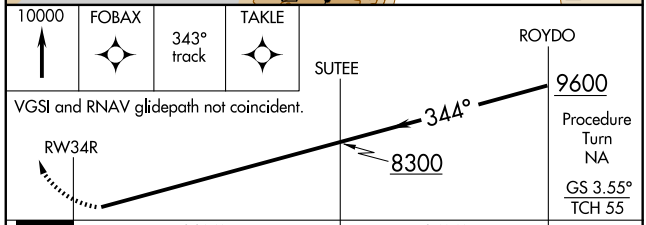
RENO/TAHOE INTL (RNO)

Circling to Rwy 7, 25 NA at night. DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
Circling requires descent on glidepath to CMDA.

MISSED APPROACH: Climb to 10000 direct FOBAX and via 343° track to TAKLE and hold, continue climb-in-hold to 10000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85





CATEGORY	A	B	C	D
LPV DA	5043-2 635 (700-2)			NA
CIRCLING	5340-2 925 (1000-2)		5340-2¾ 925 (1000-2¾)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9000
164°	TDZE	4415
	Apt Elev	4415

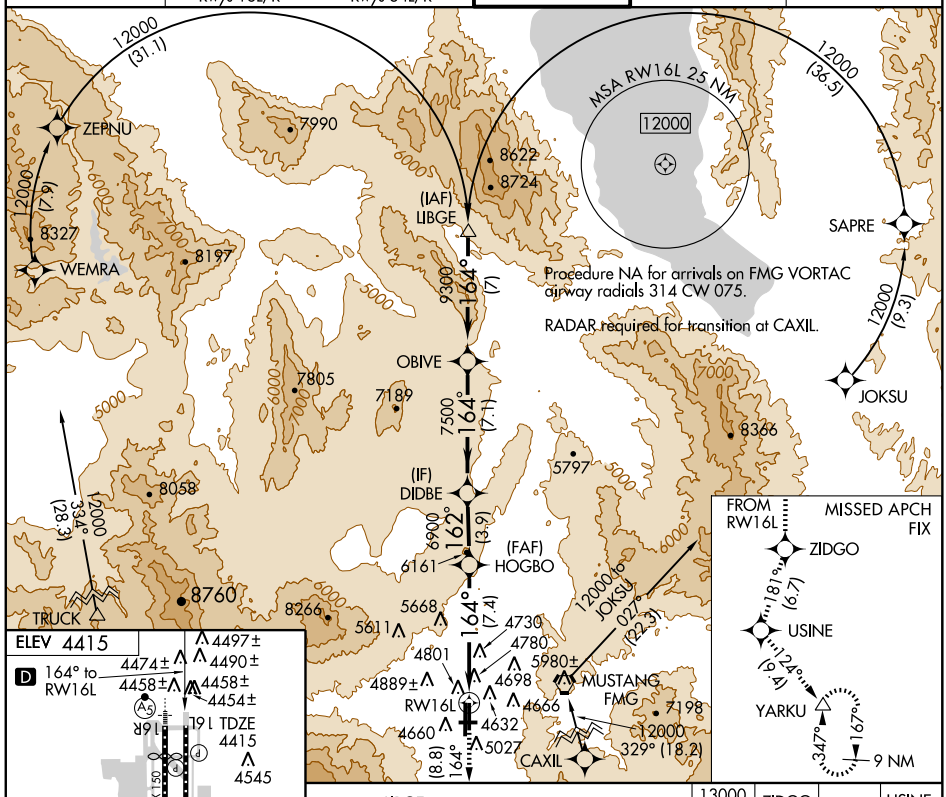
RNAV (RNP) Z RWY 16L

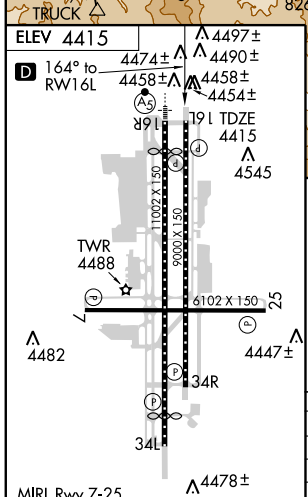
RENO/TAHOE INTL (RNO)

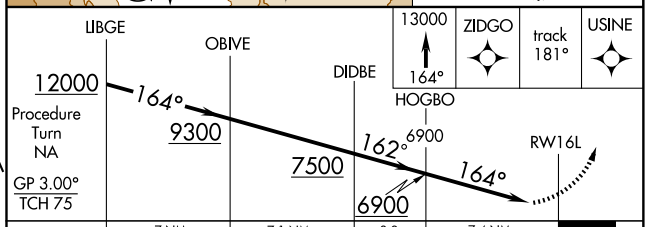
RF and GPS required. For uncompensated Baro-VNAV systems, procedure NA below -13°C (7°F) or above 54°C (130°F).
* Missed approach requires minimum climb of 260 feet per NM to 7300. Visibility reduction by helicopters NA.
When VGSI inoperative, procedure NA at night.

MISSED APPROACH: Climb to 13000 via track 164° to ZIDGO and via track 181° to USINE and via track 124° to YARKU and hold, continue climb-in-hold to 13000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85







CATEGORY	A	B	C	D
RNP 0.12 DA*	4794-1¼	379 (400-1¼)		NA
RNP 0.30 DA	5126-2½	711 (800-2½)		NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10003
164°	TDZE	4415
	Apt Elev	4415

RNAV (RNP) Z RWY 16R

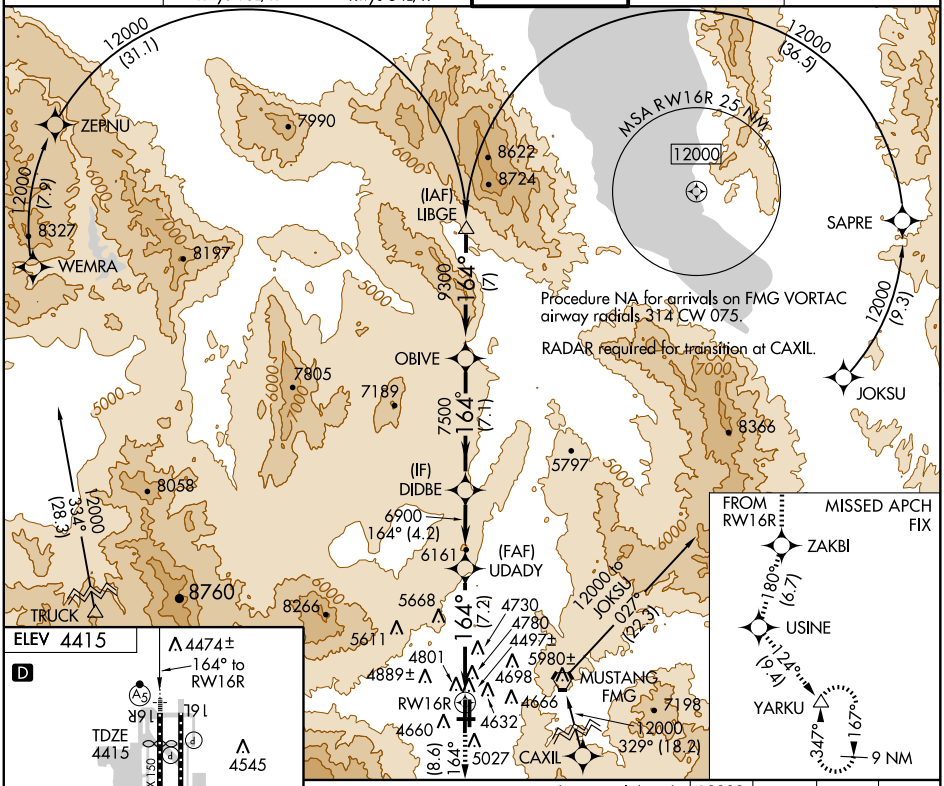
RENO/TAHOE INTL (RNO)

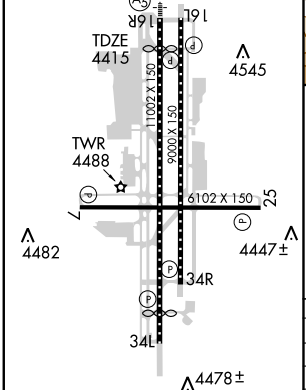
RF and GPS required. For uncompensated Baro-VNAV systems, procedure NA below -13°C (7°F) or above 54°C (130°F).
For inoperative MALSR, increase RNP 0.17* all Cats visibility to RVR 6000 and RNP 0.30 all Cats visibility to 2½ miles.
*Missed approach requires minimum climb of 260 feet per NM to 7300.

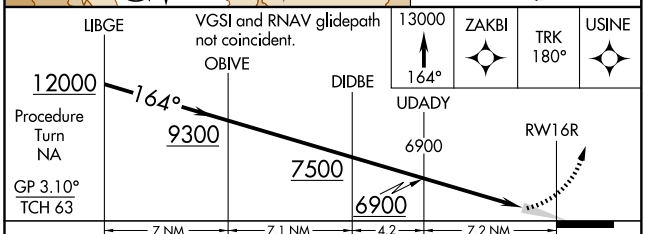
MALSR

MISSED APPROACH: Climb to 13000 via track 164° to ZAKBI and via track 180° to USINE and via track 124° to YARKU and hold, continue climb-in-hold to 13000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85







CATEGORY	A	B	C	D
RNP 0.17 DA*	4821/40 406 (500-¾)			NA
RNP 0.30 DA	5140-2 725 (800-2)			NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	10012
344°	TDZE	4410
	Apt Elev	4415

RNAV (RNP) Z RWY 34L

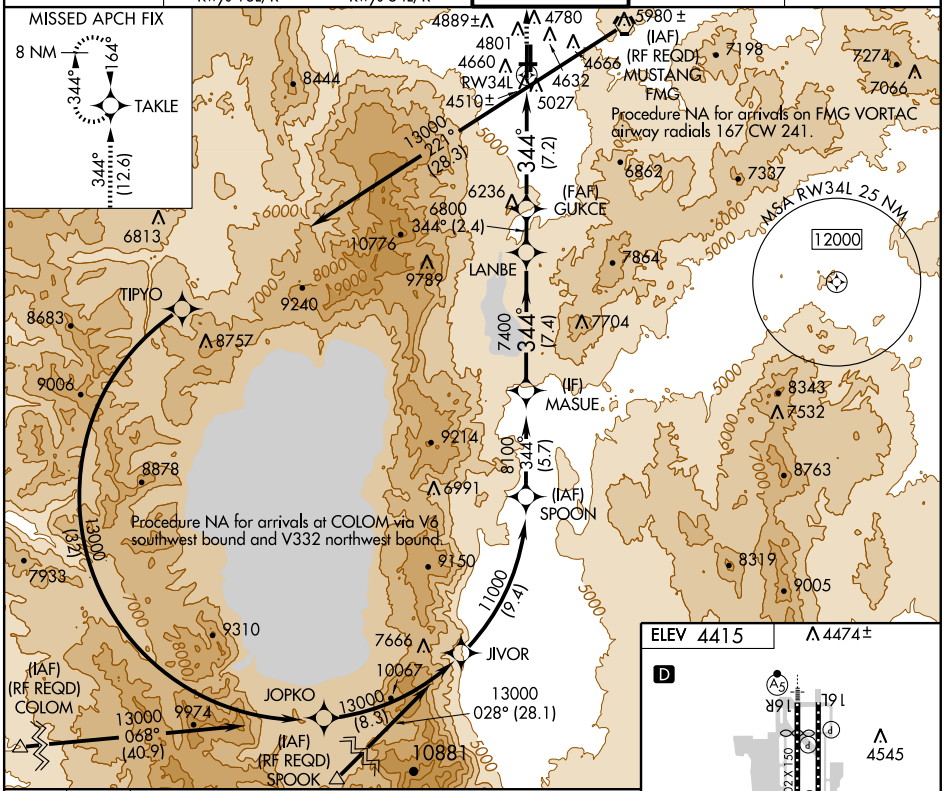
RENO/TAHOE INTL (RNO)

GPS required. Visibility reduction by helicopters NA.
For uncompensated Baro-VNAV systems, procedure NA below -13°C (8°F) or above 40°C (104°F).
For inoperative MALSR increase visibility RNP 0.12 to 1¼ mile and RNP 0.30 to 4 miles.
*Missed approach requires minimum climb of 243 feet per NM to 7200.

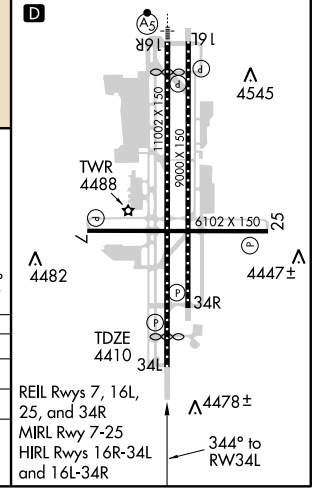
NA

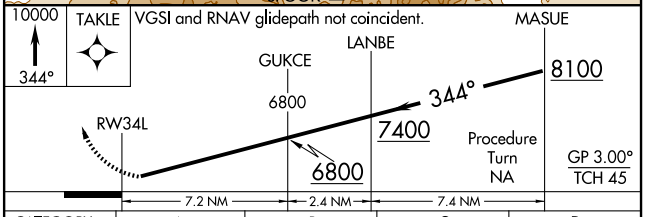
MISSED APPROACH: Climb to 10000 via 344° track to TAKLE and hold, continue climb-in-hold to 10000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85



ELEV 4415 ▲4474±





CATEGORY	A	B	C	D
RNP 0.12 DA*	4771-1	361 (400-1)		
RNP 0.30 DA	5342-2¾	932 (1000-2¾)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9000
344°	TDZE	4408
	Apt Elev	4415

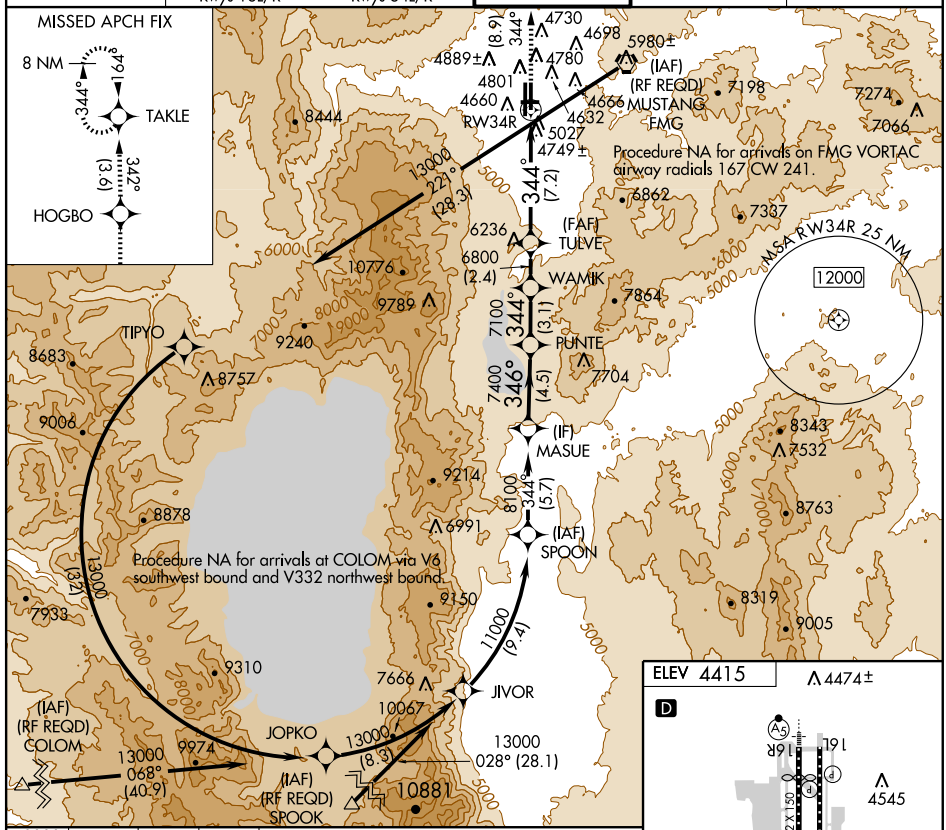
RNAV (RNP) Z RWY 34R

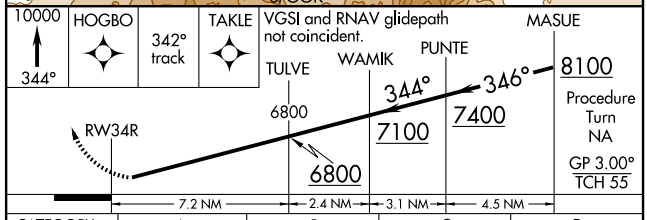
RENO/TAHOE INTL (RNO)

NA — GPS required. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, procedure NA below -13°C (8°F) or above 40°C (105°F).

MISSED APPROACH: Climb to 10000 via 344° track to HOGBO and 342° track to TAKLE and hold, continue climb-in-hold to 10000.

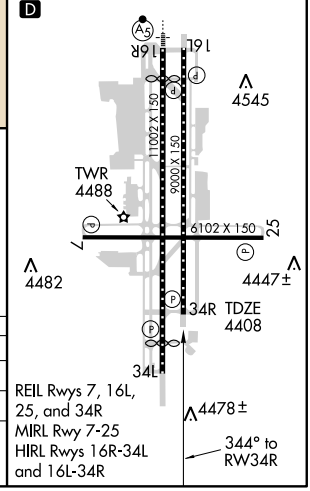
ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85





CATEGORY	A	B	C	D
RNP 0.15 DA	5173-2¾ 765 (800-2¾)			
RNP 0.30 DA	5344-4 936 (1000-4)			

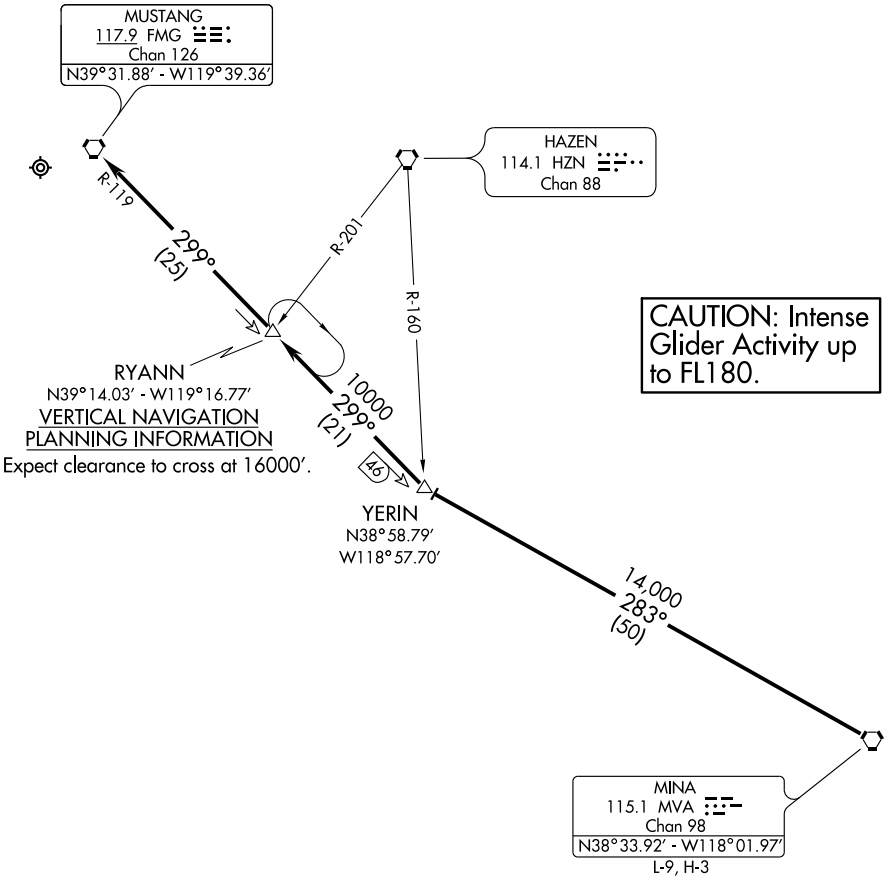
SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



SW-4, 22 OCT 2009 to 19 NOV 2009

RYANN ONE ARRIVAL

RENO APP CON
RWYS 16L/R 126.3 353.9
RWYS 34L/R 119.2 279.55
ATIS 135.8 363.0



NOTE: For Runway 16 only.

NOTE: RADAR Required.

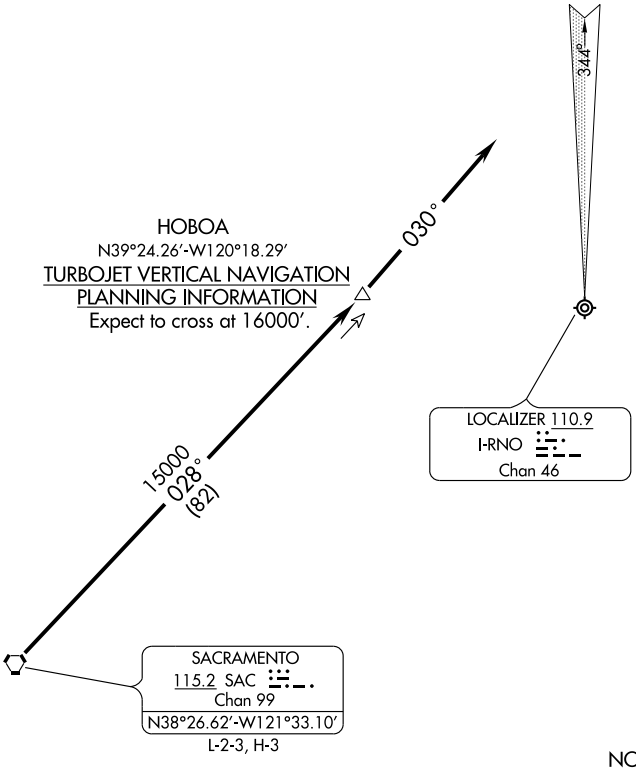
NOTE: Chart not to scale.

RUNWAY 16: From over MVA VORTAC via MVA R-283 to YERIN INT. Thence via FMG R-119 to FMG VORTAC. Expect radar vectors to Runway 16.

SIERRA THREE ARRIVAL

RENO APP CON
RWY 16L/R 126.3 353.9
RWY 34L/R 119.2 279.55
ATIS 135.8 363.0

CAUTION: Intense Glider Activity up to FL180.



NOTE: RADAR required.
NOTE: DME required.
NOTE: Chart not to scale.

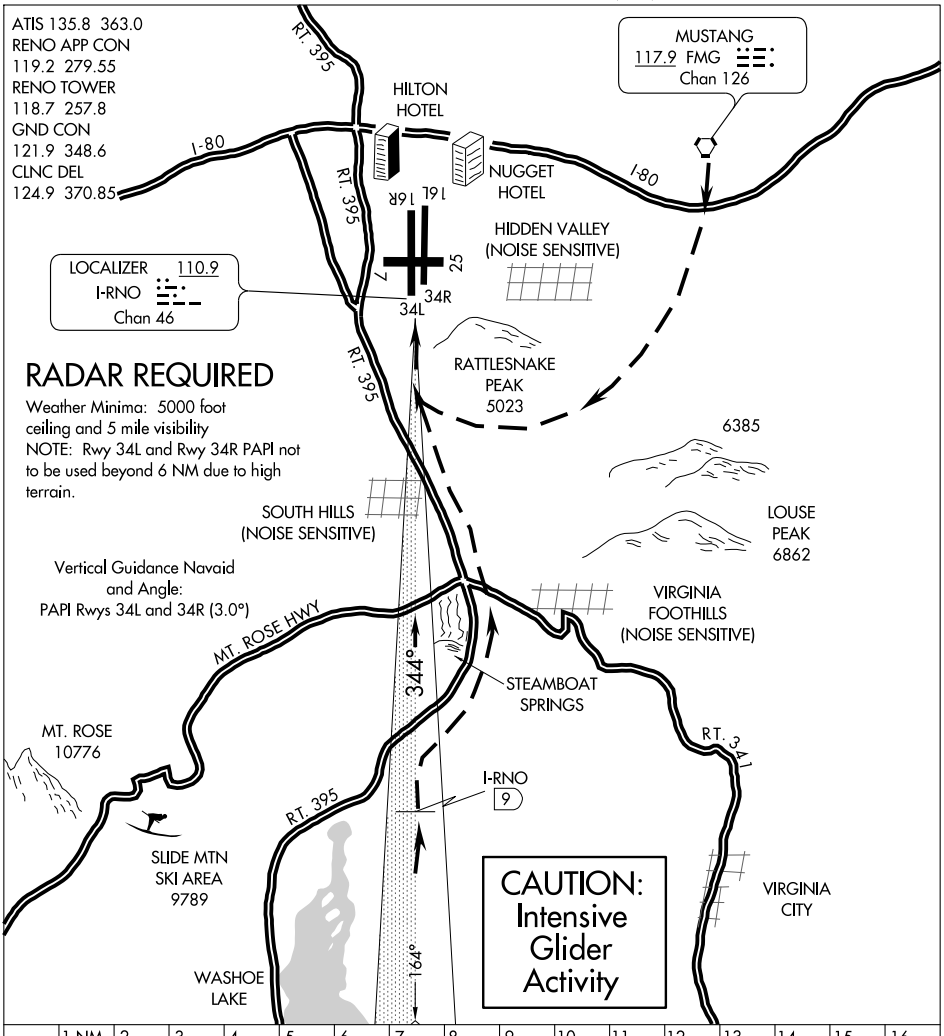
From over SAC VORTAC via SAC R-028 to HOBOA INT/SAC 82 DME. Depart HOBOA heading 030° for vectors to final approach.

SW-4, 22 OCT 2009 to 19 NOV 2009

SOUTH HILLS VISUAL RWY 34L/R

AL-346 (FAA)

RENO/TAHOE INTL (RNO)
RENO, NEVADA

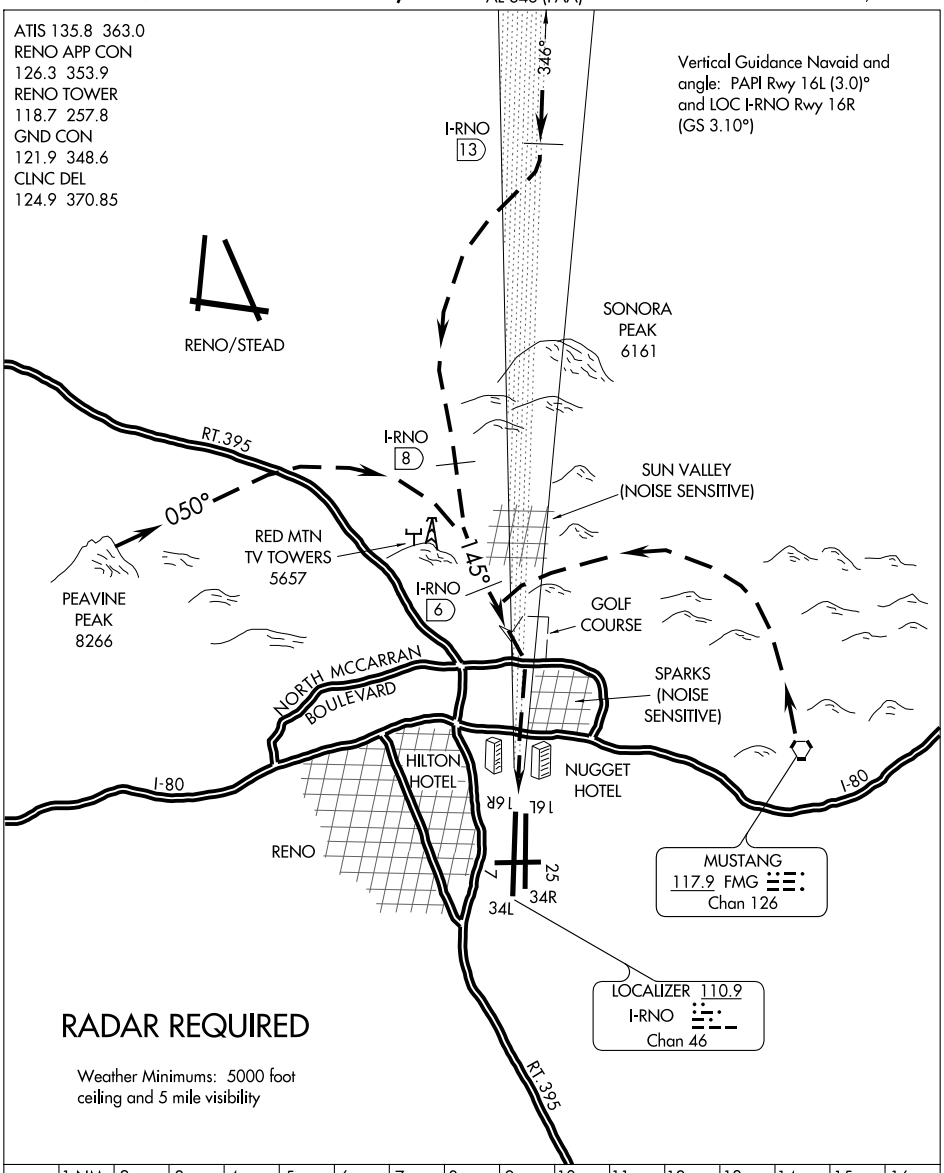


SOUTH HILLS VISUAL APPROACH RUNWAY 34L/R
PROCEDURE NOT AUTHORIZED AT NIGHT

When visual approaches to Runways 34L/R are in progress, clearances to aircraft will be given utilizing the following phraseology:
"(IDENT) CLEARED FOR SOUTH HILLS VISUAL RUNWAY 34 LEFT/RIGHT APPROACH."

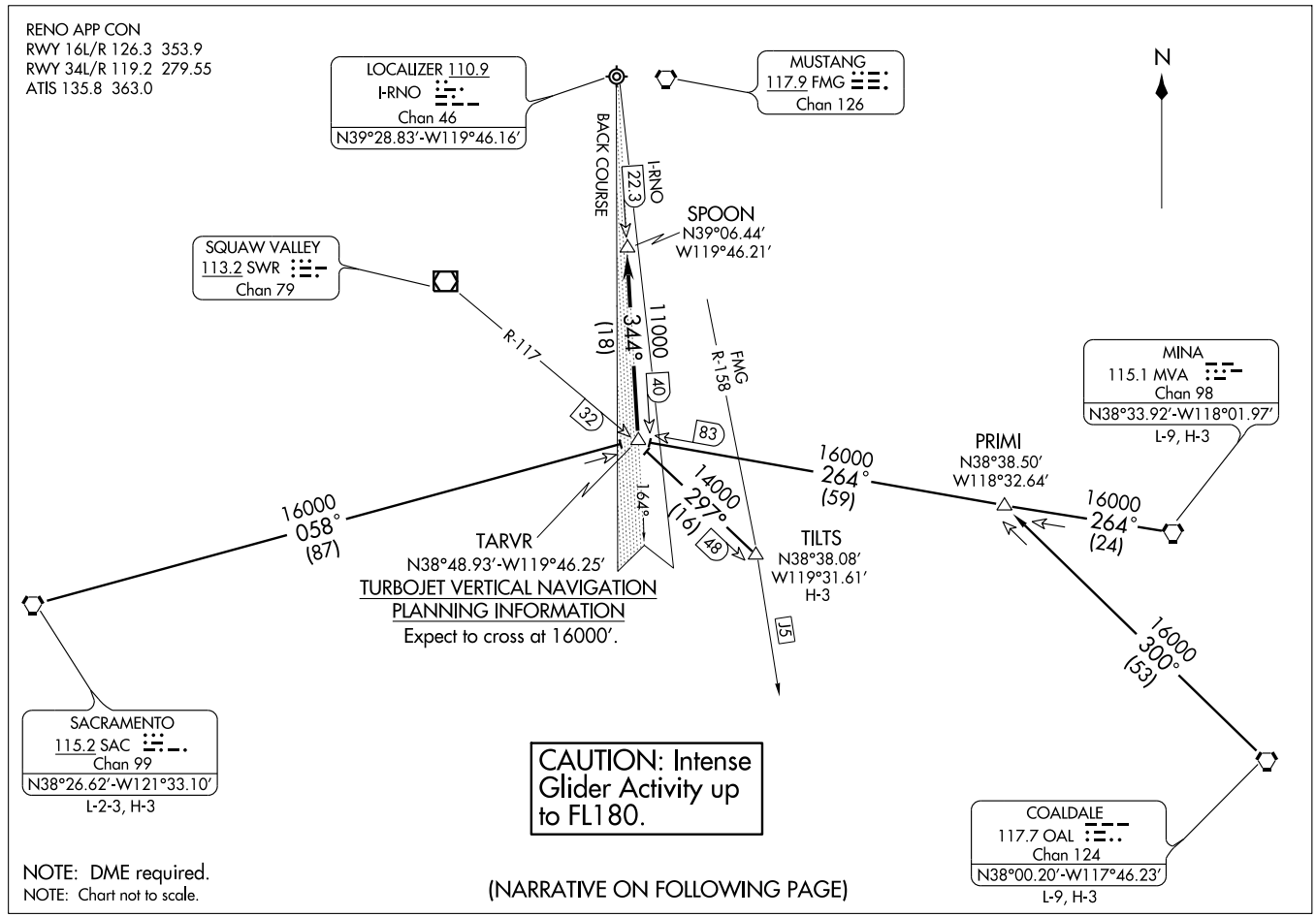
SPARKS VISUAL RWY 16L/R

RENO/TAHOE INTL (RNO)
RENO, NEVADA



SPARKS VISUAL APPROACH RWY 16L/R
PROCEDURE NOT AUTHORIZED AT NIGHT

When visual approaches to Runways 16L/R are in progress clearances to aircraft will be given utilizing the following phraseology:
(IDENT) CLEARED FOR SPARKS VISUAL RUNWAY 16 LEFT/RIGHT APPROACH



TARVR ONE ARRIVAL

(TARVR.TARVR1) 09127

ST-346 (FAA)

RENO/TAHOE INTL
RENO, NEVADA

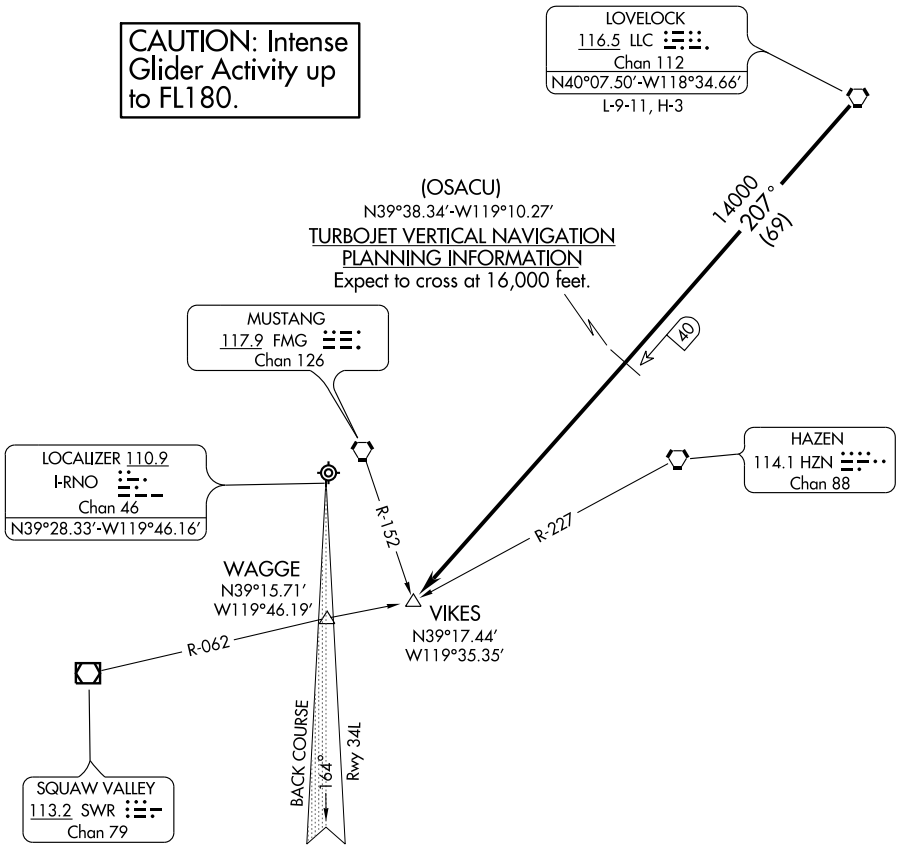
ARRIVAL ROUTE DESCRIPTION

COALDALE TRANSITION (OAL.TARVR1): From over OAL VORTAC via the OAL R-300 and the MVA R-264 to TARVR INT/DME. Thence....
MINA TRANSITION (MVA.TARVR1): From over the MVA VORTAC via MVA R-264 to TARVR INT/DME. Thence....
SACRAMENTO TRANSITION (SAC.TARVR1): From over SAC VORTAC via SAC R-058 to TARVR INT/DME. Thence....
TILTS TRANSITION (TILTS.TARVR1): From over TILTS INT/DME via SWR R-117 to TARVR INT/DME. Thence....
....From over TARVR INT/DME via I-RNO back course to SPOON I-RNO 22.3 DME.

SW-4, 22 OCT 2009 to 19 NOV 2009

VIKES ONE ARRIVAL

RENO APP CON
RWY 16L/R 126.3 353.9
RWY 34L/R 119.2 279.55
ATIS 135.8 363.0



NOTE: Chart not to scale.

From over LLC VORTAC via LLC R-207 to VIKES INT/DME, then radar vectors to the LOCALIZER BACK COURSE I-RNO.

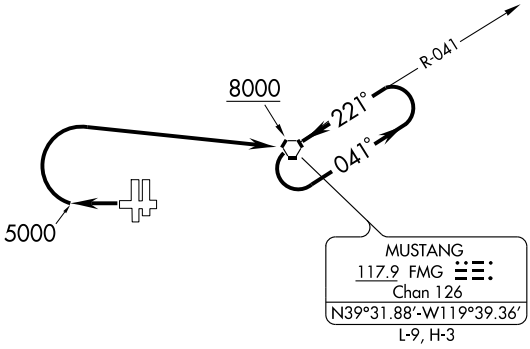
LOST COMMUNICATIONS:
Proceed via the VIKES-WAGGE terminal route and execute the LOC/DME BC RWY 34L approach to Tahoe Intl.

VISTA ONE DEPARTURE

ATIS 135.8 363.0
CLNC DEL
124.9 370.85
GND CON
121.9 348.6
RENO TOWER
118.7 257.8
RENO DEP CON
126.3 353.9

TAKE-OFF OBSTACLE NOTES

Rwy 25: Multiple poles left and right of centerline beginning 500' from DER, 467' left of centerline, up to 48' AGL/4523' MSL.
Numerous trees left and right of centerline, beginning 1877' from DER, 31' left of centerline, up to 40' AGL/4506' MSL.
Sign, 1656' from DER, 422' left of centerline, up to 31' AGL/4482' MSL.



TAKE-OFF MINIMUMS

Rwy 7: NA- obstacles

Rwys 16L, 16R, 34L, 34R: NA- ATC.

Rwy 25: Cat A/B, do not exceed 180 KIAS until FMG VORTAC, standard with a minimum climb of 380' per NM to 8400, ATC climb of 495' per NM to 8000.
Cat C/D: NA- Air traffic control.

CAUTION: Intense Glider Activity up to FL180.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 25: Climb to 5000, then climbing right turn to 10000 or assigned altitude direct FMG VORTAC, cross FMG VORTAC at or above 8000. Climb in FMG holding pattern to depart FMG VORTAC at or above MEA/MCA for direction of flight. Expect clearance to requested altitude five minutes after departure.

SW-4, 22 OCT 2009 to 19 NOV 2009

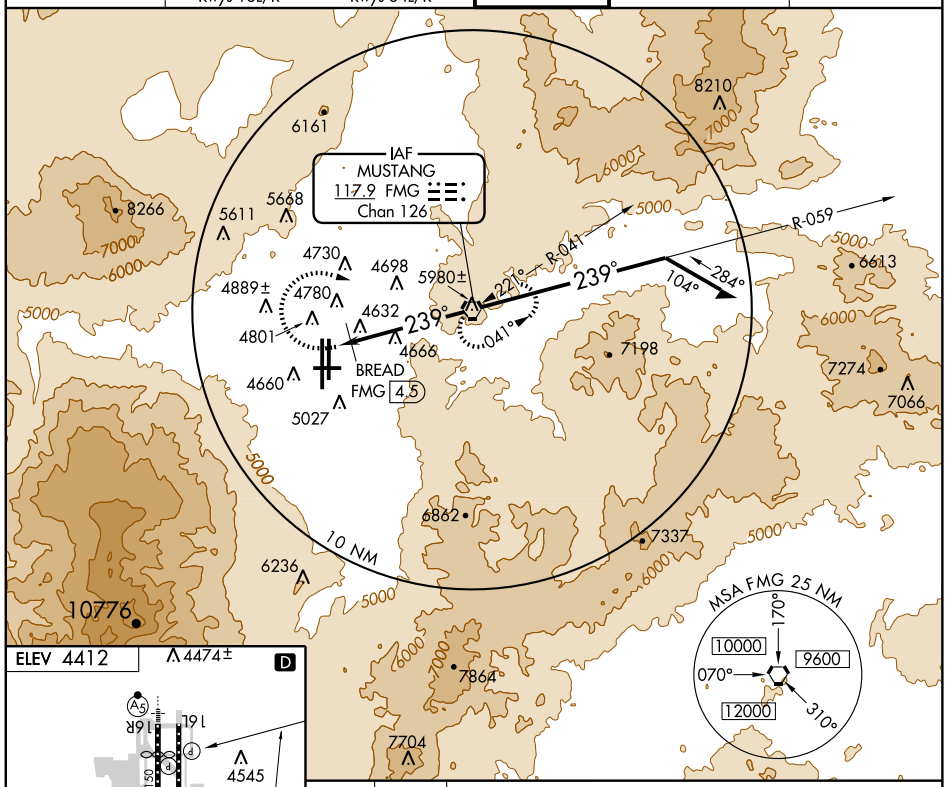
VORTAC FMG 117.9 Chan 126	APP CRS 239°	Rwy Idg N/A TDZE N/A Apt Elev 4412

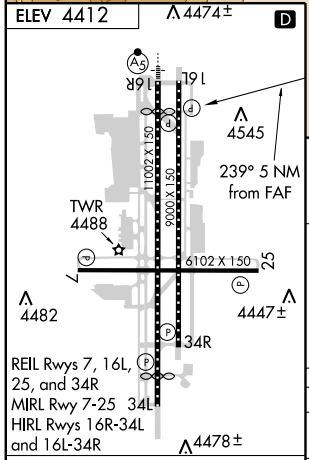
VOR-D

RENO/TAHOE INTL (RNO)

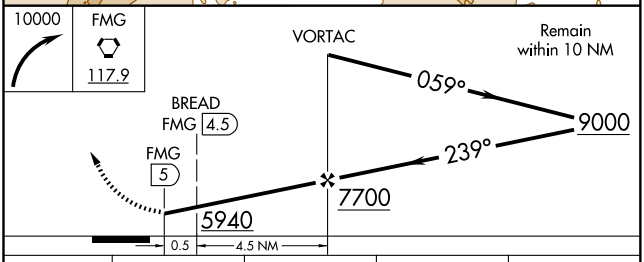
MISSED APPROACH: Climbing right turn to 10000 direct FMG VORTAC and hold. Continue climb-in-hold to 10000.

ATIS	RENO APP CON		RENO TOWER	GND CON	CLNC DEL
135.8 363.0	126.3 353.9 Rwys 16L/R	119.2 279.55 Rwys 34L/R	118.7 257.8	121.9 348.6	124.9 370.85





FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
CIRCLING	5940-1¼ 1528 (1600-1¼)	5940-1½ 1528 (1600-1½)	5940-3 1528 (1600-3)	
BREAD FIX MINIMUMS				
CIRCLING	5800-1¼ 1388 (1400-1¼)	5800-1½ 1388 (1400-1½)	5800-3 1388 (1400-3)	

SW-4, 22 OCT 2009 to 19 NOV 2009

(WAGGE2.WAGGE) 08045

WAGGE TWO DEPARTURE

SL-346 (FAA)

RENO/TAHOE INTL (RNO)
RENO, NEVADA

ATIS 135.8 363.0
CLNC DEL
124.9 370.85
GND CON
121.9 348.6
RENO TOWER
118.7 257.8
RENO DEP CON
119.2 279.55

CAUTION: Intensive Glider Activity

NOTE: All Runways: Cross departure end of rwy at or above 35 AGL.

NOTE: Rwy 16L: Tower/hazard beacon 6056' from departure end of rwy, 2403 left of centerline, 16 AGL/5027 MSL.

NOTE: Rwy 16R: Terrain 7638' from departure end of rwy, 2349 left of centerline, 4703 MSL.

LOVELOCK
116.5 LLC
Chan 112
N40°07.50'-W118°34.66'
L-9-11, H-3

MUSTANG
117.9 FMG
Chan 126
N39°31.88'-W119°39.36'
L-9, H-3

MINIMUM CROSSING ALTITUDES AT FMG FOR MUSTANG TRANSITION

V6 Southwest	12,000
V28-113 South	10,500
V165 South	10,000

LOCALIZER 110.9
I-RNO
Chan 46
N39°28.83'-W119°46.16'

HAZEN
114.1 HZN
Chan 88

JERGA
N39°21.03'
W119°30.21'

SQUAW VALLEY
113.2 SWR
Chan 79

WAGGE
N39°15.71'
W119°46.19'

CAUTION: Intense Glider Activity up to FL180.

TAKE-OFF MINIMUMS

Rwys 7, 25, 34L/R: NA- Air Traffic.

Rwy 16L: Standard with a minimum climb of 740' per NM to 8000.

Rwy 16R: Standard with a minimum climb of 370' per NM to 9200.

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climbing right turn heading 174° to intercept I-RNO South course to WAGGE INT, thence via (transition) or (assigned route).

TAKE-OFF RUNWAY 16R: Climb via I-RNO South course to WAGGE INT, thence via (transition) or (assigned route).

All aircraft maintain 15,000 or assigned altitude. Expect clearance to requested altitude five minutes after departure

LOVELOCK TRANSITION (WAGGE2.LLC): From over WAGGE INT via HZN R-230 and LLC R-206 to LLC VORTAC.

MUSTANG TRANSITION (WAGGE2.FMG): From over WAGGE INT via FMG R-182 to FMG VORTAC.

ZEFFR THREE DEPARTURE (RNAV)

ATIS 135.8 363.0
CLNC DEL
124.9 370.85
GND CON
121.9 348.6
RENO TOWER
118.7 257.8
RENO DEP CON
119.2 279.55

TAKE-OFF MINIMUMS

Rwys 7, 25, 34L, 34R: NA - ATC

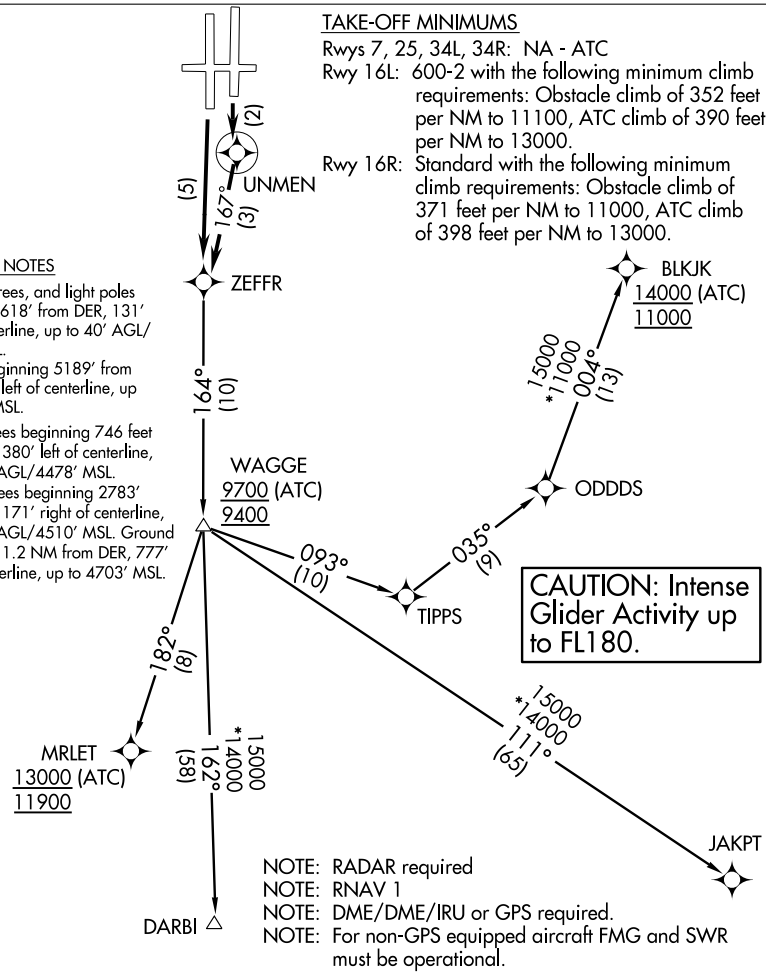
Rwy 16L: 600-2 with the following minimum climb requirements: Obstacle climb of 352 feet per NM to 11100, ATC climb of 390 feet per NM to 11000.

Rwy 16R: Standard with the following minimum climb requirements: Obstacle climb of 371 feet per NM to 11000, ATC climb of 398 feet per NM to 13000.

TAKE-OFF OBSTACLE NOTES

RWY 16L: Antenna, trees, and light poles beginning 618' from DER, 131' left of centerline, up to 40' AGL/4449' MSL. Terrain beginning 5189' from DER, 821' left of centerline, up to 4939' MSL.

RWY 16R: Multiple trees beginning 746 feet from DER, 380' left of centerline, up to 49' AGL/4478' MSL. Multiple trees beginning 2783' from DER, 171' right of centerline, up to 71' AGL/4510' MSL. Ground beginning 1.2 NM from DER, 777' left of centerline, up to 4703' MSL.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb direct UNMEN, then via 167° track to ZEFFR, Thence...

TAKE-OFF RUNWAY 16R: Climb direct ZEFFR, Thence...

....via (transition) or (assigned route). Maintain 15000. Expect clearance to filed altitude five minutes after departure.

BLKJK TRANSITION (ZEFFR3.BLKJK)

DARBI TRANSITION (ZEFFR3.DARBI)

JAKPT TRANSITION (ZEFFR3.JAKPT)

MRLET TRANSITION (ZEFFR3.MRLET)

LOC/DME I-RTS	APP CRS	Rwy Idg	7800
111.9	318°	TDZE	5045
Chan 56		Apt Elev	5050

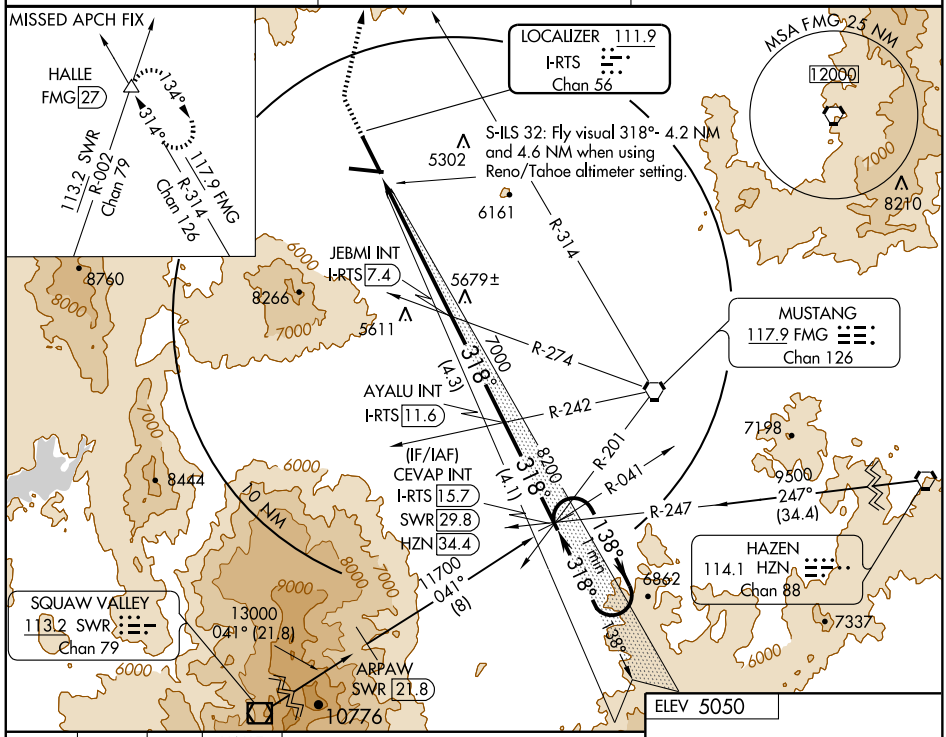
ILS or LOC/DME RWY 32

RENO/STEAD (RTS)

NA — Inoperative table does not apply. Procedure NA at night. When local altimeter setting not received, use Reno/Tahoe Intl altimeter setting and increase all DA/MDA 120 feet. VDP NA when using Reno/Tahoe Intl altimeter setting.

MISSED APPROACH: Climb to 6740 then climbing right turn to 14000 via heading 356° and FMG VORTAC R-314 to HALLEINT/FMG 27 DME and hold, continue climb-in-hold to 14000.

AWOS-A	RENO APP CON	UNICOM
135.175	126.3 353.9	122.7 (CTAF) L



CATEGORY	A	B	C	D
S-ILS 32	6425-3 1380 (1400-3)			
S-LOC 32	6720-1¼ 1675 (1700-1¼)	6720-1½ 1675 (1700-1½)	6720-3 1675 (1700-3)	
CIRCLING	6720-1¼ 1670 (1700-1¼)	6720-1½ 1670 (1700-1½)	6720-3 1670 (1700-3)	

HIRL Rwys 8-26 and 14-32 L
REIL Rwys 8, 26, 14 and 32

SW-4, 22 OCT 2009 to 19 NOV 2009

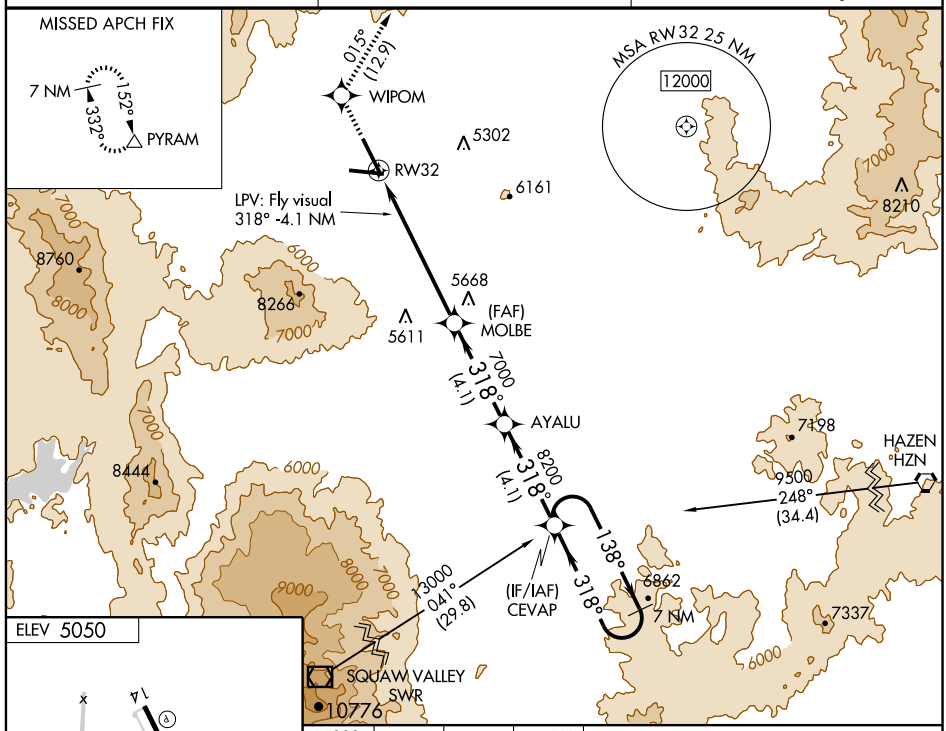
WAAS	APP CRS	Rwy Idg	7800
CH 60920	318°	TDZE	5045
W32A		Apt Elev	5050

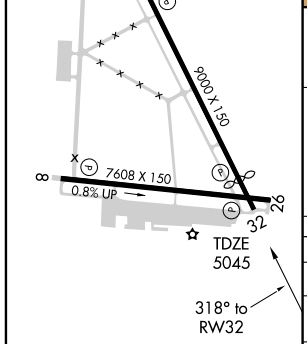
RNAV (GPS) RWY 32
RENO/STEAD (RTS)

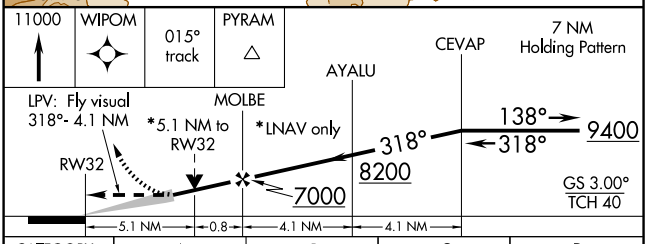
DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Reno/Tahoe Intl altimeter setting and increase all DAs/MDAs 120 feet.
VDP NA when using Reno/Tahoe Intl altimeter setting.
When VGSI inoperative, circling Rwy 8 NA at night.

MISSED APPROACH: Climb to 11000 direct WIPOM and via 015° track to PYRAM and hold, continue climb-in-hold to 11000.

AWOS-A	RENO APP CON	UNICOM
135.175	126.3 353.9	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	6390-2 1345 (1400-2)		6390-3 1345 (1400-3)	
LNAV/VNAV DA	NA			
LNAV MDA	6700-1¼ 1655 (1700-1¼)	6700-1½ 1655 (1700-1½)	6700-3 1655 (1700-3)	
CIRCLING	6700-5 1650 (1700-5)			

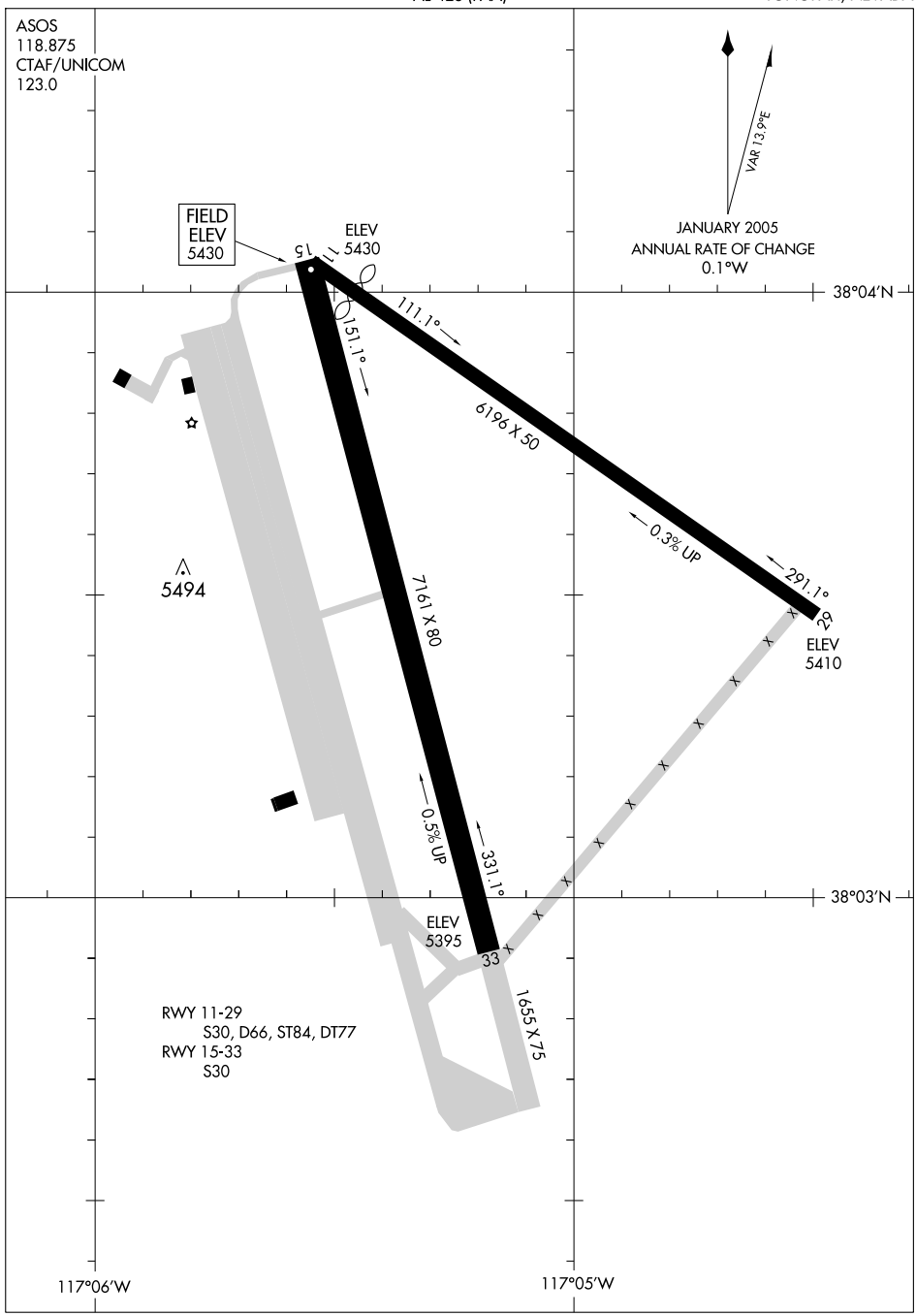
HIRL Rwys 8-26 and 14-32 L
REIL Rwys 8, 26, 14 and 32

SW-4, 22 OCT 2009 to 19 NOV 2009

AIRPORT DIAGRAM

AL-423 (FAA)

TONOPAH (TPH)
TONOPAH, NEVADA



RWY 11-29
S30, D66, ST84, DT77
RWY 15-33
S30

SW-4, 22 OCT 2009 to 19 NOV 2009

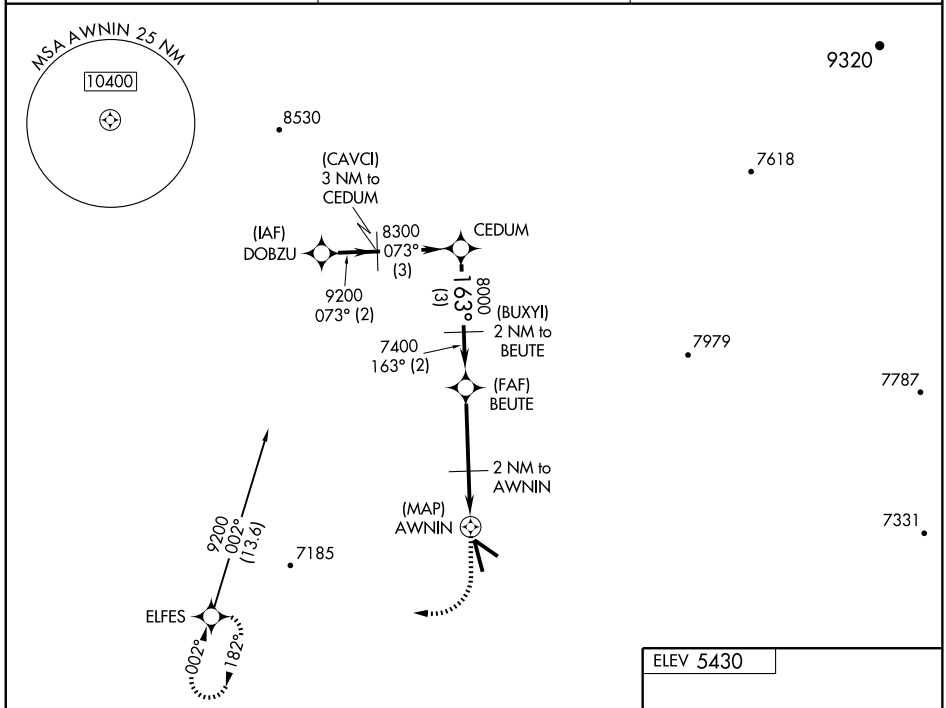
APP CRS	Rwy Idg	7161
163°	TDZE	5430
	Apt Elev	5430

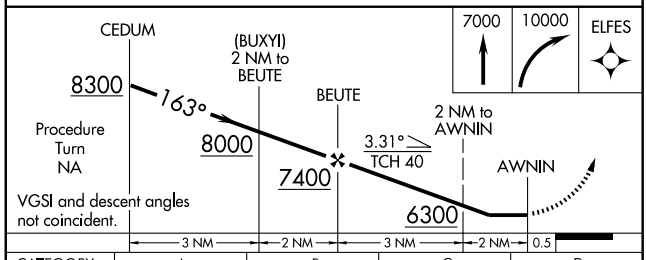
GPS RWY 15
TONOPAH (TPH)

NA

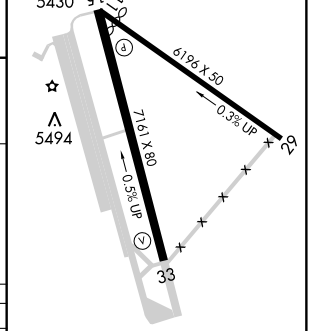
MISSED APPROACH: Climb to 7000 then climbing right turn to 10000 direct ELFES WP and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
118.875	133.45 317.625	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-15	5820-1 390 (400-1)			5820-1¼ 390 (400-1¼)
CIRCLING	5820-1 390 (400-1)	5880-1 450 (500-1)	5880-1½ 450 (500-1½)	6040-2 610 (700-2)



MIRL Rwy 15-33 L

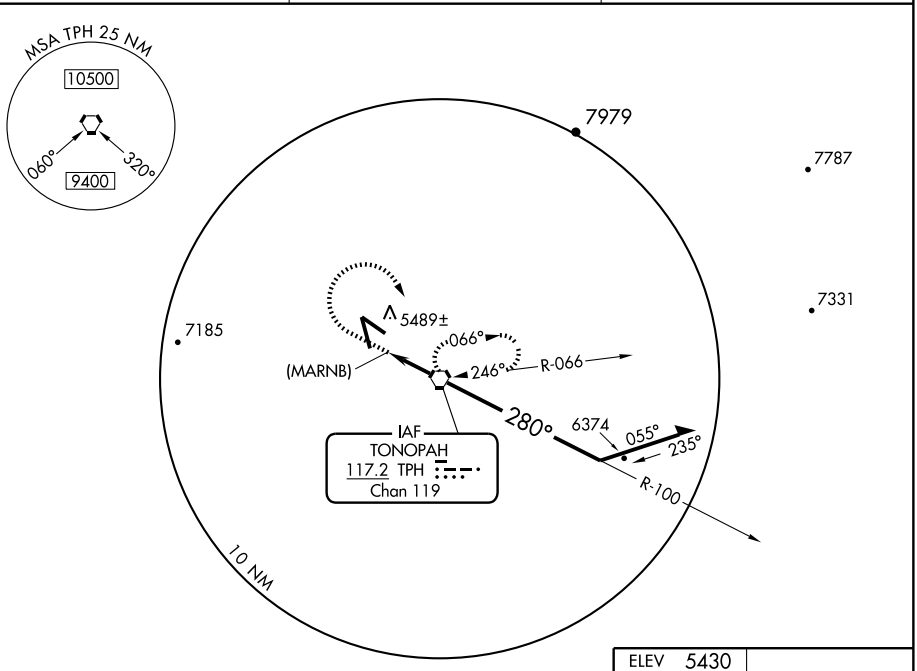
SW-4, 22 OCT 2009 to 19 NOV 2009

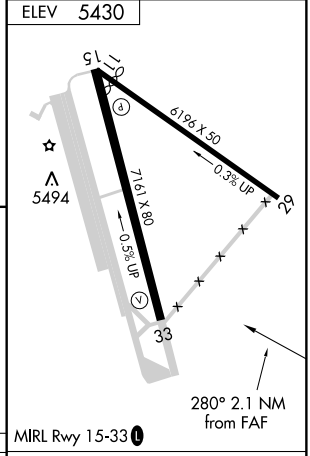
VORTAC TPH 117.2 Chan 119	APP CRS 280°	Rwy Idg N/A TDZE N/A Apt Elev 5430

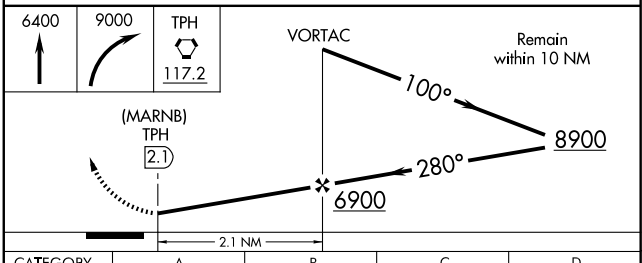
VOR or GPS-A
TONOPAH (TPH)

MISSED APPROACH: Climb to 6400 then climbing right turn to 9000 direct TPH VORTAC and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
118.875	133.45 317.625	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6100-1	670 (700-1)	6100-2 670 (700-2)	6100-2¼ 670 (700-2¼)

FAF to MAP 2.1 NM					
Knots	60	90	120	150	180
Min:Sec	2:06	1:24	1:03	0:50	0:42

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	7000
CH 62902	144°	TDZE	4304
W14A		Apt Elev	4308

RNAV (GPS) RWY 14

WINNEMUCCA MUNI (WMC)

If local altimeter setting not received, use Battle Mountain altimeter setting and increase all DAs/MDAs 140 feet.
DME/DME RNP-0.3 NA.
VDP NA when using Battle Mountain altimeter setting.

MISSED APPROACH: Climb to 12000 direct MUXSU and via 147° track to CUTVA and hold, continue climb-in-hold to 12000.

ASOS	SALT LAKE CITY CENTER	UNICOM
120.175	132.25 380.05	122.8 (CTAF) L

SOD HOUSE
SDO
8700
151°
(8.7)
8663
9095
(IAF)
LOKKA
6437
7700
143°
(6)
BOZJE
6920
7940
7400
144°
(5)
(IAF)
GOWZE
7400
083°
(16.9)
(IF)
TOWOD
5548
6300
144°
(6)
MSA RW14 25 NM
11100
5015 ±
4883 ±
6266
(FAF)
WINQY
7352
RW14
MUXSU
9396
7441
8043

ELEV 4308
144° to RW14
14
TDZE
4304
20
7000 X 100
4800 X 75
2
32

MISSED APCH FIX
7 NM
058°
238°
CUTVA

12000	MUXSU	147° track	CUTVA
↑	✧		△

TOWOD
Procedure Turn NA
7400
144°
WINQY
* 2.4 NM to RW14
* LNAV only
RW14
GS 3.00°
TCH 40
6300
6 NM
3.7 NM
2.4 NM

CATEGORY	A	B	C	D
LPV DA	4843-2 539 (600-2)			
LNAV MDA	5100-1 796 (800-1)	5100-1¼ 796 (800-1¼)	5100-2¼ 796 (800-2¼)	5100-2½ 796 (800-2½)
CIRCLING	5100-2 792 (800-2)		5100-2¼ 792 (800-2¼)	5100-2½ 792 (800-2½)

MIRL Rwy 2-20
MIRL Rwy 14-32 L

SW-4, 22 OCT 2009 to 19 NOV 2009

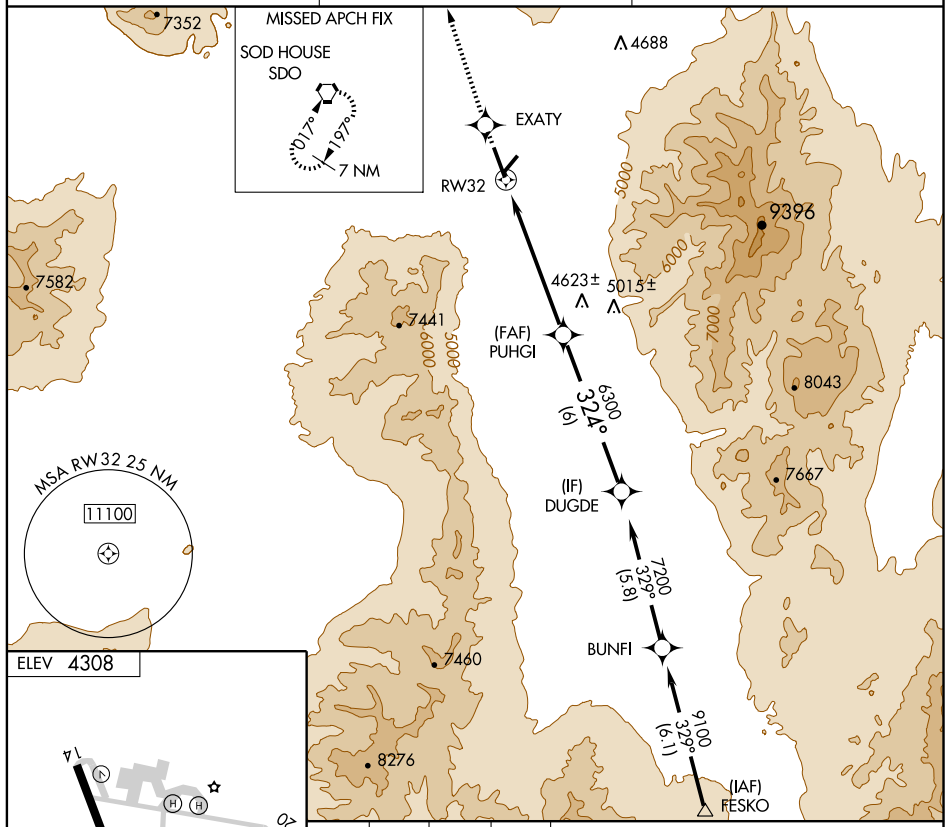
WAAS	APP CRS	Rwy Idg	7000
CH 72702	324°	TDZE	4304
W32A		Apt Elev	4308

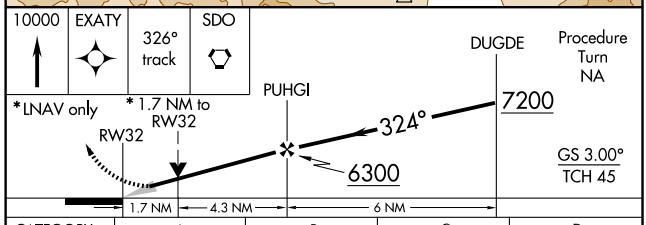
RNAV (GPS) RWY 32
WINNEMUCCA MUNI (WMC)

If local altimeter setting not received, use Battle Mountain altimeter setting and increase all DAs/MDAs 140 feet.
DME/DME RNP-0.3 NA.
VDP NA when using Battle Mountain altimeter setting.

MISSED APPROACH: Climb to 10000 direct EXATY and via 326° track to SDO VORTAC and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
120.175	132.25 380.05	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4554-¾		250 (300-¾)	
LNAV MDA	4880-1 576 (600-1)		4880-1½ 576 (600-1½)	4880-1¾ 576 (600-1¾)
CIRCLING	4880-1 572 (600-1)		4880-1½ 572 (600-1½)	4880-2 572 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME INA	APP CRS	Rwy Idg	7000
108.2	146°	TDZE	4299
Chan 19		Apt Elev	4304

VOR/DME RWY 14

WINNEMUCCA MUNI (WMC)

ACTIVATE MIRL Rwy 14-32-CTAF.

MISSED APPROACH: Climbing right turn to 8000 via INA R-326 to VICTR DME Fix and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
120.175	132.25 380.05	122.8 (CTAF) L

IAF
SOD HOUSE
114.3 SDO
Chan 90

9000
146°
(16.2)

R-326

INA 16

7800 NoPT
146° (4)

VICTR
INA 12

6500 NoPT
146° (6)

326°
101°
281°
146°

10 NM

INA 6

(IAF)
INA 4

8700
326° (4)

MSA INA 25 NM
200°
9000
10900
040°

7940
6000
5000
5548
4921±
7352
9396
7441
8043

BATTLE MOUNTAIN
112.2 BAM
Chan 59

WINNEMUCCA
108.2 INA
Chan 19

10500
326°
(24.6)

11400
228°
(45.2)

FESKO

ELEV 4304
146° 5.6 NM
from FAF
TDZE
4299
14
20
2
32
7000 X 100
4800 X 75
MIRL Rwy 2-20
MIRL Rwy 14-32 L

Remain
within 10 NM

INA 4
326°
7700
INA 6
146°
6500
5700
INA 1

8000
INA R-326
VICTR
INA 12

2 NM 3 NM 0.6

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-14	4620-1 321 (400-1)		4840-1½ 541 (600-1½)	5560-3 1261 (1300-3)
CIRCLING	4700-1 397 (400-1)	4760-1 457 (500-1)	4840-1½ 537 (600-1½)	5560-3 1257 (1300-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL ..... **RNAV (GPS) Rwy 16[12]**
RNAV (GPS) Rwy 34[34]
VOR/DME Rwy 34[15]

[1]NA when local weather not available.
[2]Categories A, B, 1200-2; Categories C, D, 1200-3.
[3]NA when control tower closed.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 2200-2; Categories C, D, 2200-3.

CARSON CITY, NV

CARSON ..... **RNAV (GPS)-A**
Categories A, B, 1700-2; Category C, 1700-3; Category D, 1800-3.
NA when local weather not available.

CEDAR CITY, UT

CEDAR CITY RGNL ..... **ILS Rwy 20**
VOR Rwy 20
Category D, 900-2¾.

DOUGLAS BISBEE, AZ

BISBEE DOUGLAS INTL ..... **VOR/DME or GPS Rwy 17**
VOR Rwy 17
NA when control zone not in effect.

ELKO, NV

ELKO RGNL..... **LDA/DME RWY 23[1]**
RNAV (GPS) Rwy 23[2]
VOR-A[3]
VOR/DME-B[4]

[1]Categories A,B, 900-2; Category C 1000-3; Category D, 1100-3.
[2]Categories A,B, 1400-2; Categories C,D, 1400-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.
[4]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME — ALTERNATE MINIMUMS

FLAGSTAFF, AZ

FLAGSTAFF PULLIAM ..... **ILS or LOC/DME Rwy 21[12]**
VOR or GPS-A[3]

[1]NA when control tower closed.
[2]ILS, Categories B,C,D, 700-2.
[3]Category D, 800-2¼.

FORT HUACHUCA-SIERRA VISTA, AZ

SIERRA VISTA MUNI-LIBBY AAF ..... **ILS or LOC Rwy 26**
NDB Rwy 26
RNAV (GPS) Rwy 8[1]
VOR Rwy 26

NA when control tower closed.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

GLENDALE, AZ

GLENDALE MUNI ..... **RNAV (GPS) Rwy 1**
NA when local weather not available.

GRAND CANYON, AZ

GRAND CANYON NATIONAL PARK ..... **ILS or LOC/DME Rwy 3**
NA when control tower closed.
Category D, 700-2.

VALLE ..... **VOR/DME Rwy 19**
NA except for operators with approved weather reporting service.

KANAB, UT

KANAB MUNI ..... **RNAV (GPS) Rwy 1**
Category B, 1100-2; Category C, 1400-3.

KINGMAN, AZ

KINGMAN ..... **RNAV (GPS) Rwy 3**
RNAV (GPS) Y Rwy 21
VOR/DME Rwy 21
Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LAKE HAVASU CITY, AZ

LAKE HAVASU CITY ..... **VOR/DME or GPS-A**
Categories A,B, 1000-2; Categories C, 1000-2¾; Category D, 1000-3.

LAS VEGAS, NV

HENDERSON EXECUTIVE ..... **RNAV (GPS)-B[1]**
VOR-C[2]
NA when local weather not available.
[1]Categories A,B, 1000-2; Category C, 1000-2¾.
[2]Categories A, B, 2400-2; Category C, 2400-3.

McCARRAN INTL ..... **ILS or LOC Rwy 25L[1]**
ILS or LOC Rwy 25R[1]
ILS or LOC/DME Rwy 1L[2]
RNAV (GPS) Rwy 1R[3]
RNAV (GPS) Rwy 19L[45]
RNAV (GPS) Rwy 19R[45]
VOR/DME-A[2]
VOR Rwy 25L/R[3]
[1]ILS,LOC,Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾, Category E, 1400-3.
[2]ILS,LOC,Categories A,B, 900-2; Category C, 900-2½.
[3]Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.
[4]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.
[5]NA when local weather not available.

NORTH LAS VEGAS ..... **ILS or LOC Rwy 12L**
NA when control tower closed.

LOVELOCK, NV

DERBY FIELD ..... **VOR or GPS-C[1]**
VOR/DME or GPS-A[2]
[1]Categories A,B, 1900-2; Categories C,D, 1900-3.
[2]Categories A,B, 900-2; Category C,900-2¾; Category D, 900-3.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD ..... **VOR or GPS-A**
Category D, 800-2½.

OGDEN, UT

OGDEN-HINCKLEY ..... **ILS Or LOC Rwy 3[12]**
RNAV (GPS) Y Rwy 3
RNAV (GPS) Z Rwy 3
NA when local weather not available.
[1]ILS, Category D, 700-2.
[2]NA when control tower closed.

NAME ALTERNATE MINIMUMS

PHOENIX, AZ

PHOENIX DEER VALLEY ..... **RNAV (GPS)-B[12]**
RNAV (GPS)-C[3]
RNAV(GPS) Rwy 7R[4]
RNAV (GPS) Rwy 25L[14]
[1]NA when local weather not available.
[2]Categories A,B, 1000-2; Category C, 1000-2¾.
[3]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1100-3.
[4]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

PHOENIX-
MESA GATEWAY ..... **ILS or LOC Rwy 30C[12]**
RNAV (GPS) Rwy 30C[1]
RNAV (GPS) Rwy 30L[3]
VOR or TACAN Rwy 30C[1]
[1]NA when local weather not available.
[2]NA when control tower closed.
[3]Category E, 800-2¼.

PHOENIX
SKY HARBOR INTL ..... **ILS or LOC Rwy 7R[1]**
ILS or LOC Rwy 7L[2]
ILS or LOC Rwy 8[3]
ILS or LOC Rwy 25L[2]
ILS or LOC Rwy 26[2]
RNAV (GPS) Y Rwy 7R[2]
RNAV (GPS) Y Rwy 7L[2]
RNAV (GPS) Y Rwy 8[4]
RNAV (GPS) Y Rwy 25L[2]
RNAV (GPS) Y Rwy 25R[2]
RNAV (GPS) Y Rwy 26[2]
[1]ILS, Categories A,B,C, 700-2; Category D, 800-2½. LOC, Category D, 800-2½.
[2]Category D, 800-2½.
[3]ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[4]Category C, 800-2¼; Category D, 800-2½.

PRESCOTT, AZ

ERNEST A. LOVE FIELD .. **ILS/DME Rwy 21L[12]**
RNAV (GPS) Rwy 21L[4]
VOR Rwy 12[3]
[1]NA when control tower closed.
[2]ILS, Category C, 700-2; Category D, 900-3. LOC, Category D, 900-3.
[3]Category D, 900-3.
[4]Category D, 1000-3.

NAME ALTERNATE MINIMUMS

PRICE, UT

CARBON COUNTY RGNL/
BUCK DAVIS FIELD ..... **VOR/DME Rwy 36**
VOR Rwy 36[1]
Category C, 900-2½; Category D, 1100-3.
[1]Categories A, B, 2000-2; Categories C, D, 2000-3.

PROVO, UT

PROVO MUNI .. **ILS or LOC/DME Rwy 13,** 700-2
Na when control tower closed.

RENO, NV

RENO/TAHOE INTL ..... **ILS Rwy 16R,** 2100-7[1]
ILS or LOC/DME Rwy 34L[2]
LOC Rwy 16R[3]
LOC/DME BC Rwy 34L[4]
RNAV (GPS) X Rwy 34L[5]
RNAV (GPS) X Rwy 34R[5]
RNAV (GPS) Y Rwy 16L[6]
RNAV (GPS) Y Rwy 16R[7]
RNAV (GPS) Y Rwy 34L[4]
RNAV (GPS) Y Rwy 34R[8]
RNAV (RNP) Z Rwy 16R, 800-2½
VOR-D, 1600-3
[1]LOC, NA.
[2]ILS,LOC, Categories A,B, 1000-2; Category C, 1000-2¾.
[3]Categories A,B, 1600-2; Categories C,D, 1600-3; Category E, 2400-3.
[4]Categories A,B, 1000-2; Categories C,D, 1000-3.
[5]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[6]Categories A,B, 1400-2; Categories C,D, 1400-3.
[7]Categories A,B, 1800-2; Categories C,D, 1800-3.
[8]Categories A,B, 1000-2; Category C, 1000-2¾.

ST. GEORGE, UT

ST. GEORGE MUNI ..... **RNAV (GPS) Rwy 34**[1]
VOR or GPS-B, 1300-2[2]
VOR-C, 1800-3[2]
VOR/DME Rwy 34[23]
[1]Categories A,B 1100-2¼; Categories C,D, 1100-3.
[2]NA except for operators with approved weather reporting service.
[3]Category C, 800-2¼; Category D, 1000-3.

ST. JOHNS, AZ

ST. JOHNS
INDUSTRIAL AIRPARK ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR/DME-A
NA when local weather not available.

NAME ALTERNATE MINIMUMS

SCOTTSDALE, AZ

SCOTTSDALE ..... **RNAV (GPS)-D**[1]
VOR or GPS-A[23]
VOR or GPS-C[24]
[1]NA when local weather not available.
[2]NA when Scottsdale altimeter not available.
[3]Categories A,B,C, 1100-3.
[4]Categories A,B, 900-2½;Category C, 900-2¾.

TONOPAH, NV

TONOPAH ..... **VOR or GPS-A**
Category D, 800-2¼.

TOOELE, UT

BOLINDER FIELD-
TOOELE VALLEY ..... **ILS or LOC/DME Rwy 17**[1]
RNAV (GPS) Y Rwy 17[2]
RNAV (GPS) Z Rwy 17
NA when local weather not available.
[1]ILS, Category D, 700-2.
[2]Categories A, B, C, D, 900-2½.

TUCSON, AZ

TUCSON INTL ..... **ILS or LOC Rwy 11L**[1]
LOC/DME BC Rwy 29R[2]
RNAV (GPS) Z Rwy 11L[2]
RNAV (GPS) Rwy 29R[2]
RNAV (GPS) Rwy 3[3]
RNAV (GPS) Rwy 29L[4]
RNAV (GPS) Z Rwy 29R[2]
VOR or TACAN Rwy 11L[2]
VOR/DME or TACAN Rwy 29R[2]
[1]ILS,LOC, Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3; Category E, 1100-3.
[2]Category E, 1100-3.
[3]Categories A,B,C,D, 800-2¼.
[4]Category D, 800-2¼.

WENDOVER, UT

WENDOVER ..... **VOR/DME-B**[1]
VOR/DME or TACAN Rwy 26[2]
[1]Categories A,B, 1700-2; Categories C,D,E, 1700-3.
[2]Category E, 800-2¾.

WINNEMUCCA, NV

WINNEMUCCA MUNI ..... **RNAV (GPS) Rwy 14**[12]
RNAV (GPS) Rwy 32[1]
VOR/DME Rwy 14[3]
[1]NA when local weather not available.
[2]Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 1300-3.

WINDOW ROCK, AZ

WINDOW ROCK ..... **VOR/DME-A**
Categories A,B, 1100-2; Categories C,D, 1100-3.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

BATTLE MOUNTAIN, NV

BATTLE MOUNTAIN (BAM)
AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ a min climb of 282' per NM to 7300 or 4700-3 for climb in visual conditions. **Rwy 12,** std. w/ a min climb of 386' per NM to 7600 or 4700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 8200 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 12,** climb heading 122° and BAM R-076 to 10000 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 21,** climb direct BAM VORTAC and BAM R-205 to 10100 before proceeding on course. **Rwy 30,** climb heading 302° and BAM R-324 to 9100 before proceeding on course.

BEAVER, UT

BEAVER MUNI

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA-obstacles. **Rwys13, 31,** 2600-2¾ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13, 31,** climb in visual conditions to cross Beaver Muni Airport Northwestbound at or above 8300 then climb to 10100 via MLF VORTAC R-102 to MLF VORTAC. Do not exceed 210 KIAS until established on MLF VORTAC R-102.

NAME — TAKE-OFF MINIMUMS

BLANDING, UT

BLANDING MUNI

TAKE-OFF MINIMUMS: **Rwy 35**, 800-1 or std. with a min. climb of 350 feet per NM to 6700.

DEPARTURE PROCEDURE: **Rwy 17,** turn left. **Rwy 35**, turn right climb to 9000 via heading 090° and DVC R-223 to DVC VORTAC, then continue climb on course to MEA.

BRIGHAM CITY, UT

BRIGHAM CITY (BMC)
AMDT 5 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34,** std. w/ min. climb of 325' per NM to 5300 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn heading 205° and OGD R-331 to OGD VORTAC. **Rwy 34,** climbing left turn heading 205° and OGD R-331 to OGD VORTAC or for climb in visual conditions: cross Brigham City airport southbound at or above 9200 then via OGD R-351 to OGD VORTAC.

NOTE: **Rwy 16,** poles 266' from DER, 558' right of centerline, 30' AGL/4258' MSL.

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL (IFP)
AMDT 1 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 370' per NM to 1800, or 1700-3 for climb in visual conditions. **Rwy 34,** std. w/ a min. climb of 495' per NM to 5500, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 164° and EED VORTAC R-334 to EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **Rwy 34,** climb via heading 344° to 1600, then climbing right turn direct EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **All Aircraft** climb in EED VORTAC holding pattern (East, right turn, 257° inbound) to cross EED VORTAC at or above MEA for direction of flight before proceeding on course.

NOTE: **Rwy 16,** multiple bushes beginning 3600' from DER, left of centerline, up to 12' AGL/1029' MSL. **Rwy 34,** multiple poles beginning 2211' from DER, right of centerline, up to 105' AGL/821' MSL.

CARSON CITY, NV

CARSON (CXP)
ORIG 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 9,** use JIMPA DEPARTURE.

CASA GRANDE, AZ

CASA GRANDE MUNI

DEPARTURE PROCEDURE: **Rwy 5**, right turn. **Rwy 23**, climb direct TFD VORTAC. Continue climb in holding pattern (SW, right turn, 048° inbound) to MEA for direction of flight.

CEDAR CITY, UT

CEDAR CITY RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 3500-3 or std. with a min. climb of 450' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 20, 26**, turn right. **Rwys 2,8**, turn left, climb direct to CDC VOR/DME, continue climb to 9000 via R-348. Northbound continue on course. All others reverse course, climb to cross CDC VOR/DME at or above MCA for direction of flight.

CHANDLER, AZ

CHANDLER MUNI

DEPARTURE PROCEDURE: **Rwy 4R,** climbing left turn heading 220°. **Rwys 22L,22R,** climbing left turn heading 190°. **All Aircraft,** continue climb via TFD R-350 to TFD VORTAC.

NOTE: **Rwy 4L,** multiple towers and buildings beginning 69' from departure end of runway, 397' left of centerline, up to 80' AGL/1319' MSL.

CHANDLER, AZ (CON'T)

STELLAR AIRPARK

DEPARTURE PROCEDURE: **Rwy 17**, turn left, climb via heading 150°. **Rwy 35**, turn right. **All aircraft** climb via TFD R-350 direct TFD VORTAC.

NOTE: **Rwy 17,** tower and signs beginning 574' from departure end of runway, 183' right of centerline, up to 50' AGL/1124' MSL. Sign 611' from departure end of runway, 365' left of centerline, 42' AGL/1214' MSL.

COLORADO CITY, AZ

COLORADO CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** NA.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwys 20, 29,** turn left. **All aircraft** climb to 7400 via the 160° bearing from AZC NDB then continue climb on course.

COOLIDGE, AZ

COOLIDGE MUNI

DEPARTURE PROCEDURE: **Rwys 5,35,** climbing left turn heading 280° to intercept TFD R-063, then via R-063 to TFD VORTAC before proceeding on course. **Rwy 17,** climbing right turn heading 240° to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course. **Rwy 23,** climb runway heading to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course.

DAVIS-MONTHAN AFB (KDMA)

TUCSON, AZ. 07186

Diverse departures not authorized, use published departure procedure for obstacle avoidance.

TAKE-OFF OBSTACLES: **Rwy 12**: Terrain 0' AGL/2707' MSL, 81' from DER, 500' left of centerline. Terrain 0' AGL/2707' MSL, 46' from DER, 512' left of centerline. Terrain 0' AGL/2707' MSL, 16' from DER, 500' left of centerline. Terrain 0' AGL/2706' MSL, 0' from DER, 200' left of centerline. **Rwy 30**: Terrain 0' AGL/2592' MSL, 0' from DER, 106' left of centerline. Terrain 0' AGL/2592' MSL, 7' from DER, 97' left of centerline. Terrain 0' AGL/2592' MSL, 0' from DER, 484' right of centerline. Terrain 0' AGL/2592' MSL, 13' from DER, 493' right of centerline. Vehicle 11' AGL/2615' MSL, 1017' from DER, 477' left of centerline. Terrain 0' AGL/2612' MSL, 237' from DER, 590' left of centerline.

DELTA, UT

DELTA MUNI

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 412' per NM to 6600, or 1800-3 for climb in visual conditions. Climb in visual conditions NA at night. **Rwy 12,** NA-terrain. **Rwy 30,** NA-airspace.

DEPARTURE PROCEDURE: **Rwy 17,** climb via DTA VORTAC R-347 to DTA VORTAC, or climb in visual conditions to cross departure end of runway southbound at or above 6400, then via DTA VORTAC R-347 to DTA VORTAC, thence...**Rwy 35,** climb via heading 346° to 5800, then climbing left turn via heading 180° and DTA VORTAC R-310 to DTA VORTAC, thence...

...climb in holding pattern (hold south, left turn, 004° inbound) to cross DTA VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 17,** trees 1598' from departure end of runway, 62' right of centerline, 60' AGL/4799' MSL.

DOUGLAS BISBEE, AZ

BISBEE- DOUGLAS INTL

DEPARTURE PROCEDURE: Climb to 5700 in holding pattern, right turn to 140 inbound DUG VORTAC, then assigned route. CAT C,D turbojets climb not to exceed 250 kts. to 8000.

DUCHESNE, UT

DUCHESNE MUNI

DEPARTURE PROCEDURE: Climb direct to MTU VORTAC to depart at or above 7200 eastbound or 10000 westbound.

ELKO, NV

ELKO RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. with a min. climb of 330' per NM to 8000. **Rwy 23**, 2500-3 or std. with a min. climb of 340' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 5**, climb runway heading to 6000, then climbing right turn direct BQU VOR/DME, then...

Rwy 23, (V32 Southwest) climb to 6000, then climbing left turn heading 200°to intercept BQU R-241 (V32).

Rwy 23, all others climb runway heading to 6000, then climbing left turn direct BQU VOR/DME, then...

climb in BQU VOR/DME holding pattern (S, left turns, 340° inbound) to cross BQU VOR/DME at the MEA/MCA/MOCA for direction of flight.

ELY, NV

ELY AIRPORT-YELLAND FIELD

TAKE-OFF MINIMUMS: **Rwys 30,36**, 3000-2 or std. with a min. climb of 700' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 12,30,36**, right turn; **Rwy 18**, straight ahead; intercept . ELY VOR/DME R-150 to 10000. Aircraft departing on V293 southeast climb on course to MEA. Departures V269 or V293 northbound, reverse course to the left, continue climb to cross ELY VOR/DME at or above 12000.

FALLON, NV

FALLON MUNI

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. with a min. climb of 350' per NM to 4300.

DEPARTURE PROCEDURE: **Rwy 21**, turn right. **Rwys 3,13,31**, turn left. All departures climb via HZN R-075 to HZN VORTAC. Climb in holding pattern (W, right turns, 075° inbound) to depart HZN VORTAC at or above: R-240 CW R-149, 8000; R-150 CW R-239, 9000. Continue climb on course to MEA or assigned altitude.

FALLON NAS (KNFL)

FALLON, NV

Diverse departures not authorized.

FLAGSTAFF, AZ

FLAGSTAFF PULLIAM

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. Aircraft departing FLG R-160 CW R-175 climb on course. All others climb southbound on FLG R-172 to 9000, then climbing left turn direct FLG VOR/DME.

FORT HUACHUCA-SIERRA VISTA, AZ

SIERRA VISTA MUNI-LIBBY AAF

TAKE-OFF MINIMUMS: **Rwy 21**, NA.

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **Rwys 26,30**, turn right. **All aircraft** climb to 9500 to TOMBS Int via FHU VOR R-019 or 018° bearing from DAO NDB.

GLENDALE, AZ

GLENDALE MUNI

TAKE-OFF MINIMUMS: **Rwy 19,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 1,** Use DRAKE (RNAV) DEPARTURE.

GLOBE, AZ

SAN CARLOS APACHE (P13)

ADMT 2 08101 (FAA)

DEPARTURE PROCEDURE: Use IZTIR DEPARTURE.

GOODYEAR, AZ

PHOENIX GOODYEAR

TAKE-OFF MINIMUMS: **Rwy 3,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 21,** Use POTER DEPARTURE.

GRAND CANYON, AZ

GRAND CANYON NATIONAL PARK

TAKE-OFF MINIMUMS: **Rwy 3,** NA-environmental.

DEPARTURE PROCEDURE: **Rwy 21,** use GRAND DEPARTURE.

HEBER CITY, UT

HEBER CITY MUNI-RUSS MCDONALD FIELD

DEPARTURE PROCEDURE: **Rwy 3,** Use COOLI RNAV DEPARTURE.

HILL AFB (KHIF)

OGDEN, UT

Diverse departures not authorized, use radar vectors or published Departure Procedures (DP) for obstacle avoidance.

HUNTINGTON, UT

HUNTINGTON MUNI (69V)

AMDT 2A 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 26, 36**, NA. **Rwy 30**, 1700-3 or std. with a min. climb of 300' per NM to 8100.

DEPARTURE PROCEDURE: **Rwys 8, 12,** climbing left turn direct PUC VOR/DME...

Rwy 30, climbing right turn direct PUC VOR/DME....

...continue climb in PUC VOR/DME holding pattern (hold S, right turns, 009° inbound) to MEA for direction of flight.

NOTE: **Rwy 8,** tree 2663' from DER, 922' left of centerline, 40' AGL/5979' MSL. **Rwy 12,** tree 333' from DER, 132' right of centerline, 40' AGL/5919' MSL. **Rwy 30,** tree 2065' from DER, 875' left of centerline, 40' AGL/5999' MSL.

KANAB, UT

KANAB MUNI

TAKE-OFF MINIMUMS: **Rwy 1,** std. with a min. climb of 316' per NM to 7200.

NOTE: Use KACIR ONE RNAV DEPARTURE.

KINGMAN, AZ

KINGMAN

TAKE-OFF MINIMUMS: **Rwys 3,17,21,35**, 800-1 or std. with a min. climb of 210' per NM to 7000.

DEPARTURE PROCEDURE: Climb northbound on IGM R-010 until reaching 6000; reverse course to the left and continue climb to 9000 direct to IGM. If unable to cross IGM at 9000 continue climb in IGM holding pattern (SW, left turns, 027° inbound).

LAGUNA AAF (LGF)

YUMA PROVING GROUND, AZ (03247)

Rwy 6, 18, 36 turn right, climb to 3600 direct BZA VORTAC.

Rwy 24 climb to 3600 direct to BZA VORTAC.

TAKE-OFF OBSTACLES:

Rwy 18: 386' (6' AGL) windsock, 818' from departure end of rwy, 194' left of centerline.

LAKE HAVASU CITY, AZ

LAKE HAVASU CITY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1½ or std. w/ min. climb of 278' per NM to 1200. **Rwy 32,** 600-1½ or std. w/ min. climb of 492' per NM to 1100.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn heading 300° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight. **Rwy 32,** climbing left turn heading 290° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 14,** obstruction light on transmission tower, 1.2 NM from departure end of runway, 1885' left of centerline, 151' AGL/1027' MSL. Transmission tower 1.4 NM from departure end of runway, 1953' left of centerline, 145' AGL/1058' MSL. Bush 1080' from departure end of runway, 500' left of centerline, 31' AGL/825' MSL. Terrain 145' from departure end of runway, 347' left of centerline, 14' AGL/797' MSL. Bush 1256' from departure end of runway, 255' left of centerline, 35' AGL/818' MSL. **Rwy 32,** obstruction light on transmission tower 4052' from departure end of runway, 932' right of centerline, 180' AGL/974' MSL. Transmision tower 2504' from departure end of runway, 1009' right of centerline, 112' AGL/903' MSL.

LAS VEGAS, NV

HENDERSON EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 17L/R,** Cat A/B std. with a min. climb of 491' per NM to 6000, or 2100-3 for climb in visual conditions, Cat C/D NA. **Rwy 35L/R,** Cat A/B std. with a min. climb of 312' per NM to 4700, or 2100-3 for climb in visual conditions, Cat C/D NA.

DEPARTURE PROCEDURE: **Rwy 17L/R,** climbing right turn via LAS R-157 to LAS VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC. **Rwy 35L/R,** climbing right turn via BLD R-257 to BLD VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC.

NOTE: **Rwy 17L,** tree 5610' from departure end of runway, 82' left of centerline, 100' AGL/2739' MSL. Tree 1.9 miles from departure end of runway, 1495' left of centerline, 100' AGL/2859' MSL. **Rwy 17R,** tree 4041' from departure end of runway, 859' left of centerline, 100' AGL/2739' MSL.

MCCARRAN INTL (KLAS)

TAKE-OFF MINIMUMS: **Rwy 25R,** 200-1 or std. with a min. climb of 220' per NM to 2400.

DEPARTURE PROCEDURE: **Rwys 1L, 1R,** climbing right turn direct BLD VORTAC. **Rwys 7L, 7R,** climb via heading 075° to 3400 then climbing right turn direct BLD VORTAC. **Rwys 19L, 19R,** climbing left turn via heading 120° and BLD VORTAC R-257 to BLD VORTAC. **Rwys 25L, 25R,** climb via heading 255° to 2700 then climbing right turn direct BLD VORTAC.

NOTE: **Rwy 1L,** multiple poles, tree, and building 450' from departure end of runway, 283' left of centerline, up to 174' AGL/2132' MSL. Obstruction light on WSK 248' from departure end of runway, 224' right of centerline, 15' AGL/2104' MSL. **Rwy 1R,** multiple sign and building 1331' from departure end of runway, 448' right of centerline, up to 100' AGL/2120' MSL. **Rwy 7L,** multiple poles and trees 747' from departure end of runway, 442' right of centerline, up to 62' AGL/2062' MSL. Tree 1257' from departure end of runway, 789' left of centerline, 65' AGL/2077' MSL. **Rwy 7R,** lighted WSK 126' from departure end of runway, 290' right of centerline, 25' AGL/2051' MSL. **Rwy 19L,** multiple poles, sign and building 1394' from departure end of runway, 320' right of centerline, up to 51' AGL/2256' MSL. **Rwy 19R,** multiple poles, sign, and building 197' from departure end of runway, 125' right of centerline, up to 51' AGL/2256' MSL. Multiple pole and building 1396' from departure end of runway, 356' left of centerline, up to 47' AGL/2262' MSL. **Rwy 25L,** multiple poles, sign, and building 1003' from departure end of runway, 251' left of centerline, up to 63' AGL/2256' MSL. **Rwy 25R,** multiple poles and road 675' from departure end of runway, 17' right of centerline, up to 100' AGL/2301' MSL. Multiple poles and buildings 533' from departure end of runway, 1' left of centerline, up to 150' AGL/2469' MSL.

NORTH LAS VEGAS (VGT)

AMDT 3 08045 (FAA)

DEPARTURE PROCEDURE: Use BOULDER CITY DEPARTURE.

LOGAN, UT

LOGAN-CACHE

TAKE-OFF MINIMUMS: **Rwys 10,28,** NA-obstacles. **Rwy 17**, 2000-3 or std. with min. climb of 270' per NM to 10000. **Rwy 35,** 1500-3 or std. with a min. climb of 270' per NM to 10000.

DEPARTURE PROCEDURE: **Rwy 17,** climbing right turn via LHO VOR/DME R-097 to LHO VOR/DME...**Rwy 35,** climbing left turn via LHO VOR/DME R-055 to LHO VOR/DME...then via LHO VOR/DME R-263 to PIMIE INT, cross PIMIE INT at or above 10000.

NOTE: **Rwy 17,** lighted WSK 194' from departure end of runway, 137' right of centerline, 26' AGL/4465' MSL. Tree 1459' from departure end of runway, 229' left of centerline, 50' AGL/4495' MSL.

LOVELOCK, NV

DERBY FIELD (LOL)

ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1**, 2300-2 or std. with a min. climb of 300' per NM to 6200. **Rwy 7**, 1100-1 or std. with a min. climb of 250' per NM to 5000. **Rwys 19, 25**, 2300-2 or std. with a min. climb of 260' per NM to 6200.

DEPARTURE PROCEDURE: **Rwy 1,** turn right. **Rwys 7,19,25,** turn left, climb direct LLC VORTAC. Aircraft departing 330° CW 359° climb via LLC R-333 to ROBUD INT; 360° CW 089° climb in LLC VORTAC holding pattern (hold NW, left turns, 153° inbound) to depart LLC VORTAC at or above 8600; 090° CW 219° climb on course; 220° CW 329° climb in LLC VORTAC holding pattern to depart LLC VORTAC at or above 8600. Continue climb on course to MEA or assigned altitude.

LUKE AFB (KLUF)

GLENDALE, AZ . . . . . AMDT 3, 09183

Diverse departures not authorized.

Use published DP, if unable to comply with DP notify clearance delivery and request RADAR Vectors.

TAKE-OFF OBSTACLES:

RWY 3L: Taxiing aircraft, 19' AGL/1126' MSL, 1221' from DER, 782' left of centerline. Taxiing aircraft, 19' AGL/1126' MSL, 1407' from DER, 609' left of centerline. Weather equipment, 15' AGL/1117' MSL, 759' from DER, 505' right of centerline. Weather equipment, 15' AGL/1117' MSL, 1209' from DER, 505' right of centerline. Building, 20' AGL/1127' MSL, 1620' from DER, 925' left of centerline.

RWY 21L: Taxiing aircraft, 38' AGL/1120' MSL, 1428' from DER, 774' left of centerline.

MESA, AZ

FALCON FIELD

TAKE-OFF MINIMUMS: **Rwys 4L,4R,** std. with a min. climb of 459' per NM to 3600, or 1100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4L, 4R,** climbing left turn to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound. For climb in visual conditions cross FFZ NDB at or above 2300 then proceed via 220° bearing to PXR R-143 southeast bound. **Rwy 22L, 22R,** climb to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound.

NOTE: **Rwy 4L,** light standard 416' from departure end of runway, 415' left of centerline, 48' AGL/1428' MSL. Obstacle light on building 1313' from departure end of runway, 424' left of centerline, 54' AGL/1434' MSL. **Rwy 4R,** light standard 514' from departure end of runway, 565' right of centerline, 48' AGL/1441' MSL. Tree 1097' from departure end of runway, 650' right of centerline, 50' AGL/1448' MSL. Tree 1060' from departure end of runway, 359' right of centerline, 50' AGL/1451' MSL. **Rwy 22L,** light pole 254' from departure end of runway, 538' right of centerline, 13' AGL/1382' MSL. Windmill 691' from departure end of runway, 528' right of centerline, 30' AGL/1389' MSL. Windmill 715' from departure end of runway, 603' right of centerline, 30' AGL/1389' MSL. Light pole 68' from departure end of runway, 764' right of centerline, 13' AGL/1382' MSL. Tree 175' from departure end of runway, 826' right of centerline, 13' AGL/1383' MSL. **Rwy 22R,** light pole 296' from departure end of runway, 541' right of centerline 13' AGL/1400' MSL. Light pole 495' from departure end of runway, 187' right of centerline, 13' AGL/1382' MSL. LIght pole 594' from departure end of runway, 65' right of centerline, 13' AGL/1382' MSL.

MESQUITE, NV

MESQUITE

TAKE-OFF MINIMUMS: **Rwy 1,** 900-3, or std. with a min. climb of 620' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 1,** climbing left turn, **Rwy 19,** climbing right turn. **All aircraft** climb direct MMM VORTAC. Aircraft departing MMM R-149 CW R-220 climb on course. All others continue climb via MMM R-196 to 6100 and reverse course to cross MMM VORTAC at or above: R-221 CW R-270 and R-331 CW R-060, 6100; R-271 CW R-330, 7300; R-061 CW R-150, 8300.

MICHAEL AAF (KDPG),

DUGWAY PROVING GROUND,UT

.... .Amdt 1, 09099

Rwy 12, 4700-3*

*Or standard with minimum climb of 305 ft/NM to 6100.

DEPARTURE PROCEDURES: **Rwy 12** Climb via heading 122° to 6100, then right turn direct DPG NDB. Continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course, or for climb in visual conditions: Cross Michael AAF, Dugway Proving Ground at or above 8900 before proceeding on course. **Rwy 30** Climb via heading 302° to 6100 then left turn direct DPG NDB, continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD

TAKE-OFF MINIMUMS: **Rwy 34**, CAT A,B 1200-2 or std. with a min. climb of 360' per NM to 6500. CAT C,D NA.

DEPARTURE PROCEDURE: **Rwy 16**, climb direct MLF VORTAC. **Rwy 34,** climbing left turn direct MLF VORTAC. Aircraft departing MLF R-170 CW R-210 climb on course. All other aircraft continue climb southbound via MLF R-190 to 7600, then climbing right turn to cross MLF VORTAC at or above 9000, then climb on course.

MINDEN, NV

MINDEN-TAHOE

TAKE-OFF MINIMUMS: **Rwys 12,16,30,** NA. **Rwy 34,** 4000-3 or std. with a min. climb of 531' per NM to 8700.

DEPARTURE PROCEDURE: **Rwy 34,** use MINDEN RNAV DEPARTURE.

MOAB,UT

CANYONLANDS FIELD

TAKE-OFF MINIMUMS: **Rwy 3**, std. with a min. climb of 320' per NM to 5800. **Rwy 21,** std. with a min. climb of 330' per NM to 5400.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right climb to 6700 via OAB R-293, then climbing right turn direct OAB VOR/DME. Climb in OAB holding pattern (NW, left turns, 113° inbound) to 10000 then proceed on course.

NOTE: **Rwy 3,** tree 4383' from departure end of runway, 1507' right of centerline, 50' AGL/4729' MSL. Road 1749' from departure end of runway, 905' left of centerline, 15' AGL/4635' MSL. Tree 3914' from departure end of runway, 1166' right of centerline, 50' AGL/4690' MSL. Tree 1.25 NM from departure end of runway, 400' right of centerline, 50' AGL/4758' MSL. **Rwy 21,** pole 2026' from departure end of runway, 78' right of centerline, 80' AGL/4625' MSL. Pole 2061' from departure end of runway, 40' right of centerline, 80' AGL/4625' MSL. Pole 2095' from departure end of runway, 857' right of centerline, 80' AGL/4623' MSL. Pole 1980' from departure end of runway, 344' right of centerline, 80' AGL/4602' MSL.

NELLIS AFB (KLSV)

LAS VEGAS, NV 08241

Rwy 3L/R, 10,200-3* SR-SS

Rwy 21L/R, 10,200-3* SR-SS

Diverse departure not authorized.

MILITARY: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 300' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vector climb gradient, A/C must depart VFR.

*CIVIL: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 330' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vectors climb gradient, A/C may use published weather minimums or depart VFR.

TAKE-OFF OBSTACLES: **RWY 3L**: Terrain 0' AGL/1870' MSL, 0' inward of DER, 500' left of centerline. Road 15' AGL/1934' MSL, 1321' from DER, 802' left of centerline. **RWY 3R**: C-5 on taxiway 65' AGL/1936' MSL, 1345' from DER, 822' right of centerline. Road 15' AGL/2014' MSL, 3929' from DER, 1404' right of centerline. **RWY 21L**: Trees 90' AGL/1949' MSL, 4594' from DER, 1596' right of centerline. Trees 90' AGL/1949' MSL, 4940' from DER, 541' right of centerline. Trees 60' AGL/1899' MSL 929' from DER, 724' left of centerline. Trees 60' AGL/1899' MSL, 946' from DER, 626' left of centerline. Trees 60' AGL/1899' MSL, 2720' from DER, 341' left of centerline. Trees 60' AGL/1899' MSL, 2514' from DER, 403' left of centerline.

RWY 21R: Terrain 0' AGL/1835' MSL, 0' inward of DER, 500' right of centerline. Trees 90' AGL/1949' MSL, 4594' from DER, 597' right of centerline. Building 45' AGL/1904' MSL, 2274' from DER, 1037' right of centerline. Road 15' AGL/1874' MSL, 1404' from DER, 465' right of centerline.

NOGALES, AZ

NOGALES INTL

TAKE-OFF MINIMUMS: **Rwy 3**, 5000-3 or std. with a min. climb of 350' per NM to 8000. **Rwy 21**, 5000-3 or std. with a min. climb of 300' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right. **All aircraft** climb via OLS R-276 and TUS R-176 to cross ARVEY Int at or above 10000. Continue on course to MEA or assigned altitude.

OGDEN, UT

OGDEN-HINCKLEY (OGD)

AMDT 2 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,16,** NA- Obstacles.

DEPARTURE PROCEDURE: **Rwys 3, 21, 25, 34,** Use EMONT DEPARTURE.

PAGE, AZ

PAGE MUNI (PGA)
AMDT 2 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA – obstacles **Rwy 15,** 300-1 or std. w/ min. climb of 252' per NM to 6500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climb via 157° heading to 6000, then climbing right turn to PGA VOR/DME. cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA, or climb in visual conditions: cross Page airport at or above 6100, before proceeding on course. **Rwy 33,** climb via 337° heading to 6000, then climbing left turn to PGA VOR/DME. Cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA.

NOTE: **Rwy 15,** terrain 192' from departure end of runway, 274' right of centerline, 4323' MSL, tree 1.07 NM from departure end of runway, 167' left of centerline, 4519 MSL, transmission lines 1.96 NM from departure end of runway, 825' left of centerline, 100' AGL/4519' MSL, power line 4.00 NM from departure end of runway, 3606' right of centerline, 75' AGL/4819' MSL, power line 4.35 NM from departure end of runway, 3968' right of centerline, 75' AGL/4919' MSL, power line 5.36 NM from departure end of runway, 5039' right of centerline, 75' AGL/5119' MSL, power line 4.51 NM from departure end of runway, 4136' right of centerline, 75' AGL/5019' MSL, tree 4.52 NM from departure end of runway, 1508' right of centerline, 100' AGL/5173' MSL, AAO 4.58 NM from departure end of runway, 1617' right of centerline, 200' AGL/5187' MSL, AAO 5.15 NM from departure end of runway, 4456' left of centerline, 200' AGL/5190' MSL, tree 5.56 NM from departure end of runway, 4097' right of centerline, 30' AGL/5249' MSL, AAO 5.98 NM from departure end of runway, 653' left of centerline, 200' AGL/5440' MSL.

PARKER, AZ

AVI SUQUILLA

TAKE-OFF MINIMUMS: **Rwy 1**, 800-1½. **Rwy 19**, 300-1.

DEPARTURE PROCEDURE: **Rwy 19**, right turn. **Rwy 1**, left turn. Climb via R-067 to PKE VORTAC, to cross above 4500. Continue climb on course to MEA or assigned altitude.

PAYSON, AZ

PAYSON

TAKE-OFF MINIMUMS: **Rwy 6,** std. with a min. climb of 360' per NM to 9300, or 2500-3 for climb in visual conditions. **Rwy 24,** std. with a min. climb of 375' per NM to 9300, or 2500-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 6, 24,** for climb in visual conditions: Cross Payson Airport at or above 7500, then proceed on course.

NOTE: **Rwy 24,** bush 15' from departure end of runway, 133' right of centerline, 6' AGL/5148' MSL. Tree 320' from departure end of runway, 183' right of centerline, 12' AGL/5154' MSL. Fence 85' from departure end of runway, 84' left of centerline, 4' AGL/5141' MSL. Tree 164' from departure end of runway, 126' left of centerline, 9' AGL/5147' MSL.

PHOENIX, AZ

PHOENIX-DEER VALLEY

DEPARTURE PROCEDURE: Use DEER VALLEY DEPARTURE.

PHOENIX SKY HARBOR INTL (PHX)
AMDT 4A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 26,** 700-3 or std. with a min. climb of 358' per NM to 2000.

DEPARTURE PROCEDURE: **Rwys 7L, 7R, 8,** climb via 078° heading to 3000, then climbing right turn direct PHOENIX (PXR) VORTAC. **Rwys 25L, 25R**, climb via 258° heading to 1550 then climbing right turn to join the PXR R-260 (V16) westbound, climb to 5000. **Rwy 26,** climb via 258° heading to 1550 then climbing left turn to join the PXR R-260 (V16) westbound, climb to 5000. Westbound departures continue climb on PXR R-260. All others, climbing right turn direct PXR VORTAC.

NOTE: **Rwy 7L,** building 1332' from DER, 798' left of centerline, 67' AGL/1176' MSL. **Rwy 7R,** rod 716' from DER, 184' right of centerline, 87' AGL/1196' MSL. **Rwy 8,** light standard 3530' from DER, 1207' left of centerline, 123' AGL/1232' MSL. Light standard 3479' from DER, 1003' left of centerline, 118' AGL/1227' MSL. **Rwy 25L,** light standard 1129' from DER, 774' left of centerline, 91' AGL/1200' MSL. ASDE-X equipment 411' from DER, 531' left of centerline, 29' AGL/1135' MSL. **Rwy 26,** light 59' from DER, 63' right of centerline, 16' AGL/1125' MSL. Pole 58' from DER, 90' right of centerline, 25' AGL/1125' MSL. Light 78' from DER of runway, 64' right of centerline, 18' AGL/1127' MSL. Light 38' from DER, 440' left of centerline, 24' AGL/1135' MSL. Light standard 77' from DER, 453' left of centerline, 27' AGL/1136' MSL. Light standard 74' from DER, 456' right of centerline, 33' AGL/1142' MSL. Light standard 77' from DER, 434' right of centerline, 31' AGL/1140' MSL. Tree 113' from DER, 294' right of centerline, 24' AGL/1133' MSL. Building 2.32 NM from DER, 3309' right of centerline,406' AGL/1496' MSL. Building 2.28 NM from DER, 3612' right of centerline, 663' AGL/1750' MSL. Tree 234' from DER, 214' right of centerline, 24' AGL/1133' MSL. Light standard 64' from DER, 68' left of centerline, 39' AGL/1125' MSL. ASDE-X equipment 897' from DER, 413' right of centerline, 35' AGL/1141' MSL.

PHOENIX-MESA GATEWAY

TAKE-OFF MINIMUMS: **Rwys 30L,30C,30R,** CAT C,D,E 2000-2 or std. with a min. climb of 230' per NM to 3900.

DEPARTURE PROCEDURE: **Rwys 12L,12C,12R,** climb to 2500 via IWA R-122 then climbing right turn direct PXR VORTAC. **Rwys 30L,30C,30R,** climbing right turn to 4000 via IWA R-122 then climbing right turn direct PXR VORTAC.

PRESCOTT, AZ

ERNEST A. LOVE FIELD

TAKE-OFF MINIMUMS: **Rwy 12,** 2700-2 or std. with a min. climb of 460' per NM to 8100. **Rwy 21L,** 2700-2 or std. with a min. climb of 500' per NM to 8100. **Rwy 30,** 300-1 or std. with a min. climb of 300' per NM to 5200. **Rwy 3L, 21R,** NA.

DEPARTURE PROCEDURE: **Rwy 3R,** turn left heading 250° to intercept DRK R-305. **Rwy 12,** turn right direct DRK VORTAC. **Rwy 21L,** turn right heading 335° to intercept DRK R-305. **Rwy 30,** climb direct DRK VORTAC. **All aircraft** continue climb via DRK R-305 to 9000. Aircraft departing via DRK R-305 continue climb on course. All other aircraft turn right direct DRK VORTAC then climb on course.

PRICE, UT

CARBON COUNTY RGNL/BUCK DAVIS FLD (PUC)

AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - per flight check **Rwy 32,** std. w/ min. climb of 425' per NM to 7000, or 3400-3 for climb in visual conditions. **Rwy 36,** std. w/ min. climb of 400' per NM to 7200, or 3400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climb on a heading between 126° CW to 193°, thence...**Rwy 18**, climb on a heading between 192° CCW to 125°, thence...**Rwy 25,** climb on a heading between 176° CCW to 124°, thence... **Rwy 32,** climb to 7000 then climbing left turn on a heading between 175° CCW to 145°,thence...**Rwy 36,** climb to 6400 then climbing right turn on a heading between 141° CW to 184°, maintain 210K until completion of turn, thence...

...continue climb to assigned altitude for direction of flight. **Rwys 32, 36,** for climb in visual conditions cross Carbon County Rgnl / Buck Davis Field at or above 9200 before proceeding on course.

NOTE: **Rwy 14,** multiple trees beginning 121' from DER, 3' left of centerline, up to 40' AGL/5839 ' MSL. **Rwy 25,** trees 515' from DER, 535' right of centerline, up to 40' AGL/5879' MSL. **Rwy 32,** trees 9544' from DER, 1644' left of centerline, up to 40' AGL/6900' MSL. Trees 11332' from DER, 74' right of centerline, up to 40' AGL/6800' MSL. **Rwy 36,** poles 2599' from DER, 615' left of centerline, 40' AGL/6079 ' MSL. Poles 2715 ' from DER, 668' right of centerline, 59' AGL/6098' MSL.

PROVO, UT

PROVO MUNI

DEPARTURE PROCEDURE: Use PROVO DEPARTURE.

RENO, NV

RENO/STEAD (RTS)

AMDT 3A 09183 (FAA)

TAKE-OFF MINIMUMS: CAT A,B only, CAT C,D NA. **Rwys 8,14,** 1300-2 or std. with a min. climb of 400' per NM to 6500. **Rwy 26,** 1900-2 or std. with a min. climb of 410' per NM to 7200. **Rwy 32,** 2300-2 or std. with a min. climb of 420' per NM to 7200.

DEPARTURE PROCEDURE: **Rwys 8,32,** climbing right turn heading 100° and FMG VORTAC R-314 to FMG VORTAC. **Rwy 14,** left turn climb direct FMG VORTAC. **Rwy 26,** climbing right turn heading 050° and FMG VORTAC R-314 to FMG VORTAC. **All aircraft** climb in FMG VORTAC holding pattern (NE, right turns, 221° inbound) to depart FMG VORTAC; R-260 CW R-170 at or above 10000; R-171 CW R-195 at or above 10500; R-196 CW R-259 at or above 12000.

RENO, NV (CON'T)

RENO/TAHOE INTL (RNO)
AMDT 4 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, NA-terrain. **Rwy 16L,** std. w/ min. climb of 730' per NM to 8000, or 600-1¼ w/ min. climb of 480' per NM to 8000, or 2700-3 for climb in visual conditions. **Rwy 16R,** std. w/ the following minimum climb requirements: 210 knots or less, 385' per NM to 8000; more than 210 knots, 420' per NM to 8900, or 2700-3 for climb in visual conditions. Resume normal speed after passing FMG VORTAC. **Rwy 25,** std. w/ min. climb of 470' per NM to 7800, or 2700-3 for climb in visual conditions. **Rwy 34L,** std. w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions. **Rwy 34R,** std. w/ min. climb of 480' per NM to 7000, or 500-1½ w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 16L/R,** climb heading 164° to 6600 then climbing left turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . .**Rwy 25,** climb heading 254° to 5000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . . **Rwys 34L/R,** climb heading 344° to 7000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . .

. . .**All aircraft:** continue climb in FMG VORTAC holding pattern (northeast, left turn, 221° inbound) to cross FMG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 16L,** multiple poles, trees, bushes and terrain beginning 618' from departure end of runway, 133' left of centerline, up to 20' AGL/4961' MSL. **Rwy 16R,** multiple trees 2784' from departure end of runway, 171' right of centerline, up to 20' AGL/4510' MSL. Multiple trees and terrain beginning 746' from departure end of runway, 380' left of centerline, up to 20' AGL/4703' MSL. **Rwy 25,** multiple trees and poles beginning 829' from departure end of runway, 201' right of centerline, up to 103' AGL/4523' MSL. Building 6023' from departure end of runway, 456' right of centerline, 152' AGL/4608' MSL. Fence 222' from departure end of runway, 270' right of centerline, up to 5' AGL/4415' MSL. Multiple trees and poles beginning 500' from departure end of runway, 31' left of centerline, up to 20' AGL/4506' MSL. **Rwy 34L,** multiple trees and poles beginning 1229' from departure end of runway, 180' right of centerline, up to 20' AGL/4498' MSL. Multiple trees beginning 1193' from departure end of runway, 331' left of centerline, up to 20' AGL/4489' MSL. **Rwy 34R,** multiple trees and poles beginning 1067' from departure end of runway, 172' right of centerline, up to 20' AGL/4497' MSL. Multiple trees and poles beginning 1230' from departure end of runway, 350' left of centerline, upt o 20' AGL/4498' MSL. Building 1.2 NM from departure end of runway, 1730' right of centerline, 363' AGL/4780' MSL.

RICHFIELD, UT

RICHFIELD MUNI (RIF)
AMDT 1 08157 (FAA)

DEPARTURE PROCEDURE: **Rwy 1,** use RICHFIELD (RNAV) DEPARTURE. **Rwy 19,** use HAMET (RNAV) DEPARTURE.

ROOSEVELT, UT

ROOSEVELT MUNI

TAKE-OFF MINIMUMS: **Rwy 25,** 700-3 or std. with a min. climb of 300' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 7,** turn right. **Rwy 25,** turn left. **All aircraft,** climb direct MTU VORTAC. Aircraft departing MTU VORTAC R-040 CW R-150, climb on course. All others continue climb in MTU holding pattern (NE, right turns, 213° inbound) to cross MTU VORTAC; R-151 CW R-290 at or above 8000; R-291 CW R-039 at or above 10,000. Then climb on course.

SAFFORD, AZ

SAFFORD RGNL

TAKE-OFF MINIMUMS: IFR departure not authorized.

ST. GEORGE, UT

ST. GEORGE MUNI

TAKE-OFF MINIMUMS: **Rwy 34**, 1500-2 or std. with a min. climb of 325' per NM to 4000.

DEPARTURE PROCEDURE: **Rwy 16**, turn left. **Rwy 34**, turn right. Climb in OZN VOR/DME holding pattern (hold SE, right turns, 296 inbound) to depart OZN VOR/DME at or above MEA for direction of flight.

ST. JOHNS, AZ

ST. JOHNS INDUSTRIAL AIR PARK (SJN)
AMDT 1A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 21**, 400-2 or std. with a min. climb of 205' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 3, 32,** climbing right turn, **Rwys 14, 21,** climbing left turn. **All aircraft,** climb direct SJN VORTAC. Aircraft departing SJN VORTAC R-240 CW R-080 climb on course. All others continue climb in SJN VORTAC holding pattern (Hold NE,right turns,239° inbound) to cross SJN VORTAC at or above 9000.

NOTE: **Rwy 14,** 5790' tower 350' right abeam departure end of runway.

SALT LAKE CITY, UT

SALT LAKE CITY INTL (SLC)
AMDT 10 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 32,** NA, operational.
DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 10000 via heading 161° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwy 17,** climb to 10000 via heading 166° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwys 34L, 34R,** climb to 9000 via heading 341° and OGD R-153 to OGD VORTAC before proceeding on course. **Rwy 35,** climb to 9000 via heading 336° and OGD R-153 to OGD VORTAC before proceeding on course.
NOTE: **Rwy 16L,** vehicle 124' from DER, 14' right of centerline, 15' AGL/4239' MSL. Light pole 988' from DER, 726' right of centerline, 34' AGL/4254' MSL. Pole 1024' from DER, 689' right of centerline, 34' AGL/4254' MSL. **Rwy 17,** vehicles beginning 335' from DER, on centerline, up to 17' AGL/4241' MSL. **Rwy 34R,** post 13' from DER, 349' right of centerline, 3' AGL/4227' MSL. **Rwy 35,** post 56' from DER, 249' left of centerline, 2' AGL/4220' MSL.

SOUTH VALLEY RGNL AIRPORT (U42)
AMDT 4A 09155 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, 2400-3 or std. with a min. climb of 295' per NM to 7700. **Rwy 34,** std. with a min. climb of 353' per NM to 9500.
DEPARTURE PROCEDURE: **Rwy 16,** climbing left turn to 9600 via heading 136° and V21 (TCH R-161 FFU R-341) to FFU VORTAC. Aircraft departing FFU R-156 CW R-263 and R-308 CW R-359 climb on course. All others continue climb in FFU VORTAC holding pattern (S, right turns, 008° inbound) to cross FFU VORTAC at or above: R-360 CW R-093 12400; R-094 CW R-138 10600; R-139 CW R-155 11300; R-264 CW R-307 11500. **Rwy 34,** climbing right turn to 9500 via heading 026° and V21 (TCH R-161) to TCH VORTAC. Aircraft departing TCH R-144 CW R-176 and R-217 CW R-355 climb on course. All others continue climb in TCH VORTAC holding pattern (NW, right turns, 116° inbound) to cross TCH VORTAC at or above: R-356 CW R-116 10700; R-117 CW R-143 11600; R-177 CW R-216 10100.

SCOTTSDALE, AZ

SCOTTSDALE (SDL)
AMDT 7 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min climb of 440' per NM to 4000, or 3100-3 for climb in visual conditions. **Rwy 21,** std. w/ min. climb of 215' per NM to 4000, or 3100-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 3,** climbing left turn to 4000 via heading 220° and PXR VORTAC R-336 southeast bound to PXR VORTAC. Thence...
Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course. **Rwy 21,** climbing right turn to 4000 via heading 300° and PXR VORTAC R-336 northwest bound then left turn direct PXR VORTAC. Thence...
Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course.
...continue climb on course.
NOTE: **Rwy 3,** multiple light standards beginning 63' from departure end of runway, 445' left of centerline, up to 44' AGL/1554' MSL. Hoist on dike 878' from departure end of runway, 735' left of centerline, 51' AGL/1561' MSL. Dike beginning 1066' from departure end of runway, 316' left of centerline, 38' AGL/1548' MSL. Day marker on dike 1230' from departure end of runway, 5' left of centerline, 39' AGL/1549' MSL. Tree, 269' from departure end of runway, 490' left of centerline, 13' AGL/1523' MSL. Tree 51' from departure end of runway, 279' left of centerline, 6' AGL/1516' MSL. Tree 765' from departure end of runway, 115' left of centerline, 22' AGL/1532' MSL. Road beginning 647' from departure end of runway, 296' left of centerline, 19' AGL/1529' MSL. Tree 227' from departure end of runway, 97' left of centerline, 6' AGL/1516' MSL. Fence beginning 5' from departure end of runway, 338' right of centerline, 6' AGL/1511' MSL. Light standard, 1013' from departure end of runway, 430' right of centerline, 44' AGL/1552' MSL. **Rwy 21,** tree 1072' from departure end of runway, 426' right of centerline, 53' AGL/1497' MSL. Building 316' from departure end of runway, 537' right of centerline, 23' AGL/1467' MSL. Tree 2087' from departure end of runway, 418' left of centerline, 61' AGL/1505' MSL. Tree 1432' from departure end of runway, 438' right of centerline, 38' MSL/1482' MSL. Tree 2234' from departure end of runway, 559' left of centerline, 58' AGL/1502' MSL.

SEDONA, AZ

SEDONA (SEZ)
AMDT 1 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 21,** Use OATES RNAV DEPARTURE.

SHOW LOW, AZ

SHOW LOW RGNL

DEPARTURE PROCEDURE: **Rwys 3,6**, turn left. **Rwys 21,24**, turn right. All aircraft climb via 345 bearing from SOW NDB to DEHOG INT then climb on course.

SPRINGERVILLE, AZ

SPRINGERVILLE MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 1000-2 or std. with a min. climb of 360' per NM to 8400.

DEPARTURE PROCEDURE: **Rwys 3, 11,** climbing left turn to 8400 via heading 360° before proceeding on course. **Rwys 21, 29,** climbing right turn to 8400 via 360° before proceeding on course.

TAYLOR, AZ

TAYLOR MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 300-1 or std. with a min. climb of 248' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 3/21,** climb on runway heading to 8000 before turning on course.

TONOPAH, NV

TONOPAH

TAKE-OFF MINIMUMS: **Rwys 11,29**, NA. **Rwys 15,33**, 2600-2 or std. with a min. climb of 260' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 15**, turn left. **Rwy 33**, turn right. Climb direct TPH VORTAC. Continue climb in holding pattern (NE, right turns, 246° inbound) to depart TPH VORTAC at or above 8000. Climb on course to MEA or assigned altitude.

TOOELE, UT

BOLINDER FIELD-TOOELE VALLEY

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 490' per NM to 11000. **Rwy 35,** std. with a min. climb of 360' per NM to 9000.

DEPARTURE PROCEDURE: Use STACO DEPARTURE.

NOTE: **Rwy 17,** tree 794' from departure end of runway, 277' right of centerline, 35' AGL/4380' MSL. Tree 967' from departure end of runway, 432' right of centerline, 35' AGL/4394' MSL. Tree 1023' from departure end of runway, 313' right of centerline, 35' AGL/4395' MSL.

TUCSON, AZ

MARANA RGNL

TAKE-OFF MINIMUMS: **Rwys 3, 12,** N/A-Obstacles

DEPARTURE PROCEDURE: **Rwy 21,** climb to 6500 via heading 360° and TUS R-308 to TOTEC Int/TUS 57 DME, then as filed. **Rwy 30,** climb to 6500 via heading 303° intercept TUS R-308 above 3500, to TOTEC INT/TUS 57 DME, then as filed.

NOTE: **Rwy 21,** road 192' from departure end of runway, 527' left of centerline 15' AGL/2034' MSL.

RYAN FIELD

DEPARTURE PROCEDURE: **Rwy 6R,** turn right; **Rwy 24L**, turn left direct to Ryan NDB. Continue climb in holding pattern (W, right turn 090° inbound) to 5000 before proceeding on course.

TUCSON, AZ (CON'T)

TUCSON INTL (TUS)

AMDT 4A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 300-1¾ or std. w/ min. climb of 228' per NM to 3000.

DEPARTURE PROCEDURE: **Rwys 3, 29L,29R,** climbing right turn direct to TUS VORTAC. **Rwys 11L,11R** climb via runway heading to 4000 then climbing left turn direct TUS VORTAC. **Rwy 21,** climbing left turn direct to TUS VORTAC. **All aircraft** continue climbing in holding pattern (NW, right turns, 128° inbound) to depart TUS VORTAC at or above 9000.

NOTE: **Rwy 3,** tower 9215' from departure end of runway, 1689' left of centerline, 246' AGL/2831' MSL.

VERNAL, UT

VERNAL RGNL

TAKE-OFF MINIMUMS: **Rwy 16**, 1500-2 or std with a min. climb of 250' per NM to 7000'. **Rwy 25**, 1500-2 or std. with a min. climb of 390' per NM to 7000. **Rwy 34**, 1600-2 pr std. with a min. climb of 330' per NM to 7000'.

DEPARTURE PROCEDURE: **Rwys 7,34**, turn right. **Rwys 16,25**, turn left. **All aircraft** climb direct VEL. Aircraft departing V391 S-bound climb on course. All others climb in holding pattern (SE, right turns, 322° inbound). Aircraft SW-bound V208 depart VEL at or above 8400', all others depart VEL at or above 9500'. Continue climb on course to MEA or assigned altitude.

WENDOVER, UT

WENDOVER

TAKE-OFF MINIMUMS: **Rwy 26,** standard wit h a min. climb of 300' per NM to 7000. **Rwy 30**, NA.

DEPARTURE PROCEDURE: **Rwys 8,12, 26,** climbing left turn direct BVL VORTAC. Aircraft departing BVL VORTAC R-330 CW R-150 climb on course. All others continue climb in BVL VORTAC holding pattern (Hold NE right turns, 247° inbound) to cross at or above 7400, then climb on course.

WILLCOX, AZ

COCHISE COUNTY

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. **All aircraft** climb direct CIE VORTAC.

WINDOW ROCK, AZ

WINDOW ROCK

TAKE-OFF MINIMUMS: **Rwy 2**, 700-2 or std. with a min. climb of 500' per NM to 8000. **Rwy 20,** 600-2 or std. with a min. climb of 260' per NM to 8200.

DEPARTURE PROCEDURE: **Rwy 2**, turn right. **Rwy 20,** turn left direct to GUP VORTAC before proceeding on course.

NOTE: **Rwy 2,** terrain 3832' from departure end of runway, 1025' right of centerline, 6926' MSL. Poles 5220' from departure end of runway, 245' right of centerline, 180' AGL/6922' MSL. Tower 7067' from departure end of runway, 3072' left of centerline, 71' AGL/7316' MSL. Terrain 7449' from departure end of runway, 1612' left of centerline, 6991' MSL. Terrain 8776' from departure end of runway, 1851' left of centerline, 7109' MSL. Tree 9665' from departure end of runway, 1326' right of centerline, 7340' MSL. Tree 11326' from departure end of runway, 355' left of centerline, 7351' MSL. **Rwy 20,** trees 1018' from departure end of runway, 620' left of centerline, 30' AGL/6768' MSL.

WINNEMUCCA, NV

WINNEMUCCA MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, 2500-2 or std. with a min. climb of 450' per NM to 6800. **Rwys 14,20**, 3200-2 or std. with a min. climb of 520' per NM to 7500.

DEPARTURE PROCEDURE: **Rwys 14,20**, turn right. **Rwy 2**, turn left. **Rwy 32**, climb straight ahead. All aircraft climb via INA R-326 to 6700 or above within 12 NM, then climbing left turn return to INA VOR/DME via R-326. Continue climb in INA VOR/DME holding pattern (hold NW, right turns, 146° inbound) to depart INA VOR/DME at or above 11000. Southbound aircraft continue via INA R-146 direct Fesko Int. Northbound aircraft continue via INA R-326 and SDO R-144 direct SDO VORTAC.

YUMA MCAS/ YUMA INTL(KNYL)

YUMA, AZ. 08213

Climb direct to BZA VORTAC, thence on course.

BEAVER, UTAH

AL-9437 (FAA)

APP CRS	Rwy Idg	N/A
067°	TDZE	N/A
	Apt Elev	5860

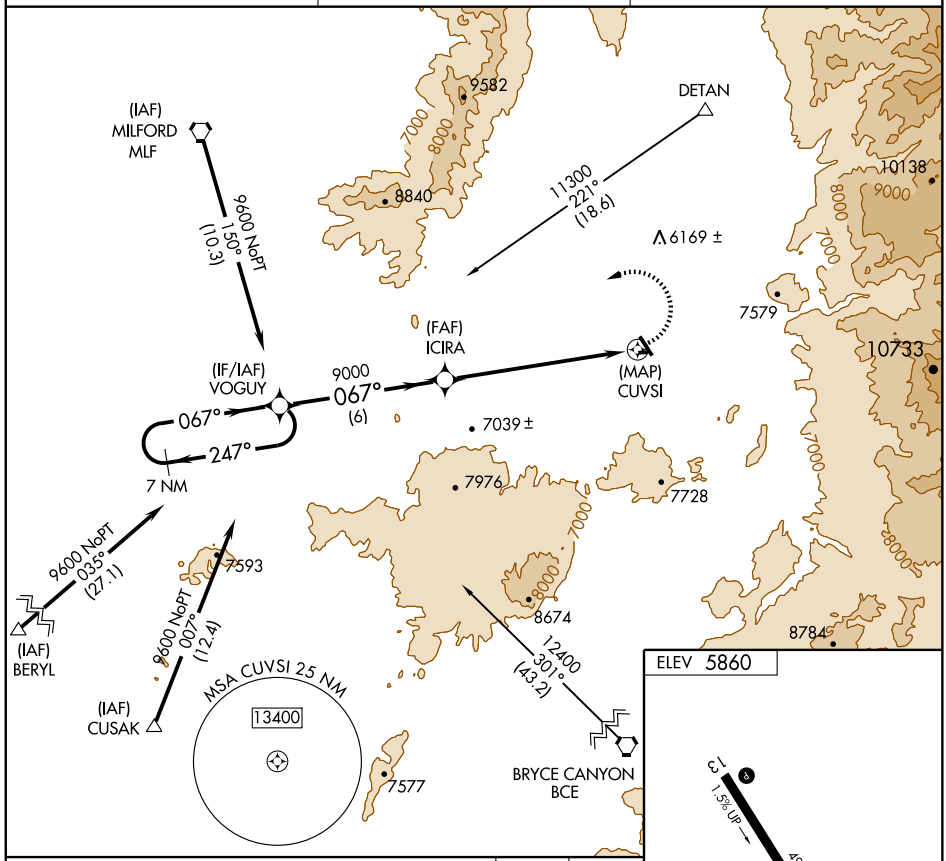
RNAV (GPS)-A

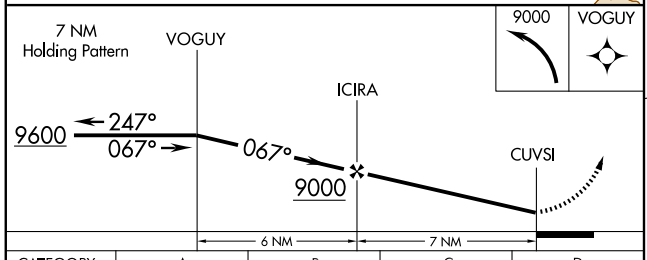
BEAVER MUNI (U52)

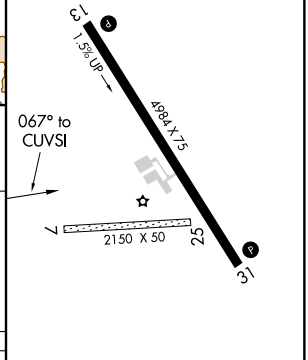
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Milford Muni altimeter setting and increase all MDAs 180 feet.

MISSED APPROACH: Climbing left turn to 9600 direct VOGUY and hold.

AWOS-3	SALT LAKE CITY CENTER	CTAF
119.925	125.575 379.275	122.9 L







CATEGORY	A	B	C	D
CIRCLING	7080-1¼ 1220 (1300-1¼)	7080-1½ 1220 (1300-1½)	7080-3 1220 (1300-3)	NA

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

SW-4, 22 OCT 2009 to 19 NOV 2009

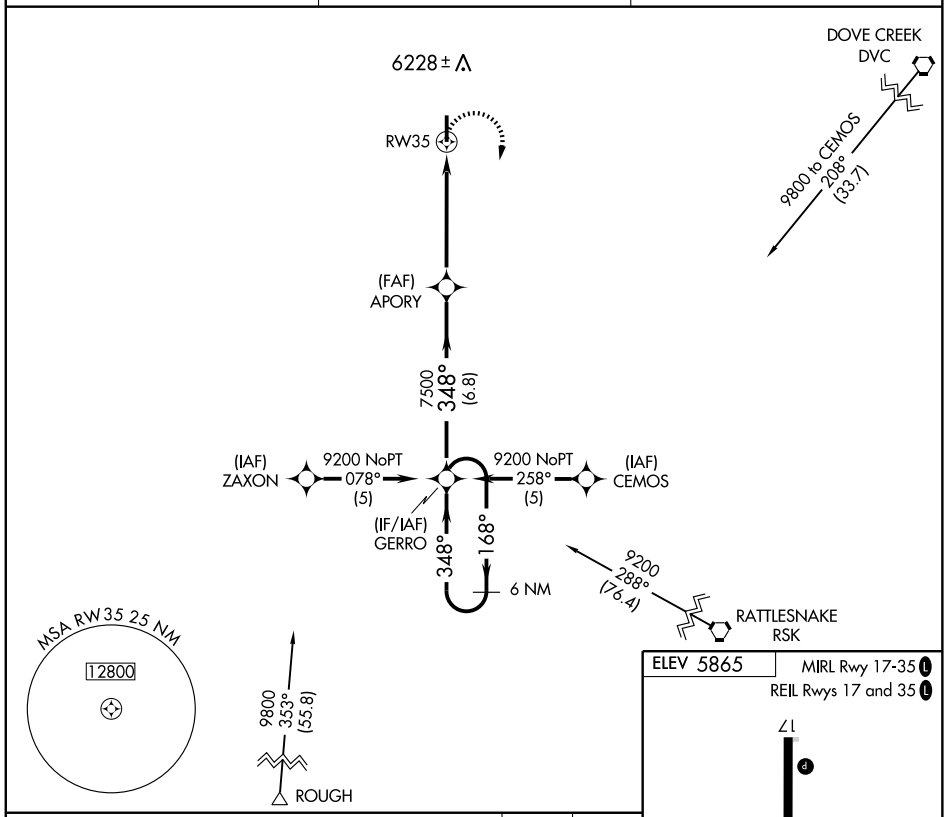
APP CRS	Rwy Idg	5781
348°	TDZE	5814
	Apt Elev	5865

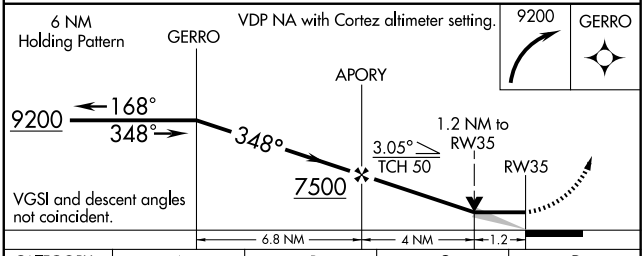
RNAV (GPS) RWY 35
BLANDING MUNI (BDG)

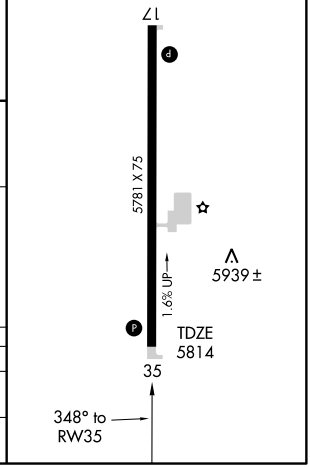
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Cortez altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climbing right turn to 9200 direct GERRO WP and hold.

AWOS-3	DENVER CENTER	UNICOM
127.75	127.55 343.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	6200-1 386 (400-1)			6200-1¼ 386 (400-1¼)
CIRCLING	6440-1 575 (600-1)	6480-1 615 (700-1)	6500-1¾ 635 (700-1¾)	6540-2¼ 675 (700-2¼)

SW-4, 22 OCT 2009 to 19 NOV 2009

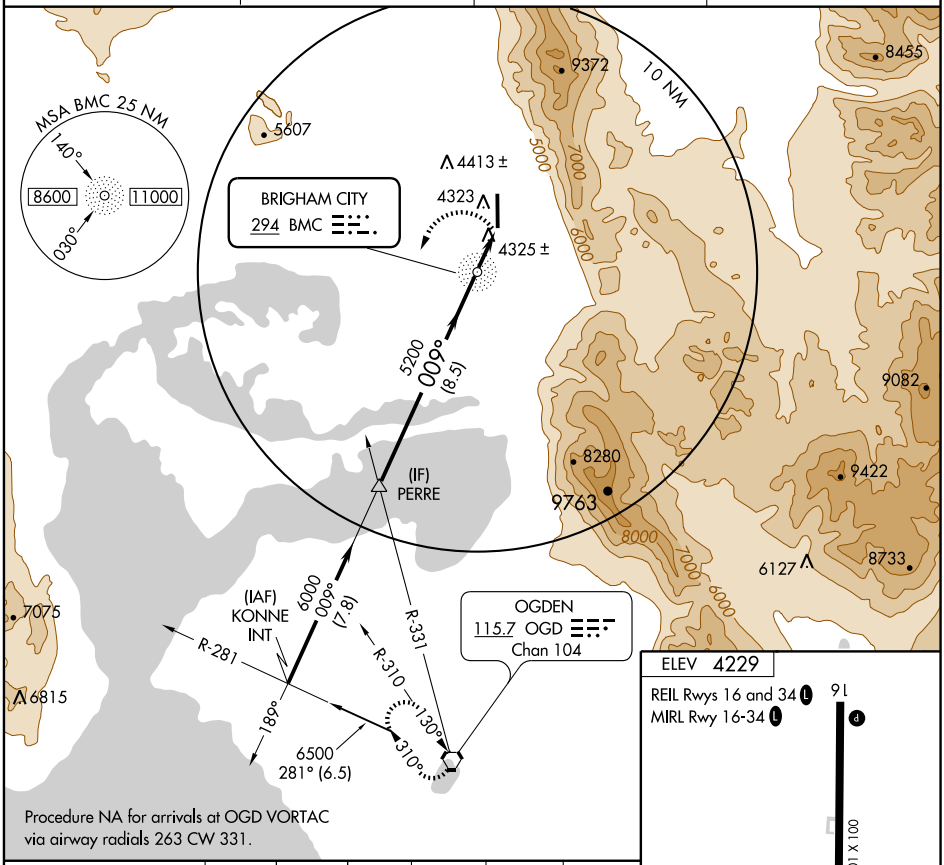
NDB BMC 294	APP CRS 009°	Rwy Idg N/A TDZE N/A Apt Elev 4229

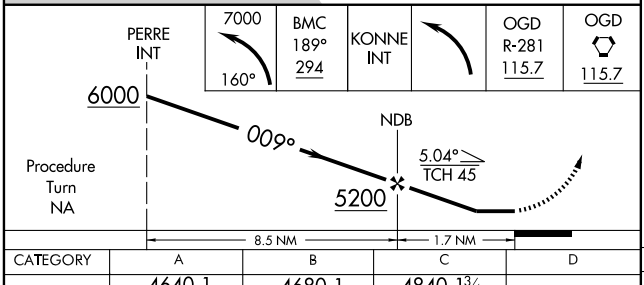
NDB-A
BRIGHAM CITY (BMC)

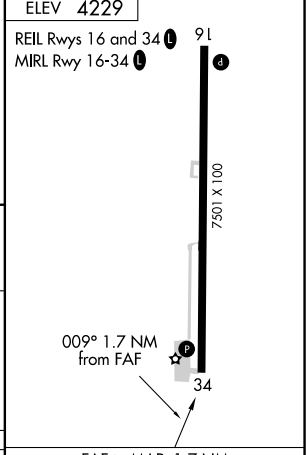
When local altimeter setting not received, use Ogden-Hinckley altimeter setting and increase all MDA 100 feet and Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 7000 via heading 160° and BMC NDB 189° bearing to KONNE Int and left turn via OGD R-281 to OGD VORTAC and hold.

AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
135.075	121.1 319.25	126.0	123.05 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	4640-1 411 (500-1)	4680-1 451 (500-1)	4840-1¾ 611 (700-1¾)	NA

FAF to MAP 1.7 NM

Knots	60	90	120	150	180
Min:Sec	1:42	1:08	0:51	0:41	0:34

SW-4, 22 OCT 2009 to 19 NOV 2009

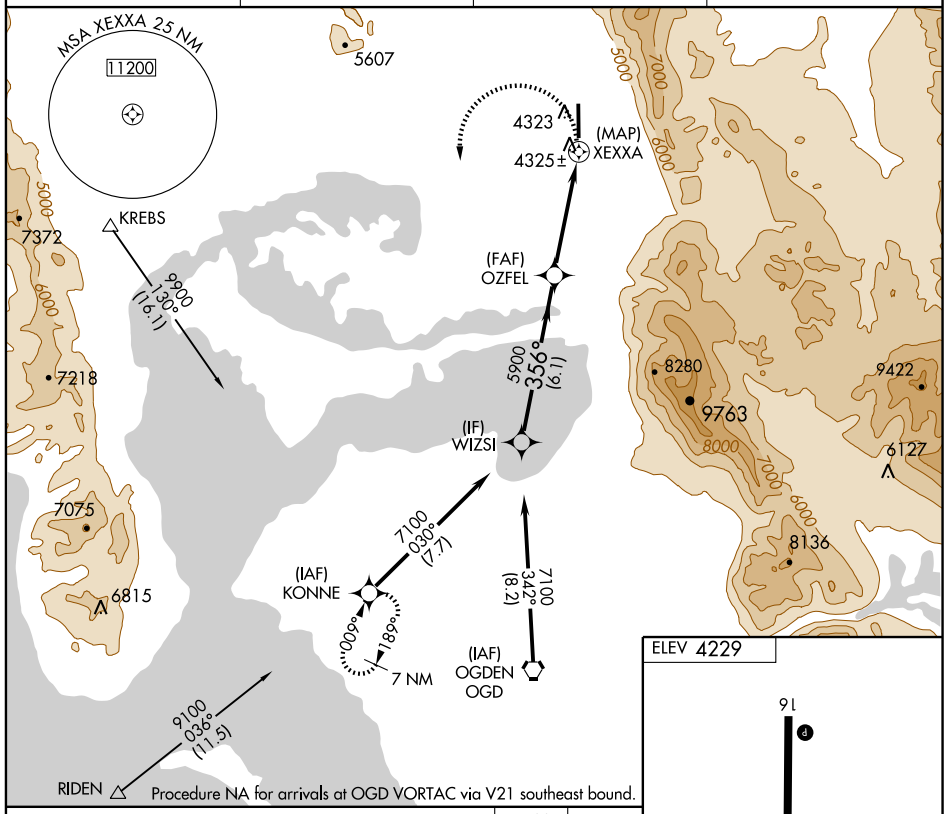
APP CRS		
356°	Rwy Idg	7501
	TDZE	4229
	Apt Elev	4229

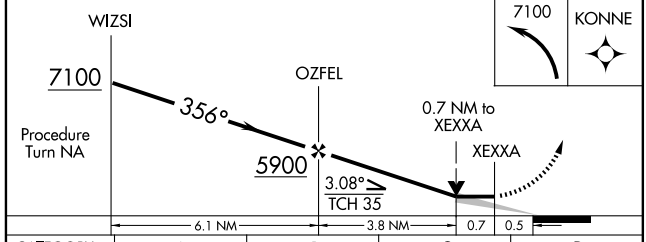
RNAV (GPS) RWY 34
BRIGHAM CITY (BMC)

T NA — If local altimeter setting not received, use Ogden altimeter setting and increase all MDAs 100 feet.
DME/DME RNP-0.3 NA.
VDP NA when using Ogden altimeter setting.

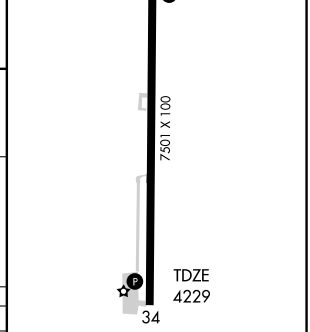
MISSED APPROACH: Climbing left turn to 7100 direct KONNE and hold.

AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
135.075	121.1 319.25	126.0	123.05 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	4640-1	411 (500-1)	4640-1¼ 411 (500-1¼)	NA
CIRCLING	4640-1 411 (500-1)	4680-1 451 (500-1)	4840-1¾ 611 (700-1¾)	NA



REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

SW-4, 22 OCT 2009 to 19 NOV 2009

CEDAR CITY, UTAH

AL-5139 (FAA)

LOC I-ECC	APP CRS	Rwy Idg	8653
110.1	200°	TDZE	5600
		Apt Elev	5622

ILS or LOC RWY 20

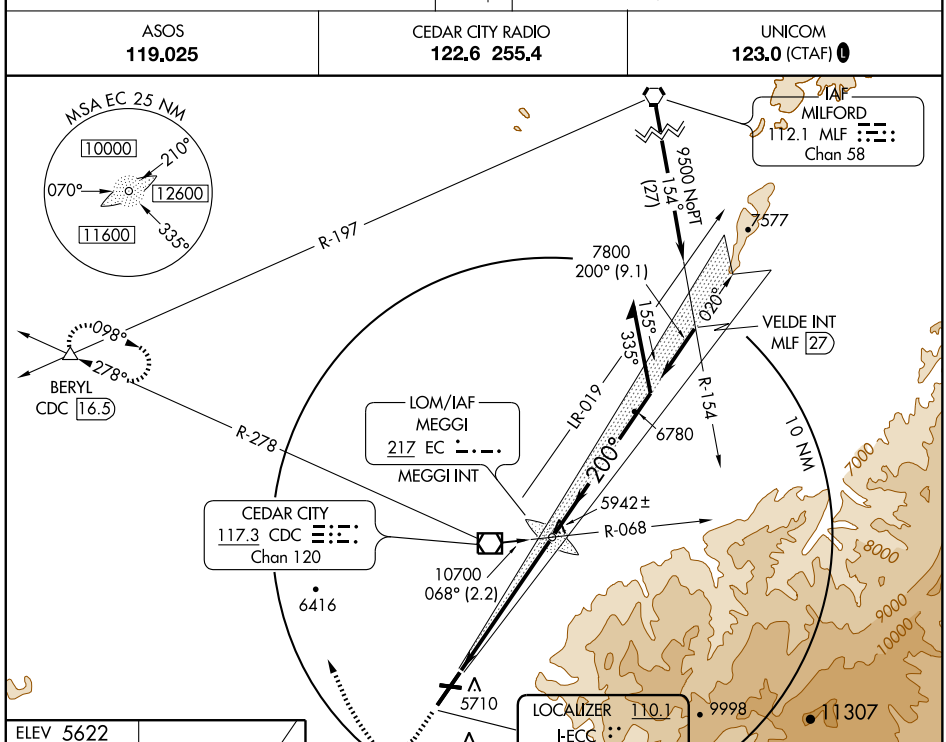
CEDAR CITY RGNL (CDC)

Circling not authorized east of Rwy 2-20.

MALSR

MISSED APPROACH: Climb to 6100, then climbing right turn to 9500 via heading 322° and CDC VOR/DME R-278 to BERYL Int/16.5 DME and hold.

ASOS	CEDAR CITY RADIO	UNICOM
119.025	122.6 255.4	123.0 (CTAF) L



FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CATEGORY	A	B	C	D
S-ILS 20	5800-½ 200 (200-½)			
S-LOC 20	5960-½ 360 (400-½)			5960-¾ 360 (400-¾)
CIRCLING	5980-1 358 (400-1)	6080-1 458 (500-1)	6080-1½ 458 (500-1½)	6440-2¾ 818 (900-2¾)

SW-4, 22 OCT 2009 to 19 NOV 2009

CEDAR CITY, UTAH

AL-5139 (FAA)

APP CRS	Rwy Idg	8653
200°	TDZE	5600
	Apt Elev	5622

RNAV (GPS) RWY 20

CEDAR CITY RGNL (CDC)

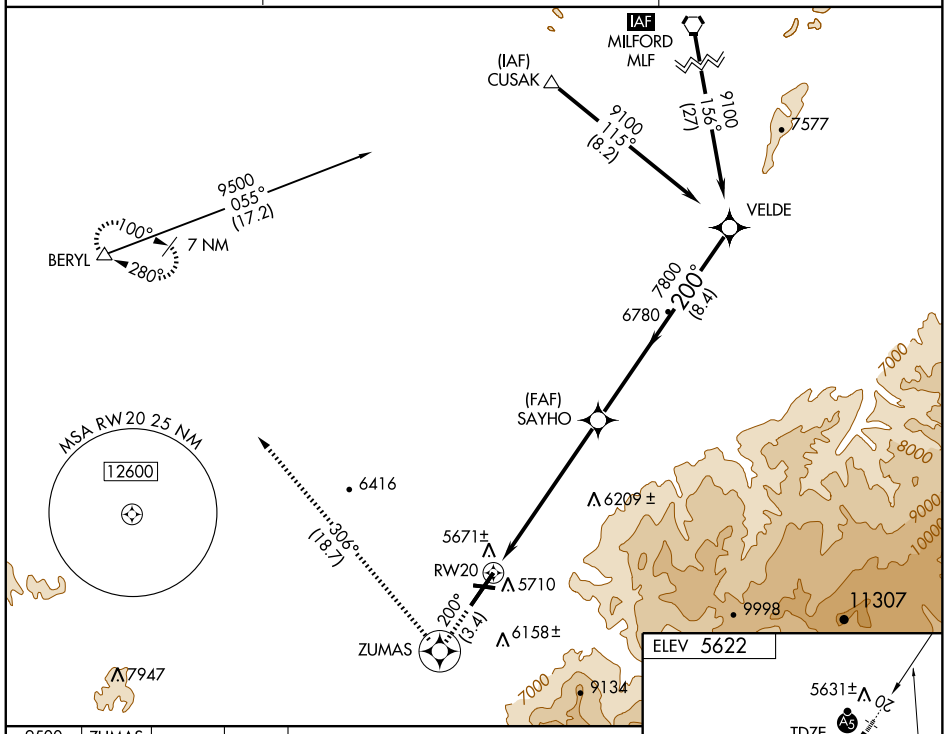
GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA. Baro-VNAV NA below -26° C (-1.5° F) Circling not authorized east of Rwy 2-20. IAF ARM APPROACH MODE PRIOR TO IAF.

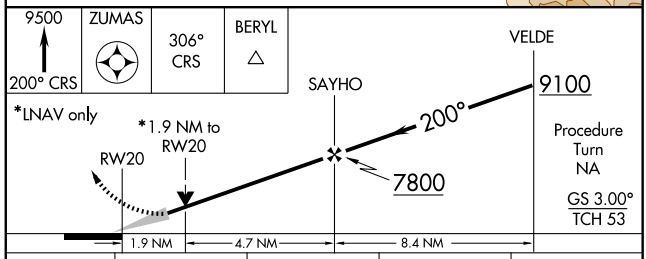
NA

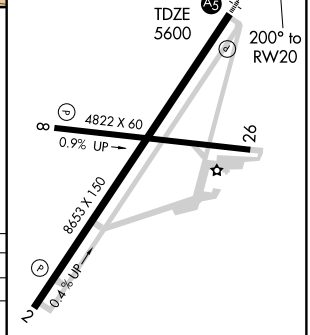
MALSR

MISSED APPROACH: Climb to 9500 via 200° course to ZUMAS WP then via 306° course to BERYL WP and hold.

ASOS	CEDAR CITY RADIO	UNICOM
119.025	122.6 255.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	6000-1 400 (400-1)			
LNAV MDA	6260-½ 660 (700-½)		6260-1¼ 660 (700-1¼)	6260-1½ 660 (700-1½)
CIRCLING	6260-1½ 638 (700-1½)		6260-1¾ 638 (700-1¾)	6440-2¾ 818 (900-2¾)

MIRL Rwy 8-26 L

HIRL Rwys 2-20 L

REIL Rwys 2, 8 and 26 L

SW-4, 22 OCT 2009 to 19 NOV 2009

CEDAR CITY, UTAH

AL-5139 (FAA)

VOR/DME CDC	APP CRS	Rwy Idg	8653
117.3	177°	TDZE	5600
Chan 120		Apt Elev	5622

VOR RWY 20

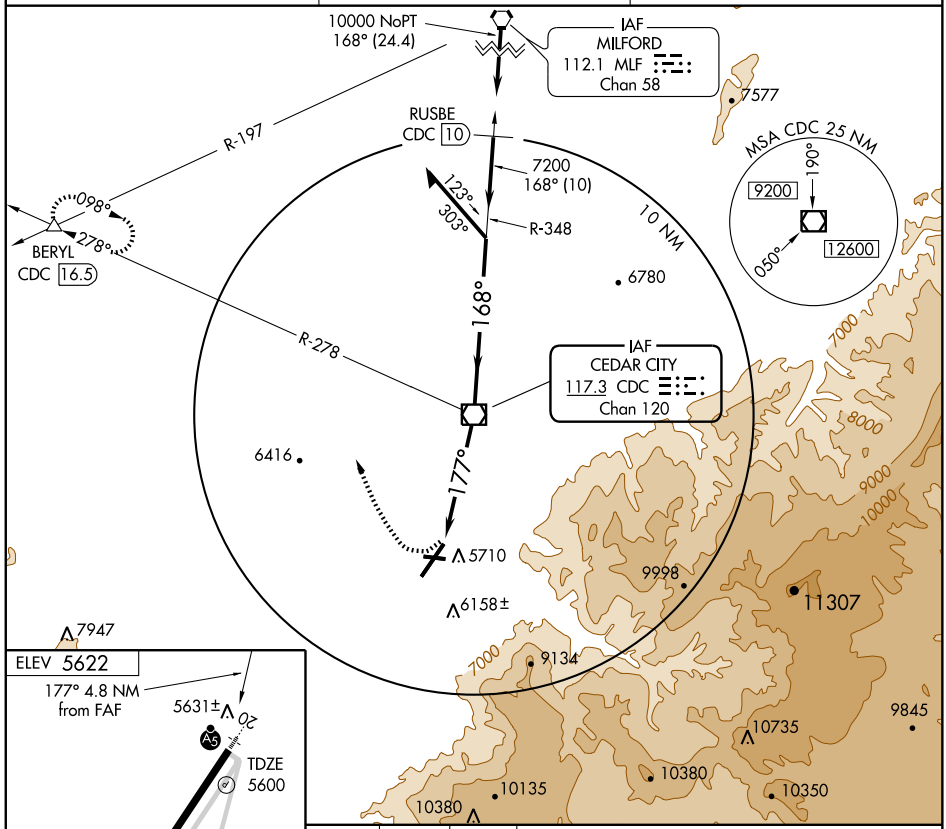
CEDAR CITY RGNL(CDC)

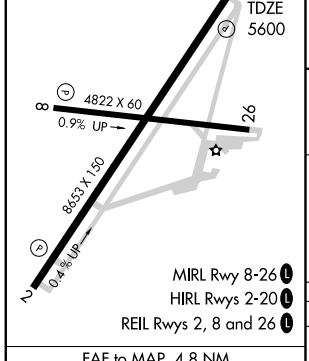
Circling not authorized east of Rwy 2-20.
Inoperative table does not apply.

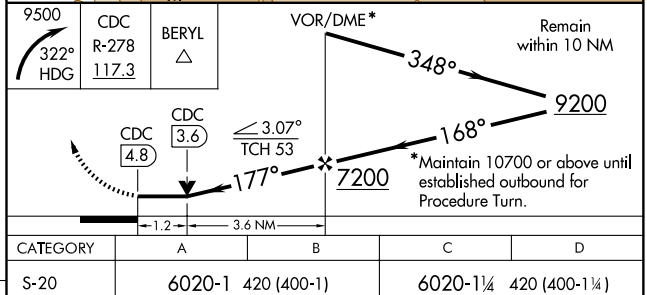
MALSR

MISSED APPROACH: Climbing right turn to 9500 via 322° heading and CDC R-278 to BERYL INT/ CDC 16.5 DME and hold.

ASOS	CEDAR CITY RADIO	UNICOM
119.025	122.6 255.4	123.0 (CTAF) L







FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
S-20	6020-1 420 (400-1)		6020-1¼ 420 (400-1¼)	
CIRCLING	6020-1 398 (400-1)	6080-1 458 (500-1)	6080-1½ 458 (500-1½)	6440-2¾ 818 (900-2¾)

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5500
166°	TDZE	4759
	Apt Elev	4759

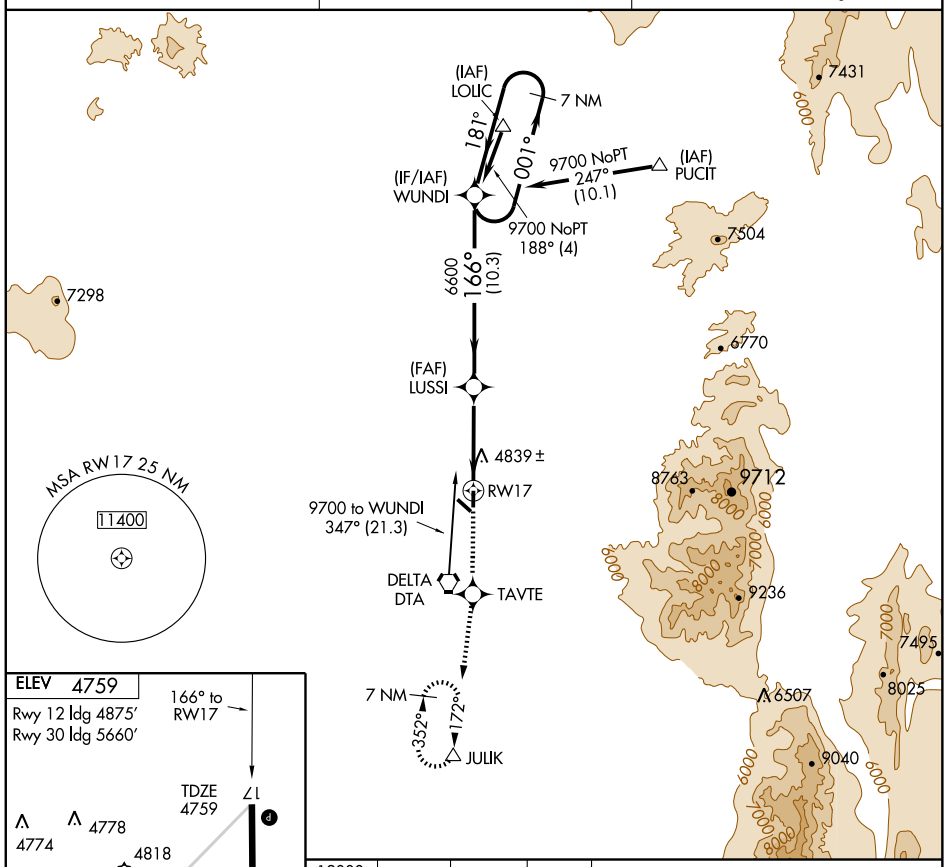
RNAV (GPS) RWY 17

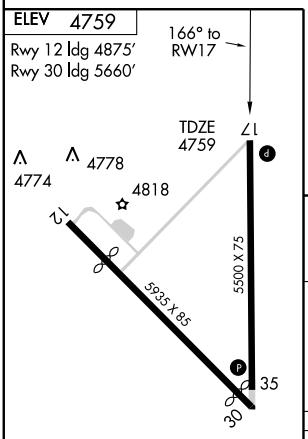
DELTA MUNI (DTA)

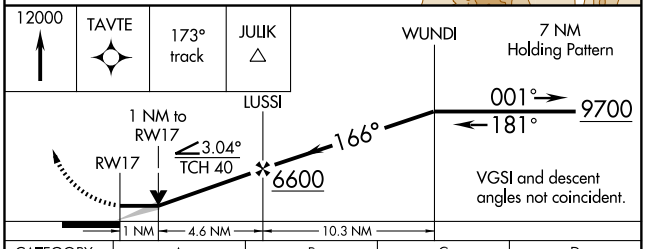
DME/DME RNP-0.3 NA. Circling to Rwy 30 NA at night. NA If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 12000 direct TAVTE and via 173 ° track to JULIK and hold, continue climb-in-hold to 12000.

AWOS-3	CEDAR CITY RADIO	UNICOM
127.75	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	5100-1 341 (400-1)			
CIRCLING	5140-1 381 (400-1)	5220-1 461 (500-1)	5220-1½ 461 (500-1½)	5320-2 561 (600-2)

MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

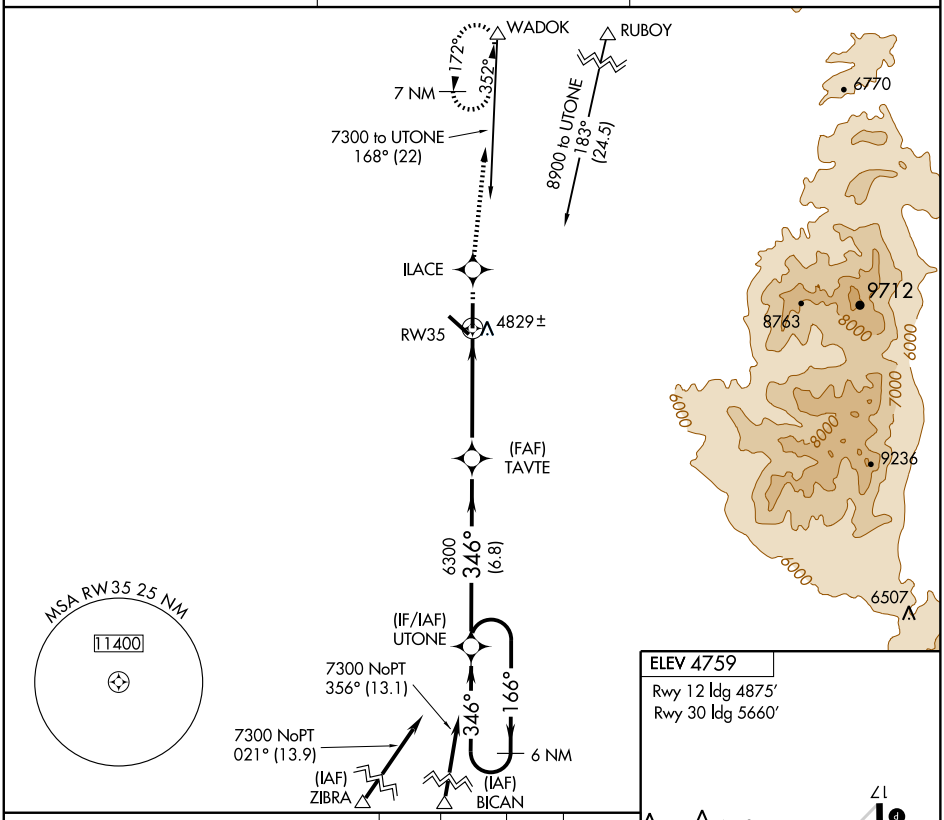
APP CRS	Rwy Idg	5500
346°	TDZE	4758
	Apt Elev	4759

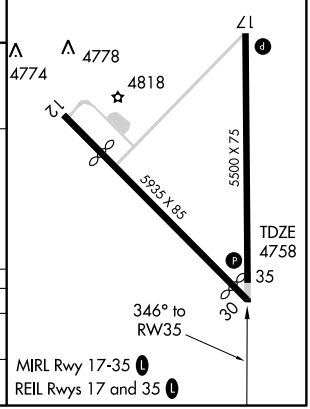
RNAV (GPS) RWY 35
DELTA MUNI (DTA)

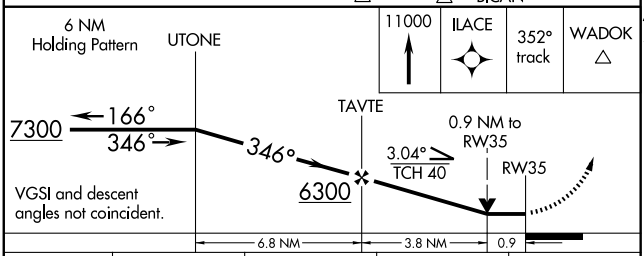
DME/DME RNP-0.3 NA.
NA Circling to Rwy 30 NA at night.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 11000 direct ILACE and via 352° track to WADOK and hold, continue climb-in-hold to 11000.

AWOS-3	CEDAR CITY RADIO	UNICOM
127.75	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	5080-1 322 (400-1)			
CIRCLING	5140-1 381 (400-1)	5220-1 461 (500-1)	5220-1½ 461 (500-1½)	5320-2 561 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

DELTA, UTAH

AL-113 (FAA)

VORTAC DTA	APP CRS	Rwy Idg	5500
116.1	166°	TDZE	4759
Chan 108		Apt Elev	4759

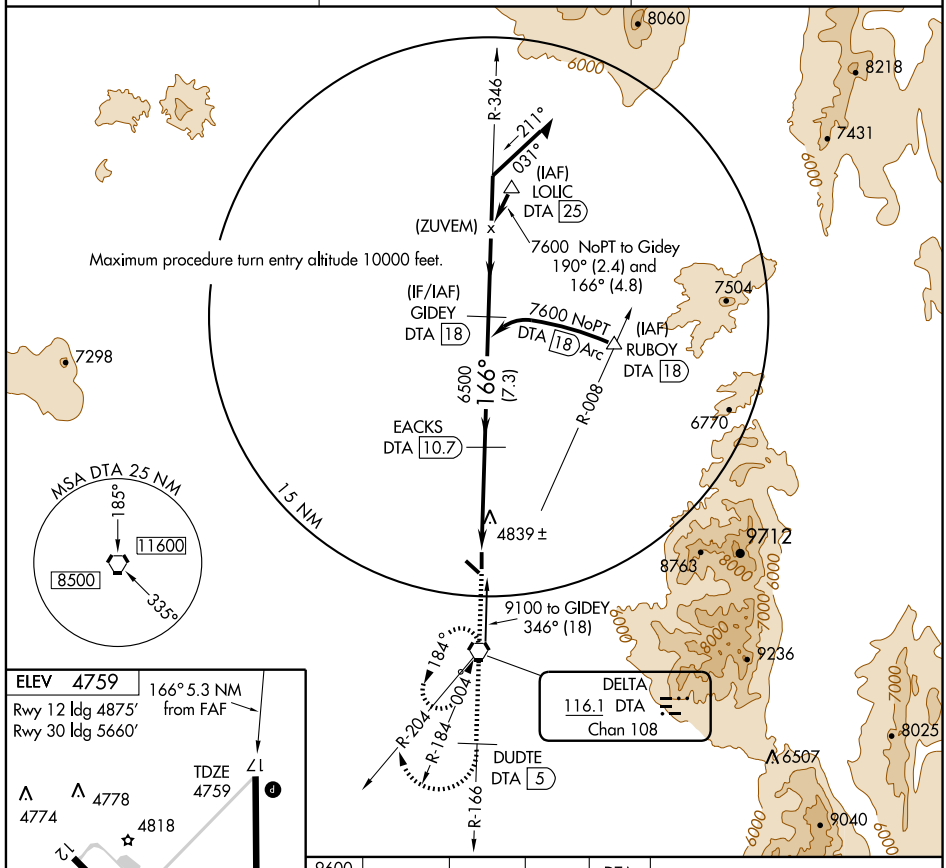
VOR/DME RWY 17

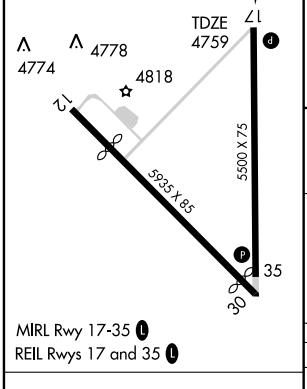
DELTA MUNI (DTA)

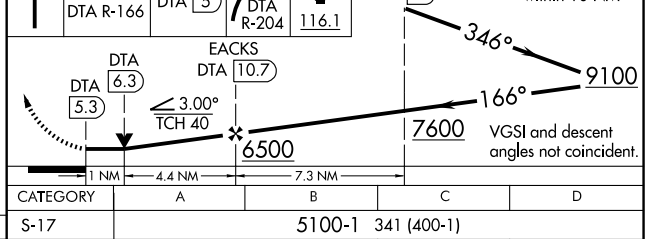
Circling to Rwy 30 NA at night.
NA If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 9600 via DTA VORTAC R-346 and R-166 to DUDTE/5 DME and climbing right turn via DTA VORTAC R-204 to DTA VORTAC and hold, continue climb-in-hold to 9600.

AWOS-3	CEDAR CITY RADIO	UNICOM
127.75	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-17	5100-1 341 (400-1)			
CIRCLING	5140-1 381 (400-1)	5220-1 461 (500-1)	5220-1½ 461 (500-1½)	5320-2 561 (600-2)

Knots	60	90	120	150	180
Min:Sec					

SW-4, 22 OCT 2009 to 19 NOV 2009

DELTA, UTAH

AL-113 (FAA)

VORTAC DTA	APP CRS	Rwy Idg	5500
116.1	346°	TDZE	4758
Chan 108		Apt Elev	4759

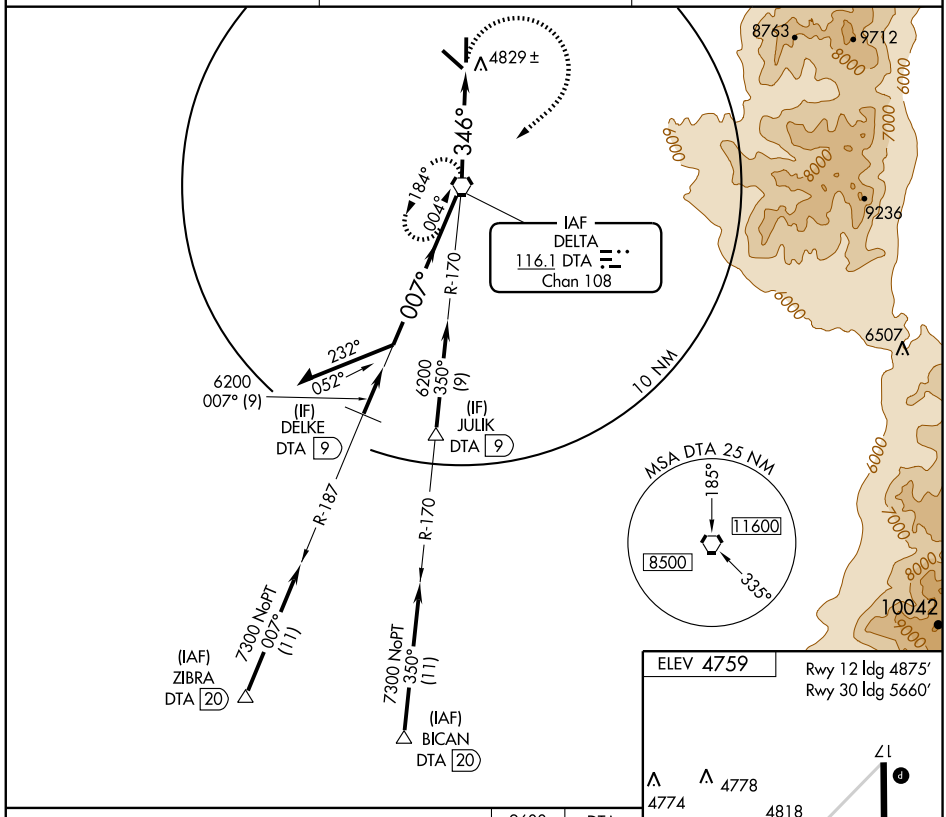
VOR RWY 35

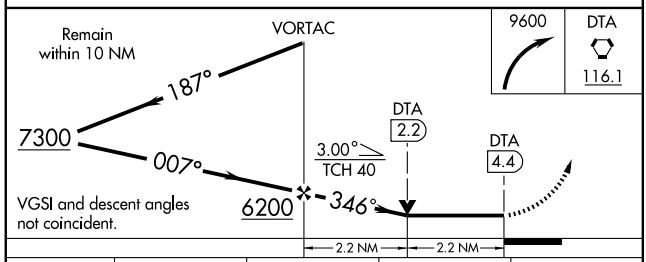
DELTA MUNI (DTA)

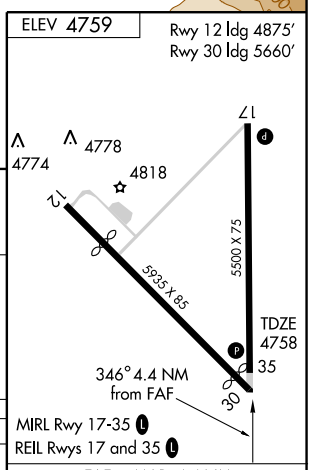
Circling to Rwy 30 NA at night.
If local altimeter setting not received, procedure, NA.

MISSED APPROACH: Climbing right turn to 9600 direct DTA VORTAC and hold, continue climb-in-hold to 9600.

AWOS-3	CEDAR CITY RADIO	UNICOM
127.75	122.1R	122.8 (CTAF)







CATEGORY	A	B	C	D
S-35	5500-1 742 (800-1)	5500-1¼ 742 (800-1¼)	5500-2¼ 742 (800-2¼)	5500-2½ 742 (800-2½)
CIRCLING	5500-1 741 (800-1)	5500-1¼ 741 (800-1¼)	5500-2¼ 741 (800-2¼)	5500-2½ 741 (800-2½)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

SW-4, 22 OCT 2009 to 19 NOV 2009

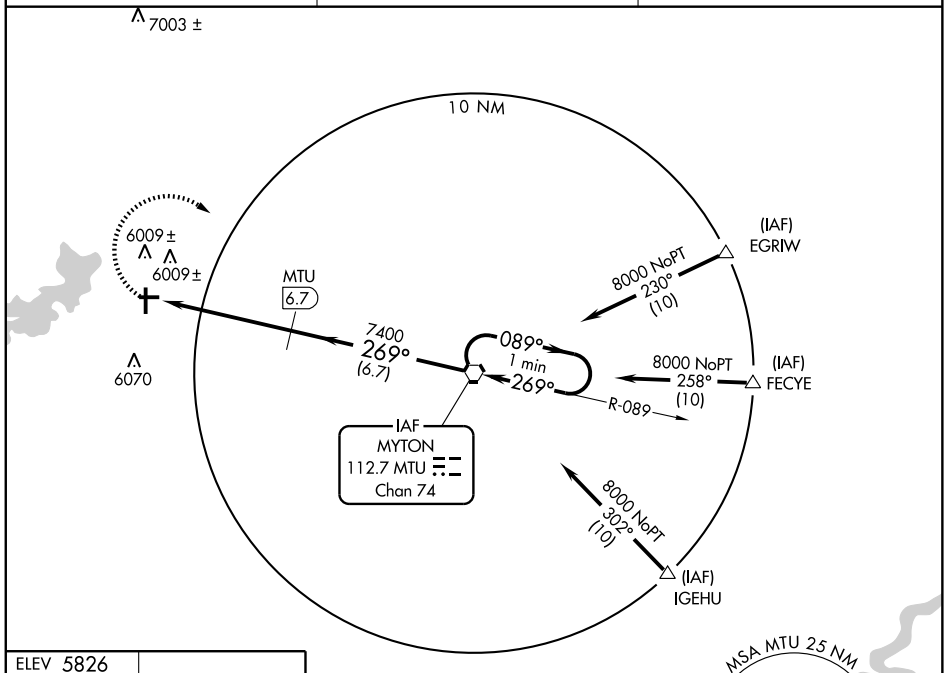
VORTAC MTU 112.7 Chan 74	APP CRS 269°	Rwy Idg N/A TDZE N/A Apt Elev 5826

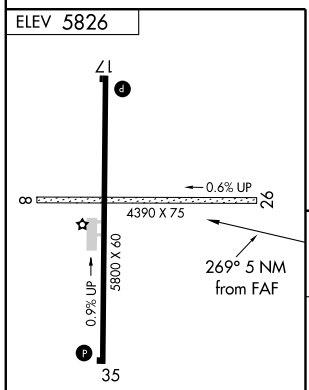
VOR/DME-A
DUCHESNE MUNI (U69)

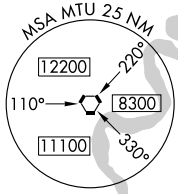
T NA — Use Vernal altimeter setting; when not received, procedure not authorized.

MISSED APPROACH: Climbing right turn to 8000 direct MTU VORTAC and hold.

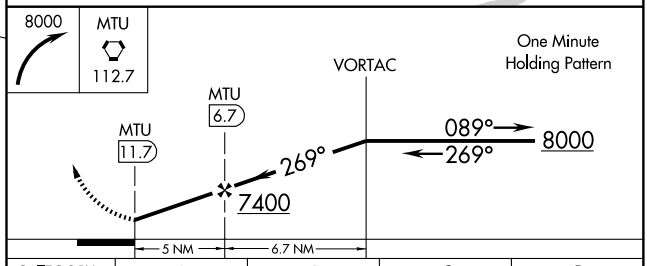
VERNAL ASOS	CEDAR CITY RADIO	UNICOM
135.175	122.1R	122.8 (CTAF) L







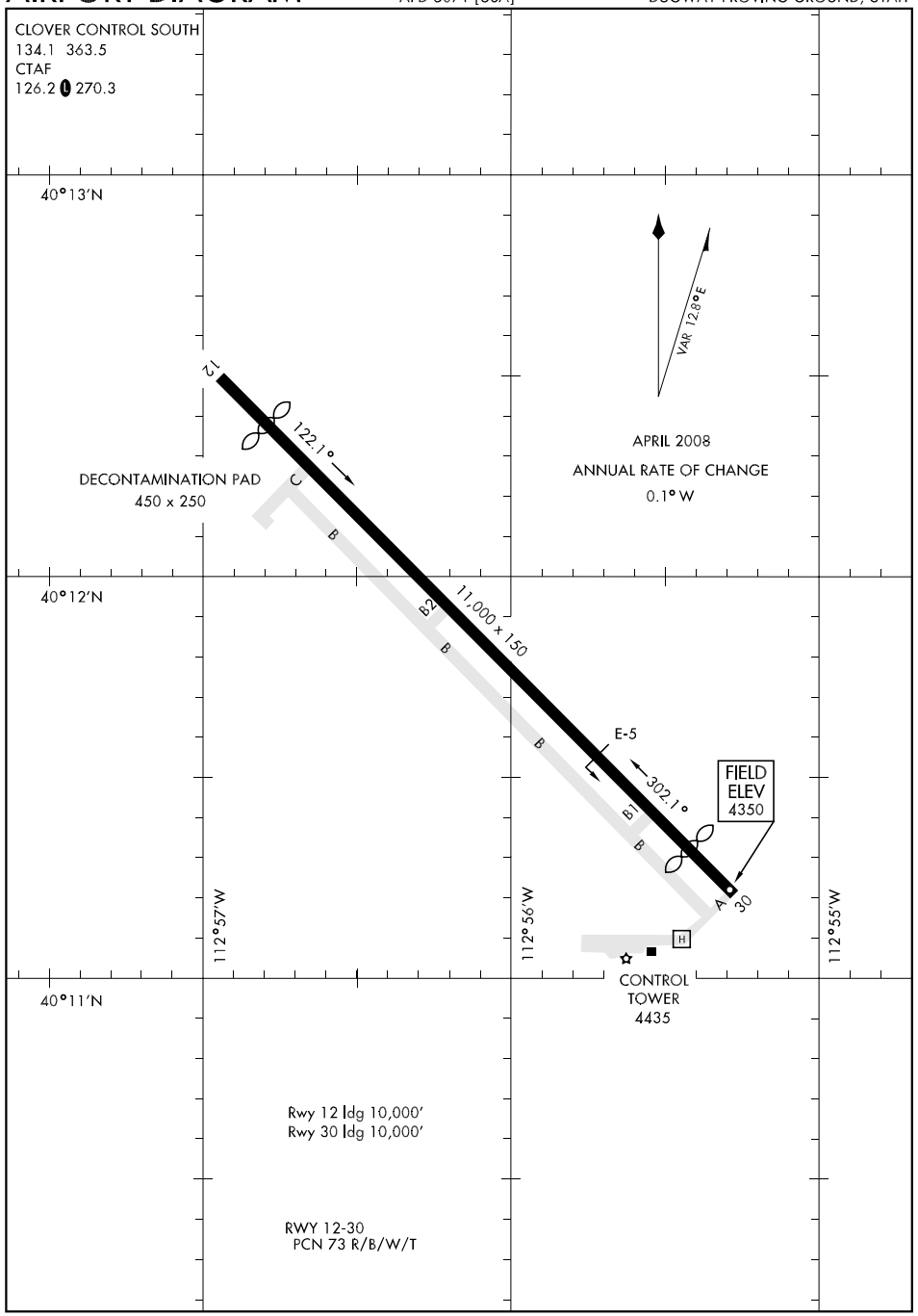
7088



REIL Rwys 17 and 35 L
MIRL Rwy 17-35 L

CATEGORY	A	B	C	D
CIRCLING	6660-1 834 (900-1)	6660-1¼ 834 (900-1¼)	6660-2½ 834 (900-2½)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009



SW-4, 22 OCT 2009 to 19 NOV 2009

COPTER NDB 080°

NDB DPG 284	APCH CRS 080°	Rwy ldg 10,000 TDZE N/A Arpt Elev 4350	AL-5071 [USA]	MICHAEL AAF (KDPG)

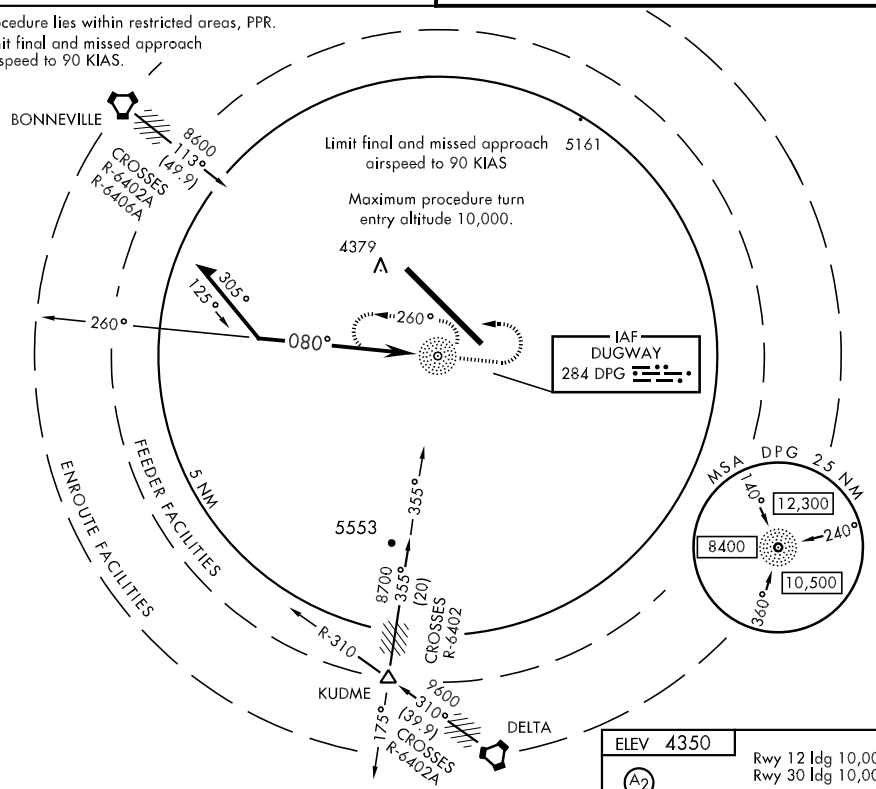
▼ ▲ NA

* Obtain local altimeter setting on CTAF; when not received, use Wendover altimeter setting.

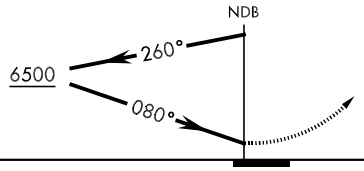
MISSED APPROACH: Climbing left turn to 6500 in DPG NDB holding pattern.

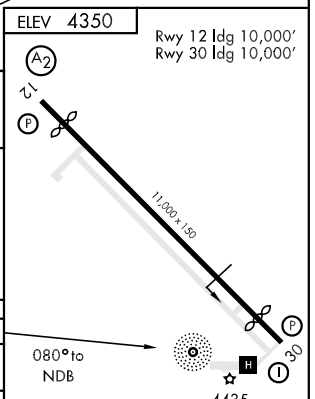
CLOVER CON	CTAF
134.1 363.5	126.2 (L) 270.3

Procedure lies within restricted areas, PPR.
Limit final and missed approach airspeed to 90 KIAS.



Remain within 5 NM of DPG NDB





CATEGORY	COPTER		
H-080°	5160-1	809	(900-1)
* WENDOVER ALTIMETER SETTING MINIMUMS			
H-080°	5320-1	969	(1000-1)

NDB-A

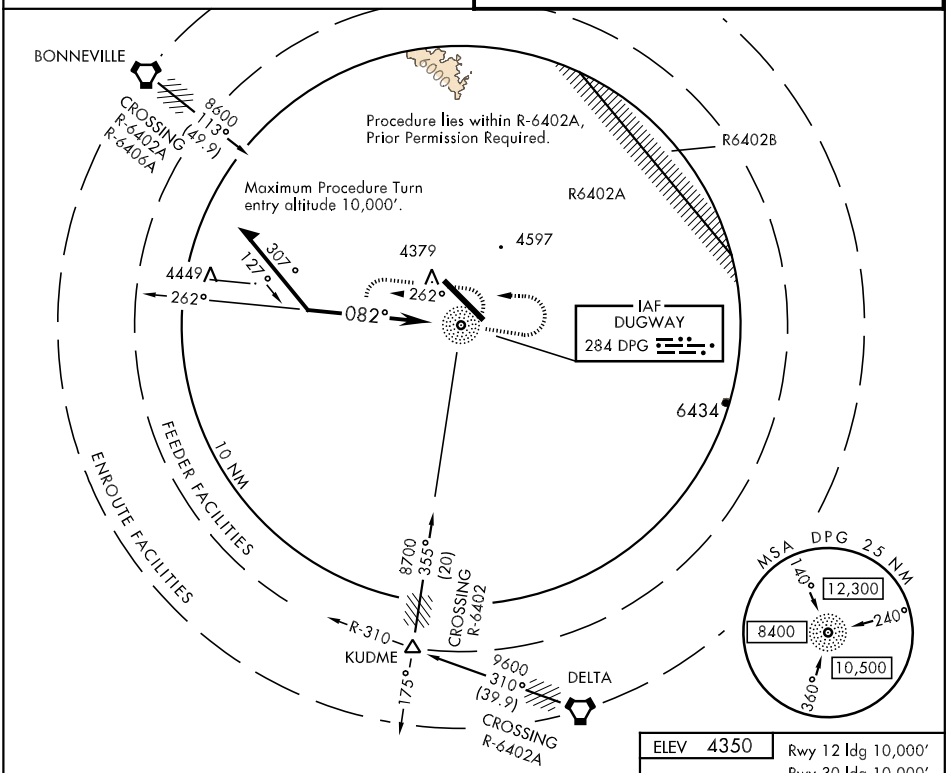
NDB DPG 284	APCH CRS 082°	Rwy ldg 10,000 TDZE N/A Arpt Elev 4350	AL-5071 [USA]	MICHAEL AAF (KDPG)

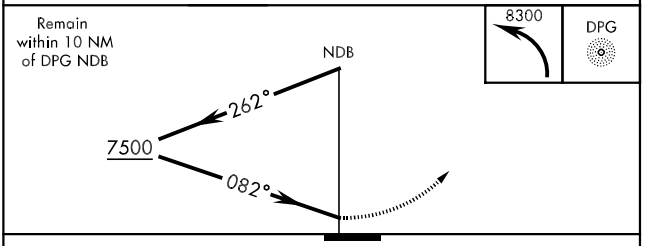
T
A NA

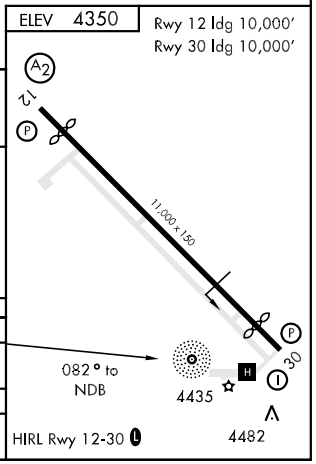
* Obtain local altimeter setting on CTAF; when not received, use Wendover altimeter setting.

MISSED APPROACH: Climbing left turn to 8300 in DPG NDB holding pattern.

CLOVER CON	CTAF
134.1 363.5	126.2 L 270.3







CATEGORY	A	B	C	D
CIRCLING	6000-1¼ 1649 (1700-1¼)	6000-1½ 1649 (1700-1½)	6000-3 1649 (1700-3)	
* WENDOVER ALTIMETER SETTING MINIMUMS				
CIRCLING	6160-1¼ 1809 (1900-1¼)	6160-1½ 1809 (1900-1½)	6160-3 1809 (1900-3)	

SW-4, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) Y RWY 12

APCH CRS	Rwy ldg	TDZE	Arpt Elev
122°	10,000	4342	4350

AL-5071 [USA]

MICHAEL AAF (KDPG)

T
A NA

* Obtain local altimeter setting on CTAF; when not received, use Wendover altimeter setting.

SALSF

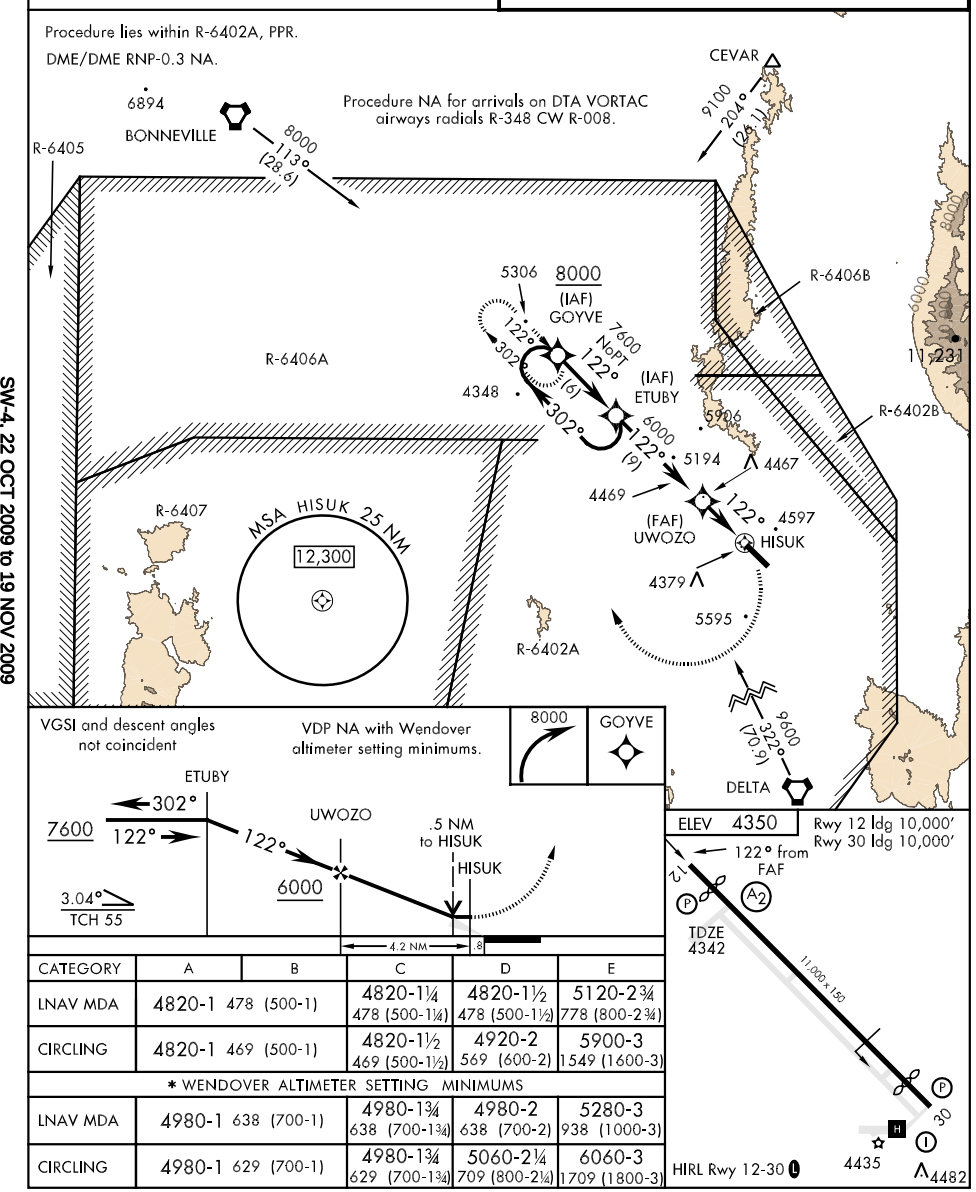
MISSED APPROACH: Climbing right turn to 8000 direct GOYVE and hold.

CLOVER CON	CTAF
134.1 363.5	126.2 270.3

Procedure lies within R-6402A, PPR.

DME/DME RNP-0.3 NA.

Procedure NA for arrivals on DTA VORTAC airways radials R-348 CW R-008.



CATEGORY	A	B	C	D	E
LNAV MDA	4820-1 478 (500-1)		4820-1¼ 478 (500-1¼)	4820-1½ 478 (500-1½)	5120-2¾ 778 (800-2¾)
CIRCLING	4820-1 469 (500-1)		4820-1½ 469 (500-1½)	4920-2 569 (600-2)	5900-3 1549 (1600-3)
* WENDOVER ALTIMETER SETTING MINIMUMS					
LNAV MDA	4980-1 638 (700-1)		4980-1¾ 638 (700-1¾)	4980-2 638 (700-2)	5280-3 938 (1000-3)
CIRCLING	4980-1 629 (700-1)		4980-1¾ 629 (700-1¾)	5060-2¼ 709 (800-2¼)	6060-3 1709 (1800-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) Z RWY 12

APCH CRS	Rwy ldg	10,000
122°	TDZE	4342
	Arpt Elev	4350

AL-5071 [USA]

MICHAEL AAF (KDPG)

▼ ▲ NA

* Obtain local altimeter setting on CTAF; when not received, use Wendover altimeter setting.

SALSF (A2)

† MISSED APPROACH: Climbing right turn to 8000 direct GOYVE and hold.

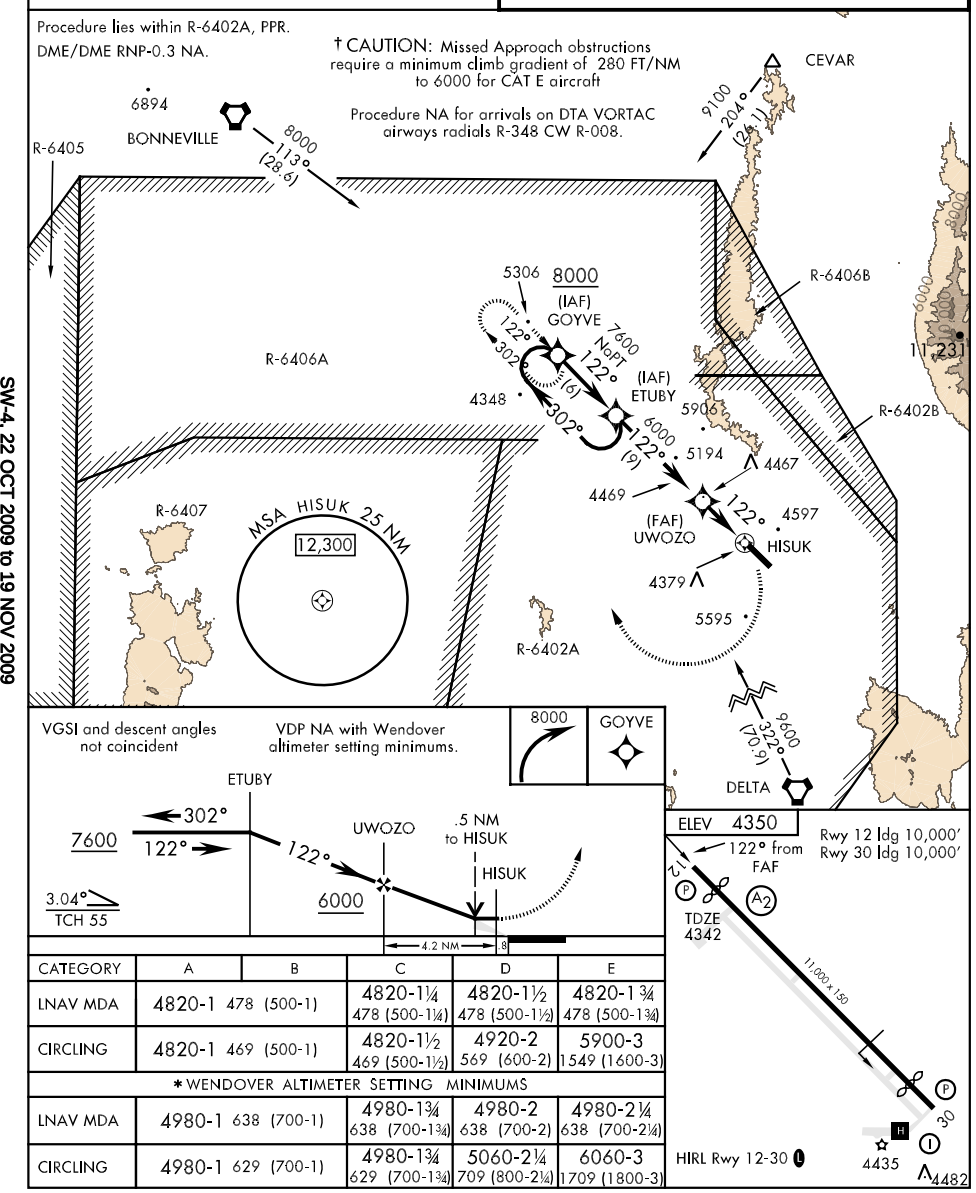
CLOVER CON	CTAF
134.1 363.5	126.2 (L) 270.3

Procedure lies within R-6402A, PPR.

DME/DME RNP-0.3 NA.

† CAUTION: Missed Approach obstructions require a minimum climb gradient of 280 FT/NM to 6000 for CAT E aircraft

Procedure NA for arrivals on DTA VORTAC airways radials R-348 CW R-008.



CATEGORY	A	B	C	D	E
LNAV MDA	4820-1 478 (500-1)		4820-1¼ 478 (500-1¼)	4820-1½ 478 (500-1½)	4820-1¾ 478 (500-1¾)
CIRCLING	4820-1 469 (500-1)		4820-1½ 469 (500-1½)	4920-2 569 (600-2)	5900-3 1549 (1600-3)
*WENDOVER ALTIMETER SETTING MINIMUMS					
LNAV MDA	4980-1 638 (700-1)		4980-1¾ 638 (700-1¾)	4980-2 638 (700-2)	4980-2¼ 638 (700-2¼)
CIRCLING	4980-1 629 (700-1)		4980-1¾ 629 (700-1¾)	5060-2¼ 709 (800-2¼)	6060-3 1709 (1800-3)

Amdt 1 09089

RNAV (GPS) Z RWY 12

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN Y RWY 12

TACAN	APCH CRS	Rwy Idg	TDZE	Arpt Elev
MIJ Chan 79	117°	10,000	4342	4350

AL-5071 [USA]

MICHAEL AAF (KDPG)

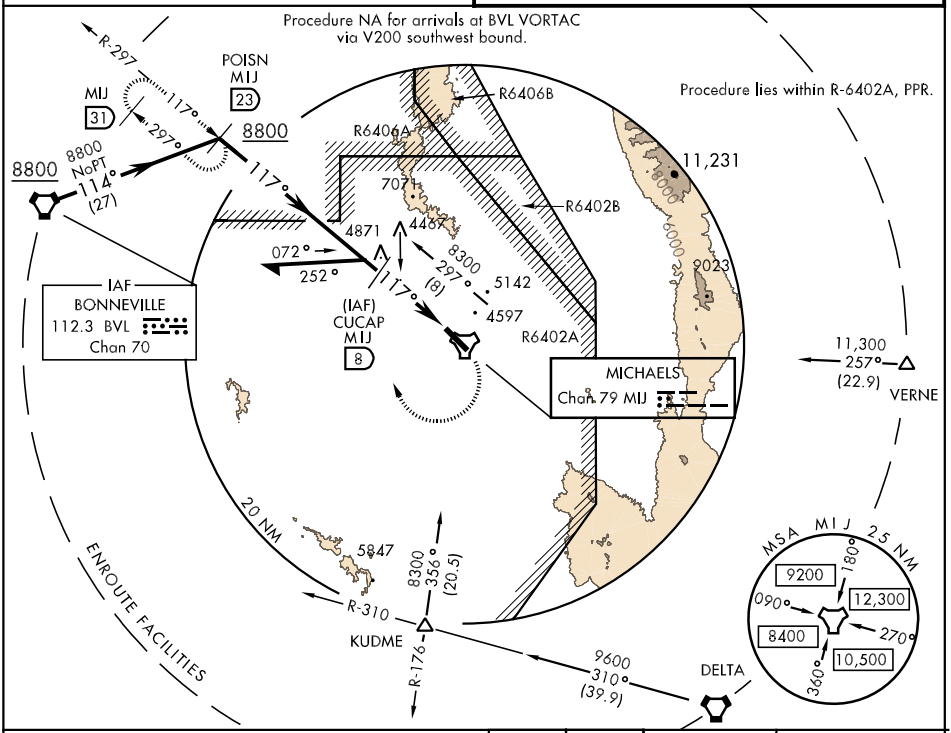
▼ NA

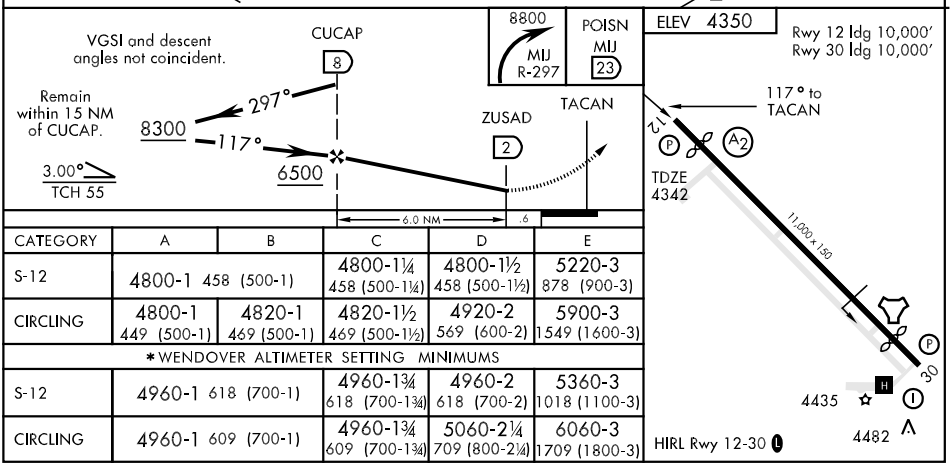
* Obtain local altimeter setting on CTAF; when not received, use Wendover altimeter setting.

SALSF A2

MISSED APPROACH: Climbing right turn to 8800 via MIJ TACAN R-297 to POISN/23 DME and hold.

CLOVER CON	CTAF
134.1 363.5	126.2 (L) 270.3





CATEGORY	A	B	C	D	E
S-12	4800-1 458 (500-1)		4800-1¼ 458 (500-1¼)	4800-1½ 458 (500-1½)	5220-3 878 (900-3)
CIRCLING	4800-1 449 (500-1)	4820-1 469 (500-1)	4820-1½ 469 (500-1½)	4920-2 569 (600-2)	5900-3 1549 (1600-3)
*WENDOVER ALTIMETER SETTING MINIMUMS					
S-12	4960-1 618 (700-1)		4960-1¾ 618 (700-1¾)	4960-2 618 (700-2)	5360-3 1018 (1100-3)
CIRCLING	4960-1¾ 609 (700-1)		4960-1¾ 609 (700-1¾)	5060-2¼ 709 (800-2¼)	6060-3 1709 (1800-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN Z RWY 12

TACAN Chan	MIJ 79	APCH CRS	117°	Rwy ldg TDZE Arpt Elev	10,000 4342 4350

AL-5071 [USA]

MICHAEL AAF (KDPG)

T NA

* Obtain local altimeter setting on CTAF; when not received, use Wendover altimeter setting.

SALSF (A2)

† MISSED APPROACH: Climbing right turn to 8800 via MIJ TACAN R-297 to POISN/23 DME and hold.

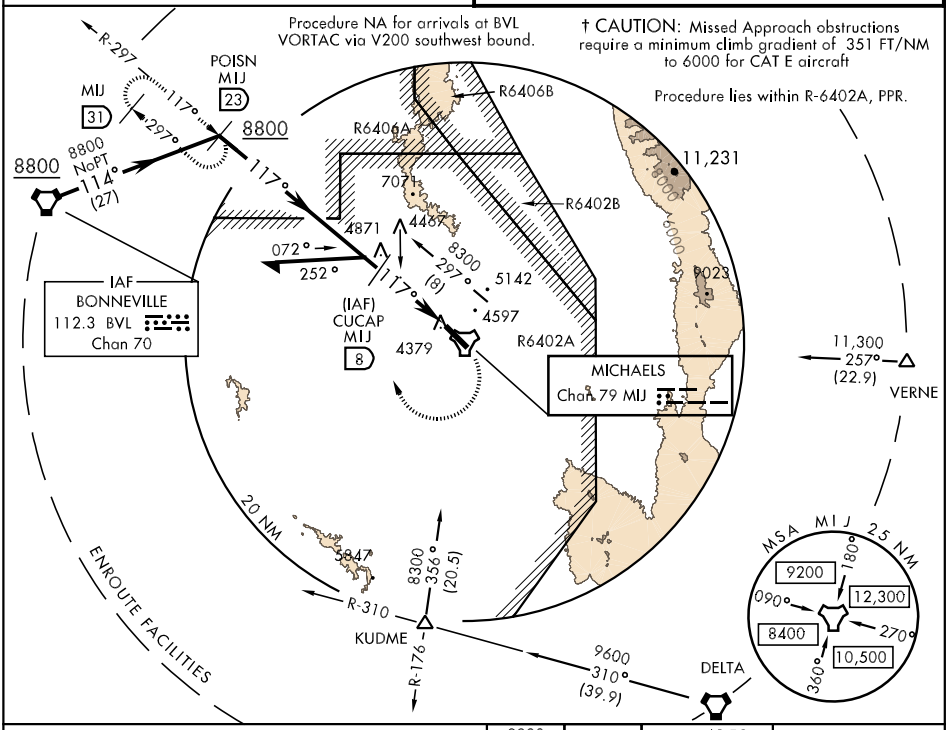
CLOVER CON
134.1 363.5

CTAF
126.2 270.3

Procedure NA for arrivals at BVL VORTAC via V200 southwest bound.

† CAUTION: Missed Approach obstructions require a minimum climb gradient of 351 FT/NM to 6000 for CAT E aircraft

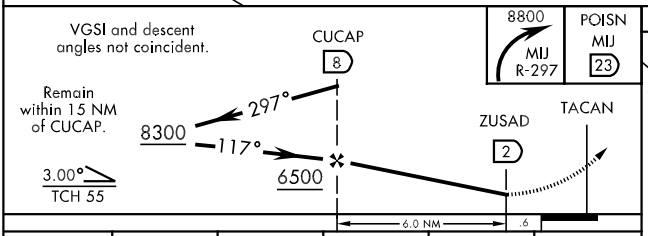
Procedure lies within R-6402A, PPR.

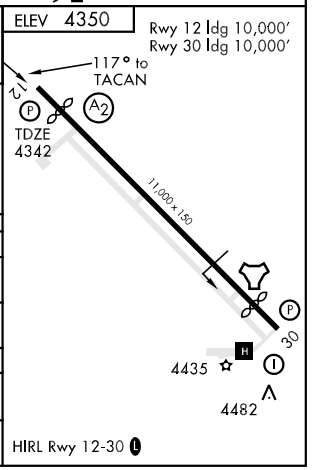


SW-4, 22 OCT 2009 to 19 NOV 2009

VGSI and descent angles not coincident.

Remain within 15 NM of CUCAP.



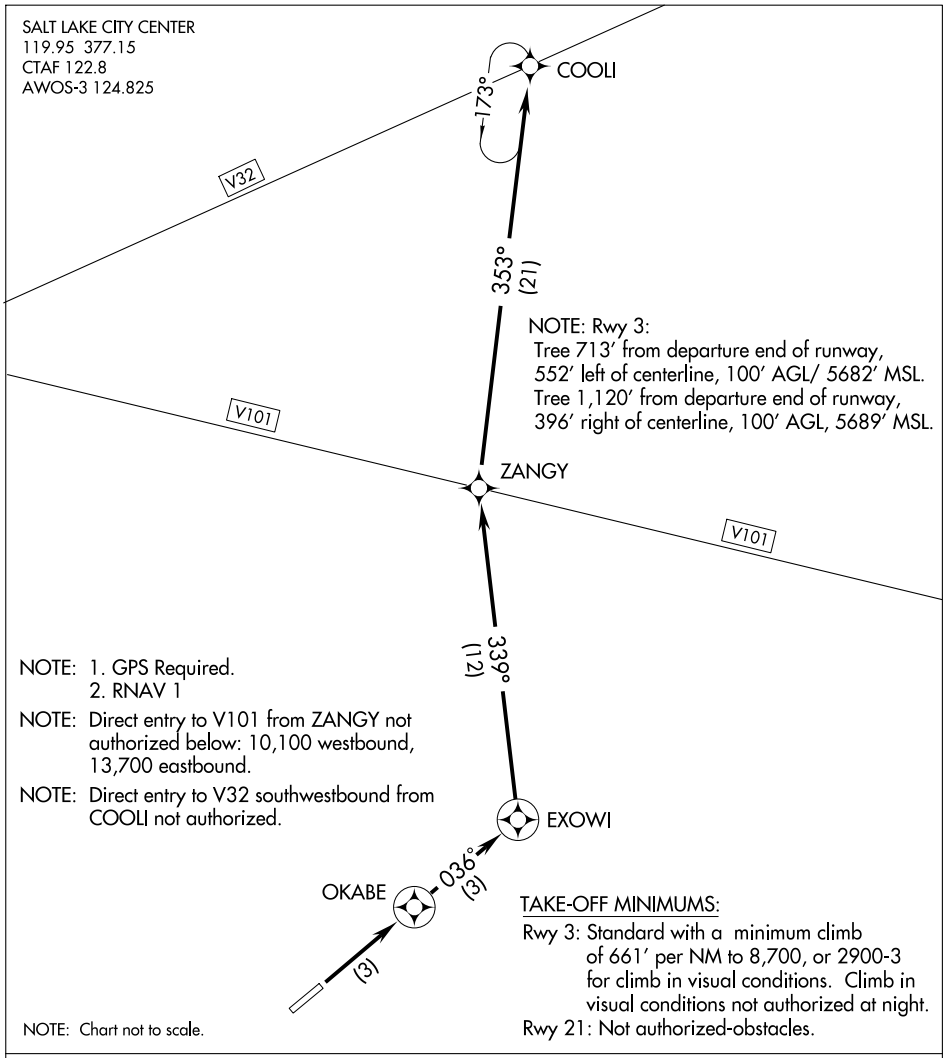


CATEGORY	A	B	C	D	E
S-12	4800-1 458 (500-1)		4800-1¼ 458 (500-1¼)	4800-1½ 458 (500-1½)	
CIRCLING	4800-1 449 (500-1)	4820-1 469 (500-1)	4820-1½ 469 (500-1½)	4920-2 569 (600-2)	5900-3 1549 (1600-3)
* WENDOVER ALTIMETER SETTING MINIMUMS					
S-12	4960-1 618 (700-1)		4960-1¾ 618 (700-1¾)	4960-2 618 (700-2)	4960-2¼ 618 (700-2¼)
CIRCLING	4960-1 609 (700-1)		4960-1¾ 609 (700-1¾)	5060-2¼ 709 (800-2¼)	6060-3 1709 (1800-3)

HEBER CITY MUNI-RUSS MCDONALD FIELD (36U)

COOLI ONE DEPARTURE (RNAV) (OBSTACLE)

HEBER CITY, UTAH



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climb to 12,000 (or assigned altitude) direct OKABE and 036° track to EXOWI, Then via depicted route to COOLI, thence...

or climb in visual conditions to cross departure end of runway northeastbound at or above 8,400 direct OKABE and 036° track to EXOWI, then via depicted route to COOLI, thence...

....climb in holding (if required) at COOLI before proceeding via assigned route.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
176°	TDZE	N/A
	Apt Elev	5637

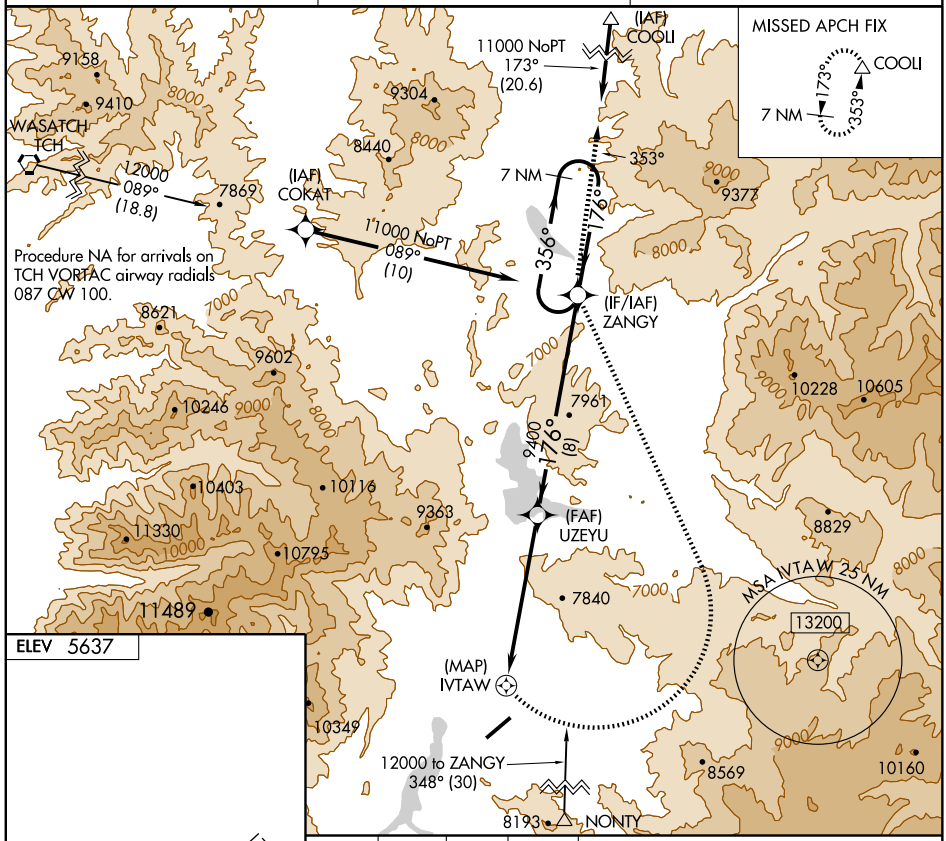
RNAV (GPS) -A

HEBER CITY MUNI-RUSS MCDONALD FIELD (36U)

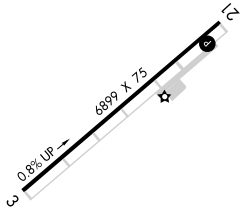
T
ANA When local altimeter setting not received, procedure NA.
Circling NA south of Rwy 3-21.
DME/DME RNP-0.3 NA.
Procedure NA at night.

MISSED APPROACH: Climbing left turn to 12000 direct ZANGY and via track 353° to COOLI and hold.

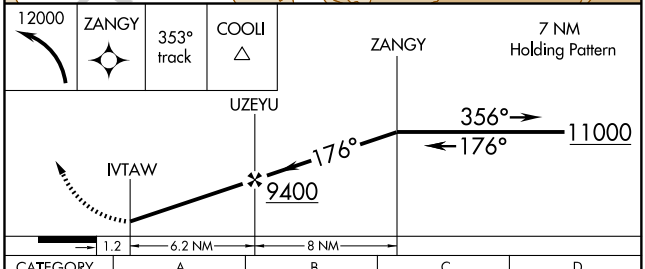
AWOS-3	SALT LAKE CITY CENTER	UNICOM
124.825	119.95 377.15	122.8 (CTAF) L



ELEV 5637



MIRL Rwy 3-21 L



CATEGORY	A	B	C	D
CIRCLING	8280-1½	2643 (2700-1½)	NA	

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	N/A
194°	TDZE	N/A
	Apt Elev	5909

RNAV (GPS) -C

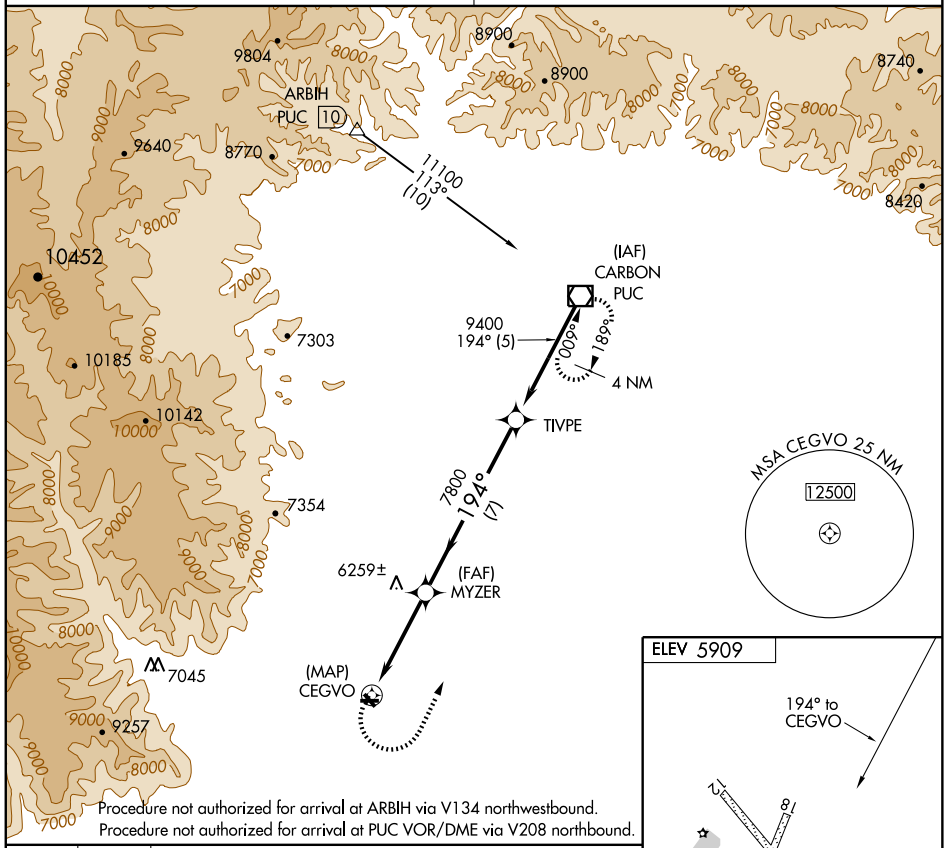
HUNTINGTON MUNI (69V)

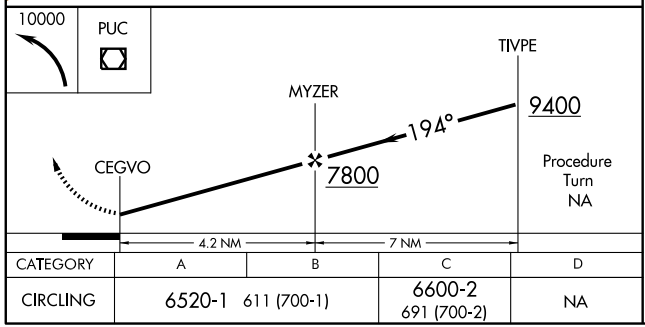
T
NA

Use Carbon County Rgnl/Buck Davis Field altimeter setting; when not received, procdure NA.
Procedure NA at night.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

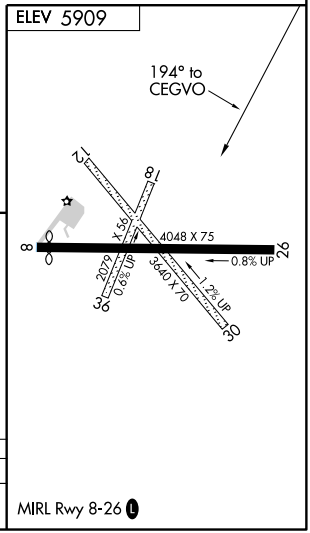
MISSED APPROACH: Climbing left turn to 10000 direct PUC VOR/DME and hold.

SALT LAKE CENTER	UNICOM
133.9 370.85	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	6520-1 611 (700-1)		6600-2 691 (700-2)	NA



MIRL Rwy 8-26 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME PUC 115.5 Chan 102	APP CRS 194°	Rwy Idg N/A TDZE N/A Apt Elev 5909

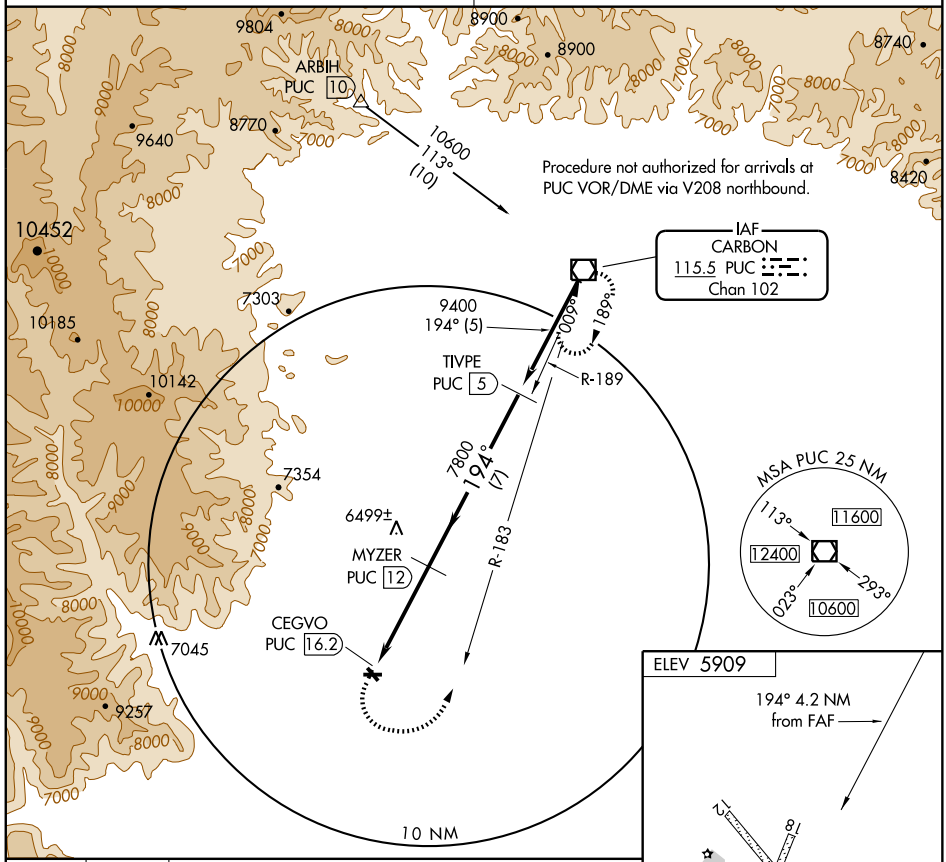
VOR/DME -B

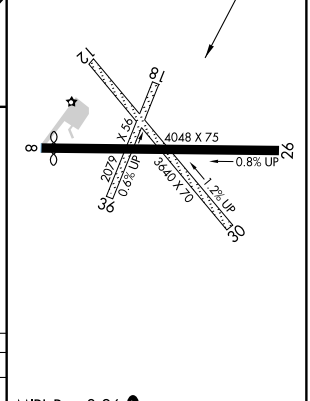
HUNTINGTON MUNI (69V)

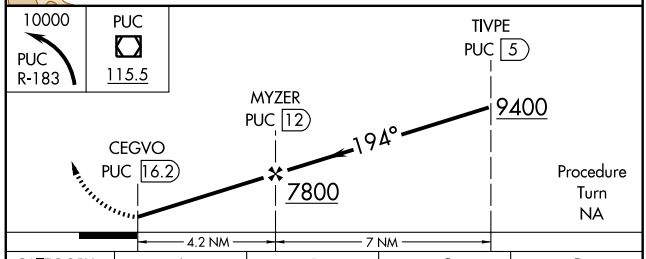
Use Carbon County Rgnl/Buck Davis Field altimeter setting; when not received, procedure not authorized. Circling not authorized at night to Rwy 18, 36, 12, and 30.

MISSED APPROACH: Climbing left turn to 10000 via PUC VOR/DME R-183 to PUC VOR/DME and hold.

SALT LAKE CENTER	UNICOM
133.9 370.85	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6620-1 711 (800-1)		6620-2 711 (800-2)	NA

MIRL Rwy 8-26 L

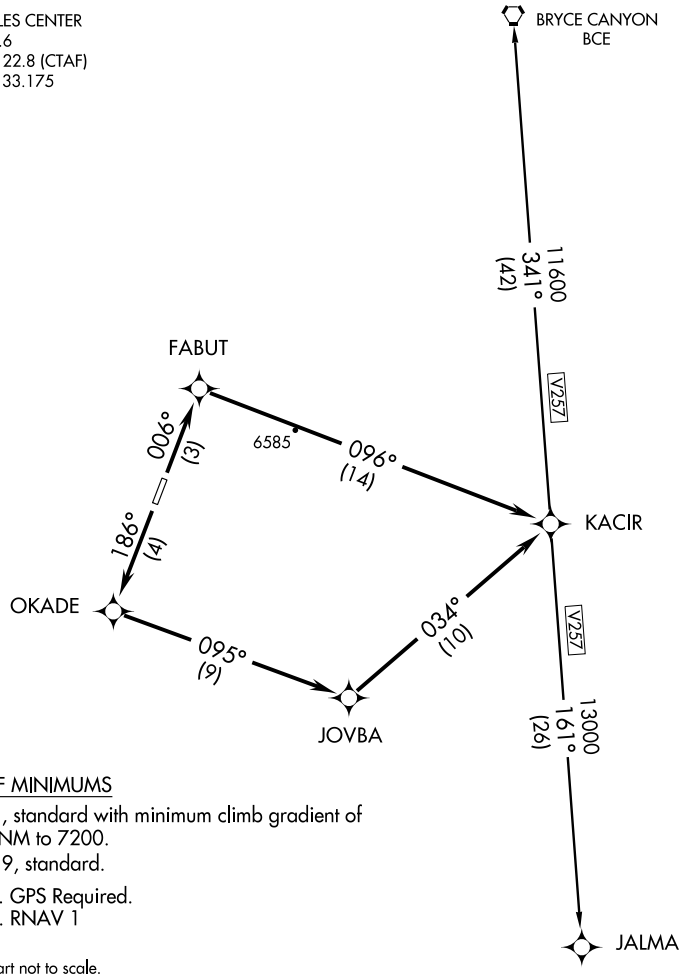
SW-4, 22 OCT 2009 to 19 NOV 2009

KACIR ONE DEPARTURE (RNAV)

SL-9072 (FAA)

KANAB MUNI (KNB)
KANAB, UTAH

LOS ANGELES CENTER
124.2 343.6
UNICOM 122.8 (CTAF)
AWOS-3 133.175



TAKE-OFF MINIMUMS

Runway 1, standard with minimum climb gradient of 316' per NM to 7200.

Runway 19, standard.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1: Climb via 006° course to FABUT WP, then via 096° course to KACIR WP, then via assigned transition/altitude.

TAKE-OFF RUNWAY 19: Climb via 186° course to OKADE WP, then via 095° course to JOVBA WP, then via 034° to KACIR WP, then via assigned transiton/altitude.

BRYCE CANYON TRANSITION (KACIR1.BCE)

JALMA TRANSITION (KACIR1.JALMA)

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6193
006°	TDZE	4831
	Apt Elev	4868

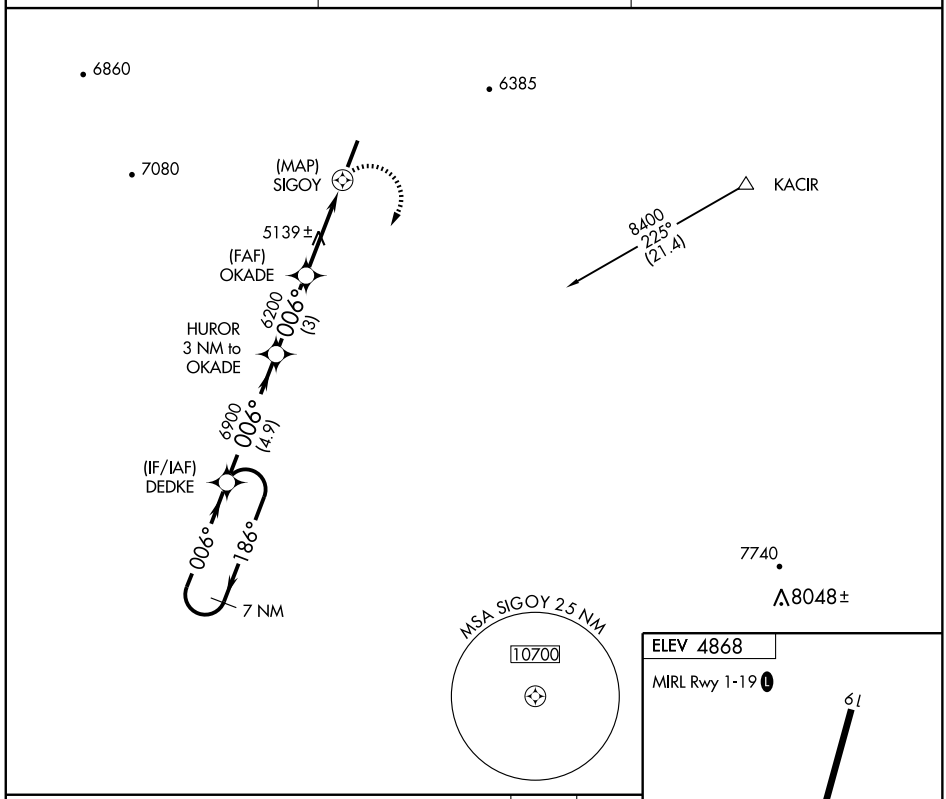
RNAV (GPS) RWY 1
KANAB MUNI (KNB)

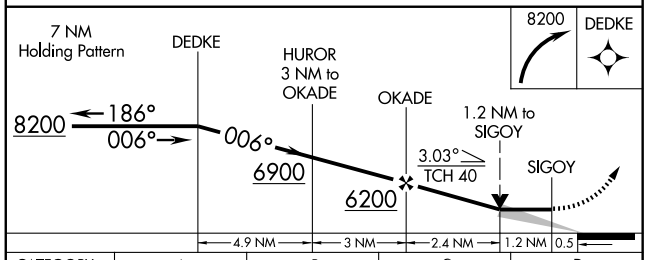
T A

DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 8200 direct DEDKE and hold.

AWOS-3	LOS ANGELES CENTER	UNICOM
133.175	124.2 343.6	122.8 (CTAF) L

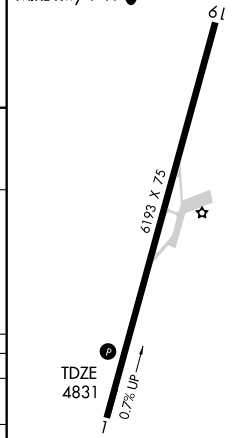




CATEGORY	A	B	C	D
LNAV MDA	5400-1 569 (600-1)		5400-1½ 569 (600-1½)	NA
CIRCLING	5600-1 732 (800-1)	5960-1½ 1092 (1100-1½)	6200-3 1332 (1400-3)	NA

ELEV 4868

MIRL Rwy 1-19 L



SW-4, 22 OCT 2009 to 19 NOV 2009

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

BATTLE MOUNTAIN, NV

BATTLE MOUNTAIN (BAM)
AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ a min climb of 282' per NM to 7300 or 4700-3 for climb in visual conditions. **Rwy 12,** std. w/ a min climb of 386' per NM to 7600 or 4700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 8200 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 12,** climb heading 122° and BAM R-076 to 10000 before proceeding on course or climb in visual conditions to cross Battle Mountain Airport at or above 9100 before proceeding on course. **Rwy 21,** climb direct BAM VORTAC and BAM R-205 to 10100 before proceeding on course. **Rwy 30,** climb heading 302° and BAM R-324 to 9100 before proceeding on course.

BEAVER, UT

BEAVER MUNI

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA-obstacles. **Rwys13, 31,** 2600-2¾ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13, 31,** climb in visual conditions to cross Beaver Muni Airport Northwestbound at or above 8300 then climb to 10100 via MLF VORTAC R-102 to MLF VORTAC. Do not exceed 210 KIAS until established on MLF VORTAC R-102.

NAME TAKE-OFF MINIMUMS

BLANDING, UT

BLANDING MUNI

TAKE-OFF MINIMUMS: **Rwy 35**, 800-1 or std. with a min. climb of 350 feet per NM to 6700.

DEPARTURE PROCEDURE: **Rwy 17,** turn left. **Rwy 35**, turn right climb to 9000 via heading 090° and DVC R-223 to DVC VORTAC, then continue climb on course to MEA.

BRIGHAM CITY, UT

BRIGHAM CITY (BMC)
AMDT 5 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34,** std. w/ min. climb of 325' per NM to 5300 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn heading 205° and OGD R-331 to OGD VORTAC. **Rwy 34,** climbing left turn heading 205° and OGD R-331 to OGD VORTAC or for climb in visual conditions: cross Brigham City airport southbound at or above 9200 then via OGD R-351 to OGD VORTAC.

NOTE: **Rwy 16,** poles 266' from DER, 558' right of centerline, 30' AGL/4258' MSL.

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL (IFP)
AMDT 1 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 370' per NM to 1800, or 1700-3 for climb in visual conditions. **Rwy 34,** std. w/ a min. climb of 495' per NM to 5500, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 164° and EED VORTAC R-334 to EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **Rwy 34,** climb via heading 344° to 1600, then climbing right turn direct EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **All Aircraft** climb in EED VORTAC holding pattern (East, right turn, 257° inbound) to cross EED VORTAC at or above MEA for direction of flight before proceeding on course.

NOTE: **Rwy 16,** multiple bushes beginning 3600' from DER, left of centerline, up to 12' AGL/1029' MSL. **Rwy 34,** multiple poles beginning 2211' from DER, right of centerline, up to 105' AGL/821' MSL.

CARSON CITY, NV

CARSON (CXP)
ORIG 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 9,** use JIMPA DEPARTURE.

CASA GRANDE, AZ

CASA GRANDE MUNI

DEPARTURE PROCEDURE: **Rwy 5**, right turn. **Rwy 23**, climb direct TFD VORTAC. Continue climb in holding pattern (SW, right turn, 048° inbound) to MEA for direction of flight.

CEDAR CITY, UT

CEDAR CITY RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 3500-3 or std. with a min. climb of 450' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 20, 26**, turn right. **Rwys 2,8**, turn left, climb direct to CDC VOR/DME, continue climb to 9000 via R-348. Northbound continue on course. All others reverse course, climb to cross CDC VOR/DME at or above MCA for direction of flight.

CHANDLER, AZ

CHANDLER MUNI

DEPARTURE PROCEDURE: **Rwy 4R,** climbing left turn heading 220°. **Rwys 22L,22R,** climbing left turn heading 190°. **All Aircraft,** continue climb via TFD R-350 to TFD VORTAC.

NOTE: **Rwy 4L,** multiple towers and buildings beginning 69' from departure end of runway, 397' left of centerline, up to 80' AGL/1319' MSL.

CHANDLER, AZ (CON'T)

STELLAR AIRPARK

DEPARTURE PROCEDURE: **Rwy 17**, turn left, climb via heading 150°. **Rwy 35**, turn right. **All aircraft** climb via TFD R-350 direct TFD VORTAC.

NOTE: **Rwy 17,** tower and signs beginning 574' from departure end of runway, 183' right of centerline, up to 50' AGL/1124' MSL. Sign 611' from departure end of runway, 365' left of centerline, 42' AGL/1214' MSL.

COLORADO CITY, AZ

COLORADO CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** NA.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwys 20, 29,** turn left. **All aircraft** climb to 7400 via the 160° bearing from AZC NDB then continue climb on course.

COOLIDGE, AZ

COOLIDGE MUNI

DEPARTURE PROCEDURE: **Rwys 5,35,** climbing left turn heading 280° to intercept TFD R-063, then via R-063 to TFD VORTAC before proceeding on course. **Rwy 17,** climbing right turn heading 240° to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course. **Rwy 23,** climb runway heading to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course.

DAVIS-MONTHAN AFB (KDMA)

TUCSON, AZ. 07186

Diverse departures not authorized, use published departure procedure for obstacle avoidance.

TAKE-OFF OBSTACLES: **Rwy 12**: Terrain 0' AGL/2707' MSL, 81' from DER, 500' left of centerline. Terrain 0' AGL/2707' MSL, 46' from DER, 512' left of centerline. Terrain 0' AGL/2707' MSL, 16' from DER, 500' left of centerline. Terrain 0' AGL/2706' MSL, 0' from DER, 200' left of centerline. **Rwy 30**: Terrain 0' AGL/2592' MSL, 0' from DER, 106' left of centerline. Terrain 0' AGL/2592' MSL, 7' from DER, 97' left of centerline. Terrain 0' AGL/2592' MSL, 0' from DER, 484' right of centerline. Terrain 0' AGL/2592' MSL, 13' from DER, 493' right of centerline. Vehicle 11' AGL/2615' MSL, 1017' from DER, 477' left of centerline. Terrain 0' AGL/2612' MSL, 237' from DER, 590' left of centerline.

DELTA, UT

DELTA MUNI

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 412' per NM to 6600, or 1800-3 for climb in visual conditions. Climb in visual conditions NA at night. **Rwy 12,** NA-terrain. **Rwy 30,** NA-airspace.

DEPARTURE PROCEDURE: **Rwy 17,** climb via DTA VORTAC R-347 to DTA VORTAC, or climb in visual conditions to cross departure end of runway southbound at or above 6400, then via DTA VORTAC R-347 to DTA VORTAC, thence...**Rwy 35,** climb via heading 346° to 5800, then climbing left turn via heading 180° and DTA VORTAC R-310 to DTA VORTAC, thence...

...climb in holding pattern (hold south, left turn, 004° inbound) to cross DTA VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 17,** trees 1598' from departure end of runway, 62' right of centerline, 60' AGL/4799' MSL.

DOUGLAS BISBEE, AZ

BISBEE- DOUGLAS INTL

DEPARTURE PROCEDURE: Climb to 5700 in holding pattern, right turn to 140 inbound DUG VORTAC, then assigned route. CAT C,D turbojets climb not to exceed 250 kts. to 8000.

DUCHESNE, UT

DUCHESNE MUNI

DEPARTURE PROCEDURE: Climb direct to MTU VORTAC to depart at or above 7200 eastbound or 10000 westbound.

ELKO, NV

ELKO RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. with a min. climb of 330' per NM to 8000. **Rwy 23**, 2500-3 or std. with a min. climb of 340' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 5**, climb runway heading to 6000, then climbing right turn direct BQU VOR/DME, then...

Rwy 23, (V32 Southwest) climb to 6000, then climbing left turn heading 200°to intercept BQU R-241 (V32).

Rwy 23, all others climb runway heading to 6000, then climbing left turn direct BQU VOR/DME, then...

climb in BQU VOR/DME holding pattern (S, left turns, 340° inbound) to cross BQU VOR/DME at the MEA/MCA/MOCA for direction of flight.

ELY, NV

ELY AIRPORT-YELLAND FIELD

TAKE-OFF MINIMUMS: **Rwys 30,36**, 3000-2 or std. with a min. climb of 700' per NM to 10000.

DEPARTURE PROCEDURE: **Rwys 12,30,36**, right turn; **Rwy 18**, straight ahead; intercept . ELY VOR/DME R-150 to 10000. Aircraft departing on V293 southeast climb on course to MEA. Departures V269 or V293 northbound, reverse course to the left, continue climb to cross ELY VOR/DME at or above 12000.

FALLON, NV

FALLON MUNI

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. with a min. climb of 350' per NM to 4300.

DEPARTURE PROCEDURE: **Rwy 21**, turn right. **Rwys 3,13,31**, turn left. All departures climb via HZN R-075 to HZN VORTAC. Climb in holding pattern (W, right turns, 075° inbound) to depart HZN VORTAC at or above: R-240 CW R-149, 8000; R-150 CW R-239, 9000. Continue climb on course to MEA or assigned altitude.

FALLON NAS (KNFL)

FALLON, NV

Diverse departures not authorized.

FLAGSTAFF, AZ

FLAGSTAFF PULLIAM

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. Aircraft departing FLG R-160 CW R-175 climb on course. All others climb southbound on FLG R-172 to 9000, then climbing left turn direct FLG VOR/DME.

FORT HUACHUCA-SIERRA VISTA, AZ

SIERRA VISTA MUNI-LIBBY AAF

TAKE-OFF MINIMUMS: **Rwy 21**, NA.

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **Rwys 26,30**, turn right. **All aircraft** climb to 9500 to TOMBS Int via FHU VOR R-019 or 018° bearing from DAO NDB.

GLENDALE, AZ

GLENDALE MUNI

TAKE-OFF MINIMUMS: **Rwy 19,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 1,** Use DRAKE (RNAV) DEPARTURE.

GLOBE, AZ

SAN CARLOS APACHE (P13)

ADMT 2 08101 (FAA)

DEPARTURE PROCEDURE: Use IZTIR DEPARTURE.

GOODYEAR, AZ

PHOENIX GOODYEAR

TAKE-OFF MINIMUMS: **Rwy 3,** NA-ATC.

DEPARTURE PROCEDURE: **Rwy 21,** Use POTER DEPARTURE.

GRAND CANYON, AZ

GRAND CANYON NATIONAL PARK

TAKE-OFF MINIMUMS: **Rwy 3,** NA-environmental.

DEPARTURE PROCEDURE: **Rwy 21,** use GRAND DEPARTURE.

HEBER CITY, UT

HEBER CITY MUNI-RUSS MCDONALD FIELD

DEPARTURE PROCEDURE: **Rwy 3,** Use COOLI RNAV DEPARTURE.

HILL AFB (KHIF)

OGDEN, UT

Diverse departures not authorized, use radar vectors or published Departure Procedures (DP) for obstacle avoidance.

HUNTINGTON, UT

HUNTINGTON MUNI (69V)

AMDT 2A 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 26, 36**, NA. **Rwy 30**, 1700-3 or std. with a min. climb of 300' per NM to 8100.

DEPARTURE PROCEDURE: **Rwys 8, 12,** climbing left turn direct PUC VOR/DME...

Rwy 30, climbing right turn direct PUC VOR/DME....

...continue climb in PUC VOR/DME holding pattern (hold S, right turns, 009° inbound) to MEA for direction of flight.

NOTE: **Rwy 8,** tree 2663' from DER, 922' left of centerline, 40' AGL/5979' MSL. **Rwy 12,** tree 333' from DER, 132' right of centerline, 40' AGL/5919' MSL. **Rwy 30,** tree 2065' from DER, 875' left of centerline, 40' AGL/5999' MSL.

KANAB, UT

KANAB MUNI

TAKE-OFF MINIMUMS: **Rwy 1,** std. with a min. climb of 316' per NM to 7200.

NOTE: Use KACIR ONE RNAV DEPARTURE.

KINGMAN, AZ

KINGMAN

TAKE-OFF MINIMUMS: **Rwys 3,17,21,35**, 800-1 or std. with a min. climb of 210' per NM to 7000.

DEPARTURE PROCEDURE: Climb northbound on IGM R-010 until reaching 6000; reverse course to the left and continue climb to 9000 direct to IGM. If unable to cross IGM at 9000 continue climb in IGM holding pattern (SW, left turns, 027° inbound).

LAGUNA AAF (LGF)

YUMA PROVING GROUND, AZ (03247)

Rwy 6, 18, 36 turn right, climb to 3600 direct BZA VORTAC.

Rwy 24 climb to 3600 direct to BZA VORTAC.

TAKE-OFF OBSTACLES:

Rwy 18: 386' (6' AGL) windsock, 818' from departure end of rwy, 194' left of centerline.

LAKE HAVASU CITY, AZ

LAKE HAVASU CITY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1½ or std. w/ min. climb of 278' per NM to 1200. **Rwy 32,** 600-1½ or std. w/ min. climb of 492' per NM to 1100.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn heading 300° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight. **Rwy 32,** climbing left turn heading 290° to intercept EED VORTAC R-155 to EED VORTAC, climb in EED VORTAC holding pattern (east, right turn, 257° inbound) to cross EED VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 14,** obstruction light on transmission tower, 1.2 NM from departure end of runway, 1885' left of centerline, 151' AGL/1027' MSL. Transmission tower 1.4 NM from departure end of runway, 1953' left of centerline, 145' AGL/1058' MSL. Bush 1080' from departure end of runway, 500' left of centerline, 31' AGL/825' MSL. Terrain 145' from departure end of runway, 347' left of centerline, 14' AGL/797' MSL. Bush 1256' from departure end of runway, 255' left of centerline, 35' AGL/818' MSL. **Rwy 32,** obstruction light on transmission tower 4052' from departure end of runway, 932' right of centerline, 180' AGL/974' MSL. Transmision tower 2504' from departure end of runway, 1009' right of centerline, 112' AGL/903' MSL.

LAS VEGAS, NV

HENDERSON EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 17L/R,** Cat A/B std. with a min. climb of 491' per NM to 6000, or 2100-3 for climb in visual conditions, Cat C/D NA. **Rwy 35L/R,** Cat A/B std. with a min. climb of 312' per NM to 4700, or 2100-3 for climb in visual conditions, Cat C/D NA.

DEPARTURE PROCEDURE: **Rwy 17L/R,** climbing right turn via LAS R-157 to LAS VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC. **Rwy 35L/R,** climbing right turn via BLD R-257 to BLD VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC.

NOTE: **Rwy 17L,** tree 5610' from departure end of runway, 82' left of centerline, 100' AGL/2739' MSL. Tree 1.9 miles from departure end of runway, 1495' left of centerline, 100' AGL/2859' MSL. **Rwy 17R,** tree 4041' from departure end of runway, 859' left of centerline, 100' AGL/2739' MSL.

MCCARRAN INTL (KLAS)

TAKE-OFF MINIMUMS: **Rwy 25R,** 200-1 or std. with a min. climb of 220' per NM to 2400.

DEPARTURE PROCEDURE: **Rwys 1L, 1R,** climbing right turn direct BLD VORTAC. **Rwys 7L, 7R,** climb via heading 075° to 3400 then climbing right turn direct BLD VORTAC. **Rwys 19L, 19R,** climbing left turn via heading 120° and BLD VORTAC R-257 to BLD VORTAC. **Rwys 25L, 25R,** climb via heading 255° to 2700 then climbing right turn direct BLD VORTAC.

NOTE: **Rwy 1L,** multiple poles, tree, and building 450' from departure end of runway, 283' left of centerline, up to 174' AGL/2132' MSL. Obstruction light on WSK 248' from departure end of runway, 224' right of centerline, 15' AGL/2104' MSL. **Rwy 1R,** multiple sign and building 1331' from departure end of runway, 448' right of centerline, up to 100' AGL/2120' MSL. **Rwy 7L,** multiple poles and trees 747' from departure end of runway, 442' right of centerline, up to 62' AGL/2062' MSL. Tree 1257' from departure end of runway, 789' left of centerline, 65' AGL/2077' MSL. **Rwy 7R,** lighted WSK 126' from departure end of runway, 290' right of centerline, 25' AGL/2051' MSL. **Rwy 19L,** multiple poles, sign and building 1394' from departure end of runway, 320' right of centerline, up to 51' AGL/2256' MSL. **Rwy 19R,** multiple poles, sign, and building 197' from departure end of runway, 125' right of centerline, up to 51' AGL/2256' MSL. Multiple pole and building 1396' from departure end of runway, 356' left of centerline, up to 47' AGL/2262' MSL. **Rwy 25L,** multiple poles, sign, and building 1003' from departure end of runway, 251' left of centerline, up to 63' AGL/2256' MSL. **Rwy 25R,** multiple poles and road 675' from departure end of runway, 17' right of centerline, up to 100' AGL/2301' MSL. Multiple poles and buildings 533' from departure end of runway, 1' left of centerline, up to 150' AGL/2469' MSL.

NORTH LAS VEGAS (VGT)

AMDT 3 08045 (FAA)

DEPARTURE PROCEDURE: Use BOULDER CITY DEPARTURE.

LOGAN, UT

LOGAN-CACHE

TAKE-OFF MINIMUMS: **Rwys 10,28 ,**NA-obstacles. **Rwy 17**, 2000-3 or std. with min. climb of 270' per NM to 10000. **Rwy 35,** 1500-3 or std. with a min. climb of 270' per NM to 10000.

DEPARTURE PROCEDURE: **Rwy 17,** climbing right turn via LHO VOR/DME R-097 to LHO VOR/DME...**Rwy 35,** climbing left turn via LHO VOR/DME R-055 to LHO VOR/DME...then via LHO VOR/DME R-263 to PIMIE INT, cross PIMIE INT at or above 10000.

NOTE: **Rwy 17,** lighted WSK 194' from departure end of runway, 137' right of centerline, 26' AGL/4465' MSL. Tree 1459' from departure end of runway, 229' left of centerline, 50' AGL/4495' MSL.

LOVELOCK, NV

DERBY FIELD (LOL)

ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1**, 2300-2 or std. with a min. climb of 300' per NM to 6200. **Rwy 7**, 1100-1 or std. with a min. climb of 250' per NM to 5000. **Rwys 19, 25**, 2300-2 or std. with a min. climb of 260' per NM to 6200.

DEPARTURE PROCEDURE: **Rwy 1,** turn right. **Rwys 7,19,25,** turn left, climb direct LLC VORTAC. Aircraft departing 330° CW 359° climb via LLC R-333 to ROBUD INT; 360° CW 089° climb in LLC VORTAC holding pattern (hold NW, left turns, 153° inbound) to depart LLC VORTAC at or above 8600; 090° CW 219° climb on course; 220° CW 329° climb in LLC VORTAC holding pattern to depart LLC VORTAC at or above 8600. Continue climb on course to MEA or assigned altitude.

LUKE AFB (KLUF)

GLENDALE, AZ . . . . . AMDT 3, 09183

Diverse departures not authorized.

Use published DP, if unable to comply with DP notify clearance delivery and request RADAR Vectors.

TAKE-OFF OBSTACLES:

RWY 3L: Taxiing aircraft, 19' AGL/1126' MSL, 1221' from DER, 782' left of centerline. Taxiing aircraft, 19' AGL/1126' MSL, 1407' from DER, 609' left of centerline. Weather equipment, 15' AGL/1117' MSL, 759' from DER, 505' right of centerline. Weather equipment, 15' AGL/1117' MSL, 1209' from DER, 505' right of centerline. Building, 20' AGL/1127' MSL, 1620' from DER, 925' left of centerline.

RWY 21L: Taxiing aircraft, 38' AGL/1120' MSL, 1428' from DER, 774' left of centerline.

MESA, AZ

FALCON FIELD

TAKE-OFF MINIMUMS: **Rwys 4L,4R,** std. with a min. climb of 459' per NM to 3600, or 1100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4L, 4R,** climbing left turn to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound. For climb in visual conditions cross FFZ NDB at or above 2300 then proceed via 220° bearing to PXR R-143 southeast bound. **Rwy 22L, 22R,** climb to 5000 via 220° bearing from FFZ NDB to intercept the PXR VORTAC R-143 southeast bound.

NOTE: **Rwy 4L,** light standard 416' from departure end of runway, 415' left of centerline, 48' AGL/1428' MSL. Obstacle light on building 1313' from departure end of runway, 424' left of centerline, 54' AGL/1434' MSL. **Rwy 4R,** light standard 514' from departure end of runway, 565' right of centerline, 48' AGL/1441' MSL. Tree 1097' from departure end of runway, 650' right of centerline, 50' AGL/1448' MSL. Tree 1060' from departure end of runway, 359' right of centerline, 50' AGL/1451' MSL. **Rwy 22L,** light pole 254' from departure end of runway, 538' right of centerline, 13' AGL/1382' MSL. Windmill 691' from departure end of runway, 528' right of centerline, 30' AGL/1389' MSL. Windmill 715' from departure end of runway, 603' right of centerline, 30' AGL/ 1389' MSL. Light pole 68' from departure end of runway, 764' right of centerline, 13' AGL/ 1382' MSL. Tree 175' from departure end of runway, 826' right of centerline, 13' AGL/ 1383' MSL. **Rwy 22R,** light pole 296' from departure end of runway, 541' right of centerline 13' AGL/1400' MSL. Light pole 495' from departure end of runway, 187' right of centerline, 13' AGL/ 1382' MSL. LIght pole 594' from departure end of runway, 65' right of centerline, 13' AGL/1382' MSL.

MESQUITE, NV

MESQUITE

TAKE-OFF MINIMUMS: **Rwy 1,** 900-3, or std. with a min. climb of 620' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 1,** climbing left turn, **Rwy 19,** climbing right turn. **All aircraft** climb direct MMM VORTAC. Aircraft departing MMM R-149 CW R-220 climb on course. All others continue climb via MMM R-196 to 6100 and reverse course to cross MMM VORTAC at or above: R-221 CW R-270 and R-331 CW R-060, 6100; R-271 CW R-330, 7300; R-061 CW R-150, 8300.

MICHAEL AAF (KDPG),

DUGWAY PROVING GROUND,UT

.... .Amdt 1, 09099

Rwy 12, 4700-3*

* Or standard with minimum climb of 305 ft/NM to 6100.

DEPARTURE PROCEDURES: **Rwy 12** Climb via heading 122° to 6100, then right turn direct DPG NDB. Continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course, or for climb in visual conditions: Cross Michael AAF, Dugway Proving Ground at or above 8900 before proceeding on course. **Rwy 30** Climb via heading 302° to 6100 then left turn direct DPG NDB, continue climb in DPG NDB holding pattern (Hold W, LT, 080° inbound) to 9600 before proceeding on course.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD

TAKE-OFF MINIMUMS: **Rwy 34**, CAT A,B 1200-2 or std. with a min. climb of 360' per NM to 6500. CAT C,D NA.

DEPARTURE PROCEDURE: **Rwy 16**, climb direct MLF VORTAC. **Rwy 34,** climbing left turn direct MLF VORTAC. Aircraft departing MLF R-170 CW R-210 climb on course. All other aircraft continue climb southbound via MLF R-190 to 7600, then climbing right turn to cross MLF VORTAC at or above 9000, then climb on course.

MINDEN, NV

MINDEN-TAHOE

TAKE-OFF MINIMUMS: **Rwys 12,16,30,** NA. **Rwy 34,** 4000-3 or std. with a min. climb of 531' per NM to 8700.

DEPARTURE PROCEDURE: **Rwy 34,** use MINDEN RNAV DEPARTURE.

MOAB,UT

CANYONLANDS FIELD

TAKE-OFF MINIMUMS: **Rwy 3**, std. with a min. climb of 320' per NM to 5800. **Rwy 21,** std. with a min. climb of 330' per NM to 5400.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right climb to 6700 via OAB R-293, then climbing right turn direct OAB VOR/DME. Climb in OAB holding pattern (NW, left turns, 113° inbound) to 10000 then proceed on course.

NOTE: **Rwy 3,** tree 4383' from departure end of runway, 1507' right of centerline, 50' AGL/4729' MSL. Road 1749' from departure end of runway, 905' left of centerline, 15' AGL/4635' MSL. Tree 3914' from departure end of runway, 1166' right of centerline, 50' AGL/4690' MSL. Tree 1.25 NM from departure end of runway, 400' right of centerline, 50' AGL/4758' MSL. **Rwy 21,** pole 2026' from departure end of runway, 78' right of centerline, 80' AGL/4625' MSL. Pole 2061' from departure end of runway, 40' right of centerline, 80' AGL/4625' MSL. Pole 2095' from departure end of runway, 857' right of centerline, 80' AGL/4623' MSL. Pole 1980' from departure end of runway, 344' right of centerline, 80' AGL/4602' MSL.

NELLIS AFB (KLSV)

LAS VEGAS, NV 08241

Rwy 3L/R, 10,200-3* SR-SS

Rwy 21L/R, 10,200-3* SR-SS

Diverse departure not authorized.

MILITARY: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 300' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vector climb gradient, A/C must depart VFR.

* CIVIL: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 330' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vectors climb gradient, A/C may use published weather minimums or depart VFR.

TAKE-OFF OBSTACLES: **RWY 3L**: Terrain 0' AGL/1870' MSL, 0' inward of DER, 500' left of centerline. Road 15' AGL/1934' MSL, 1321' from DER, 802' left of centerline. **RWY 3R**: C-5 on taxiway 65' AGL/1936' MSL, 1345' from DER, 822' right of centerline. Road 15' AGL/2014' MSL, 3929' from DER, 1404' right of centerline. **RWY 21L**: Trees 90' AGL/1949' MSL, 4594' from DER, 1596' right of centerline. Trees 90' AGL/1949' MSL, 4940' from DER, 541' right of centerline. Trees 60' AGL/1899' MSL 929' from DER, 724' left of centerline. Trees 60' AGL/1899' MSL, 946' from DER, 626' left of centerline. Trees 60' AGL/1899' MSL, 2720' from DER, 341' left of centerline. Trees 60' AGL/1899' MSL, 2514' from DER, 403' left of centerline.

RWY 21R: Terrain 0' AGL/1835' MSL, 0' inward of DER, 500' right of centerline. Trees 90' AGL/1949' MSL, 4594' from DER, 597' right of centerline. Building 45' AGL/1904' MSL, 2274' from DER, 1037' right of centerline. Road 15' AGL/1874' MSL, 1404' from DER, 465' right of centerline.

NOGALES, AZ

NOGALES INTL

TAKE-OFF MINIMUMS: **Rwy 3**, 5000-3 or std. with a min. climb of 350' per NM to 8000. **Rwy 21**, 5000-3 or std. with a min. climb of 300' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwy 21**, turn right. **All aircraft** climb via OLS R-276 and TUS R-176 to cross ARVEY Int at or above 10000. Continue on course to MEA or assigned altitude.

OGDEN, UT

OGDEN-HINCKLEY (OGD)

AMDT 2 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,16,** NA- Obstacles.

DEPARTURE PROCEDURE: **Rwys 3, 21, 25, 34,** Use EMONT DEPARTURE.

PAGE, AZ

PAGE MUNI (PGA)

AMDT 2 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25,** NA – obstacles **Rwy 15,** 300-1 or std. w/ min. climb of 252' per NM to 6500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climb via 157° heading to 6000, then climbing right turn to PGA VOR/DME. cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA, or climb in visual conditions: cross Page airport at or above 6100, before proceeding on course. **Rwy 33,** climb via 337° heading to 6000, then climbing left turn to PGA VOR/DME. Cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold NW, right turns, 147° inbound) to airway MEA.

NOTE: **Rwy 15,** terrain 192' from departure end of runway, 274' right of centerline, 4323' MSL, tree 1.07 NM from departure end of runway, 167' left of centerline, 4519 MSL, transmission lines 1.96 NM from departure end of runway, 825' left of centerline, 100' AGL/4519' MSL, power line 4.00 NM from departure end of runway, 3606' right of centerline, 75' AGL/4819' MSL, power line 4.35 NM from departure end of runway, 3968' right of centerline, 75' AGL/4919' MSL, power line 5.36 NM from departure end of runway, 5039' right of centerline, 75' AGL/5119' MSL, power line 4.51 NM from departure end of runway, 4136' right of centerline, 75' AGL/5019' MSL, tree 4.52 NM from departure end of runway, 1508' right of centerline, 100' AGL/5173' MSL, AAO 4.58 NM from departure end of runway, 1617' right of centerline, 200' AGL/5187' MSL, AAO 5.15 NM from departure end of runway, 4456' left of centerline, 200' AGL/5190' MSL, tree 5.56 NM from departure end of runway, 4097' right of centerline, 30' AGL/5249' MSL, AAO 5.98 NM from departure end of runway, 653' left of centerline, 200' AGL/5440' MSL.

PARKER, AZ

AVI SUQUILLA

TAKE-OFF MINIMUMS: **Rwy 1**, 800-1½. **Rwy 19**, 300-1.

DEPARTURE PROCEDURE: **Rwy 19**, right turn. **Rwy 1**, left turn. Climb via R-067 to PKE VORTAC, to cross above 4500. Continue climb on course to MEA or assigned altitude.

PAYSON, AZ

PAYSON

TAKE-OFF MINIMUMS: **Rwy 6,** std. with a min. climb of 360' per NM to 9300, or 2500-3 for climb in visual conditions. **Rwy 24,** std. with a min. climb of 375' per NM to 9300, or 2500-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 6, 24,** for climb in visual conditions: Cross Payson Airport at or above 7500, then proceed on course.

NOTE: **Rwy 24,** bush 15' from departure end of runway, 133' right of centerline, 6' AGL/5148' MSL. Tree 320' from departure end of runway, 183' right of centerline, 12' AGL/5154' MSL. Fence 85' from departure end of runway, 84' left of centerline, 4' AGL/5141' MSL. Tree 164' from departure end of runway, 126' left of centerline, 9' AGL/5147' MSL.

PHOENIX, AZ

PHOENIX-DEER VALLEY

DEPARTURE PROCEDURE: Use DEER VALLEY DEPARTURE.

PHOENIX SKY HARBOR INTL (PHX)

AMDT 4A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 26,** 700-3 or std. with a min. climb of 358' per NM to 2000.

DEPARTURE PROCEDURE: **Rwys 7L, 7R, 8,** climb via 078° heading to 3000, then climbing right turn direct PHOENIX (PXR) VORTAC. **Rwys 25L, 25R**, climb via 258° heading to 1550 then climbing right turn to join the PXR R-260 (V16) westbound, climb to 5000. **Rwy 26,** climb via 258° heading to 1550 then climbing left turn to join the PXR R-260 (V16) westbound, climb to 5000. Westbound departures continue climb on PXR R-260. All others, climbing right turn direct PXR VORTAC.

NOTE: **Rwy 7L,** building 1332' from DER, 798' left of centerline, 67' AGL/1176' MSL. **Rwy 7R,** rod 716' from DER, 184' right of centerline, 87' AGL/1196' MSL. **Rwy 8,** light standard 3530' from DER, 1207' left of centerline, 123' AGL/1232' MSL. Light standard 3479' from DER, 1003' left of centerline, 118' AGL/1227' MSL. **Rwy 25L,** light standard 1129' from DER, 774' left of centerline, 91' AGL/1200' MSL. ASDE-X equipment 411' from DER, 531' left of centerline, 29' AGL/1135' MSL. **Rwy 26,** light 59' from DER, 63' right of centerline, 16' AGL/1125' MSL. Pole 58' from DER, 90' right of centerline, 25' AGL/1125' MSL. Light 78' from DER of runway, 64' right of centerline, 18' AGL/1127' MSL. Light 38' from DER, 440' left of centerline, 24' AGL/1135' MSL. Light standard 77' from DER, 453' left of centerline, 27' AGL/1136' MSL. Light standard 74' from DER, 456' right of centerline, 33' AGL/1142' MSL. Light standard 77' from DER, 434' right of centerline, 31' AGL/1140' MSL. Tree 113' from DER, 294' right of centerline, 24' AGL/1133' MSL. Building 2.32 NM from DER, 3309' right of centerline,406' AGL/1496' MSL. Building 2.28 NM from DER, 3612' right of centerline, 663' AGL/1750' MSL. Tree 234' from DER, 214' right of centerline, 24' AGL/1133' MSL. Light standard 64' from DER, 68' left of centerline, 39' AGL/1125' MSL. ASDE-X equipment 897' from DER, 413' right of centerline, 35' AGL/1141' MSL.

PHOENIX-MESA GATEWAY

TAKE-OFF MINIMUMS: **Rwys 30L,30C,30R,** CAT C,D,E 2000-2 or std. with a min. climb of 230' per NM to 3900.

DEPARTURE PROCEDURE: **Rwys 12L,12C,12R,** climb to 2500 via IWA R-122 then climbing right turn direct PXR VORTAC. **Rwys 30L,30C,30R,** climbing right turn to 4000 via IWA R-122 then climbing right turn direct PXR VORTAC.

PRESCOTT, AZ

ERNEST A. LOVE FIELD

TAKE-OFF MINIMUMS: **Rwy 12,** 2700-2 or std. with a min. climb of 460' per NM to 8100. **Rwy 21L,** 2700-2 or std. with a min. climb of 500' per NM to 8100. **Rwy 30,** 300-1 or std. with a min. climb of 300' per NM to 5200. **Rwy 3L, 21R,** NA.

DEPARTURE PROCEDURE: **Rwy 3R,** turn left heading 250° to intercept DRK R-305. **Rwy 12,** turn right direct DRK VORTAC. **Rwy 21L,** turn right heading 335° to intercept DRK R-305. **Rwy 30,** climb direct DRK VORTAC. **All aircraft** continue climb via DRK R-305 to 9000. Aircraft departing via DRK R-305 continue climb on course. All other aircraft turn right direct DRK VORTAC then climb on course.

PRICE, UT

CARBON COUNTY RGNL/BUCK DAVIS FLD (PUC)

AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - per flight check **Rwy 32,** std. w/ min. climb of 425' per NM to 7000, or 3400-3 for climb in visual conditions. **Rwy 36,** std. w/ min. climb of 400' per NM to 7200, or 3400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climb on a heading between 126° CW to 193°, thence...**Rwy 18**, climb on a heading between 192° CCW to 125°, thence...**Rwy 25,** climb on a heading between 176° CCW to 124°, thence... **Rwy 32,** climb to 7000 then climbing left turn on a heading between 175° CCW to 145°,thence...**Rwy 36,** climb to 6400 then climbing right turn on a heading between 141° CW to 184°, maintain 210K until completion of turn, thence...

...continue climb to assigned altitude for direction of flight. **Rwys 32, 36,** for climb in visual conditions cross Carbon County Rgnl / Buck Davis Field at or above 9200 before proceeding on course.

NOTE: **Rwy 14,** multiple trees beginning 121' from DER, 3' left of centerline, up to 40' AGL/5839 ' MSL. **Rwy 25,** trees 515' from DER, 535' right of centerline, up to 40' AGL/5879' MSL. **Rwy 32,** trees 9544' from DER, 1644' left of centerline, up to 40' AGL/6900' MSL. Trees 11332' from DER, 74' right of centerline, up to 40' AGL/6800' MSL. **Rwy 36,** poles 2599' from DER, 615' left of centerline, 40' AGL/6079 ' MSL. Poles 2715 ' from DER, 668' right of centerline, 59' AGL/6098' MSL.

PROVO, UT

PROVO MUNI

DEPARTURE PROCEDURE: Use PROVO DEPARTURE.

RENO, NV

RENO/STEAD (RTS)

AMDT 3A 09183 (FAA)

TAKE-OFF MINIMUMS: CAT A,B only, CAT C,D NA. **Rwys 8,14,** 1300-2 or std. with a min. climb of 400' per NM to 6500. **Rwy 26,** 1900-2 or std. with a min. climb of 410' per NM to 7200. **Rwy 32,** 2300-2 or std. with a min. climb of 420' per NM to 7200.

DEPARTURE PROCEDURE: **Rwys 8,32,** climbing right turn heading 100° and FMG VORTAC R-314 to FMG VORTAC. **Rwy 14,** left turn climb direct FMG VORTAC. **Rwy 26,** climbing right turn heading 050° and FMG VORTAC R-314 to FMG VORTAC. **All aircraft** climb in FMG VORTAC holding pattern (NE, right turns, 221° inbound) to depart FMG VORTAC; R-260 CW R-170 at or above 10000; R-171 CW R-195 at or above 10500; R-196 CW R-259 at or above 12000.

RENO, NV (CON'T)

RENO/TAHOE INTL (RNO)

AMDT 4 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, NA-terrain. **Rwy 16L,** std. w/ min. climb of 730' per NM to 8000, or 600-1¼ w/ min. climb of 480' per NM to 8000, or 2700-3 for climb in visual conditions. **Rwy 16R,** std. w/ the following minimum climb requirements: 210 knots or less, 385' per NM to 8000; more than 210 knots, 420' per NM to 8900, or 2700-3 for climb in visual conditions. Resume normal speed after passing FMG VORTAC. **Rwy 25,** std. w/ min. climb of 470' per NM to 7800, or 2700-3 for climb in visual conditions. **Rwy 34L,** std. w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions. **Rwy 34R,** std. w/ min. climb of 480' per NM to 7000, or 500-1½ w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 16L/R,** climb heading 164° to 6600 then climbing left turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . . **Rwy 25,** climb heading 254° to 5000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . . **Rwys 34L/R,** climb heading 344° to 7000 then climbing right turn direct FMG VORTAC, thence. . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence. . .

. . .**All aircraft:** continue climb in FMG VORTAC holding pattern (northeast, left turn, 221° inbound) to cross FMG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 16L,** multiple poles, trees, bushes and terrain beginning 618' from departure end of runway, 133' left of centerline, up to 20' AGL/4961' MSL. **Rwy 16R,** multiple trees 2784' from departure end of runway, 171' right of centerline, up to 20' AGL/4510' MSL. Multiple trees and terrain beginning 746' from departure end of runway, 380' left of centerline, up to 20' AGL/4703' MSL. **Rwy 25,** multiple trees and poles beginning 829' from departure end of runway, 201' right of centerline, up to 103' AGL/4523' MSL. Building 6023' from departure end of runway, 456' right of centerline, 152' AGL/4608' MSL. Fence 222' from departure end of runway, 270' right of centerline, up to 5' AGL/4415' MSL. Multiple trees and poles beginning 500' from departure end of runway, 31' left of centerline, up to 20' AGL/4506' MSL. **Rwy 34L,** multiple trees and poles beginning 1229' from departure end of runway, 180' right of centerline, up to 20' AGL/4498' MSL. Multiple trees beginning 1193' from departure end of runway, 331' left of centerline, up to 20' AGL/4489' MSL. **Rwy 34R,** multiple trees and poles beginning 1067' from departure end of runway, 172' right of centerline, up to 20' AGL/4497' MSL. Multiple trees and poles beginning 1230' from departure end of runway, 350' left of centerline, upt o 20' AGL/4498' MSL. Building 1.2 NM from departure end of runway, 1730' right of centerline, 363' AGL/4780' MSL.

RICHFIELD, UT

RICHFIELD MUNI (RIF)

AMDT 1 08157 (FAA)

DEPARTURE PROCEDURE: **Rwy 1,** use RICHFIELD (RNAV) DEPARTURE. **Rwy 19,** use HAMET (RNAV) DEPARTURE.

ROOSEVELT, UT

ROOSEVELT MUNI

TAKE-OFF MINIMUMS: **Rwy 25,** 700-3 or std. with a min. climb of 300' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 7,** turn right. **Rwy 25,** turn left. **All aircraft,** climb direct MTU VORTAC. Aircraft departing MTU VORTAC R-040 CW R-150, climb on course. All others continue climb in MTU holding pattern (NE, right turns, 213° inbound) to cross MTU VORTAC; R-151 CW R-290 at or above 8000; R-291 CW R-039 at or above 10,000. Then climb on course.

SAFFORD, AZ

SAFFORD RGNL

TAKE-OFF MINIMUMS: IFR departure not authorized.

ST. GEORGE, UT

ST. GEORGE MUNI

TAKE-OFF MINIMUMS: **Rwy 34**, 1500-2 or std. with a min. climb of 325' per NM to 4000.

DEPARTURE PROCEDURE: **Rwy 16**, turn left. **Rwy 34**, turn right. Climb in OZN VOR/DME holding pattern (hold SE, right turns, 296 inbound) to depart OZN VOR/DME at or above MEA for direction of flight.

ST. JOHNS, AZ

ST. JOHNS INDUSTRIAL AIR PARK (SJN)

AMDT 1A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 21**, 400-2 or std. with a min. climb of 205' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 3, 32,** climbing right turn, **Rwys 14, 21,** climbing left turn. **All aircraft,** climb direct SJN VORTAC. Aircraft departing SJN VORTAC R-240 CW R-080 climb on course. All others continue climb in SJN VORTAC holding pattern (Hold NE,right turns,239° inbound) to cross SJN VORTAC at or above 9000.

NOTE: **Rwy 14,** 5790' tower 350' right abeam departure end of runway.

SALT LAKE CITY, UT

SALT LAKE CITY INTL (SLC)

AMDT 10 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 32,** NA, operational.

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 10000 via heading 161° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwy 17,** climb to 10000 via heading 166° and FFU R-341 to FFU VORTAC before proceeding on course. **Rwys 34L, 34R,** climb to 9000 via heading 341° and OGD R-153 to OGD VORTAC before proceeding on course. **Rwy 35,** climb to 9000 via heading 336° and OGD R-153 to OGD VORTAC before proceeding on course.

NOTE: **Rwy 16L,** vehicle 124' from DER, 14' right of centerline, 15' AGL/4239' MSL. Light pole 988' from DER, 726' right of centerline, 34' AGL/4254' MSL. Pole 1024' from DER, 689' right of centerline, 34' AGL/4254' MSL. **Rwy 17,** vehicles beginning 335' from DER, on centerline, up to 17' AGL/4241' MSL. **Rwy 34R,** post 13' from DER, 349' right of centerline, 3' AGL/4227' MSL. **Rwy 35,** post 56' from DER, 249' left of centerline, 2' AGL/4220' MSL.

SOUTH VALLEY RGNL AIRPORT (U42)

AMDT 4A 09155 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, 2400-3 or std. with a min. climb of 295' per NM to 7700. **Rwy 34,** std. with a min. climb of 353' per NM to 9500.

DEPARTURE PROCEDURE: **Rwy 16,** climbing left turn to 9600 via heading 136° and V21 (TCH R-161 FFU R-341) to FFU VORTAC. Aircraft departing FFU R-156 CW R-263 and R-308 CW R-359 climb on course. All others continue climb in FFU VORTAC holding pattern (S, right turns, 008° inbound) to cross FFU VORTAC at or above: R-360 CW R-093 12400; R-094 CW R-138 10600; R-139 CW R-155 11300; R-264 CW R-307 11500. **Rwy 34,** climbing right turn to 9500 via heading 026° and V21 (TCH R-161) to TCH VORTAC. Aircraft departing TCH R-144 CW R-176 and R-217 CW R-355 climb on course. All others continue climb in TCH VORTAC holding pattern (NW, right turns, 116° inbound) to cross TCH VORTAC at or above: R-356 CW R-116 10700; R-117 CW R-143 11600; R-177 CW R-216 10100.

SCOTTSDALE, AZ

SCOTTSDALE (SDL)

AMDT 7 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min climb of 440' per NM to 4000, or 3100-3 for climb in visual conditions. **Rwy 21,** std. w/ min. climb of 215' per NM to 4000, or 3100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climbing left turn to 4000 via heading 220° and PXR VORTAC R-336 southeast bound to PXR VORTAC. Thence...

Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course. **Rwy 21,** climbing right turn to 4000 via heading 300° and PXR VORTAC R-336 northwest bound then left turn direct PXR VORTAC. Thence...

Or, for climb in visual conditions: cross Scottsdale airport at or above 4500 MSL before proceeding on course.

...continue climb on course.

NOTE: **Rwy 3,** multiple light standards beginning 63' from departure end of runway, 445' left of centerline, up to 44' AGL/1554' MSL. Hoist on dike 878' from departure end of runway, 735' left of centerline, 51' AGL/1561' MSL. Dike beginning 1066' from departure end of runway, 316' left of centerline, 38' AGL/1548' MSL. Day marker on dike 1230' from departure end of runway, 5' left of centerline, 39' AGL/1549' MSL. Tree, 269' from departure end of runway, 490' left of centerline, 13' AGL/1523' MSL. Tree 51' from departure end of runway, 279' left of centerline, 6' AGL/1516' MSL. Tree 765' from departure end of runway, 115' left of centerline, 22' AGL/1532' MSL. Road beginning 647' from departure end of runway, 296' left of centerline, 19' AGL/1529' MSL. Tree 227' from departure end of runway, 97' left of centerline, 6' AGL/1516' MSL. Fence beginning 5' from departure end of runway, 338' right of centerline, 6' AGL/1511' MSL. Light standard, 1013' from departure end of runway, 430' right of centerline, 44' AGL/1552' MSL. **Rwy 21,** tree 1072' from departure end of runway, 426' right of centerline, 53' AGL/1497' MSL. Building 316' from departure end of runway, 537' right of centerline, 23' AGL/1467' MSL. Tree 2087' from departure end of runway, 418' left of centerline, 61' AGL/1505' MSL. Tree 1432' from departure end of runway, 438' right of centerline, 38' MSL/1482' MSL. Tree 2234' from departure end of runway, 559' left of centerline, 58' AGL/1502' MSL.

SEDONA, AZ

SEDONA (SEZ)

AMDT 1 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** NA- Obstacles.

DEPARTURE PROCEDURE: **Rwy 21,** Use OATES RNAV DEPARTURE.

SHOW LOW, AZ

SHOW LOW RGNL

DEPARTURE PROCEDURE: **Rwys 3,6**, turn left. **Rwys 21,24**, turn right. All aircraft climb via 345 bearing from SOW NDB to DEHOG INT then climb on course.

SPRINGERVILLE, AZ

SPRINGERVILLE MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 1000-2 or std. with a min. climb of 360' per NM to 8400.

DEPARTURE PROCEDURE: **Rwys 3, 11,** climbing left turn to 8400 via heading 360° before proceeding on course. **Rwys 21, 29,** climbing right turn to 8400 via 360° before proceeding on course.

TAYLOR, AZ

TAYLOR MUNI

TAKE-OFF MINIMUMS: **Rwy 21,** 300-1 or std. with a min. climb of 248' per NM to 6100.

DEPARTURE PROCEDURE: **Rwy 3/21,** climb on runway heading to 8000 before turning on course.

TONOPAH, NV

TONOPAH

TAKE-OFF MINIMUMS: **Rwys 11,29**, NA. **Rwys 15,33**, 2600-2 or std. with a min. climb of 260' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 15**, turn left. **Rwy 33**, turn right. Climb direct TPH VORTAC. Continue climb in holding pattern (NE, right turns, 246° inbound) to depart TPH VORTAC at or above 8000. Climb on course to MEA or assigned altitude.

TOOELE, UT

BOLINDER FIELD-TOOELE VALLEY

TAKE-OFF MINIMUMS: **Rwy 17,** std. with a min. climb of 490' per NM to 11000. **Rwy 35,** std. with a min. climb of 360' per NM to 9000.

DEPARTURE PROCEDURE: Use STACO DEPARTURE.

NOTE: **Rwy 17,** tree 794' from departure end of runway, 277' right of centerline, 35' AGL/4380' MSL. Tree 967' from departure end of runway, 432' right of centerline, 35' AGL/4394' MSL. Tree 1023' from departure end of runway, 313' right of centerline, 35' AGL/4395' MSL.

TUCSON, AZ

MARANA RGNL

TAKE-OFF MINIMUMS: **Rwys 3, 12,** N/A-Obstacles

DEPARTURE PROCEDURE: **Rwy 21,** climb to 6500 via heading 360° and TUS R-308 to TOTEC Int/TUS 57 DME, then as filed. **Rwy 30,** climb to 6500 via heading 303° intercept TUS R-308 above 3500, to TOTEC INT/TUS 57 DME, then as filed.

NOTE: **Rwy 21,** road 192' from departure end of runway, 527' left of centerline 15' AGL/2034' MSL.

RYAN FIELD

DEPARTURE PROCEDURE: **Rwy 6R,** turn right; **Rwy 24L**, turn left direct to Ryan NDB. Continue climb in holding pattern (W, right turn 090° inbound) to 5000 before proceeding on course.

TUCSON, AZ (CON'T)

TUCSON INTL (TUS)

AMDT 4A 08241 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 300-1¾ or std. w/ min. climb of 228' per NM to 3000.

DEPARTURE PROCEDURE: **Rwys 3, 29L,29R,** climbing right turn direct to TUS VORTAC. **Rwys 11L,11R** climb via runway heading to 4000 then climbing left turn direct TUS VORTAC. **Rwy 21,** climbing left turn direct to TUS VORTAC. **All aircraft** continue climbing in holding pattern (NW, right turns, 128° inbound) to depart TUS VORTAC at or above 9000.

NOTE: **Rwy 3,** tower 9215' from departure end of runway, 1689' left of centerline, 246' AGL/2831' MSL.

VERNAL, UT

VERNAL RGNL

TAKE-OFF MINIMUMS: **Rwy 16**, 1500-2 or std with a min. climb of 250' per NM to 7000'. **Rwy 25**, 1500-2 or std. with a min. climb of 390' per NM to 7000. **Rwy 34**, 1600-2 pr std. with a min. climb of 330' per NM to 7000'.

DEPARTURE PROCEDURE: **Rwys 7,34**, turn right. **Rwys 16,25**, turn left. **All aircraft** climb direct VEL. Aircraft departing V391 S-bound climb on course. All others climb in holding pattern (SE, right turns, 322° inbound). Aircraft SW-bound V208 depart VEL at or above 8400', all others depart VEL at or above 9500'. Continue climb on course to MEA or assigned altitude.

WENDOVER, UT

WENDOVER

TAKE-OFF MINIMUMS: **Rwy 26,** standard wit h a min. climb of 300' per NM to 7000. **Rwy 30**, NA.

DEPARTURE PROCEDURE: **Rwys 8,12, 26,** climbing left turn direct BVL VORTAC. Aircraft departing BVL VORTAC R-330 CW R-150 climb on course. All others continue climb in BVL VORTAC holding pattern (Hold NE right turns, 247° inbound) to cross at or above 7400, then climb on course.

WILLCOX, AZ

COCHISE COUNTY

DEPARTURE PROCEDURE: **Rwy 3,** turn right. **Rwy 21,** turn left. **All aircraft** climb direct CIE VORTAC.

WINDOW ROCK, AZ

WINDOW ROCK

TAKE-OFF MINIMUMS: **Rwy 2**, 700-2 or std. with a min. climb of 500' per NM to 8000. **Rwy 20,** 600-2 or std. with a min. climb of 260' per NM to 8200.

DEPARTURE PROCEDURE: **Rwy 2**, turn right. **Rwy 20,** turn left direct to GUP VORTAC before proceeding on course.

NOTE: **Rwy 2,** terrain 3832' from departure end of runway, 1025' right of centerline, 6926' MSL. Poles 5220' from departure end of runway, 245' right of centerline, 180' AGL/6922' MSL. Tower 7067' from departure end of runway, 3072' left of centerline, 71' AGL/7316' MSL. Terrain 7449' from departure end of runway, 1612' left of centerline, 6991' MSL. Terrain 8776' from departure end of runway, 1851' left of centerline, 7109' MSL. Tree 9665' from departure end of runway, 1326' right of centerline, 7340' MSL. Tree 11326' from departure end of runway, 355' left of centerline, 7351' MSL. **Rwy 20,** trees 1018' from departure end of runway, 620' left of centerline, 30' AGL/6768' MSL.

WINNEMUCCA, NV

WINNEMUCCA MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, 2500-2 or std. with a min. climb of 450' per NM to 6800. **Rwys 14,20**, 3200-2 or std. with a min. climb of 520' per NM to 7500.

DEPARTURE PROCEDURE: **Rwys 14,20**, turn right. **Rwy 2**, turn left. **Rwy 32**, climb straight ahead. All aircraft climb via INA R-326 to 6700 or above within 12 NM, then climbing left turn return to INA VOR/DME via R-326. Continue climb in INA VOR/DME holding pattern (hold NW, right turns, 146° inbound) to depart INA VOR/DME at or above 11000. Southbound aircraft continue via INA R-146 direct Fesko Int. Northbound aircraft continue via INA R-326 and SDO R-144 direct SDO VORTAC.

YUMA MCAS/ YUMA INTL(KNYL)

YUMA, AZ. 08213

Climb direct to BZA VORTAC, thence on course.

LOGAN, UTAH

AL-663 (FAA)

LOC/DME I-LGU	APP CRS	Rwy Idg	9095
109.15	169°	TDZE	4457
Chan 28 (Y)		Apt Elev	4457

ILS or LOC/DME RWY 17

LOGAN-CACHE (LGU)

Circling NA east of Rwy 17-35.
Circling to Rwy 10-28 NA at night.
Inoperative table does not apply.

MALSR

MISSED APPROACH: Climb to 5800 then climbing right turn to 14000 via heading 340° and LHO VOR/DME R-357 to FILOB INT/LHO 19.6 DME and hold, continue climb-in-hold to 14000.

ASOS	CEDAR CITY RADIO	UNICOM
135.275	122.2	122.8 (CTAF) L

DME REQUIRED

FILOB
LHO 19.6

(IF)
KOKPE
I-LGU 18

(IAF)
HUSEM
LHO 18.9

JINUG
LHO 18.9

LHO 18.9 Arc

MALAD CITY
117.4 MLD
Chan 121

LOCIG
I-LGU 11.1

IKUCI
I-LGU 7.7

MSA LHO 25 NM
201°
141°
021°
10700
11200
9900

10 NM

Procedure NA for arrivals at HUSEM via V142 westbound.

BRIGHAM CITY
112.9 LHO
Chan 76

LOCALIZER 109.15
I-LGU
Chan 28 (Y)

NIWTE
12000
302° (23.8)

ELEV 4457

169° 9.5 NM from FAF

TDZE 4457

9095 X 100

5005 X 60

4509

4493

4495 ±

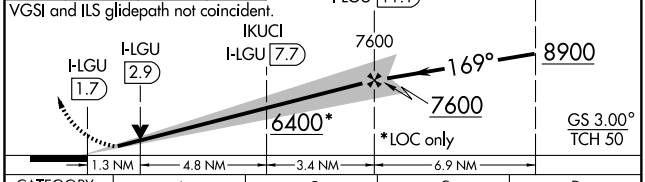
MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

5800	14000	LHO R-357 112.9	FILOB
	340°		

Use I-LGU DME when on localizer course.

Procedure Turn NA

VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 17	4657-¾ 200 (200-¾)			
S-LOC 17	4900-1 443 (500-1)		4900-1¼ 443 (500-1¼)	4900-1½ 443 (500-1½)
CIRCLING	4900-1 443 (500-1)	4920-1 463 (500-1)	4920-1½ 463 (500-1½)	5020-2 563 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 17
LOGAN-CACHE (LGU)

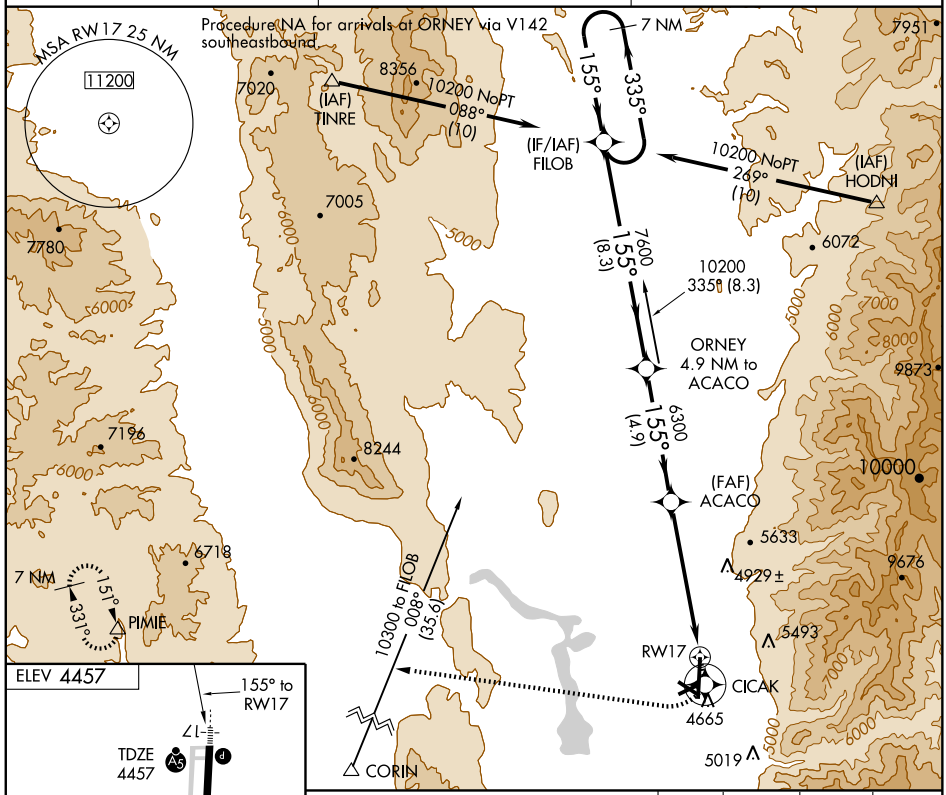
APP CRS	Rwy Idg	9095
155°	TDZE	4457
	Apt Elev	4457

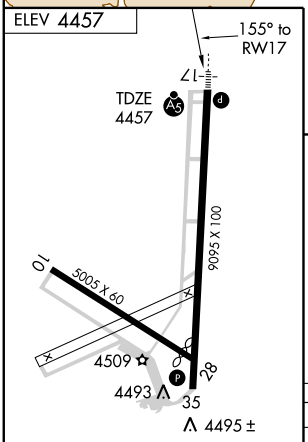
Circling NA east of Rwy 17-35.
DME/DME RNP-0.3 NA.

MALSR

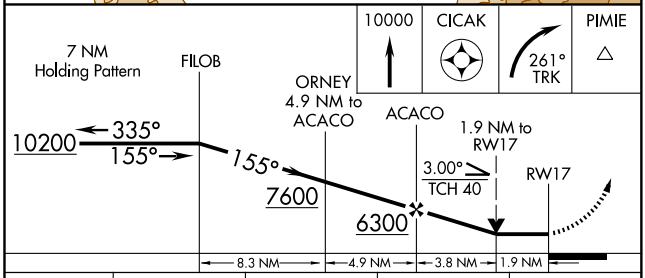
MISSED APPROACH: Climb to 10000 direct CICAK and right turn via 261° track to PIMIE and hold, continue climb-in-hold to 10000.

ASOS	CEDAR CITY RADIO	UNICOM
135.275	122.2	122.8 (CTAF) L





MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L



CATEGORY	A	B	C	D
LNAV MDA	5100-1	643 (700-1)	5100-1¾ 643 (700-1¾)	5100-2 643 (700-2)
CIRCLING	5100-1	643 (700-1)	5100-1¾ 643 (700-1¾)	5100-2 643 (700-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

LOGAN, UTAH

AL-663 (FAA)

WAAS	APP CRS	Rwy Idg	9095
CH 57900	349°	TDZE	4457
W35A		Apt Elev	4457

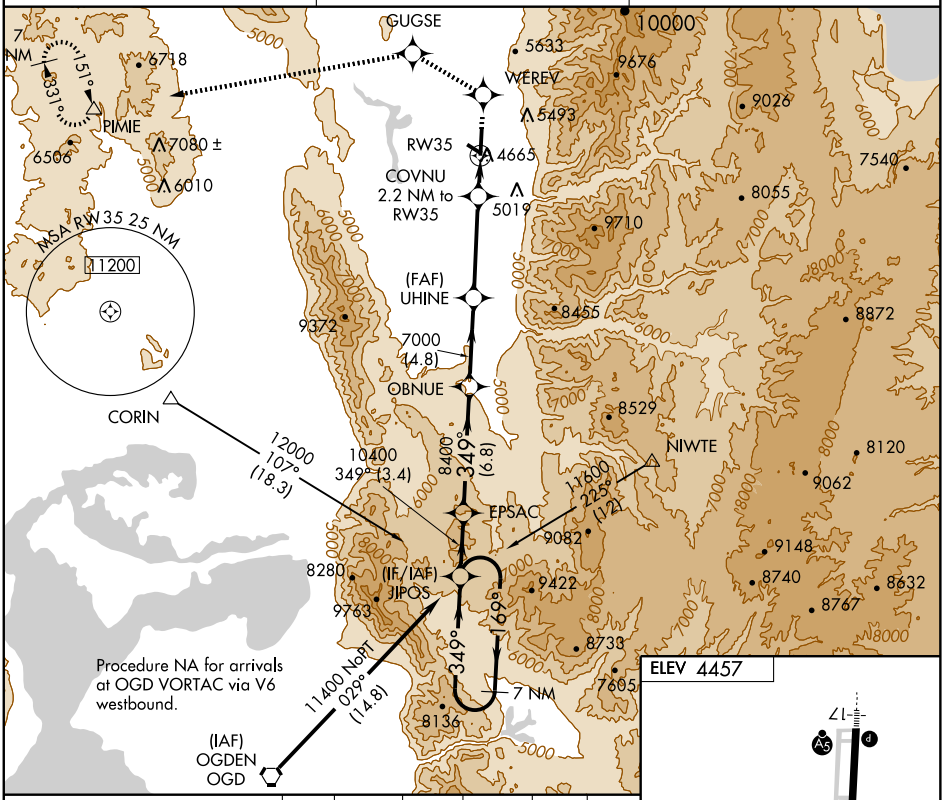
RNAV (GPS) RWY 35

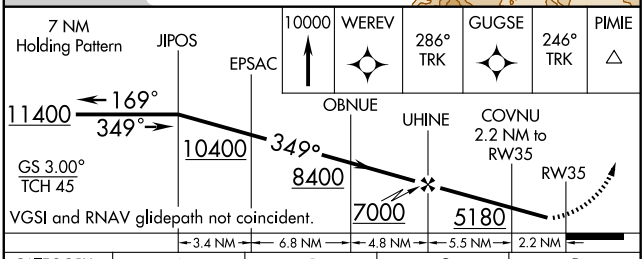
LOGAN-CACHE (LGU)

Circling NA east of Rwy 17-35.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 10000 direct WEREV and via 286° track to GUGSE and 246° track to PIMIE and hold, continue climb-in-hold to 10000.

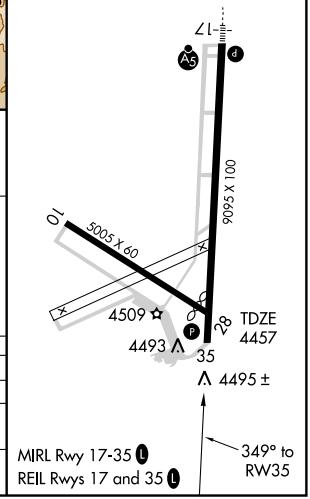
ASOS	CEDAR CITY RADIO	UNICOM
135.275	122.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4746-1 289 (300-1)			
LNAV MDA	5060-1 603 (700-1)		5060-1¾ 603 (700-1¾)	5060-2 603 (700-2)
CIRCLING	5060-1 603 (700-1)		5060-1¾ 603 (700-1¾)	5060-2 603 (700-2)

ELEV 4457



SW-4, 22 OCT 2009 to 19 NOV 2009

MILFORD, UTAH

AL-260 (FAA)

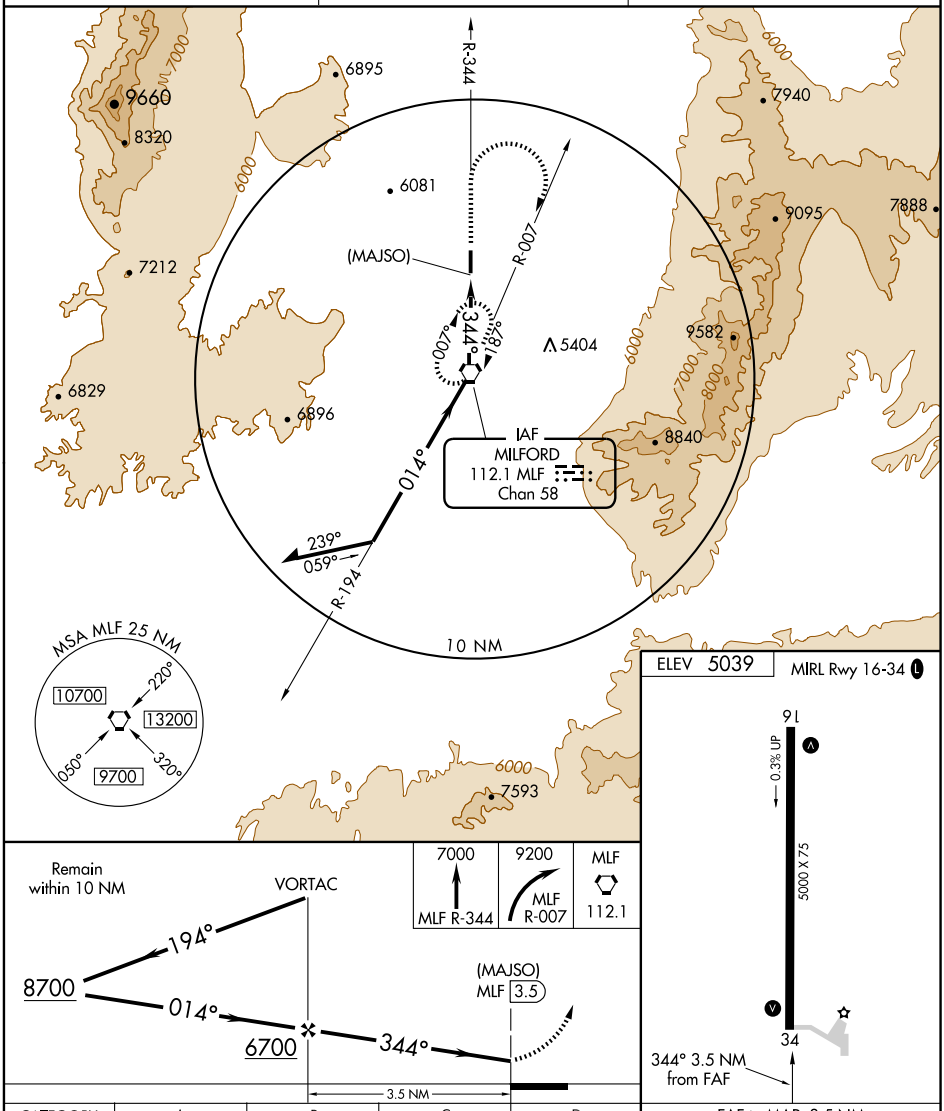
VORTAC MLF 112.1 Chan 58	APP CRS 344°	Rwy Idg N/A TDZE N/A Apt Elev 5039

VOR or GPS-A

MILFORD MUNI/BEN AND JUDY BRISCOE FIELD (MLF)

MISSED APPROACH: Climb to 7000 via MLF R-344, then climbing right turn to 9200 via R-007 to MLF VORTAC and hold.

ASOS 135.025	CEDAR CITY RADIO 122.1R	UNICOM 122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	5660-1 621 (700-1)	5680-1 641 (700-1)	5700-1¾ 661 (700-1¾)	5780-2 ½ 741 (800-2 ½)

FAF to MAP 3.5 NM					
Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7100
039°	TDZE	4551
	Apt Elev	4555

RNAV (GPS) RWY 3

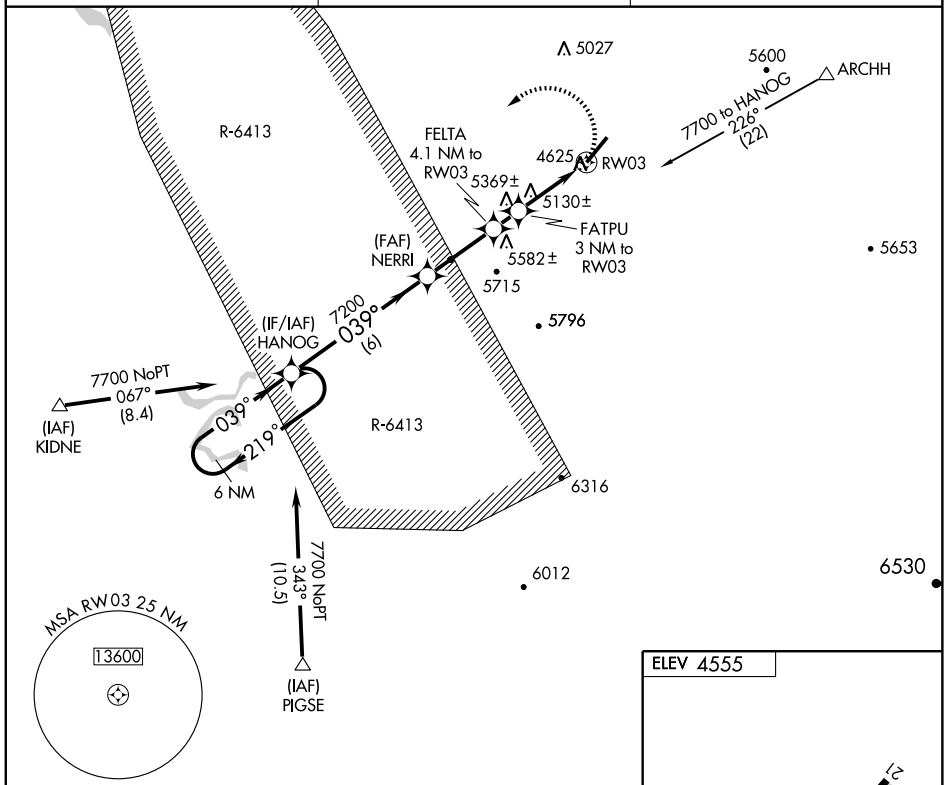
MOAB/CANYONLANDS FIELD (CNY)

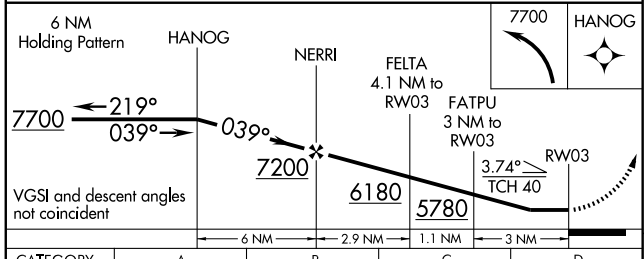
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Procedure NA when R-6413 in operation. Procedure NA at night.

NA

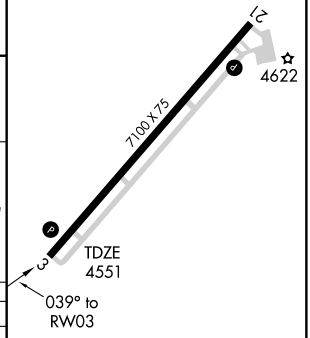
MISSED APPROACH: Climbing left turn to 7700 direct HANOG WP and hold.

ASOS	DENVER CENTER	UNICOM
118.525	134.5 327.8	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	5380-1 829 (900-1)	5380-1¼ 829 (900-1¼)	5380-2½ 829 (900-2½)	5380-2¾ 829 (900-2¾)
CIRCLING	5380-1 825 (900-1)	5380-1¼ 825 (900-1¼)	5380-2½ 825 (900-2½)	5440-3 885 (900-3)



REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME OAB	APP CRS	Rwy Idg	N/A
109.8	113°	TDZE	N/A
Chan 35		Apt Elev	4555

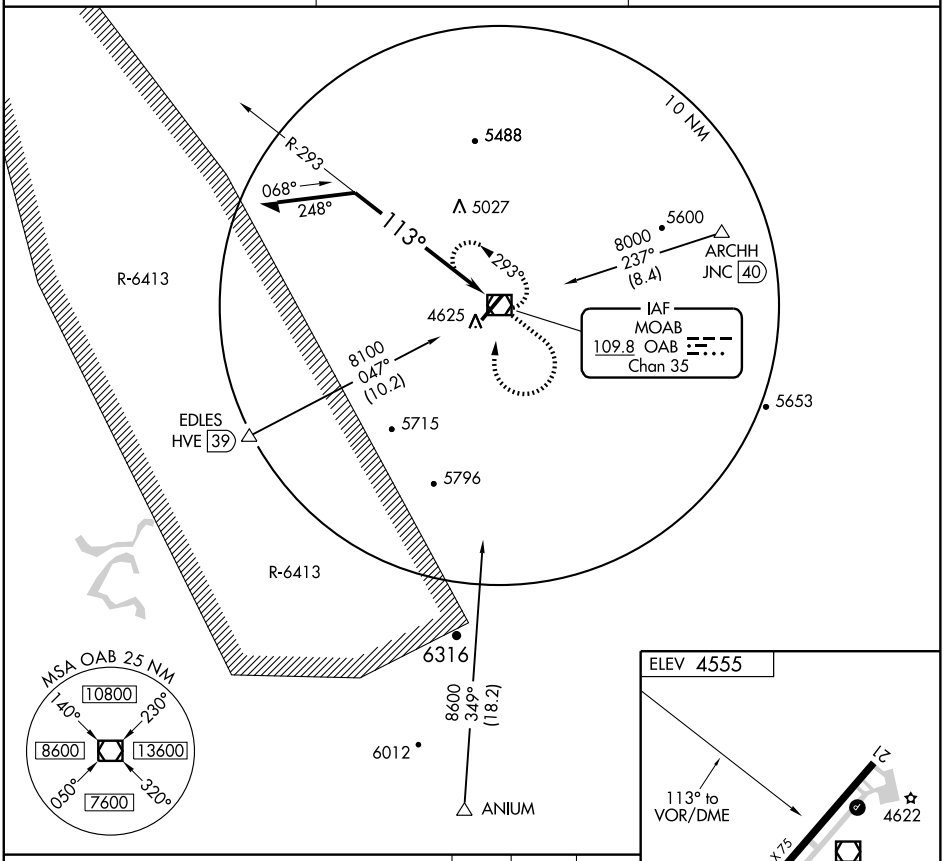
VOR-A

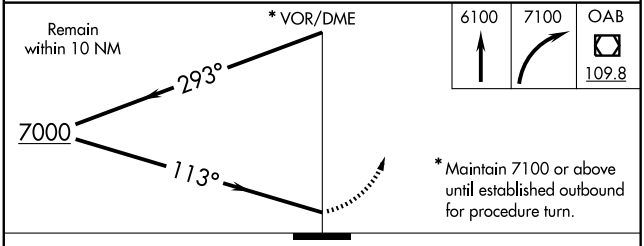
MOAB/CANYONLANDS FIELD (CNY)

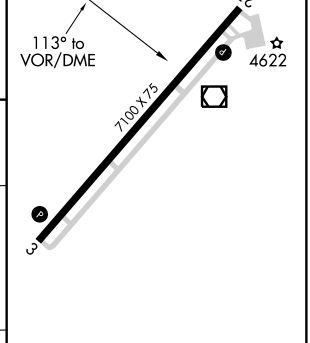
T
ANA Procedure not authorized when R-6413 in operation.

MISSED APPROACH: Climb to 6100 then climbing right turn to 7100 direct OAB VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
118.525	134.5 327.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5500-1¼ 945 (1000-1¼)		5500-2¾ 945 (1000-2¾)	5500-3 945 (1000-3)

REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L

SW-4, 22 OCT 2009 to 19 NOV 2009

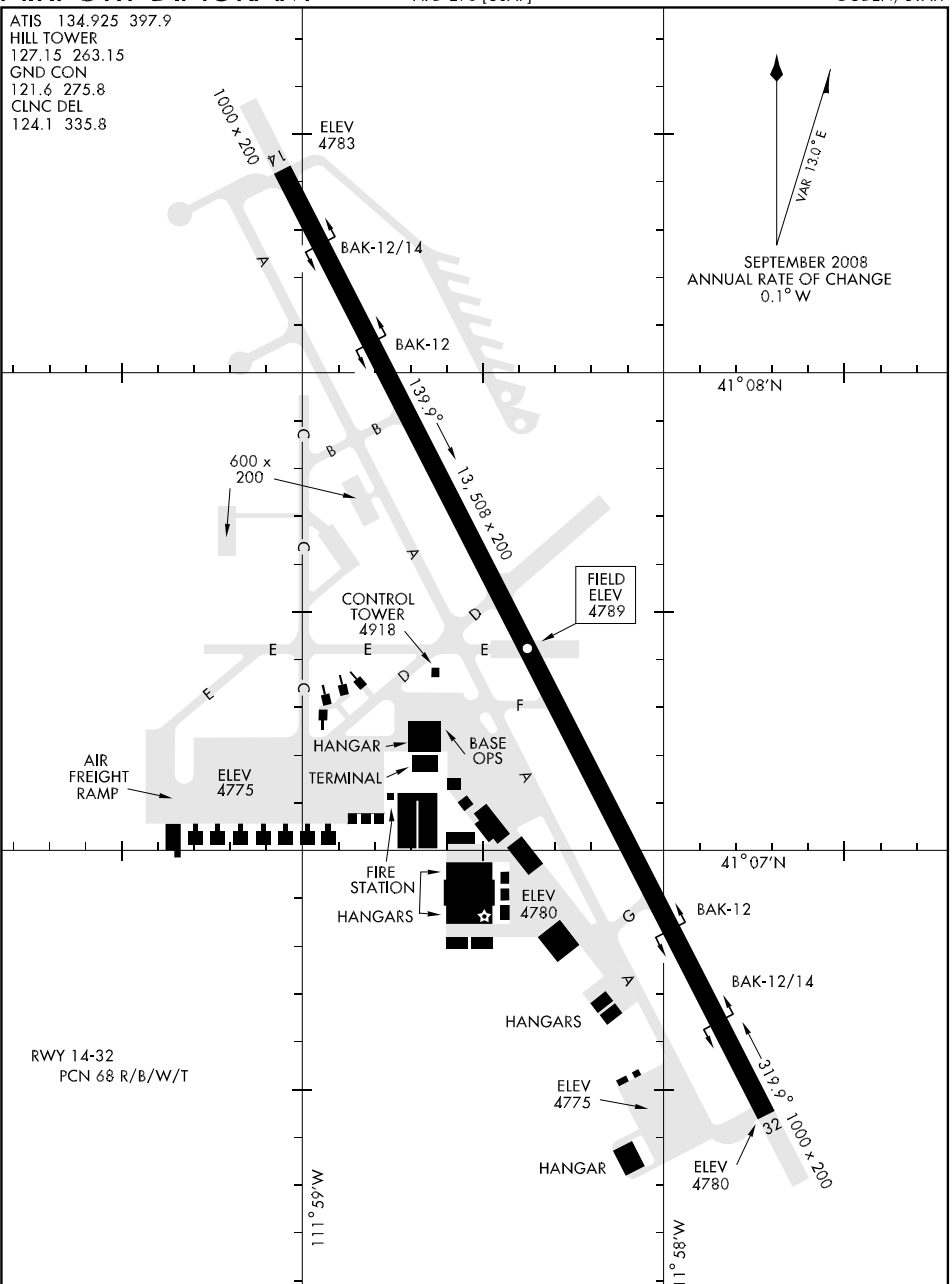
08269

AIRPORT DIAGRAM

AFD-296 [USAF]

HILL AFB (KHIF)

OGDEN, UTAH



SW-4, 22 OCT 2009 to 19 NOV 2009

DEVLN 1 DP (DEVLN1 • DEVLN)

SHL-296 [USAF]

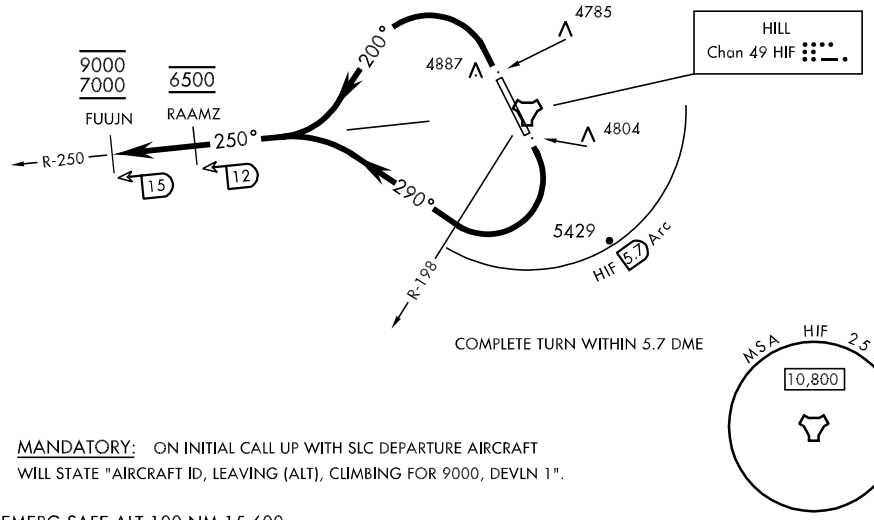
OGDEN, UTAH

ATIS 134.925 397.9
CLNC DEL
124.1 335.8
GND CON
121.6 275.8
HILL TOWER
127.15 263.15
SALT LAKE CITY
DEP CON
121.1 319.25
CLOVER CON
134.1 285.65

Rwy	Knots	60	120	180	240	300	360
14	V/V(fpm)	2095	4190	6285	8380	10475	12570
32	V/V(fpm)	4610	9220	13830	18440	23050	27660

ATC Climb Rate to 5200

AIRSPEED IN EXCESS OF 350 KIAS NOT AUTHORIZED UNTIL ESTABLISHED:
RWY 14 HEADING 290°
RWY 32 HEADING 200°



MANDATORY: ON INITIAL CALL UP WITH SLC DEPARTURE AIRCRAFT WILL STATE "AIRCRAFT ID, LEAVING (ALT), CLIMBING FOR 9000, DEVLN 1".

EMERG SAFE ALT 100 NM 15,600

SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 14: Turn right heading 290°, remain within HIF TACAN 5.7 DME until passing the HIF R-198 and established on a heading greater than 256°, intercept HIF R-250 outbound prior to HIF 12 DME, cross RAAMZ at 6500, climb and maintain 7000 block 9000.

TAKE-OFF RWY 32: Turn left heading 200°, intercept HIF TACAN R-250 outbound prior to HIF 12 DME, cross RAAMZ at 6500, climb and maintain 7000 block 9000.

DEVLN 1 DP (DEVLN1 • DEVLN)

FALCN 1 DP (FALCN1 • FALCN)

SHL-296 [USAF]

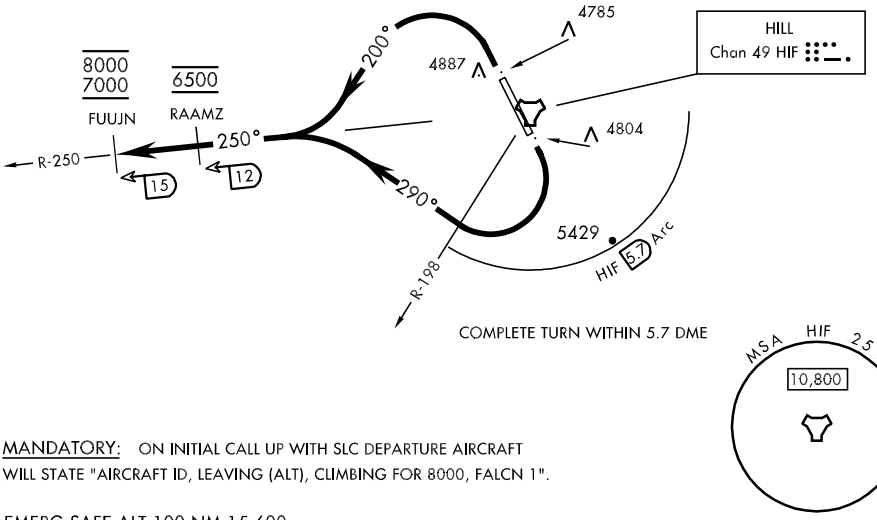
OGDEN, UTAH

ATIS 134.925 397.9
CLNC DEL
124.1 335.8
GND CON
121.6 275.8
HILL TOWER
127.15 263.15
SALT LAKE CITY
DEP CON
121.1 319.25
CLOVER CON
134.1 285.65

Rwy	Knots	60	120	180	240	300	360
14	V/V(fpm)	2095	4190	6285	8380	10475	12570
32	V/V(fpm)	4610	9220	13830	18440	23050	27660

ATC Climb Rate to 5200

AIRSPEED IN EXCESS OF 350 KIAS NOT AUTHORIZED UNTIL ESTABLISHED:
RWY 14 HEADING 290°
RWY 32 HEADING 200°



MANDATORY: ON INITIAL CALL UP WITH SLC DEPARTURE AIRCRAFT WILL STATE "AIRCRAFT ID, LEAVING (ALT), CLIMBING FOR 8000, FALCN 1".

EMERG SAFE ALT 100 NM 15,600

SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 14: Turn right heading 290°, remain within HIF TACAN 5.7 DME until passing the HIF R-198 and established on a heading greater than 256°, intercept HIF R-250 outbound prior to HIF 12 DME, cross RAAMZ at 6500, climb and maintain 7000 block 8000.

TAKE-OFF RWY 32: Turn left heading 200°, intercept HIF TACAN R-250 outbound prior to HIF 12 DME, cross RAAMZ at 6500, climb and maintain 7000 block 8000.

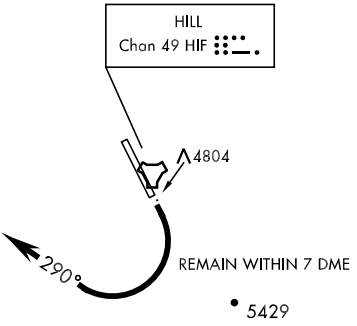
FREMONT 1 (VECTOR) DP (FRMNT1 • FRMNT)

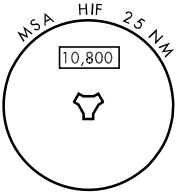
ATIS 134.925 397.9
CLNC DEL
124.1 335.8
GND CON
121.6 275.8
HILL TOWER
127.15 263.15
SALT LAKE CITY
DEP CON
121.1 319.25
CLOVER CON
134.1 285.65

SHL-296 [USAF]

Rwy	Knots	60	120	180	240	300	360
14 ⓐ	V/V(fpm)	580	1160	1740	2320	2900	3480
14 ⓑ	V/V(fpm)	260	520	780	1040	1300	1560

ATC Climb Rate
ⓐ To 5200
ⓑ From 5200 to 6300





LOST COMMUNICATIONS: IF RADIO CONTACT HAS NOT BEEN ESTABLISHED BY HIF R-225 OR 12 DME, SQUAWK 7600 AND IMMEDIATELY CLIMB TO 7500 MSL.

EMERG SAFE ALT 100 NM 15,600

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 14: Turn right heading 290°, remain within 7 DME, maintain 6500.

TACAN OUT: Turn right heading 290°, maintain 6500.

SW-4, 22 OCT 2009 to 19 NOV 2009

HI-ILS RWY 14

HILL AFB (KHIF)

LOC I-HIF 109.9	APCH CRS 139°	Rwy ldg 13,508 TDZE 4786 Arpt Elev 4789

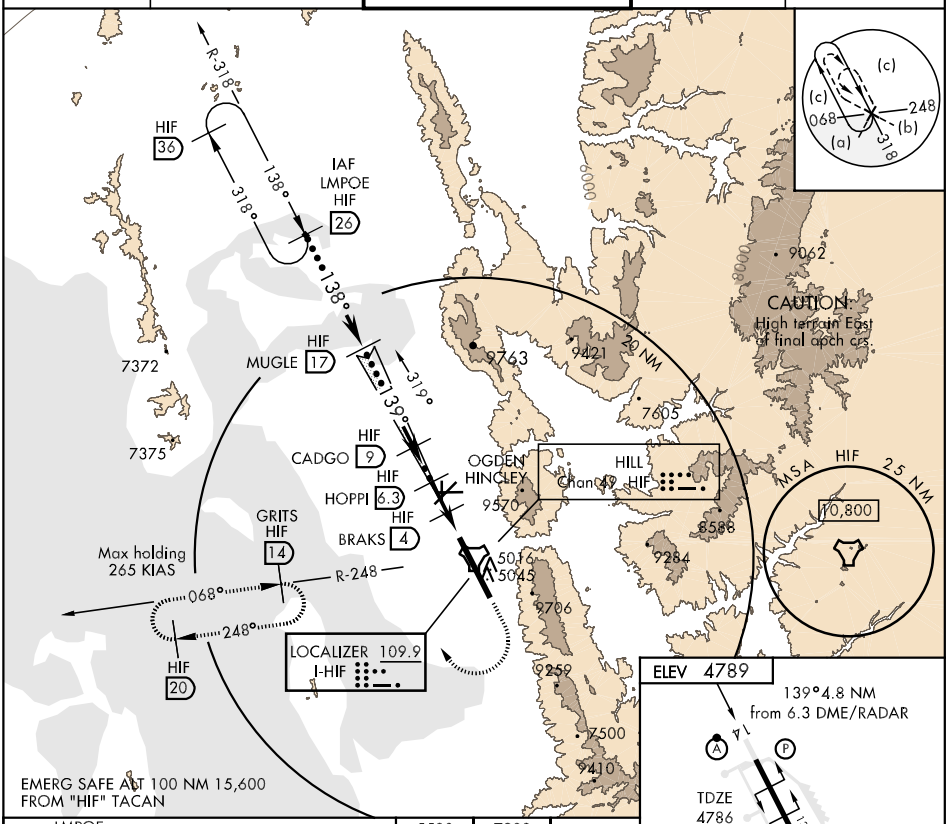
JAL-296 [USAF]

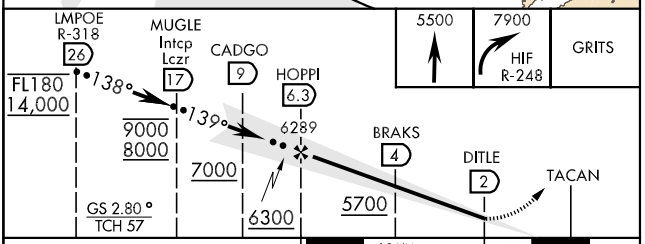
▼ * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase RVR to 50 and vis to 1 mile.
*** Circling not authorized NE of Rwy 14-32.

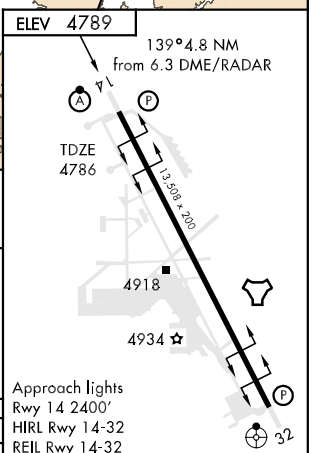
ALSF-2

MISSED APPROACH: To 5500, then climbing right turn to 7900 out HIF R-248 to GRITS and hold.

ATIS *	SALT LAKE CITY APP CON	HILL TOWER	GND CON	CLNC DEL
134.925 397.9	121.1 319.25	127.15 263.15	121.6 275.8	124.1 335.8







CATEGORY	C	D	E
S-ILS 14 *	4986/24	200	(200-½)
S-LOC 14 **	5040/40	254	(300-¾)
CIRCLING ***	5240-1½ 451 (500-1½)	5340-2	551 (600-2)

FAF to MAP 4.3 NM

Knots	120	140	160	180	200
Min:Sec	2:09	1:51	1:37	1:26	1:17

SW-4, 22 OCT 2009 to 19 NOV 2009

HI-TACAN RWY 14

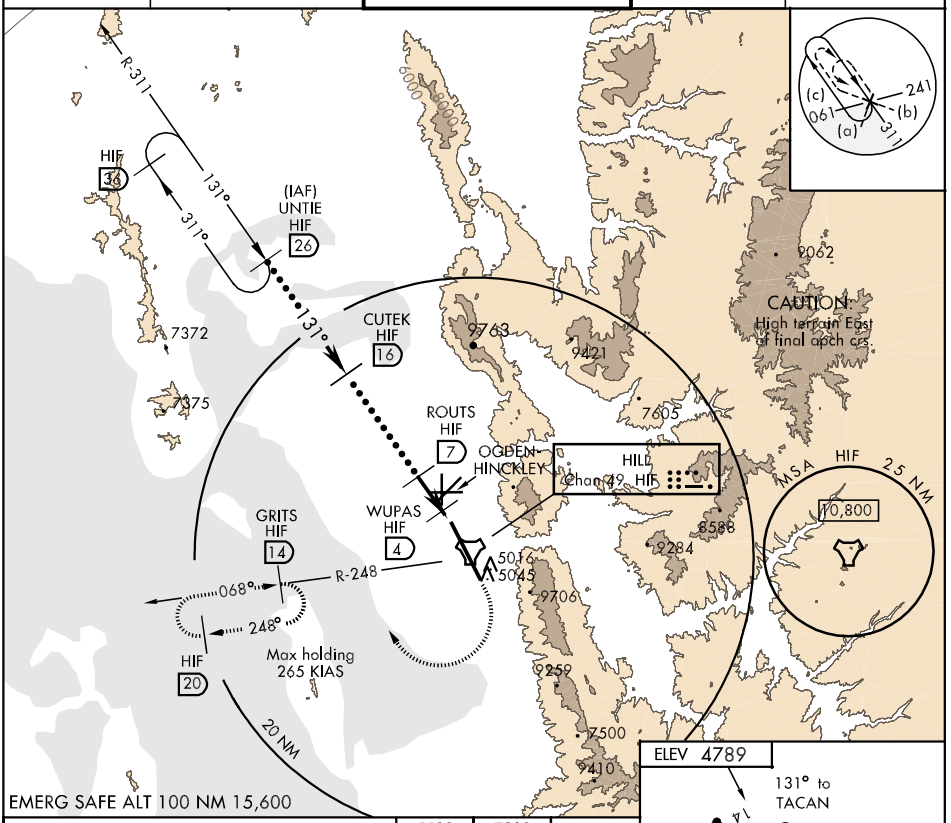
TACAN HIF Chan 49	APCH CRS 131°	Rwy Idg 13,508 TDZE 4786 Arpt Elev 4789	JAL-296 [USAF]	HILL AFB (KHIF)

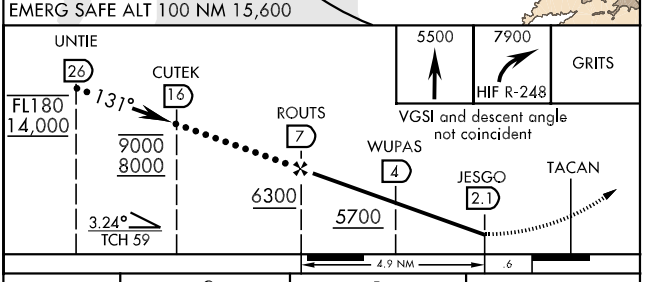
▼ *When ALS inop, increase CAT C RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.
**Circling not authorized NE of Rwy 14-32.

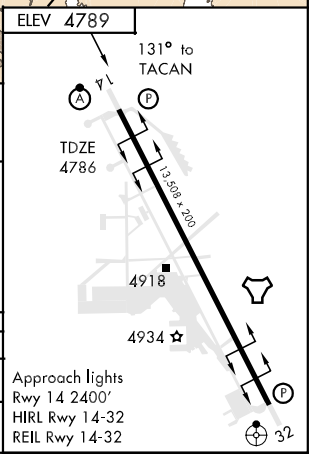
ALSF-2

MISSED APPROACH: To 5500, then climbing right turn to 7900 out HIF R-248 to GRITS and hold.

ATIS *	SALT LAKE CITY APP CON	HILL TOWER	GND CON	CLNC DEL
134.925 397.9	121.1 319.25	127.15 263.15	121.6 275.8	124.1 335.8







CATEGORY	C	D	E
S-14 *	5140/40 354 (400-¾)		
CIRCLING **	5240-1½ 451 (500-1½)	5340-2 551 (600-2)	

Approach lights
Rwy 14 2400′
HIRL Rwy 14-32
REIL Rwy 14-32

HI-TACAN RWY 32

TACAN	APCH CRS	Rwy Idg	TDZE	Arpt Elev
HIF Chan 49	332°	13,508	4783	4789

JAL-296 [USAF] — HILL AFB (KHIF)

▼ *Circling not authorized E of Rwy 14-32.
CAUTION: High terrain East of final apch crs.

ODALS

MISSED APPROACH: Climbing left turn to 8400 out HIF R-295 to BRESS and hold.

ATIS	SALT LAKE CITY APP CON	HILL TOWER	GND CON	CLNC DEL
134.925 397.9	121.1 319.25	127.15 263.15	121.6 275.8	124.1 335.8

Max holding 265 KIAS
HIF 30
BRESS HIF 20
115°
295°
R-295
20 NM
OGDEN HINCKLEY
HILL Chan 49 HIF
OPGEE HIF 6
TUBBY HIF 10
FEDAD HIF 14
ZASKO HIF 18
SALT LAKE CITY INTL
(IAF) PEERC HIF 24
332°
152°
HIF 34
R-152
MSA HIF 25 NM
10,800
EMERG SAFE ALT 100 NM 15,600

9062 9763 9421 7075 7605 9570 8588 9284 5016 5045 9706 9259 8170 6896 7500 9419 9304 8000 10000

(a) 152 (b) 222 (c) 042 (c)

SW-4, 22 OCT 2009 to 19 NOV 2009

ELEV 4789
4887 A P
4876
13,508 x 200
4918
4934
TDZE 4783
P
32
Approach lights
Rwy 14 2400'
HIRL Rwy 14-32
REIL Rwy 14-32
332° to TACAN

8400
HIF R-295
BRESS HIF 20

VGSI and descent angle not coincident.

TACAN FIKAP 1.4 OPGEE 6 TUBBY 10 FEDAD 14 ZASKO 18 PEERC R-152 24
6800 8400 9500 10000 15,000 14,000
3.55°
TCH 52
.6 8.6 NM

CATEGORY	C	D	E
S-32	5240/50 457 (500-1)	5240/60	457 (500-1¼)
CIRCLING *	5240-1½ 451 (500-1½)	5340-2	551 (600-2)

41°07'N-111°58'W

ATIS 134.925 397.9
CLNC DEL
124.1 335.8
GND CON
121.6 275.8
HILL TOWER
127.15 263.15
SALT LAKE CITY
DEP CON
121.1 319.25
CLOVER CON
134.1 285.65

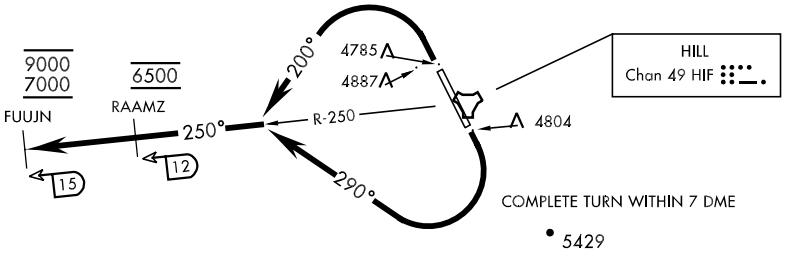
Rwy	Knots	60	120	180	240	300	360
14 ⓐ	V/V(fpm)	580	1160	1740	2320	2900	3480
14 ⓑ	V/V(fpm)	260	520	780	1040	1300	1560
32 ⓒ	V/V(fpm)	660	1320	1980	2640	3300	3960

ATC Climb Rate

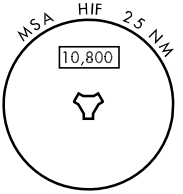
ⓐ To 5200

ⓑ From 5200 to 6300

ⓒ To 5700



AIRSPEED IN EXCESS OF 350 KIAS NOT AUTHORIZED UNTIL ESTABLISHED:
RWY 14 HEADING 290°
RWY 32 HEADING 200°



EMERG SAFE ALT 100 NM 15,600

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 14: Turn right heading 290°, intercept HIF R-250 outbound prior to 12 DME (complete turn within 7 DME), cross RAAMZ at 6500, maintain block 7000 through 9000.

TAKE-OFF RWY 32: Turn left heading 200°, intercept HIF R-250 outbound prior to 12 DME, cross RAAMZ at 6500, maintain block 7000 through 9000.

ILS RWY 14

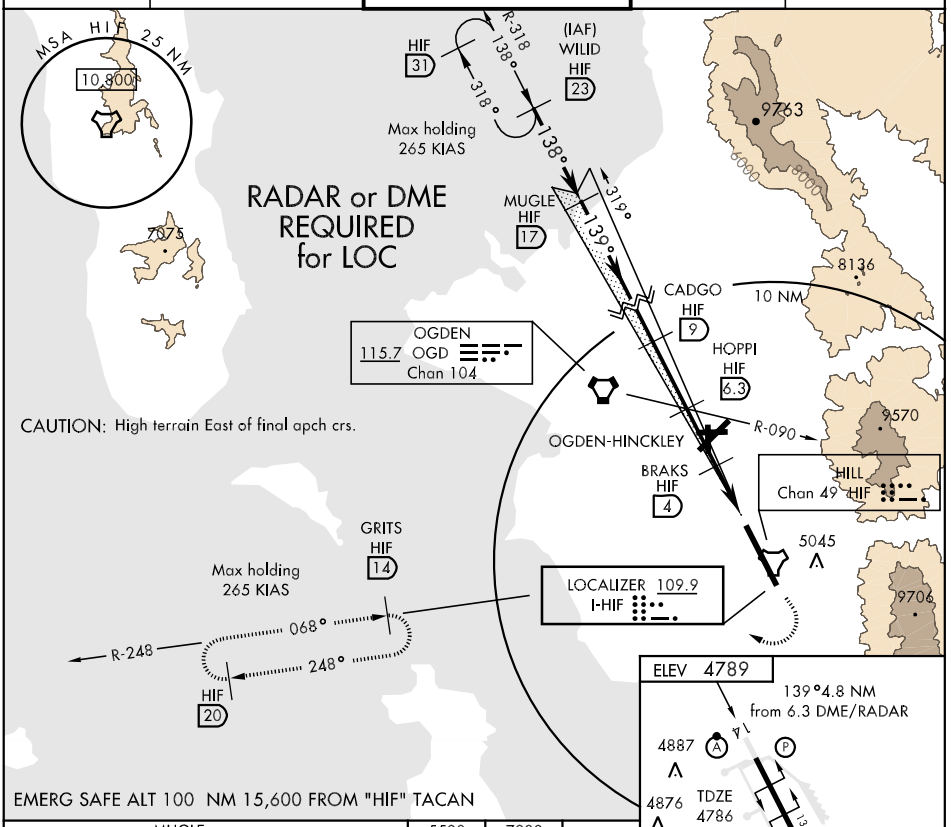
LOC I-HIF	APCH CRS	Rwy ldg 13,508 TDZE 4786 Arpt Elev 4789	AL-296 [USAF]	HILL AFB (KHIF)
109.9	139°			

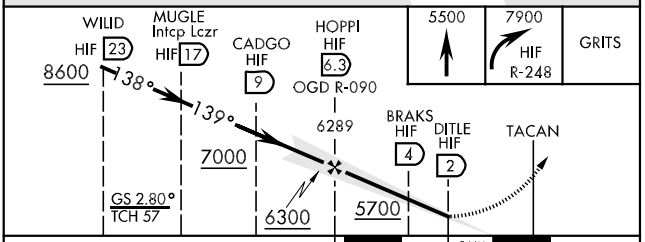
▼ * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase RVR to 50 and vis to 1 mile.
*** Circling not authorized in sector NE of Rwy 14-32.

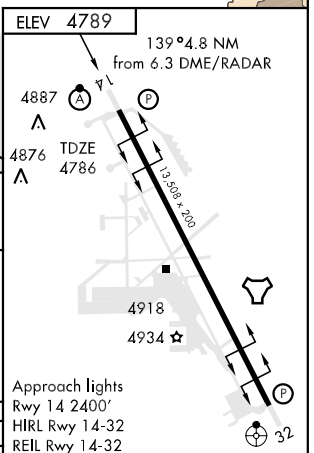
ALSF-2

MISSED APPROACH: To 5500, then climbing right turn to 7900 out HIF R-248 to GRITS and hold.

ATIS	SALT LAKE CITY APP CON	HILL TOWER	GND CON	CLNC DEL
134.925 397.9	121.1 319.25	127.15 263.15	121.6 275.8	124.1 335.8







CATEGORY	A	B	C	D	E
S-ILS 14 *	4986/24 200 (200-½)				
S-LOC 14 **	5040/24 254 (300-½)		5040/40 254 (300-¾)		
CIRCLING ***	5240-1 451 (500-1)		5240-1½ 451(500-1½)	5340-2 551 (600-2)	

FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

ILS Z RWY 14

LOC I-HIF	APCH CRS	Rwy ldg 13,508 / TDZE 4786 / Arpt Elev 4789	AL-296 [USAF]	HILL AFB (KHIF)
109.9	139°			

* When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase RVR to 50 and vis to 1 mile.
*** Circling not authorized in sector NE of Rwy 14-32.

ALSF-2

MISSED APPROACH: To 5500, then climbing right turn to 7900, track 285° intercept OGD R-209 to GRITS and hold.

ATIS	SALT LAKE CITY APP CON	HILL TOWER	GND CON	CLNC DEL
134.925 397.9	121.1 319.25	127.15 263.15	121.6 275.8	124.1 335.8

DME REQUIRED

M.S.A. OGD 25 NM 10,800

(IAF) WOKIN OGD 15

Max holding 265 KIAS

139° 319° R-348

9764 6000 8000 8136 10 NM 9572 9707

OGDEN 115.7 OGD Chan 104

HOPPI R-090 R-108

OGDEN-HINCKLEY

5045

LOCALIZER 109.9 I-HIF

CAUTION: High terrain East of final apch crs.

7075

GRITS OGD 11

OGD 19 209° 029° R-209

Max holding 265 KIAS

EMERG SAFE ALT 100 NM 15,600 FROM "HIF" TACAN

ELEV 4789

139° 4.8 NM

4887 4876 TDZE 4786

13,508 x 200

4918 4934

Approach lights
Rwy 14 2400'
HIRL Rwy 14-32
REIL Rwy 14-32

32

WOKIN 15 8600 OGD R-348 139° 7600 HOPPI 6289 OGD R-108 6300 5700

GS 2.80° TCH 57

4.3 NM .5 NM

5500 7900 tr 285° OGD GRITS 11

CATEGORY	A	B	C	D	E
S-ILS 14 *	4986/24 200 (200-½)				
S-LOC 14 **	5060/24 274 (300-½)		5060/40 274 (300-¾)		
CIRCLING ***	5240-1 451 (500-1)		5240-1½ 451(500-1½)	5340-2 551 (600-2)	

FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

SW-4, 22 OCT 2009 to 19 NOV 2009

TACAN RWY 14

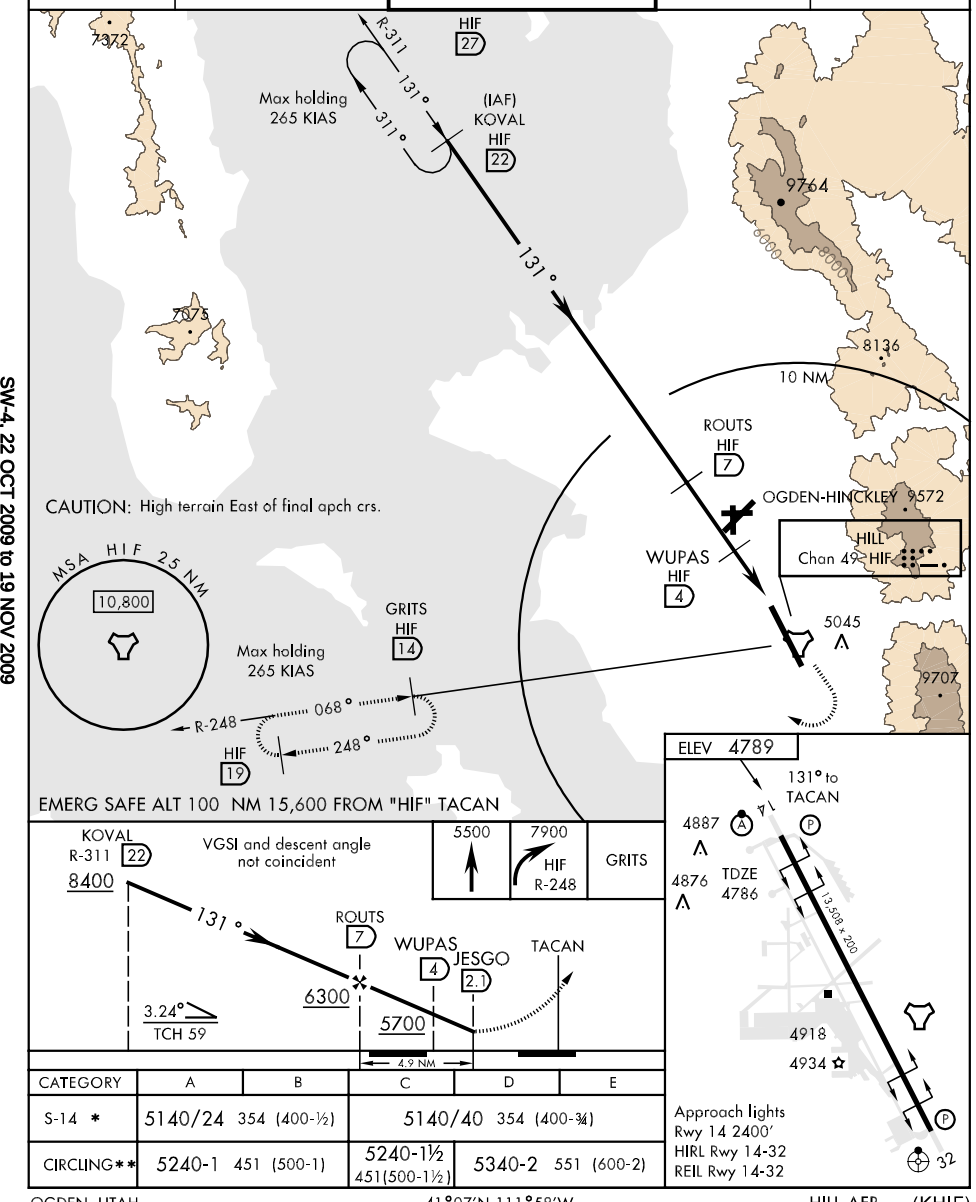
TACAN HIF Chan 49	APCH CRS 131°	Rwy ldg 13,508 TDZE 4786 Arpt Elev 4789	AL-296 [USAF]	HILL AFB (KHIF)

▼ * When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.
** Circling not authorized in sector NE of Rwy 14-32.

ALSF-2

MISSED APPROACH: To 5500, then climbing right turn to 7900 out HIF R-248 to GRITS and hold.

ATIS	SALT LAKE CITY APP CON	HILL TOWER	GND CON	CLNC DEL
134.925 397.9	121.1 319.25	127.15 263.15	121.6 275.8	124.1 335.8



CATEGORY	A	B	C	D	E
S-14 *	5140/24 354 (400-½)		5140/40 354 (400-¾)		
CIRCLING**	5240-1 451 (500-1)		5240-1½ 451(500-1½)	5340-2 551 (600-2)	

WILLARD 1 (VECTOR) DP (WLLRD1 • WLLRD)

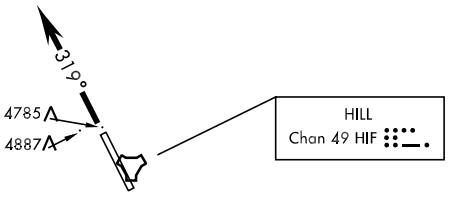
OGDEN, UTAH

ATIS 134.925 397.9
CLNC DEL
124.1 335.8
GND CON
121.6 275.8
HILL TOWER
127.15 263.15
SALT LAKE CITY
DEP CON
121.1 319.25
CLOVER CON
134.1 285.65

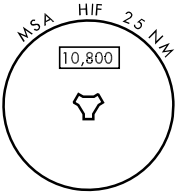
SHL-296 [USAF]

Rwy	Knots	60	120	180	240	300	360
32	V/V(fpm)	660	1320	1980	2640	3300	3960

ATC Climb Rate to 5700



5429



EMERG SAFE ALT 100 NM 15,600

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 32: Track heading 319 °, maintain 7000.

WILLARD 1 (VECTOR) DP (WLLRD1 • WLLRD)

OGDEN, UTAH

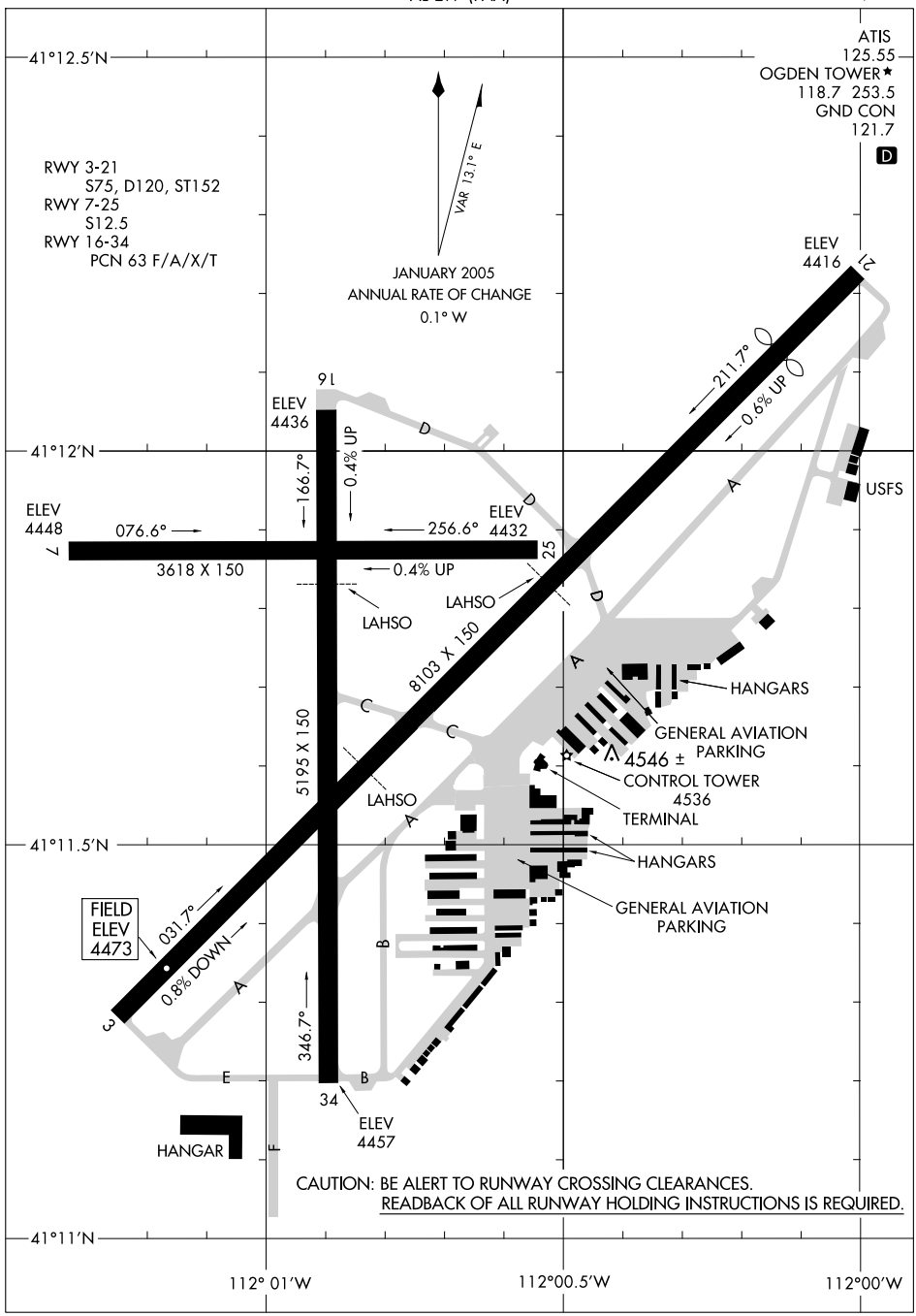
09015

AIRPORT DIAGRAM

AL-297 (FAA)

OGDEN-HINCKLEY (OGD)

OGDEN, UTAH



SW-4, 22 OCT 2009 to 19 NOV 2009

EMONT ONE DEPARTURE (OBSTACLE)

SL-297 (FAA)

OGDEN-HINCKLEY (OGD)
OGDEN, UTAH

ATIS 125.55
GND CON
121.7
OGDEN TOWER ★
118.7 253.5
SALT LAKE CITY DEP CON
121.1 319.25

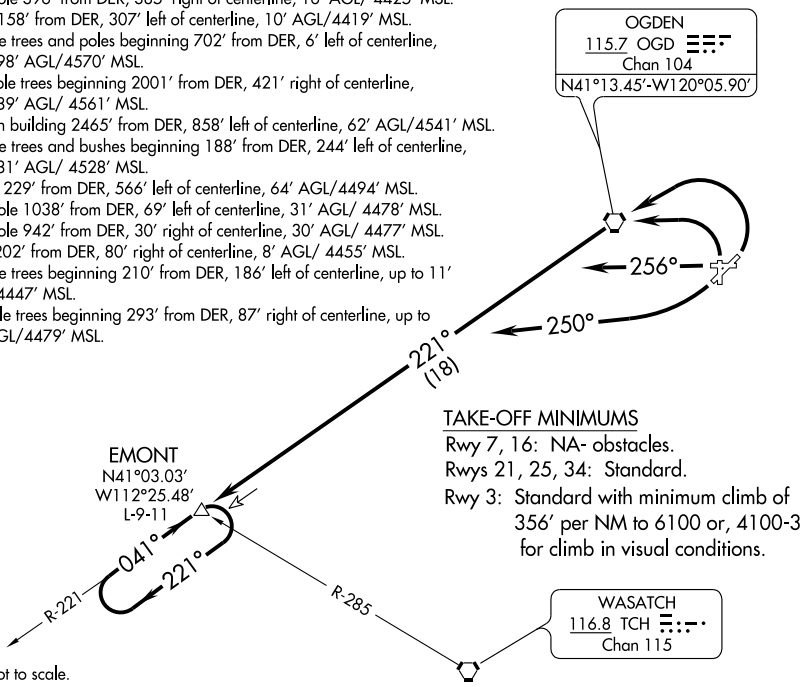
TAKE-OFF OBSTACLE NOTES

Rwy 3: Multiple trees beginning 376′ from DER, 62′ left of centerline, up to 42′ AGL/4451′ MSL.
Tree 430′ from DER, 503′ right of centerline, 46′ AGL/4455′ MSL.
Flagpole 348′ from DER, 583′ right of centerline, 42′ AGL/4451′ MSL.
Lightpole 241′ from DER, 535′ left of centerline, 38′ AGL/4447′ MSL.
Pole 628′ from DER, 611′ right of centerline, 45′ AGL/ 4454′ MSL.
OL on DME 195′ from DER, 268′ right of centerline, 17′ AGL/ 4426′ MSL.
Road 231′ from DER, 470′ right of centerline, 14′ AGL/ 4423′ MSL.
Lightpole 396′ from DER, 385′ right of centerline, 16′ AGL/ 4425′ MSL.
Road 158′ from DER, 307′ left of centerline, 10′ AGL/4419′ MSL.

Rwy 21: Multiple trees and poles beginning 702′ from DER, 6′ left of centerline, up to 98′ AGL/4570′ MSL.
Multiple trees beginning 2001′ from DER, 421′ right of centerline, up to 89′ AGL/ 4561′ MSL.
Rod on building 2465′ from DER, 858′ left of centerline, 62′ AGL/4541′ MSL.

Rwy 25: Multiple trees and bushes beginning 188′ from DER, 244′ left of centerline, up to 81′ AGL/ 4528′ MSL.
Tank 1229′ from DER, 566′ left of centerline, 64′ AGL/4494′ MSL.
Lightpole 1038′ from DER, 69′ left of centerline, 31′ AGL/ 4478′ MSL.
Lightpole 942′ from DER, 30′ right of centerline, 30′ AGL/ 4477′ MSL.
Bush 202′ from DER, 80′ right of centerline, 8′ AGL/ 4455′ MSL.

Rwy 34: Multiple trees beginning 210′ from DER, 186′ left of centerline, up to 11′ AGL/4447′ MSL.
Multiple trees beginning 293′ from DER, 87′ right of centerline, up to 43′ AGL/4479′ MSL.



NOTE: Chart not to scale.

TAKE-OFF MINIMUMS

Rwy 7, 16: NA- obstacles.
Rwys 21, 25, 34: Standard.
Rwy 3: Standard with minimum climb of 356′ per NM to 6100 or, 4100-3 for climb in visual conditions.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climbing left turn direct OGD VORTAC then via OGD R-221 to EMONT INT/ OGD 18 DME, thence.... Or, climb in visual conditions to cross OGD VORTAC southwest bound at or above 8500, then on OGD R-221 to EMONT INT/ OGD 18 DME, thence....

TAKE-OFF RUNWAY 21: Climbing right turn heading 250° to intercept OGD R-221 to EMONT INT/ OGD 18 DME, thence....

TAKE-OFF RUNWAY 25: Climb heading 256° to intercept OGD R-221 to EMONT INT/ OGD 18 DME, thence....

TAKE-OFF RUNWAY 34: Climbing left turn direct OGD VORTAC then via OGD R-221 to EMONT INT/ OGD 18 DME, thence....

....Climb in EMONT INT holding pattern to MEA/MCA for assigned route of flight.

SW-4, 22 OCT 2009 to 19 NOV 2009

OGDEN, UTAH

AL-297 (FAA)

ILS or LOC RWY 3

OGDEN-HINCKLEY (OGD)

LOC/DME I-OGD	APP CRS	Rwy Idg	7252
111.7	031°	TDZE	4473
Chan 54		Apt Elev	4473

When VGSI inoperative, circling Rwy 7 and 16 NA at night.
DME or RADAR required.
Inoperative table does not apply to S-ILS-3 and S-LOC-3 Cat C.
When local altimeter setting not received, use Hill AFB altimeter setting.

MALS

MISSED APPROACH: Climb to 4900, then climbing left turn to 6000 direct OGD VORTAC, then climb to 13000 via OGD R-263 to MOINT INT/OGD 15.1 DME and hold, continue climb-in-hold to 13000.

ATIS	SALT LAKE CITY APP CON	OGDEN TOWER★	GND CON	UNICOM
125.55	121.1 319.25	118.7 (CTAF) L 253.5	121.7	122.95

RADAR REQUIRED

117.4 MLD Chan 121

MOINT OGD 15.1

R-162

R-263

LOCALIZER 111.7 I-OGD Chan 54

OGDEN 115.7 OGD Chan 104

WULFE I-OGD 6 RADAR

(IF/IAF) JOSIF I-OGD 15.3

031° 19.4

10 NM

ALTERNATE MISSED APCH FIX

R-296

JOSIF I-OGD 15.3

211°

031°

116.8 TCH Chan 115

MSA OGD 25 NM

160°

11000

8600

325°

7075

6815

083°

263°

6000

5000

8136

9570

9706

9259

6596

4629

4754

4611±

4751

4784

5057

ELEV 4473 D

9L

27

3618 X 150

0.4% UP

4489±

4600±

6195 X 150

8103 X 150

0.8% DOWN

0.4% up

4546 ±

TWR 4546

TDZE 4473

34

4497

4570

031° 4.6 NM from FAF

HIRL Rwy 3-21 L

MIRL Rwy 16-34 L

REIL Rwys 16 and 34

JOSIF I-OGD 15.3

Procedure Turn NA

8600

031°

6000

WULFE I-OGD 6 RADAR

4900 | 6000 | OGD 115.7 | 13000 | MOINT

OGD R-263

VGSI and ILS glidepath not coincident

I-OGD 2.5

I-OGD 1.4

GS 3.00°

TCH 49

9.4 NM

3.5 NM

1.1 NM

CATEGORY	A	B	C	D
S-ILS 3	4673-¾ 200 (200-¾)			
S-LOC 3	4880-¾ 407 (500-¾)		4880-1¼ 407 (500-1¼)	
CIRCLING	4980-1 507 (600-1)	5060-1 587 (600-1)	5060-1½ 587 (600-1½)	5100-2 627 (700-2)

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	7252
031°	TDZE	4473
	Apt Elev	4473

RNAV (GPS) Y RWY 3

OGDEN-HINCKLEY (OGD)

DME/DME RNP- 0.3 NA.
When local altimeter setting not received, use Hill AFB altimeter setting.
When VGSI inoperative, circling Rwy 7 and 16 NA at night.
Inoperative table does not apply to LNAV Cat C.

MALS

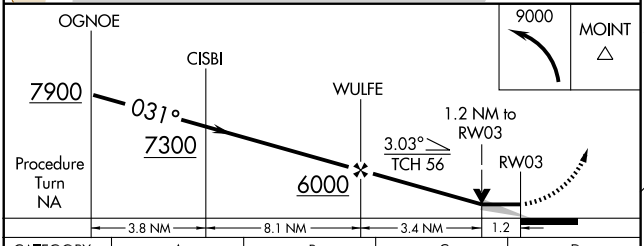
MISSED APPROACH: Climbing left turn to 9000 direct MOINT and hold, continue climb-in-hold to 9000.

ATIS	SALT LAKE CITY APP CON	OGDEN TOWER*	GND CON	UNICOM
125.55	121.1 319.25	118.7 (CTAF) L 253.5	121.7	122.95

Procedure NA for arrivals at TCH VORTAC via V21-101 southeastbound.

6815
083°
MOINT
263°
7 NM
145°
(6.2)
9000
(IAF)
RIDEN
7900
130°
(11.6)
(FAF)
WULFE
6000
031°
(8.1)
CISBI
7300
031°
(3.8)
(IF)
OGNOE
MSA RW03 25 NM
11000
6596
7900
289°
(15.9)
(IAF)
WASATCH
TCH
7900
018°
(12.2)
(IAF)
STACO
4629
RW03
4751
4754
4784
9570
5057
9706
9259

ELEV 4473 D



CATEGORY	A	B	C	D
LNAV MDA	4920-¾ 447 (500-¾)		4920-1¼ 447 (500-1¼)	4920-1½ 447 (500-1½)
CIRCLING	4980-1 507 (600-1)	5060-1 587 (600-1)	5060-1½ 587 (600-1½)	5100-2 627 (700-2)

HIRL Rwy 3-21 L
MIRL Rwy 16-34 L
REIL Rwys 16 and 34

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	7252
CH 65620	031°	TDZE	4473
W03A		Apt Elev	4473

RNAV (GPS) Z RWY 3

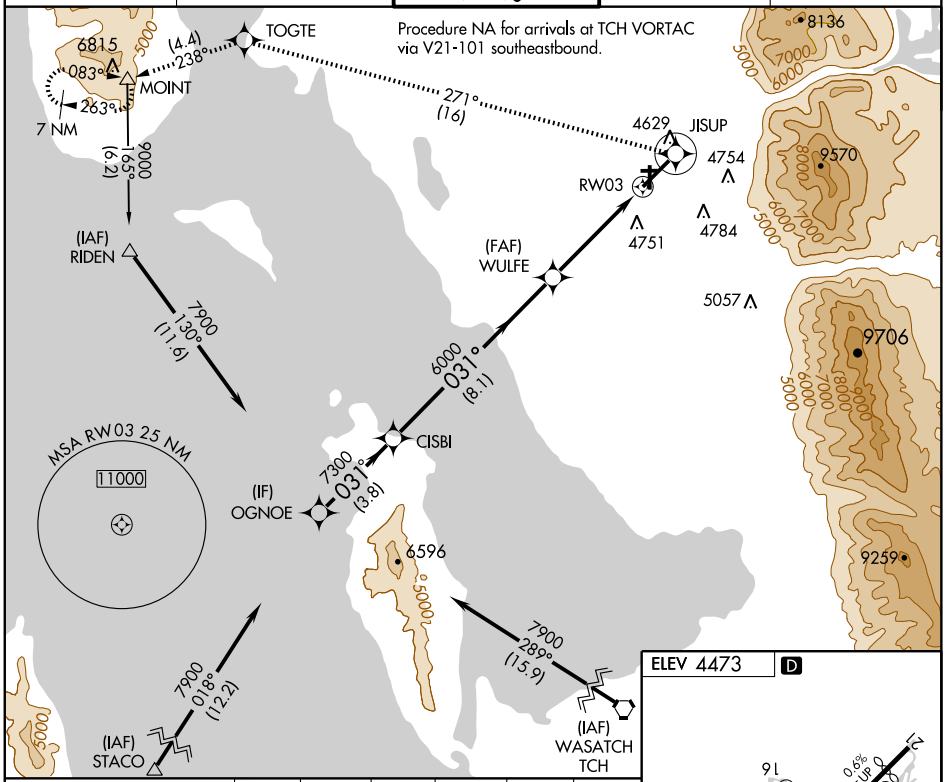
OGDEN-HINCKLEY (OGD)

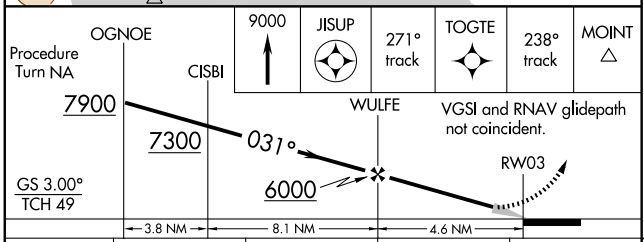
DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Hill AFB altimeter setting.
Inoperative table does not apply.

MALS

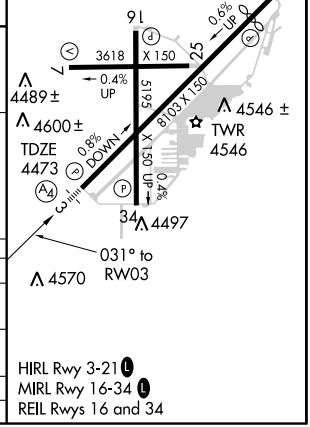
MISSED APPROACH: Climb to 9000 direct JISUP and via 271° track to TOGTE and via 238° track to MOINT and hold, continue climb-in-hold to 9000.

ATIS	SALT LAKE CITY APP CON	OGDEN TOWER★	GND CON	UNICOM
125.55	121.1 319.25	118.7 (CTAF) L 253.5	121.7	122.95





CATEGORY	A	B	C	D
LPV DA	4890-1½	417 (500-1½)		
LNAV/VNAV DA	NA			
LNAV MDA	NA			
CIRCLING	NA			



HIRL Rwy 3-21 L
MIRL Rwy 16-34 L
REIL Rwys 16 and 34

SW-4, 22 OCT 2009 to 19 NOV 2009

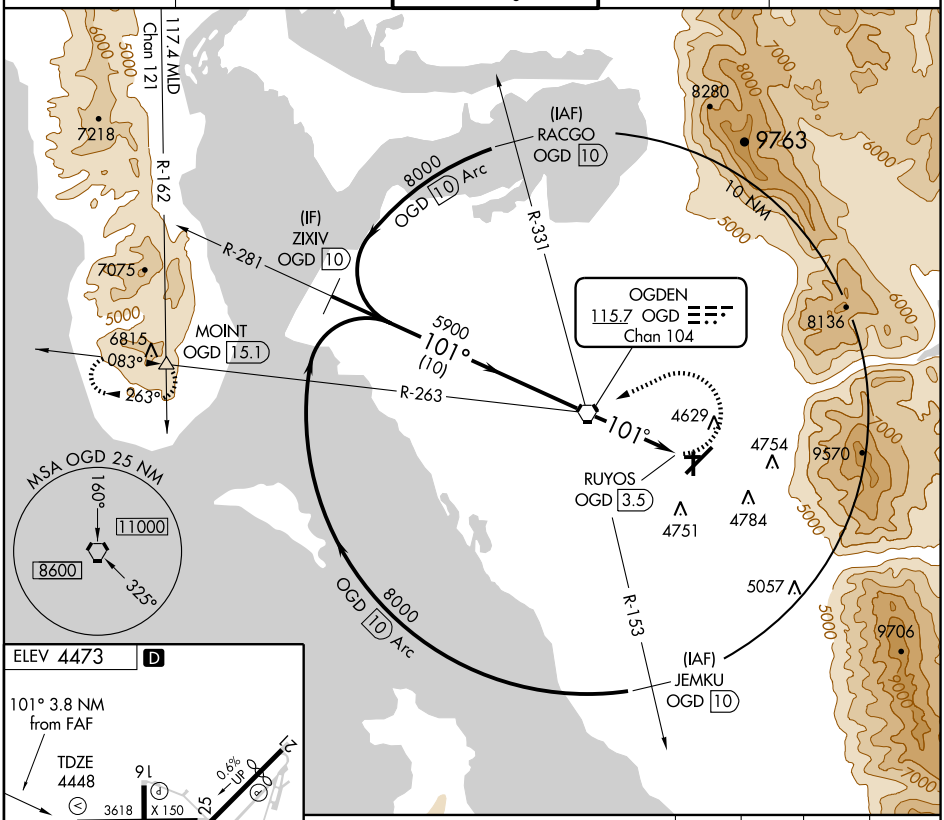
VORTAC OGD 115.7 Chan 104	APP CRS 101°	Rwy Idg 3618 TDZE 4448 Apt Elev 4473

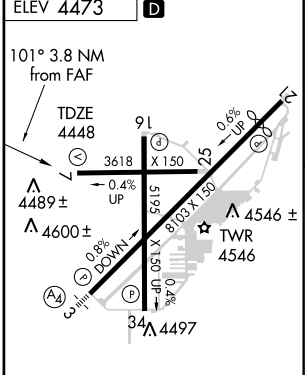
VOR/DME RWY 7
OGDEN-HINCKLEY (OGD)

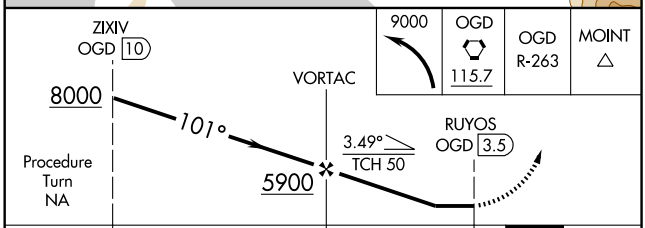
When local altimeter setting not received, use Hill AFB altimeter setting.
When VGSI inoperative, straight-in/circling Rwy 7 procedure NA at night.
When VGSI inoperative, circling Rwy 16 NA at night.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 9000 direct OGD VORTAC and via OGD VORTAC R-263 to MOINT/15.1 DME and hold, continue climb-in-hold to 9000.

ATIS	SALT LAKE CITY APP CON	OGDEN TOWER★	GND CON	UNICOM
125.55	121.1 319.25	118.7 (CTAF) L 253.5	121.7	122.95







CATEGORY	A	B	C	D
S-7	4900-1 452 (500-1)		4900-1¼ 452 (500-1¼)	4900-1½ 452 (500-1½)
CIRCLING	4980-1 507 (600-1)	5060-1 587 (600-1)	5060-1½ 587 (600-1½)	5100-2 627 (700-2)

HIRL Rwy 3-21 L
MIRL Rwy 16-34 L
REIL Rwys 16 and 34

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-PUC	APP CRS	Rwy Idg	8313
109.35	004°	TDZE	5863
Chan 30 (Y)		Apt Elev	5957

ILS or LOC/DME RWY 36

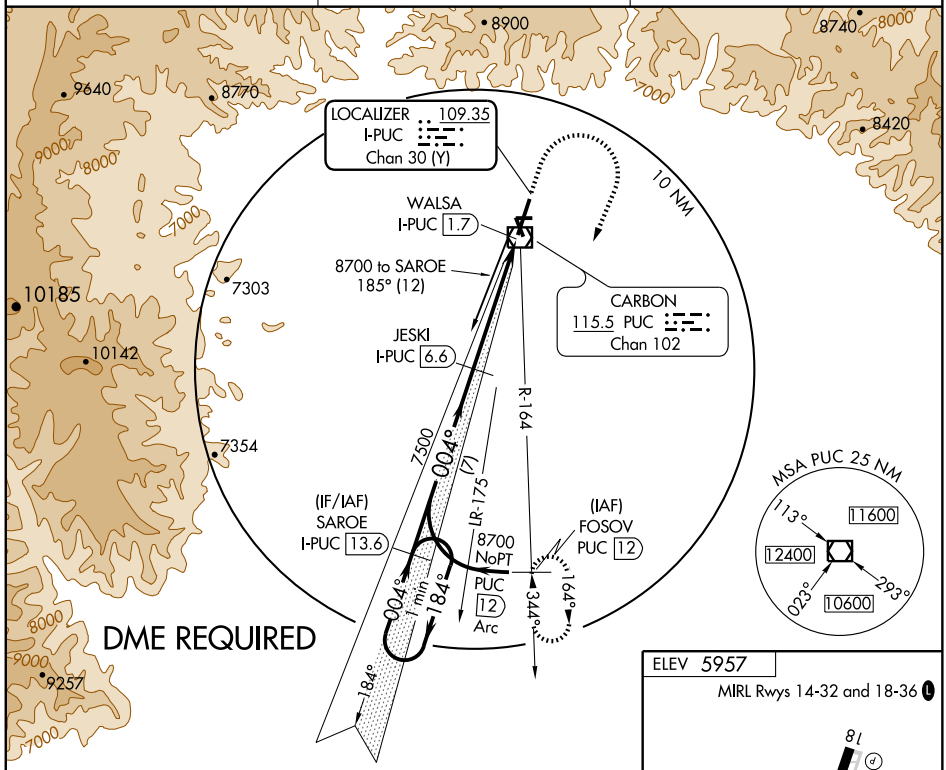
PRICE/CARBON COUNTY RGNL/BUCK DAVIS FIELD (PUC)

T Inoperative table does not apply.
NA Circling NA at night to Rwy 18, 25, and 32.

MALSF

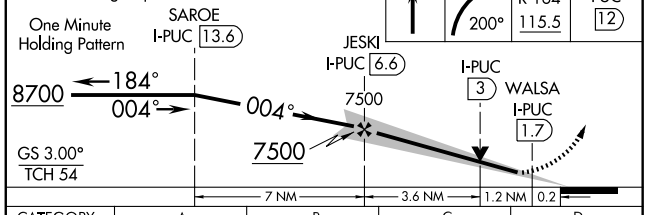
MISSED APPROACH: Climb to 6400, then climbing right turn to 10000 via heading 200° and PUC VOR/DME R-164 to FOSOV/PUC VOR/DME 12 DME and hold, continue climb-in-hold to 10000.

ASOS	SALT LAKE CENTER	UNICOM
135.425	133.9 370.85	122.8 (CTAF) L



Use I-PUC DME when on the localizer course.
VGSI and ILS glidepath not coincident

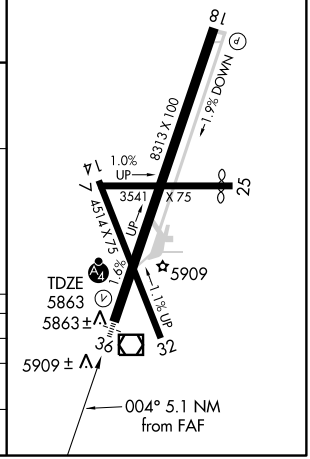
6400	10000	PUC	FOSOV
↑	200°	R-164	PUC
		115.5	12



CATEGORY	A	B	C	D
S-ILS 36	6114-1 251 (200-1)			
S-LOC 36	6240-1 377 (300-1)			6240-1¼ 377 (300-1¼)
CIRCLING	6660-1 703 (800-1)	6740-1¼ 783 (800-1¼)	6820-2½ 863 (900-2½)	6980-3 1023 (1100-3)

ELEV 5957

MIRL Rwys 14-32 and 18-36 L



SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	8313
004°	TDZE	5835
	Apt Elev	5953

RNAV (GPS) RWY 36

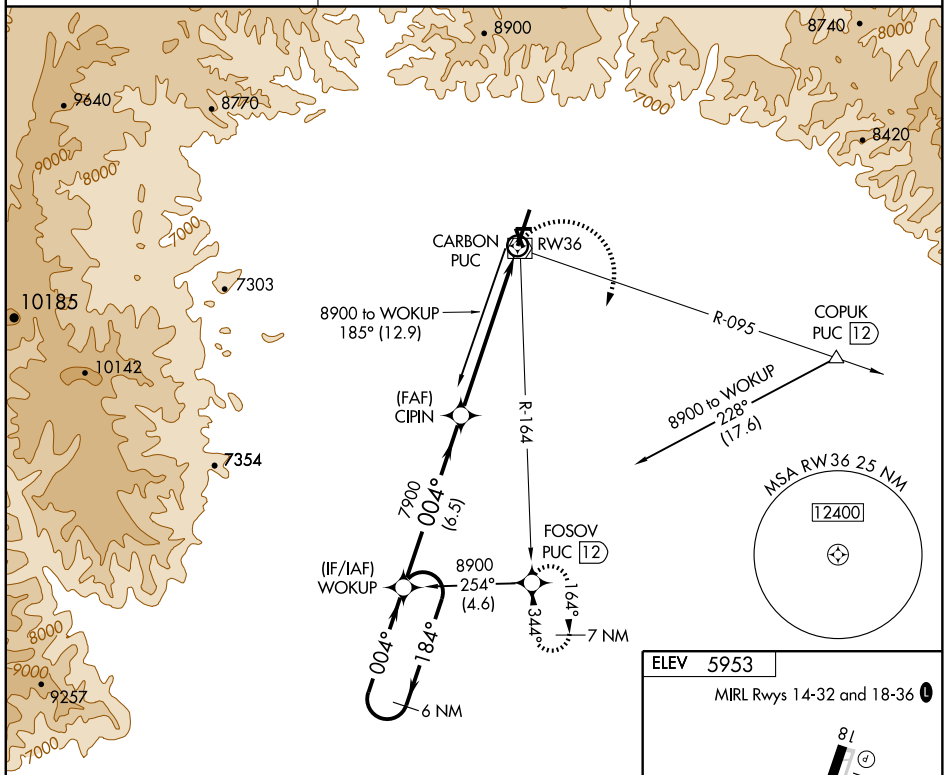
PRICE/ CARBON COUNTY RGNL/BUCK DAVIS FIELD AIRPORT (PUC)

T NA — Circling not authorized at night to Rwy 18, 25, and 32. GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

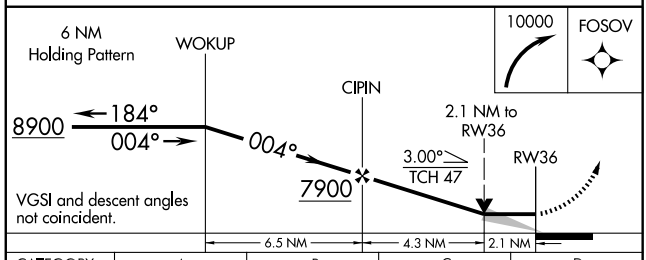
MALSF

MISSED APPROACH: Climbing right turn to 10000 direct FOSOV WP and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.425	133.9 370.85	122.8 (CTAF) L



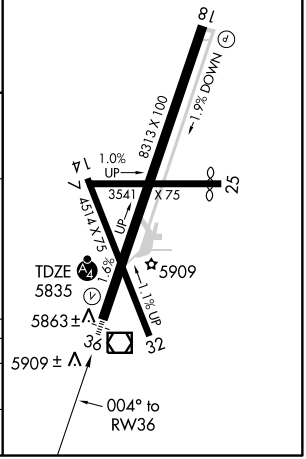
Procedure NA for arrival at COPUK via V134 eastbound.



CATEGORY	A	B	C	D
LNAV MDA	6400-1 565 (500-1)		6400-1½ 565 (500-1½)	6400-1¾ 565 (500-1¾)
CIRCLING	6660-1 707 (800-1)	6740-1¼ 787 (800-1¼)	6820-2½ 867 (900-2½)	6980-3 1027 (1100-3)

ELEV 5953

MIRL Rwys 14-32 and 18-36 L



SW-4, 22 OCT 2009 to 19 NOV 2009

PRICE, UTAH

AL-681 (FAA)

VOR/DME PUC	APP CRS	Rwy Idg	8313
115.5	009°	TDZE	5835
Chan 102		Apt Elev	5953

VOR/DME RWY 36

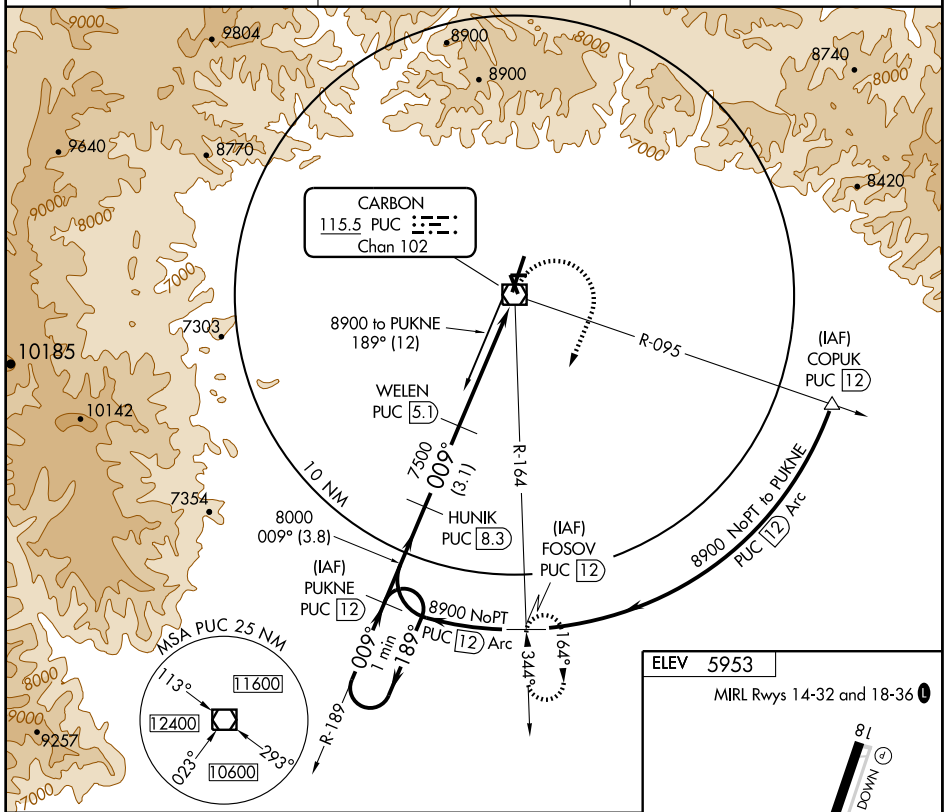
PRICE/CARBON COUNTY RGNL/BUCK DAVIS FIELD (PUC)

T A — Circling NA at night to Rwy 18, 25, and 32.

MALSF

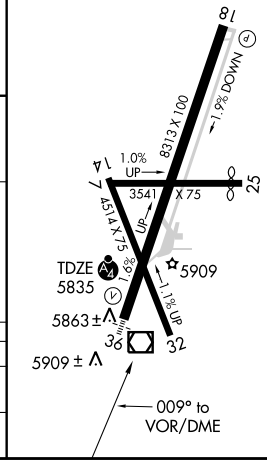
MISSED APPROACH: Climbing right turn to 10000 via heading 200° and PUC VOR/DME R-164 to FOSOV/12 DME and hold.

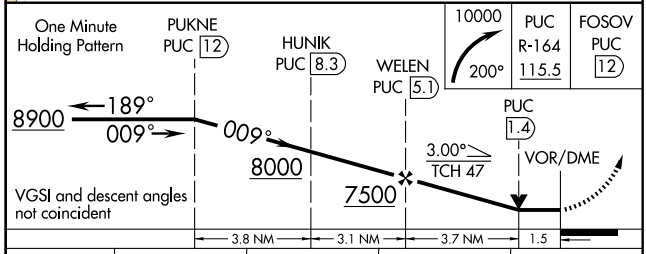
ASOS	SALT LAKE CENTER	UNICOM
135.425	133.9 370.85	122.8 (CTAF) L



ELEV 5953

MIRL Rwys 14-32 and 18-36 L





CATEGORY	A	B	C	D
S-36	6240-1 405 (300-1)		6240-1¼ 405 (300-1¼)	
CIRCLING	6660-1 707 (800-1)	6740-1¼ 787 (800-1¼)	6820-2½ 867 (900-2½)	6980-3 1027 (1100-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME PUC	APP CRS	Rwy Idg	8313
115.5	009°	TDZE	5835
Chan 102		Apt Elev	5953

VOR RWY 36

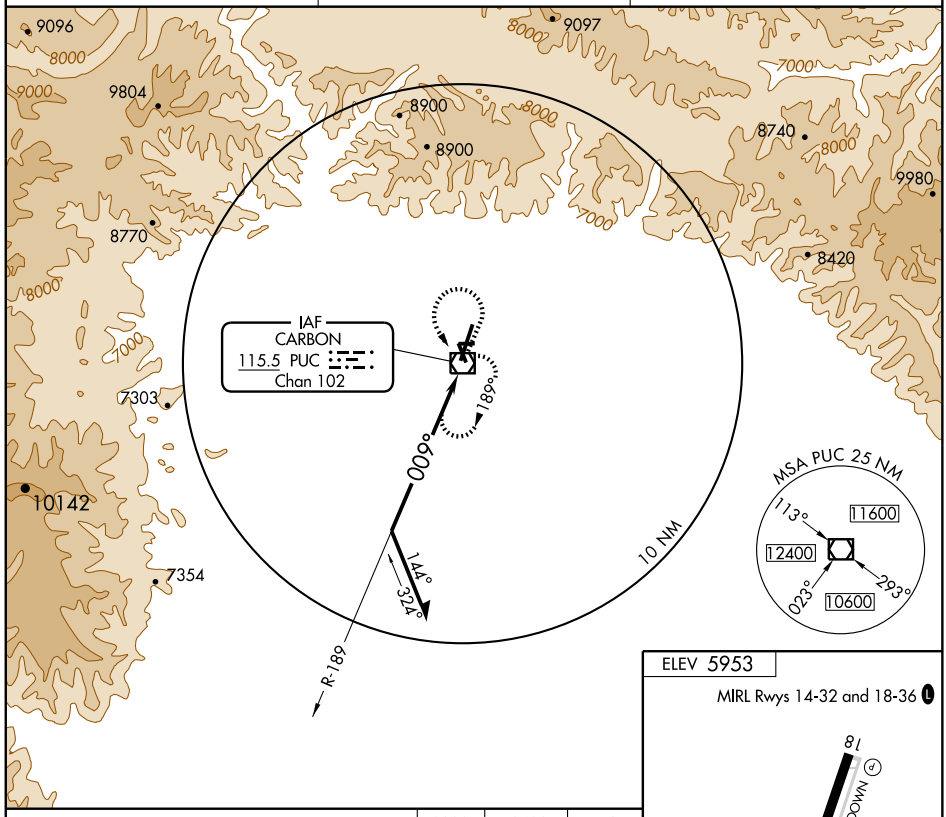
PRICE/CARBON COUNTY RGNL/BUCK DAVIS FIELD (PUC)

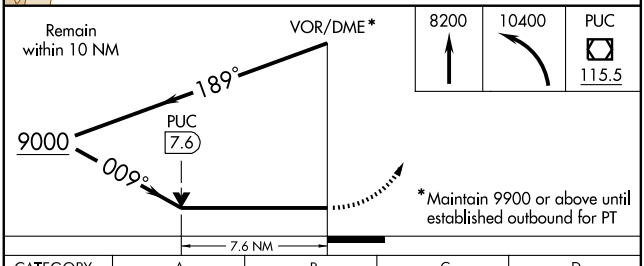
Circling NA at night to Rwy 18, 25, and 32.

MALSF

MISSED APPROACH: Climb to 8200, then climbing left turn to 10400 direct PUC VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.425	133.9 370.85	122.8 (CTAF) L

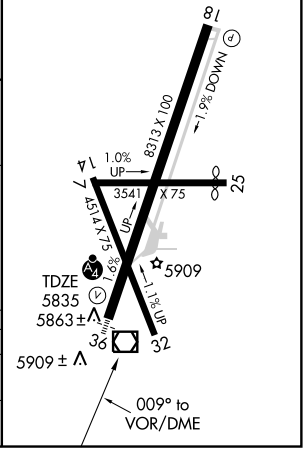




CATEGORY	A	B	C	D
S-36	7880-1¼ 2045 (2000-1¼)	7880-1½ 2045 (2000-1½)	7880-3	2045 (2000-3)
CIRCLING	7880-1¼ 1927 (2000-1¼)	7880-1½ 1927 (2000-1½)	7880-3	1927 (2000-3)

ELEV 5953

MIRL Rwys 14-32 and 18-36 L



SW-4, 22 OCT 2009 to 19 NOV 2009

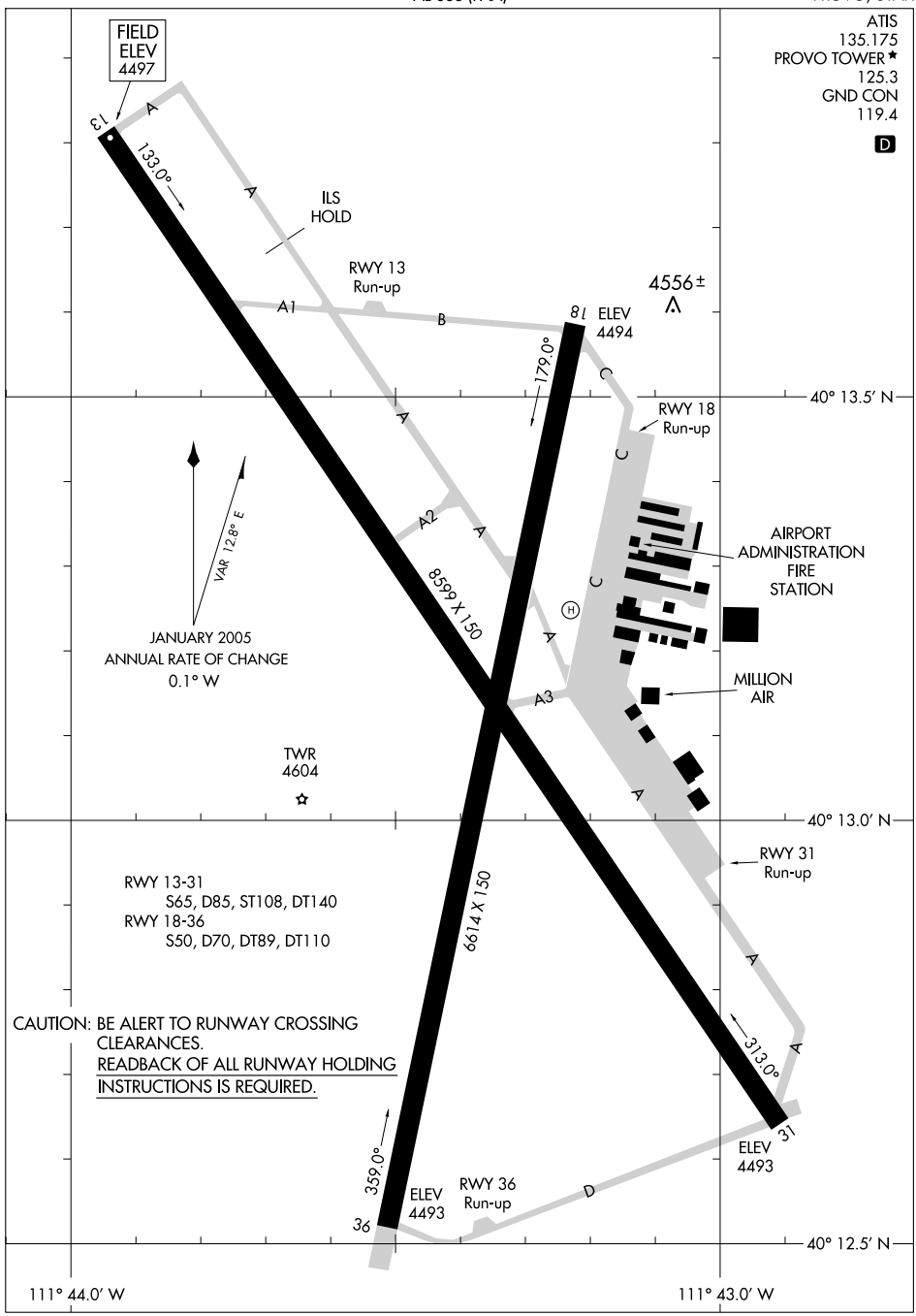
09295

AIRPORT DIAGRAM

AL-683 (FAA)

PROVO MUNI (PVU)

PROVO, UTAH



SW-4, 22 OCT 2009 to 19 NOV 2009

ILS or LOC/DME RWY 13

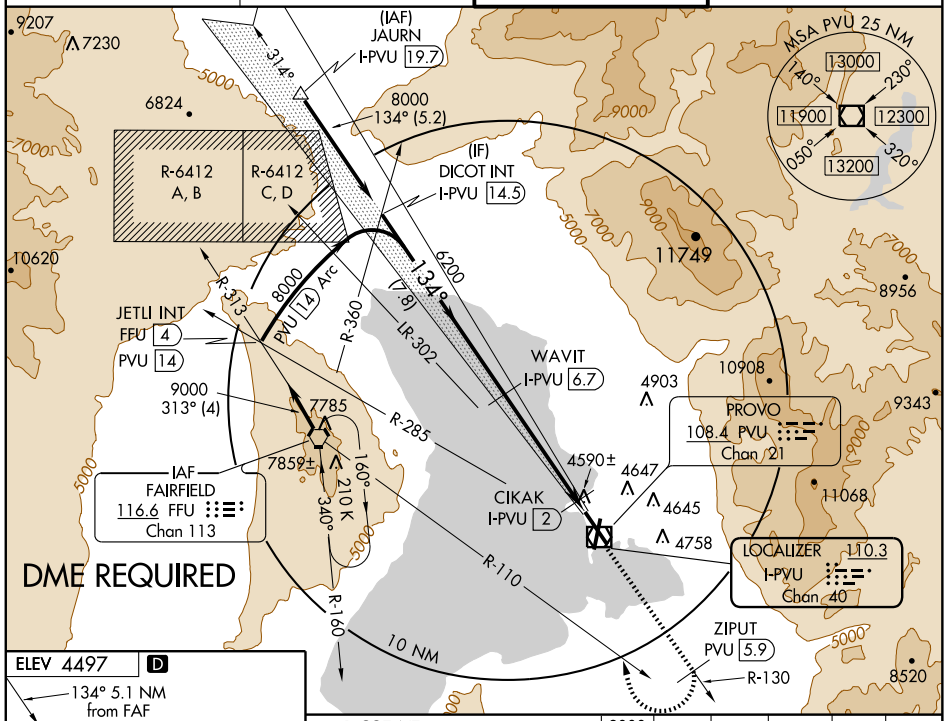
PROVO MUNI (PVU)

LOC/DME I-PVU	APP CRS	Rwy Idg	8599
110.3	134°	TDZE	4497
Chan 40		Apt Elev	4497

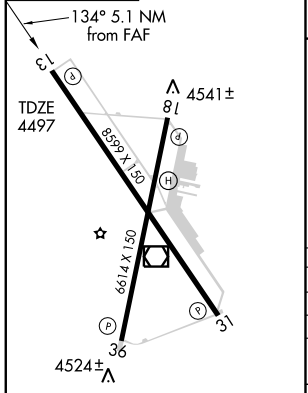
T A Circling NA East of Rwys 18 and 31.
*Missed approach requires minimum climb of 315 feet per NM to 8600.

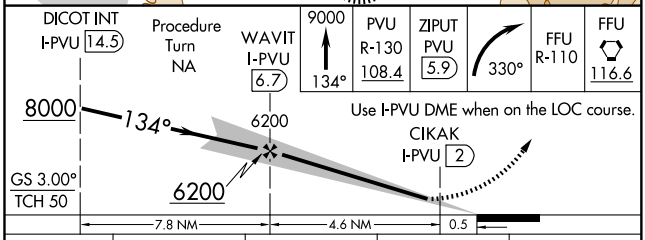
MISSED APPROACH: Climb to 9000 via heading 134° to intercept PVU VOR/DME R-130 to ZIPUT/PVU 5.9 DME then climbing right turn via heading 330° and FFU VORTAC R-110 to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	PROVO TOWER ★	GND CON
135.175	124.3 322.3	125.3 (CTAF)	119.4



ELEV 4497 D





CATEGORY	A	B	C	D
S-ILS 13*	4697-¾ 200 (200-¾)			
S-LOC 13*	4820-1 323 (400-1)			
CIRCLING*	4900-1 403 (500-1)	4960-1 463 (500-1)	4980-1½ 483 (500-1½)	5060-2 563 (600-2)
S-ILS 13	4947-1½ 450 (500-½)			
S-LOC 13	5100-1	603 (700-1)	5100-1¾ 603 (700-1¾)	5100-2 603 (700-2)
CIRCLING	5100-1	603 (700-1)	5100-1¾ 603 (700-1¾)	5100-2 603 (700-2)

REIL Rwy 13
HIRL Rwy 13-31
MIRL Rwy 18-36

SW-4, 22 OCT 2009 to 19 NOV 2009

PROVO FOUR DEPARTURE (OBSTACLE)

ATIS 135.175
GND CON 119.4
PROVO TOWER ★
125.3 (CTAF)
SALT LAKE CITY DEP CON
118.85

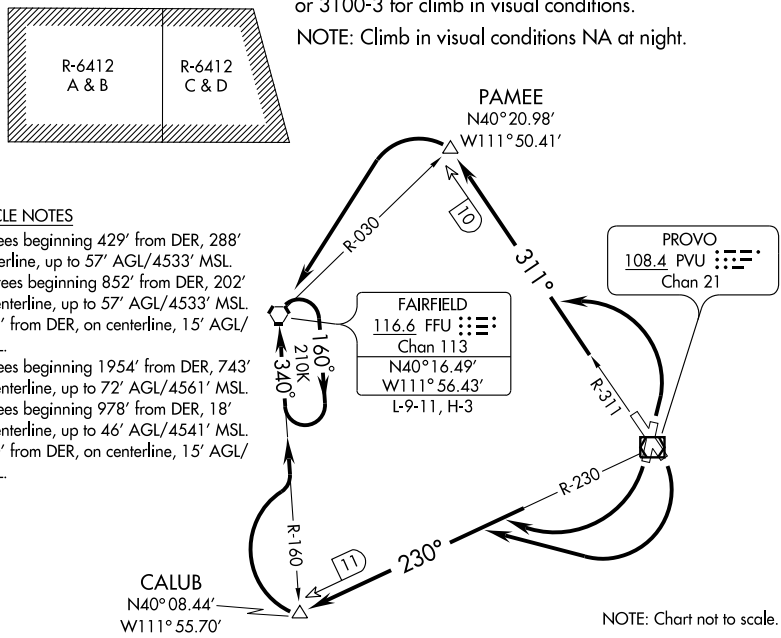
TAKE-OFF MINIMUMS

Rwy 13: Standard with a minimum climb of 400′ per NM to 9000, or 3100-3 for climb in visual conditions.
Rwy 18: Standard with a minimum climb of 350′ per NM to 9000, or 3100-3 for climb in visual conditions.
Rwy 31: Standard with a minimum climb of 380′ per NM to 9000, or 3100-3 for climb in visual conditions.
Rwy 36: Standard with a minimum climb of 365′ per NM to 9000, or 3100-3 for climb in visual conditions.

NOTE: Climb in visual conditions NA at night.

TAKE-OFF OBSTACLE NOTES

Rwy 18: Multiple trees beginning 429′ from DER, 288′ left of centerline, up to 57′ AGL/4533′ MSL. Multiple trees beginning 852′ from DER, 202′ right of centerline, up to 57′ AGL/4533′ MSL. Road 775′ from DER, on centerline, 15′ AGL/4518′ MSL.
Rwy 31: Multiple trees beginning 1954′ from DER, 743′ right of centerline, up to 72′ AGL/4561′ MSL.
Rwy 36: Multiple trees beginning 978′ from DER, 18′ right of centerline, up to 46′ AGL/4541′ MSL. Road 210′ from DER, on centerline, 15′ AGL/4516′ MSL.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13, 18: Climbing right turn to 9000 via PVU VOR/DME R-230 to CALUB INT/PVU 11 DME and a right turn via FFU VORTAC R-160 to FFU VORTAC and hold. Thence....
or climb in visual conditions to cross Provo Muni Airport southwest bound at or above 7400, climb to 9000 via PVU R-230 to CALUB INT/PVU 11 DME and right turn via FFU R-160 to FFU VORTAC and hold. Thence...

TAKE-OFF RUNWAY 31: Climb to 9000 via PVU VOR/DME R-311 to PAMEE INT/PVU 10 DME and left turn direct FFU VORTAC and hold. Thence....
or climb in visual conditions to cross Provo Muni Airport northwest bound at or above 7400, climb to 9000 via PVU R-311 to PAMEE INT/PVU 10 DME and left turn direct FFU VORTAC and hold. Thence...

TAKE-OFF RUNWAY 36: Climbing left turn to 9000 via PVU VOR/DME R-311 to PAMEE INT/PVU 10 DME and left turn direct FFU VORTAC and hold. Thence....
or climb in visual conditions to cross Provo Muni Airport northwest bound at or above 7400, climb to 9000 via PVU R-311 to PAMEE INT/PVU 10 DME, and left turn direct FFU VORTAC and hold. Thence...

....Expect clearance for filed route and altitude within 10 minutes after departure.

PROVO, UTAH

AL-683 (FAA)

WAAS	APP CRS	Rwy Idg	8599
CH 97307	134°	TDZE	4497
W13A		Apt Elev	4497

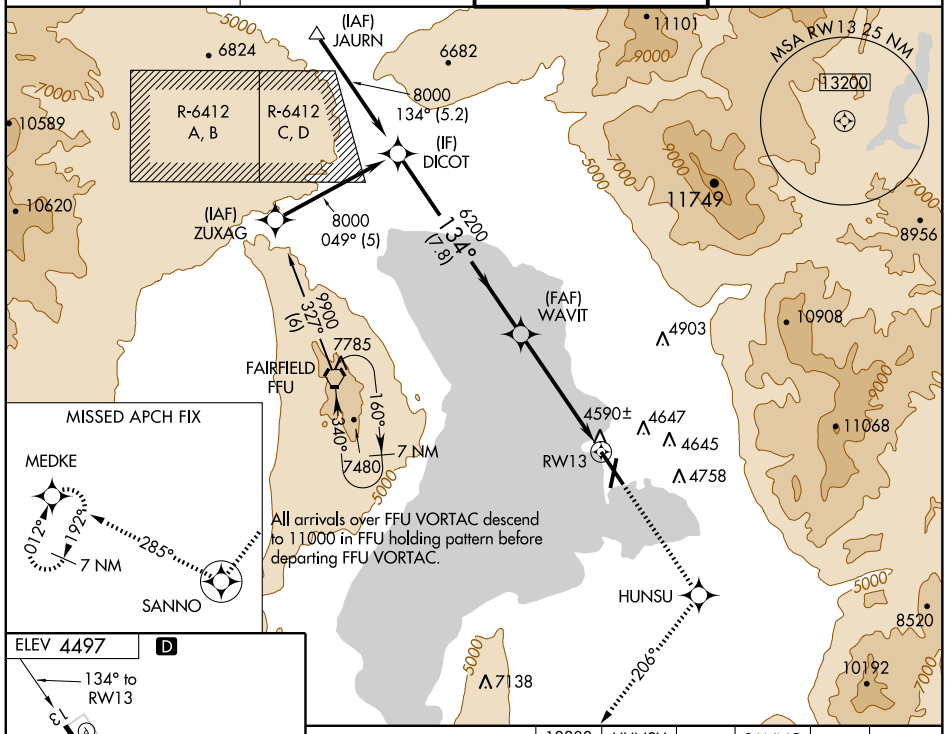
RNAV (GPS) RWY 13

PROVO MUNI (PVU)

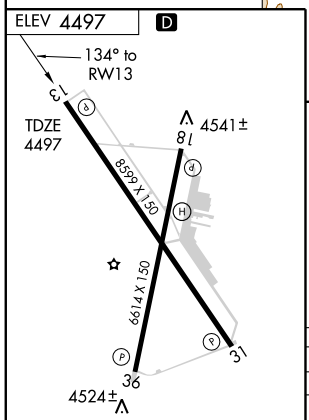
Circling NA East of Rwys 18 and 31.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 40°C (104°F).
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 10300 direct HUNSU and via track 206° to SANNO and via track 285° to MEDKE and hold, continue climb-in-hold to 10300.

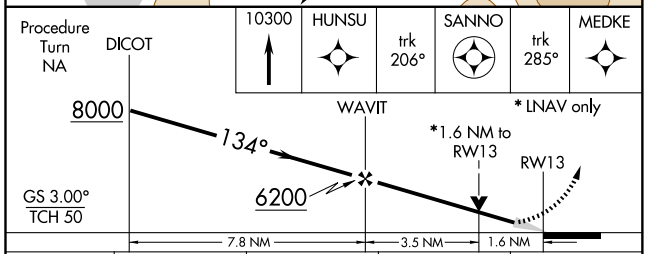
ATIS	SALT LAKE CITY APP CON	PROVO TOWER★	GND CON
135.175	124.3 322.3	125.3 (CTAF)	119.4



All arrivals over FFU VORTAC descend to 11000 in FFU holding pattern before departing FFU VORTAC.



REIL Rwy 13
HIRL Rwy 13-31
MIRL Rwy 18-36



CATEGORY	A	B	C	D
LPV DA	4770-1 273 (300-1)			
LNAV/VNAV DA	4940-1½ 443 (500-1½)			
LNAV MDA	5040-1 543 (600-1)		5040-1½ 543 (600-1½)	5040-1¾ 543 (600-1¾)
CIRCLING	5040-1 543 (600-1)		5040-1½ 543 (600-1½)	5060-2 563 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

PROVO, UTAH

AL-683 (FAA)

VOR/DME PVU	APP CRS	Rwy Idg	8599
108.4	134°	TDZE	4497
Chan 21		Apt Elev	4497

VOR/DME RWY 13

PROVO MUNI (PVU)

Circling NA East of Rwys 18 and 31.

MISSED APPROACH: Climb to 9000 direct PVU VOR/DME and PVU R-130 to ZIPUT/5.9 DME then climbing right turn via heading 330° and FFU VORTAC R-110 to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	PROVO TOWER ★	GND CON
135.175	124.3 322.3	125.3 (CTAF)	119.4

All arrivals over FFU VORTAC descend to 11000 in FFU holding pattern before departing FFU VORTAC.

MSA PVU 25 NM
140° 13000 230°
11900 12300
050° 13200 320°

(IAF) MASIE PVU 21
8500 (7) 134°
(IF) FAVUR PVU 14
6200 (7.8) 134°
8500 PVU 14 Arc
R-373
R-314
R-6412 A, B
R-6412 C, D
JETLI INT FFU 4 PVU 14
9200 313° (4)
SUGIE PVU 6.2
OFWIG PVU 1.7
R-285
R-188
R-110
R-130
10 NM
IAF FAIRFIELD 116.6 FFU Chan 113
PROVO 108.4 PVU Chan 21
ZIPUT PVU 5.9

7160 7230 6824 11253 11101 10349 6682 11749 8956 10908 9343 4903 7785 7480 4647 4645 4758 11068 8520 7138 10192

ELEV 4497 D

TDZE 4497
4541±
8599 X 150
6614 X 150
4524±
13 31 8 26

REIL Rwy 13
HIRL Rwy 13-31
MIRL Rwy 18-36

9000	PVU 108.4	PVU R-130	ZIPUT PVU 5.9	330°	FFU R-110	FFU 116.6

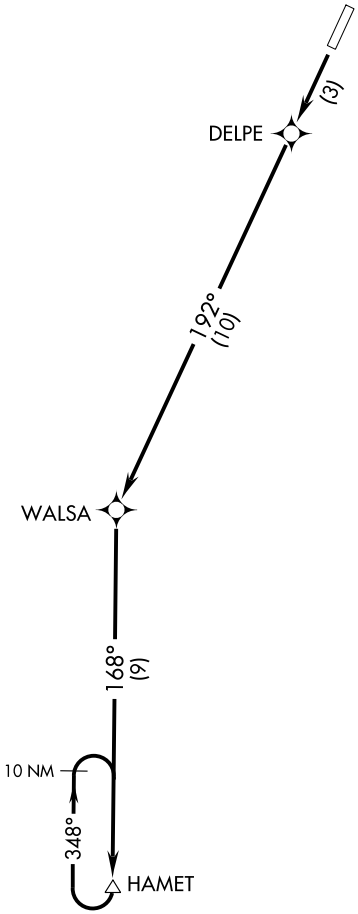
FAVUR PVU 14
8500
134°
SUGIE PVU 6.2
6200
PVU 2.6
OFWIG PVU 1.7
3.00°
TCH 50
Procedure Turn NA
7.8 NM 3.6 NM 1 NM 0.6

CATEGORY	A	B	C	D
S-13	5040-1	543 (600-1)	5040-1½ 543 (600-1½)	5040-1¾ 543 (600-1¾)
CIRCLING	5040-1	543 (600-1)	5040-1½ 543 (600-1½)	5060-2 563 (600-2)

SW-4, 22 OCT 2009 to 19 NOV 2009

HAMET TWO DEPARTURE (RNAV) (OBSTACLE)

SALT LAKE CITY CENTER
133.6 269.25
UNICOM 122.8 (CTAF)
AWOS-3 133.375



NOTE: GPS Required.

NOTE: RNAV 1

TAKE-OFF MINIMUMS

Rwy 1: NA-ATC.

Rwy 19: Standard with a minimum climb of 382′ per NM to 14700.

TAKE-OFF OBSTACLE NOTE

Rwy 19: Road 0′ from DER, 400′ right of centerline, 15′ AGL/5334′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

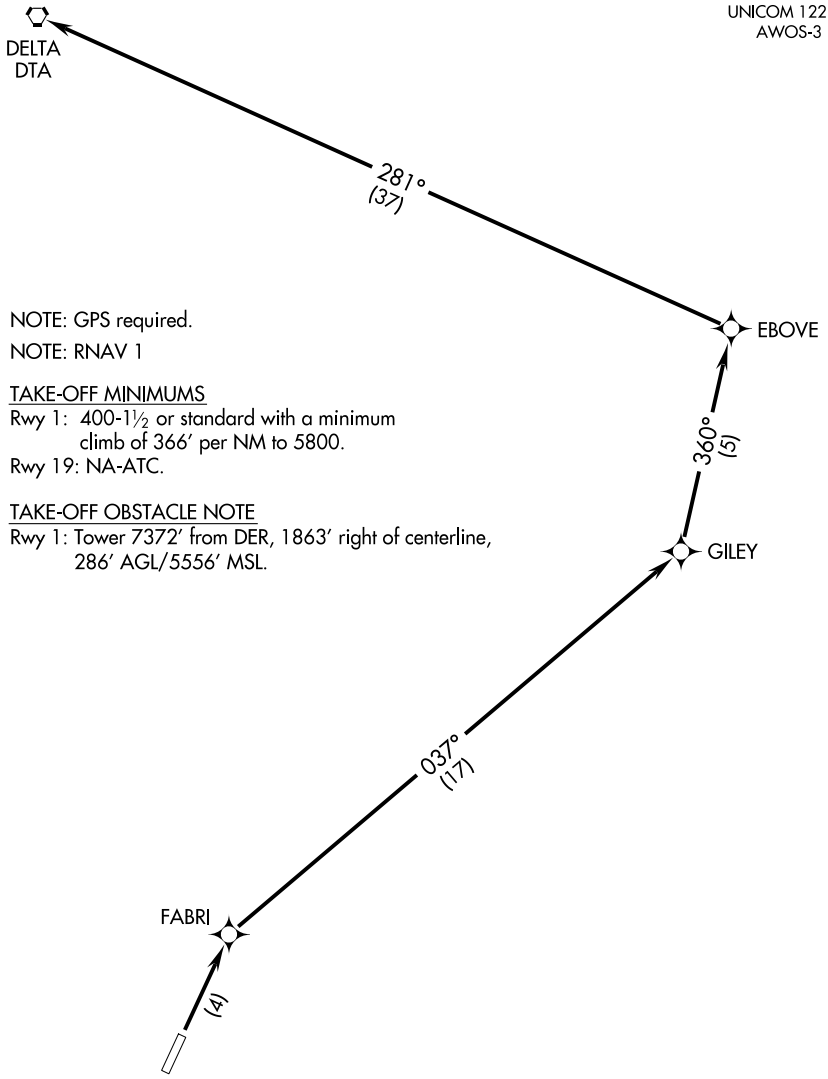
TAKE-OFF RUNWAY 19: Climb direct DELPE, then via 192° track/10 to WALSA, then via 168° track/9 to HAMET. Continue climb-in-hold at HAMET to 16000 before proceeding on course.

SW-4, 22 OCT 2009 to 19 NOV 2009

RICHFIELD ONE DEPARTURE (RNAV) (OBSTACLE)

RICHFIELD MUNI (RIF)
RICHFIELD, UTAH

SALT LAKE CITY CENTER
133.6 269.25
UNICOM 122.8 (CTAF)
AWOS-3 133.375



NOTE: GPS required.

NOTE: RNAV 1

TAKE-OFF MINIMUMS
Rwy 1: 400-1½ or standard with a minimum climb of 366' per NM to 5800.
Rwy 19: NA-ATC.

TAKE-OFF OBSTACLE NOTE
Rwy 1: Tower 7372' from DER, 1863' right of centerline, 286' AGL/5556' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1: Climb direct FABRI, then via 037° track/17 to GILEY, then via 360° track/5 to EBOVE, then via 281° track/37 to DELTA VORTAC, maintain 10700.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	6600
207°	TDZE	5275
	Apt Elev	5301

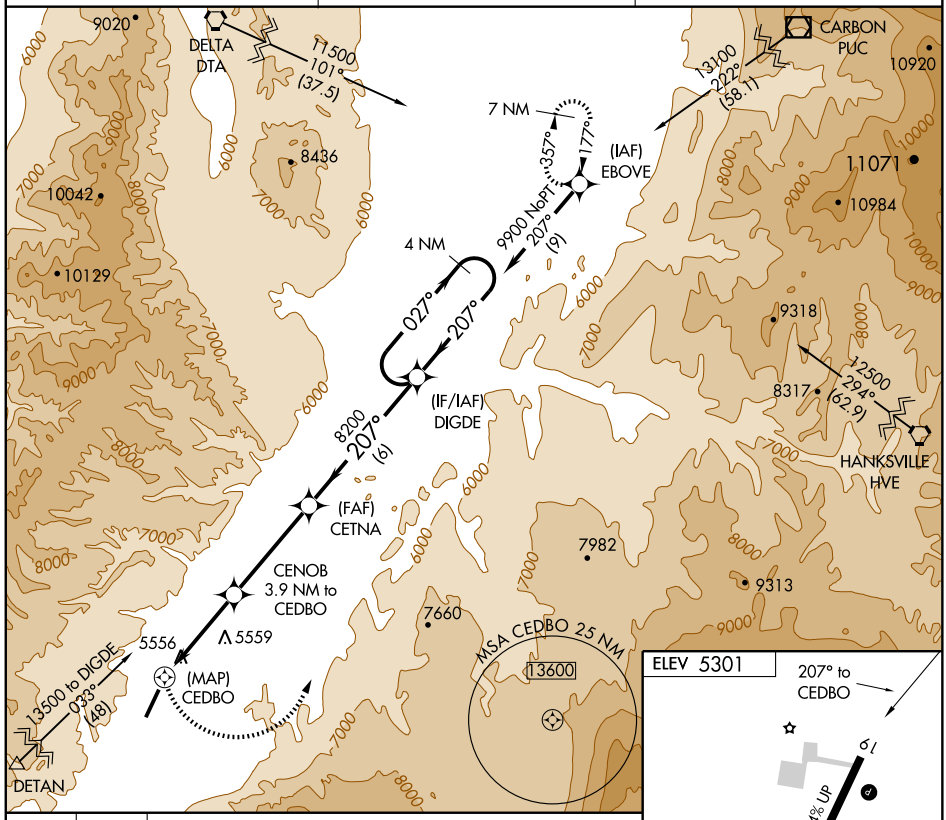
RNAV (GPS) RWY 19
RICHFIELD MUNI (RIF)

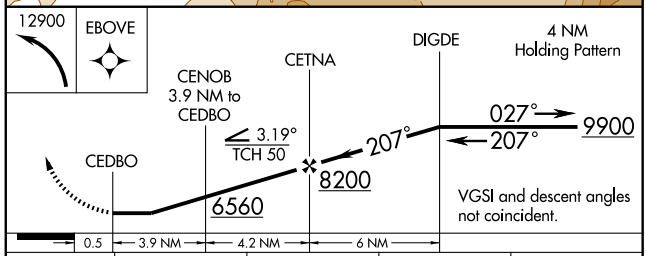
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

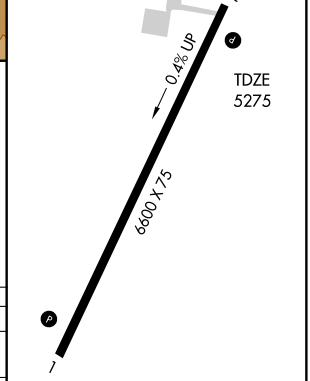
NA

MISSED APPROACH: Climbing left turn to 12900 direct EBOVE WP and hold.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
133.375	133.6 269.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	6440-1¼ 1165 (1200-1¼)	6440-1½ 1165 (1200-1½)	6440-3 1165 (1200-3)	NA
CIRCLING	6780-1¼ 1479 (1500-1¼)	7120-1½ 1819 (1900-1½)	7280-3 1979 (2000-3)	NA

SW-4, 22 OCT 2009 to 19 NOV 2009

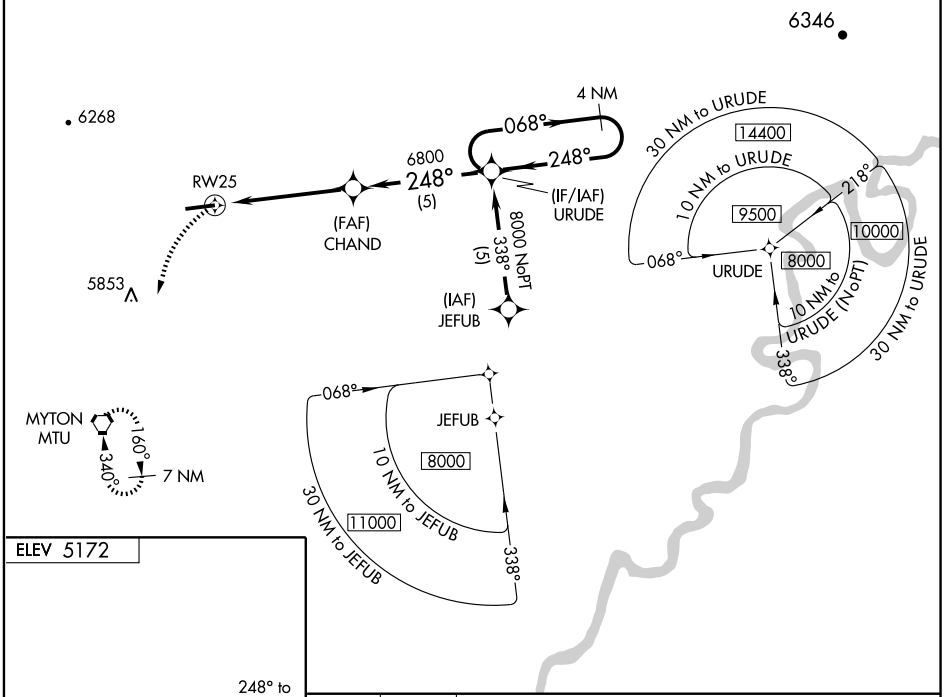
APP CRS	Rwy Idg	6500
248°	TDZE	5140
	Apt Elev	5172

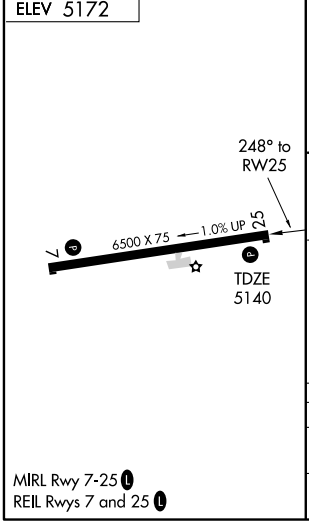
RNAV (GPS) RWY 25
ROOSEVELT MUNI (74V)

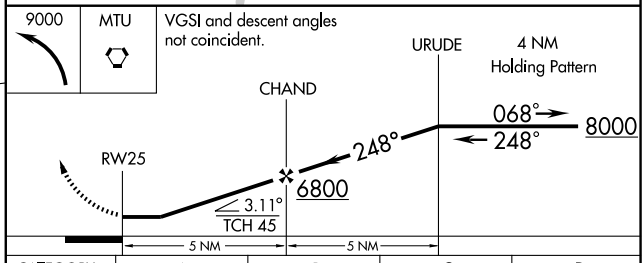
T NA — Use Vernal altimeter setting. When not received, procedure not authorized.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 9000 direct MTU VORTAC and hold.

AWOS-3	CEDAR CITY RADIO	UNICOM
118.975	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	5880-1	740 (800-1)	5880-2 740 (800-2)	NA
CIRCLING	6140-1¼ 968 (1000-1¼)	6140-1½ 968 (1000-1½)	6260-3 1088 (1100-3)	NA

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

SW-4, 22 OCT 2009 to 19 NOV 2009

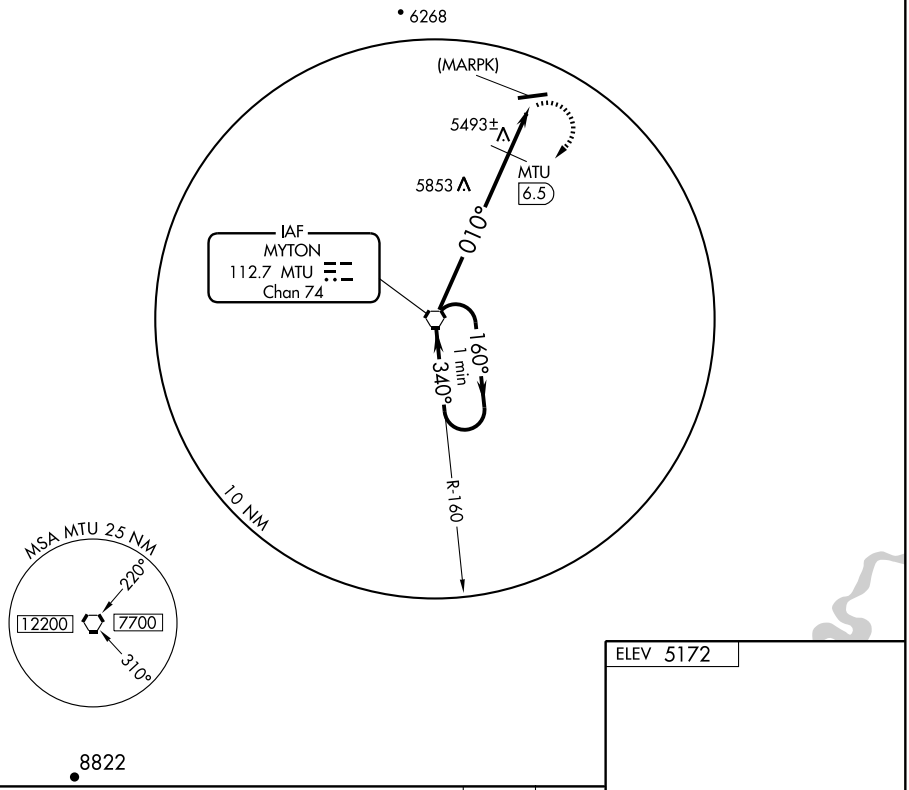
VORTAC MTU	APP CRS	Rwy Idg	N/A
112.7	010°	TDZE	N/A
Chan 74		Apt Elev	5172

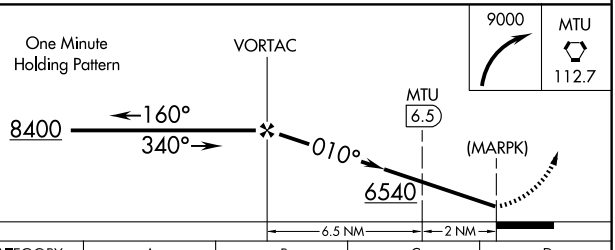
VOR or GPS-A
ROOSEVELT MUNI (74V)

Use Vernal altimeter setting. When not received, procedure not authorized.

MISSED APPROACH: Climbing right turn to 9000 direct MTU VORTAC and hold.

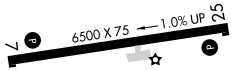
AWOS-3	CEDAR CITY RADIO	UNICOM
118.975	122.1R	122.8 (CTAF)





CATEGORY	A	B	C	D
CIRCLING	6540-1¼ 1368 (1400-1¼)	6540-1½ 1368 (1400-1½)	6540-3 1368 (1400-3)	NA
DME MINIMUMS				
CIRCLING	6140-1¼ 968 (1000-1¼)	6140-1½ 968 (1000-1½)	6260-3 1088 (1100-3)	NA

ELEV 5172



010° 8.5 NM from FAF

MIRL Rwy 7-25
REIL Rwys 7 and 25

FAF to MAP 8.5 NM

Knots	60	90	120	150	180
Min:Sec	8:30	5:40	4:15	3:24	2:50

SW-4, 22 OCT 2009 to 19 NOV 2009

09239

AIRPORT DIAGRAM

AL-365 (FAA)

SALT LAKE CITY INTL (SLC)

SALT LAKE CITY, UTAH

ASDE-X Surveillance System in use:
Pilots should operate transponders with Mode C on all twys and rwys.

ATIS
124.75 127.625
SALT LAKE CITY TOWER
119.05 257.8 (Rwy 16L-34R)
118.3 257.8 (Rwys 14-32, 17-35)
132.65 336.4 (Rwy 16R-34L)
GND CON
121.9 348.6 (Rwys 14-32, 17-35)
133.65 348.6 (Rwys 16L-34R, 16R-34L)
CLNC DEL
127.3 379.975

RWY 14-32
S60, D200, ST175, DT350, DDT850
RWY 16L-34R
S60, D200, ST175, DT350, DDT850
RWY 16R-34L
S60, D200, ST175, DT350, DDT850
RWY 17-35
S60, D200, ST175, DT350, DDT850

VAR 13.0°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W

40°49′N
40°48′N
40°47′N
40°46′N
112°00′W
111°59′W
111°58′W
111°57′W

ELEV 4221
ELEV 4226
ELEV 4219
ELEV 4222
ELEV 4224
ELEV 4221
ELEV 4224

FIRE DEPT TRAINING FACILITY
CARGO
FIELD ELEV 4227
CONTROL TOWER 4549
HANGARS
FIRE STATION
TERMINAL TWO
TERMINAL ONE
TRANSIENT PARKING
FIRE STATION
SOUTH CARGO APRON
ILS HOLD
ILS HOLD
UTAH ANG
FIRE STATION
GENERAL AVIATION PARKING
FBO
GENERAL AVIATION HANGARS
FBO
AVIATION PARKING
ILS NWS
HOLD
AREA NOT VISIBLE FROM CONTROL TOWER

12000 X 150
12004 X 150
9596 X 150
4892 X 150

16R
34L
16L
34R
17
35

162.0°
342.0°
167.0°
139.9°
319.9°
347.0°

HOT 1
HOT 2

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SW-4, 22 OCT 2009 to 19 NOV 2009

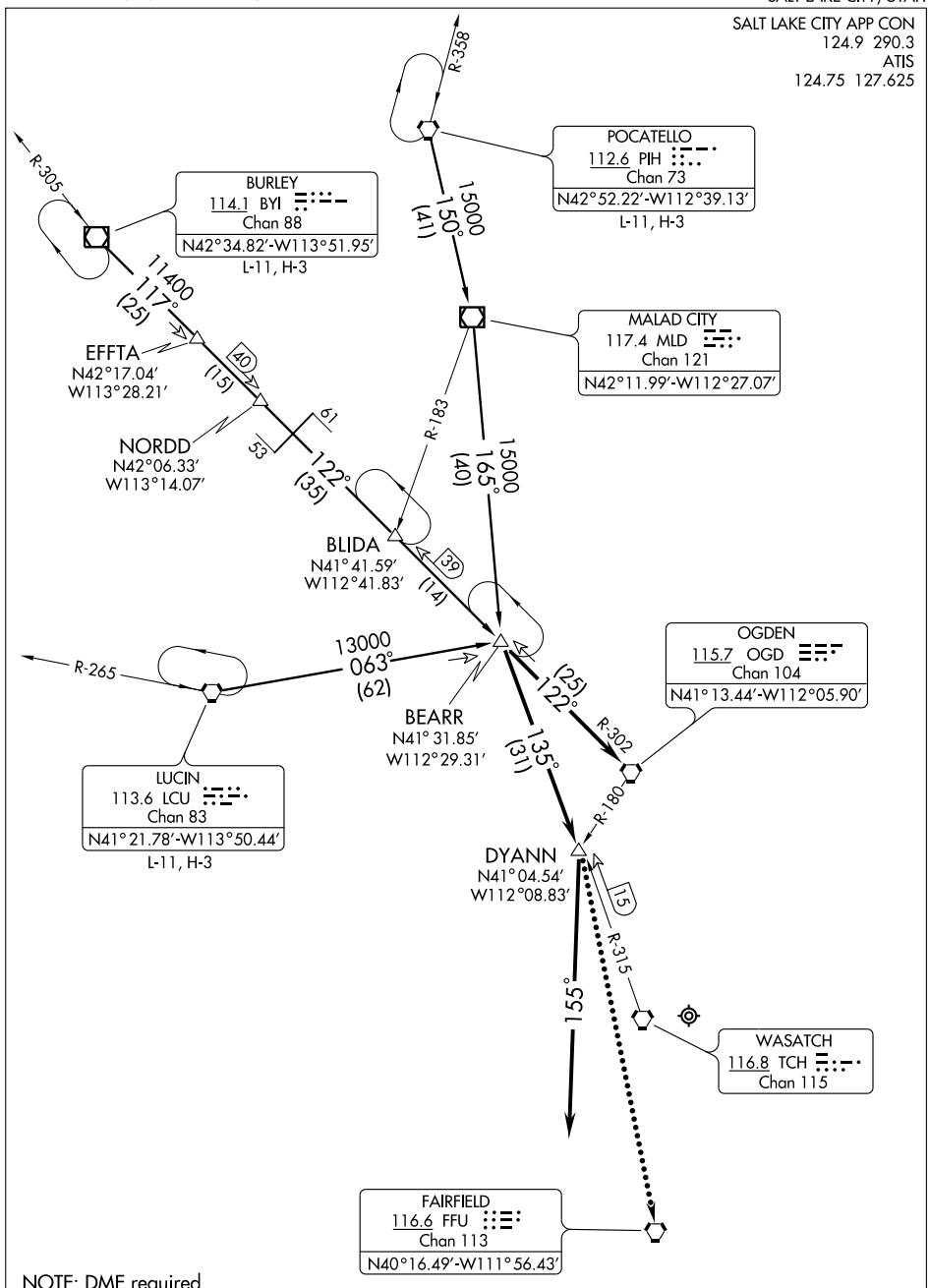
(BEARR.BEARR4) 08325

BEARR FOUR ARRIVAL

ST-365 (FAA)

SALT LAKE CITY INTL
SALT LAKE CITY, UTAH

SALT LAKE CITY APP CON
124.9 290.3
ATIS
124.75 127.625



NOTE: DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

ARRIVAL DESCRIPTION

BURLEY TRANSITION (BYI.BEARR4): From over BYI VOR/DME via BYI R-117 and OGD R-302 to BEARR INT. Thence....
LUCIN TRANSITION (LCU.BEARR4): From over LCU VORTAC via LCU R-063 to BEARR INT.Thence....
POCATELLO TRANSITION (PIH.BEARR4): From over PIH VORTAC via PIH R-150 to MLD VOR/DME, then via MLD R-165 to BEARR INT. Thence....

.... LANDING NORTH: Via TCH R-315 to DYANN INT. After DYANN INT fly heading 155° for vectors ILS/DME or VISUAL RWY 34L approach.
.... LANDING SOUTH: Via OGD R-302 to OGD VORTAC. Expect ILS/DME RWY 16L approach.

LOST COMMUNICATIONS: LANDING NORTH: In the event of lost communications, at DYANN INT proceed direct FFU VORTAC. Maintain 13,000' until FFU VORTAC.

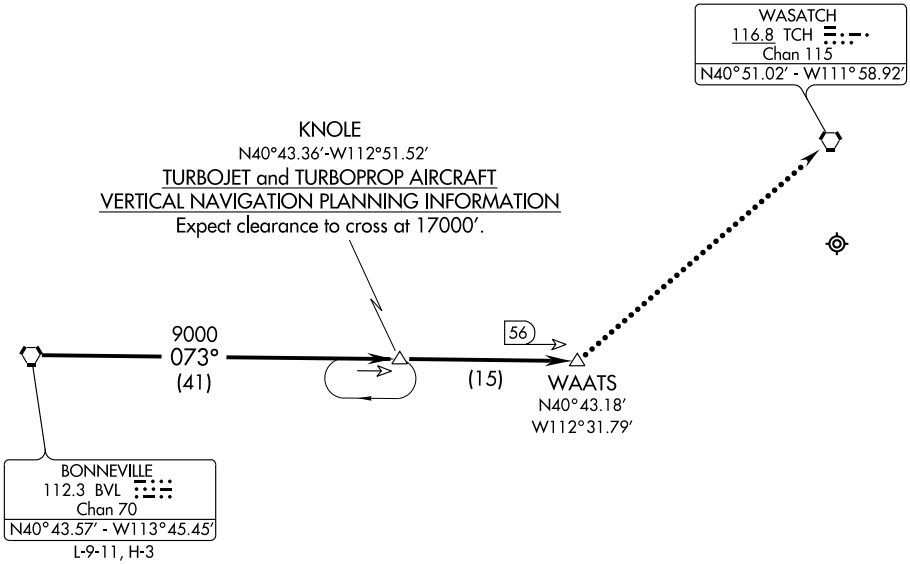
SW-4, 22 OCT 2009 to 19 NOV 2009

BONNEVILLE ONE ARRIVAL

ST-365 (FAA)

SALT LAKE CITY INTL
SALT LAKE CITY, UTAH

SALT LAKE CITY APP CON
124.3 322.3
ATIS 124.75 127.625



NOTE: DME required.

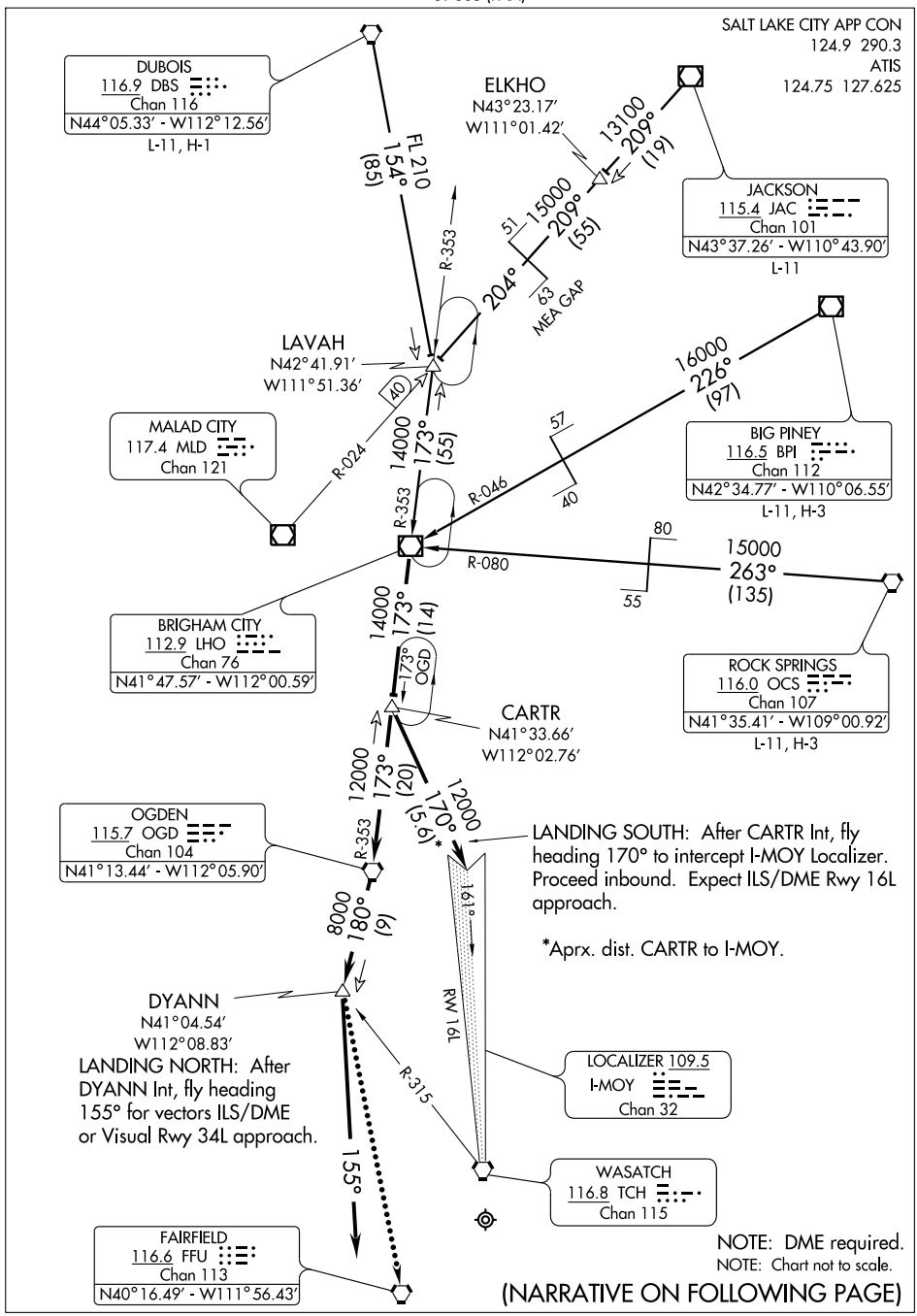
NOTE: Chart not to scale.

From over BVL VORTAC via BVL R-073 to WAATS DME Fix, thence expect radar vectors to final approach course.

LOST COMMUNICATIONS: In the event of lost communications at WAATS, proceed direct TCH VORTAC. Maintain 13000' until TCH VORTAC.

BRIGHAM CITY THREE ARRIVAL ST-365 (FAA)

SALT LAKE CITY APP CON
124.9 290.3
ATIS
124.75 127.625



NOTE: DME required.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

ARRIVAL ROUTE DESCRIPTION

BIG PINEY TRANSITION (BPI.LHO3): From over BPI VOR/DME via BPI R-226 and LHO R-046 to LHO VOR/DME. Thence....

DUBOIS TRANSITION (DBS.LHO3): From over DBS VORTAC via DBS R-154 to LAVAH INT, then via LHO R-353 to LHO VOR/DME. Thence....

JACKSON TRANSITION (JAC.LHO3): From over JAC VOR/DME via JAC R-209 and MLD R-024 to LAVAH INT, then via LHO R-353 to LHO VOR/DME. Thence....

ROCK SPRINGS TRANSITION (OCS.LHO3): From over OCS VORTAC via OCS R-263 and LHO R-080 to LHO VOR/DME. Thence....

LANDING NORTH:
.... From over LHO VOR/DME via LHO R-173 to CARTR INT, then via OGD R-353 to OGD VORTAC, then via OGD R-180 to DYANN INT. After DYANN INT, fly heading 155° for vectors ILS/DME or VISUAL RWY 34L approach.

LANDING SOUTH:
.... From over LHO VOR/DME via LHO R-173 to CARTR INT. After CARTR INT, fly heading 170° to intercept I-MOY Localizer, proceed inbound. Expect ILS/DME RWY 16L approach.

LOST COMMUNICATIONS:
LANDING NORTH: In the event of lost communications, at DYANN INT proceed direct FFU VORTAC. Maintain 13,000' until FFU VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

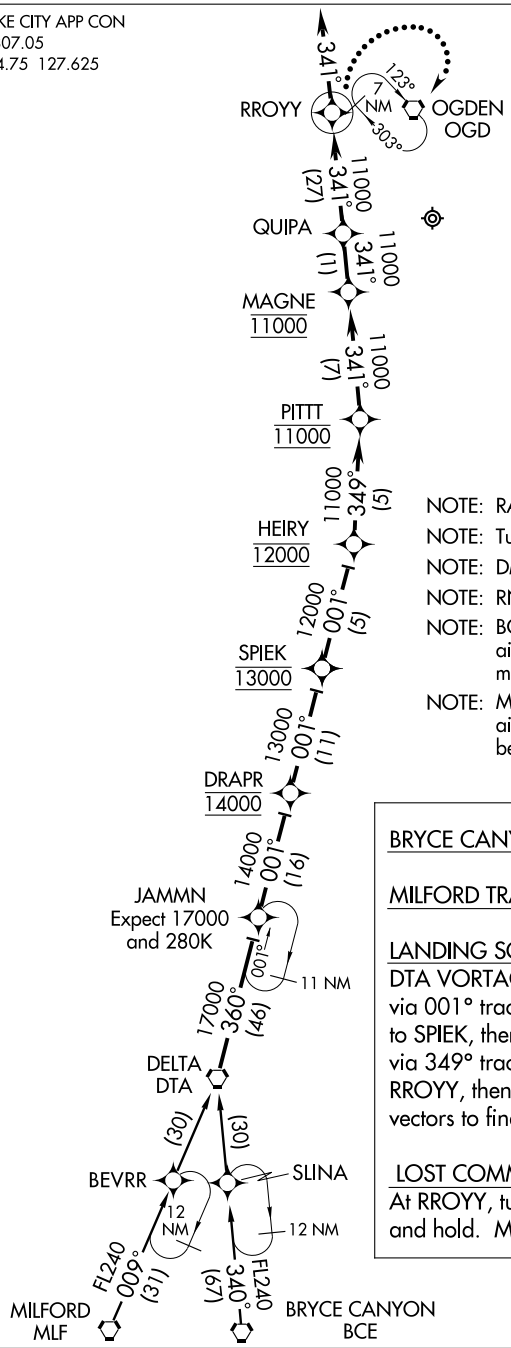
(DELTA.DELTA3) 09183

DELTA THREE ARRIVAL (RNAV)

ST-365 (FAA)

SALT LAKE CITY INTL
SALT LAKE CITY, UTAH

SALT LAKE CITY APP CON
128.1 307.05
ATIS 124.75 127.625



NOTE: RADAR required.

NOTE: Turbojet aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: BCE TRANSITION: For Non-GPS equipped aircraft, BVL, FFU, TCH, and OGD DMEs must be operational.

NOTE: MLF TRANSITION: For Non-GPS equipped aircraft, BVL, TCH, and OGD DMEs must be operational.

BRYCE CANYON TRANSITION (BCE.DELTA3)

MILFORD TRANSITION (MLF.DELTA3)

LANDING SOUTH (RWY 16L/16R/17): From DTA VORTAC via 360° track to JAMMN, then via 001° track to DRAPR, then via 001° track to SPIEK, then via 001° track to HEIRY, then via 349° track to PITTT, then as depicted to RROYY, then via 341° heading. Expect radar vectors to final approach course.

LOST COMMUNICATIONS:
At RROYY, turn right direct OGD VORTAC and hold. Maintain 11000.

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

EDETH ONE DEPARTURE (RNAV)

SALT LAKE CITY INTL(SLC)
SALT LAKE CITY, UTAH

ATIS 124.75 127.625
CLNC DEL
127.3 379.975
GND CON
121.9 348.6 (Rwys 14-32, 17-35)
133.65 348.6 (Rwys 16L-34R, 16R-34L)
SALT LAKE CITY TOWER
119.05 257.8 (Rwy 16L-34R)
118.3 257.8 (Rwys 14-32, 17-35)
132.65 336.4 (Rwy 16R-34L)
SALT LAKE CITY DEP CON
128.1 307.05

BUCCO
10000 230 KIAS
243° (6)
SAPEE
4727
341° 341° 346°
196° (4)
SCANT
10000
178° (4)
HIDUT
11000
173° (8)
TOOLE
13000
175° (14)
MUSAW
FL230 250 KIAS
Resume normal speed after MUSAW
194° (10)
TRILA
194° (34)
EDETH
(30) 13000 *8600 180° 173° 13000 *8100 (28)
TRANT
SEVYR
FL220 *14400 240° (236)
COALDALE OAL
173° FL220 *9500 (52)
FL220 *11400 180° (80)
MILFORD MLF
FL240 *12400 122° (52)
BERYL
BRYCE CANYON BCE

TAKE-OFF MINIMUMS
Rwys 14, 32, 16R/L, 17: NA-ATC.
Rwy 34R: Standard with minimum climb of 420′ per NM to 10900.
ATC climb of 264′ per NM from 11000 to 13000.
Rwy 34L: Standard with minimum climb of 430′ per NM to 10700. ATC climb of 264′ per NM from 11000 to 13000.
Rwy 35: Standard with minimum climb of 425′ per NM to 10800. ATC climb of 264′ per NM from 11000 to 13000.

NOTE: If unable to accept climb rates and crossing restrictions, advise ATC on inital contact.
NOTE: DME/DME/IRU or GPS required.
NOTE: Radar required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft only.

NOTE: For Non-GPS equipped aircraft:
FFU and DTA DMEs must be operational for BRYCE CANYON, MILFORD, and BERYL transitions.
FFU, DTA, ILC, TPH, MVA, and OAL DMEs must be operational for COALDALE transitions.

TAKE-OFF OBSTACLES
Rwy 34R: Post 12′ from DER, 349′ right of centerline, 4′ AGL/4227′ MSL.
Rwy 35: Post 55′ from DER, 249′ left of centerline, 4′ AGL/4220′ MSL.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

EDETH ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

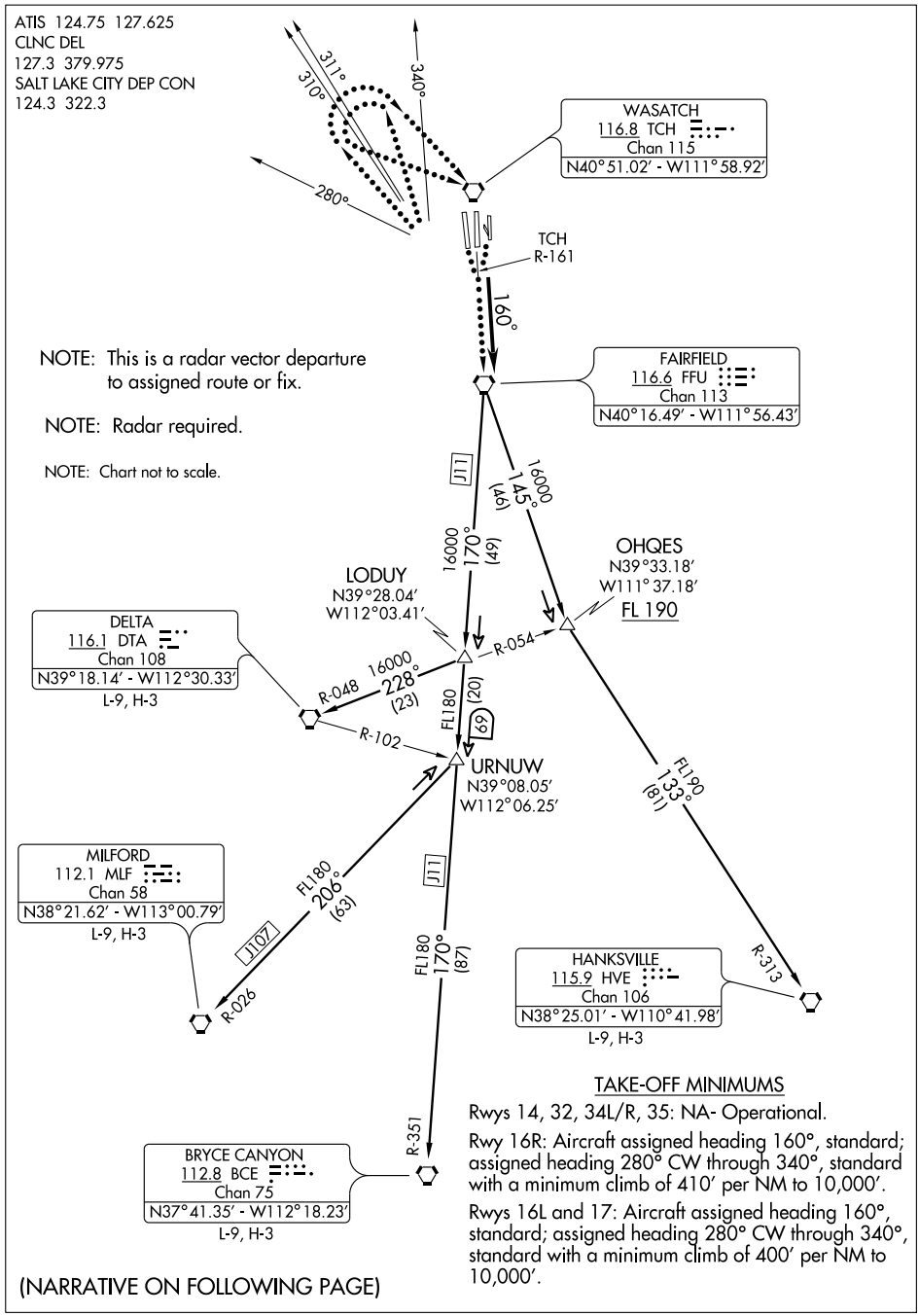
TAKE-OFF RUNWAY 34R: Climb heading 341° to 4727, then left turn direct SAPEE, then via depicted route to EDETH, thence. . . .
TAKE-OFF RUNWAY 34L: Climb heading 341° to 4727, then left turn direct SAPEE, then via depicted route to EDETH, thence. . . .
TAKE-OFF RUNWAY 35: Climb heading 346° to 4727, then left turn direct SAPEE, then via depicted route to EDETH, thence. . . .

. . . .via (transition) maintain FL230 or lower filed altitude. Expect filed altitude 10 minutes after departure.

BERYL TRANSITION (EDETH1.BERYL)
BRYCE CANYON TRANSITION (EDETH1.BCE)
COALDALE TRANSITION (EDETH1.OAL)
MILFORD TRANSITION (EDETH1.MLF)

SW-4, 22 OCT 2009 to 19 NOV 2009

FAIRFIELD SIX DEPARTURE (OBSTACLE)



TAKE-OFF MINIMUMS

Rwys 14, 32, 34L/R, 35: NA- Operational.

Rwy 16R: Aircraft assigned heading 160°, standard; assigned heading 280° CW through 340°, standard with a minimum climb of 410′ per NM to 10,000′.

Rwys 16L and 17: Aircraft assigned heading 160°, standard; assigned heading 280° CW through 340°, standard with a minimum climb of 400′ per NM to 10,000′.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

FAIRFIELD SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R and 17: Fly heading 160° or as assigned, maintain 10,000′ or assigned lower altitude. Expect radar vectors to FFU VORTAC then via filed/assigned transition. Expect clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control 1 minute after take-off:

Aircraft assigned heading 160°:
Runways 16L and 17 turn right, thence. . . .
Runway 16R turn left, thence. . . .
. . . . climb to 11,000′ via TCH R-161 to FFU VORTAC and continue climb via assigned/filed transition.

All others, fly assigned heading to 11,000′. Then:
Aircraft heading 280° CW through 310°: a climbing right turn, thence. . . .
Aircraft heading 311° CW through 340°: a climbing left turn, thence. . . .
. . . . direct TCH VORTAC, TCH R-161 to FFU VORTAC, and continue climb via assigned/filed transition.

BRYCE CANYON TRANSITION (FFU6.BCE): From over FFU VORTAC via FFU R-170 and BCE R-351 to BCE VORTAC.

DELTA TRANSITION (FFU6.DTA): From over FFU VORTAC via FFU R-170 and DTA R-048 to DTA VORTAC.

HANKSVILLE TRANSITION (FFU6.HVE): From over FFU VORTAC via FFU R-145 and HVE R-313 to HVE VORTAC.

MILFORD TRANSITION (FFU6.MLF): From over FFU VORTAC via FFU R-170 and MLF R-026 to MLF VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-UTJ	APP CRS	Rwy Idg	9272
111.5	346°	TDZE	4224
Chan 52		Apt Elev	4227

ILS or LOC/DME RWY 35

SALT LAKE CITY INTL (SLC)

For inoperative MALSR, increase S-ILS 35 all Cats visibility to RVR 4000 and S-LOC 35 Cat E visibility to 1¾.

MALSR

MISSED APPROACH: Climb to 9000 via left turn direct TCH VORTAC and TCH VORTAC R-326 to POGJI/TCH 21.9 DME and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8 (Rwy 16L-34R)	118.3 257.8 (Rwys 14-32, 17-35)	132.65 336.4 (Rwy 16R-34L)	121.9 348.6 (Rwys 14-32, 17-35)	133.65 348.6 (Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

MISSED APCH FIX

R-326 146° 326°

POGJI TCH 21.9

WASATCH 116.8 TCH Chan 115

LOCALIZER 111.5 I-UTJ Chan 52

SUPNE I-UTJ 3.1

KERNN I-UTJ 6.3

CYRSS INT I-UTJ 16.2 (IF)

MSA TCH 25 NM

11000 140° 230° 8600 050° 12700

15 NM

346° (9.9) 6400

R-6412 C & D

R-6412 A & B

Procedure NA for arrivals at FFU VORTAC on airway radials 310 CW 030.

9100 to CYRSS 340° (13.5)

IAF FAIRFIELD 116.6 FFU Chan 113

108.4 PVU Chan 21

R-312 166°

ELEV 4227

HIRL all Rwys

REIL Rwy 32

TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

12000 X 150

9596 X 150

10045 X 150

8951 X 289

4463 ±

4549

4254

346° 6.5 NM from FAF

TDZE 4224

9000	TCH 116.8	TCH R-326	POGJI TCH 21.9

VGSI and ILS glidepath not coincident.

*LOC only

I-UTJ DME ANT. 0.2 | I-UTJ 1 | SUPNE I-UTJ 3.1 | KERNN I-UTJ 6.3 | CYRSS INT I-UTJ 16.2

5320* | 6400 | 9100 | 346°

Procedure Turn NA

GS 3.00° TCH 53

0.2 | 1 NM | 2.1 NM | 3.2 NM | 9.9 NM

CATEGORY	A	B	C	D	E
S-ILS 35	4424/18 200 (200-½)				4424/24 200 (200-½)
S-LOC 35	4700/24 476 (500-½)		4700/40 476 (500-¾)	4700/50 476 (500-1)	4700/60 476 (500-1¼)

SW-4, 22 OCT 2009 to 19 NOV 2009

LOC/DME I-MOY	APP CRS	Rwy Idg 12004
109.5	161°	TDZE 4227
Chan 32		Apt Elev 4227

ILS or LOC RWY 16L

SALT LAKE CITY INTL (SLC)

For inoperative ALSF, increase S-LOC Cat D to RVR 5000. Simultaneous approach authorized with Rwy 16R. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climb to 10000 via FFU VORTAC R-341 to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER	GND CON
124.75 127.625	124.3 322.3	119.05 257.8 (Rwy 16L-34R) 118.3 257.8 (Rwys 14-32, 17-35) 132.65 336.4 (Rwy 16R-34L)	121.9 348.6 (Rwys 14-32, 17-35) 133.65 348.6 (Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

Procedure NA for arrivals on OGD VORTAC airway radials 068 CW 153.

IAF OGDEN 115.7 OGD Chan 104

(IAF) WEBER I-MOY 33

11000 161° (10.6)

11000 128° (6.1)

(IF) IRRON I-MOY 22.4

9000 161° (6)

TOOME I-MOY 16.4

7500 161° (4.4)

LGOON I-MOY 12

6000 161° (4.5)

YYIPP I-MOY 7.5 RADAR

MSA TCH 2.5 NM 11000 140° 230° 8600 050° 12700

15 NM

WASATCH 116.8 TCH Chan 115

STACO TCH 20

IM 4500 4542 4620± 6237± 4781 4670 4467± 4368± 5458

MISSED APCH FIX

FAIRFIELD FFU 116.6 Chan 113 160° 340° R-160

ALTERNATE MISSED APCH FIX

STACO TCH 20 115.7 OGD R-197 Chan 104 116.8 TCH Chan 115 069° 249° R-249

LOCALIZER 109.5 I-MOY Chan 32

116.6 FFU R-341 Chan 113

4990 4988± 5355± 9486

ELEV 4227

TDZE 4227

161° 5.3 NM from FAF

4463± 4549 4254

16R 16L 34L 34R 17 35

12004 X 150 12000 X 150 9596 X 150 8892 X 150

HIRL all Rwys

REIL Rwy 32

TDZ/CL Rwys 16L, 16R, 17, 34L, 34R and 35

VGSI and ILS glidepath not coincident.

4800	10000	FFU
	FFU R-341	116.6

IRRON I-MOY 22.4 — 11000 — 9000

TOOME I-MOY 16.4 — 161°

LGOON I-MOY 12 — 7500

YYIPP I-MOY 7.5 RADAR — 6000

I-MOY 3 — 7000

I-MOY 2.2 — 6000

IM

GS 3.00° TCH 55

Procedure Turn NA

6 NM 4.4 NM 4.5 NM 4.5 NM 0.7 0.1

CATEGORY	A	B	C	D
S-ILS 16L	4427/18 200 (200-½)			
S-LOC 16L	4560/24 333 (400-½)		4560/40 333 (400-¾)	

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:17	3:32	2:39	2:07	1:46

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-UAT	APP CRS	Rwy Idg 12000
111.9	161°	TDZE 4223
Chan 56		Apt Elev 4227

ILS or LOC RWY 16R

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 16L. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climbing right turn to 9000 via heading 300° and TCH R-249 to STACO INT/TCH 20 DME and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER	GND CON
124.75	124.3 322.3	119.05 257.8 (Rwy 16L-34R) 118.3 257.8 (Rwys 14-32, 17-35) 132.65 336.4 (Rwy 16R-34L)	121.9 348.6 (Rwys 14-32, 17-35) 133.65 348.6 (Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

IAF OGDEN 115.7 OGD Chan 104

(IAF) FANDS I-UAT 30

MSA TCH 25 NM 11000 8600 12700 140° 230° 050°

15 NM

9000 161° (7.6)

9000 137° (5.5)

(IF) RRUFF I-UAT 22.4

UFEMY I-UAT 16.3

7500 161° (3.7)

BHIVE I-UAT 12.6

6000 161° (5.1)

BNKER I-UAT 7.5 RADAR

STACO TCH 20

WASATCH 116.8 TCH Chan 115

R-197 R-249 069° 249°

IM

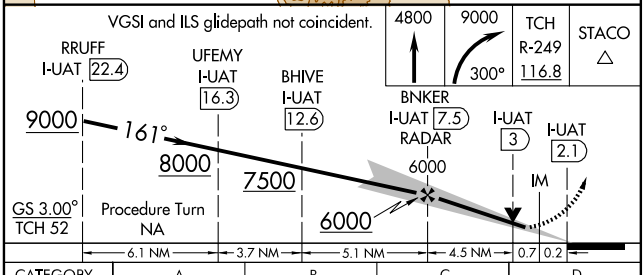
4500 4542 4620± 6237± 4781 4467± 4368± 4670 5458

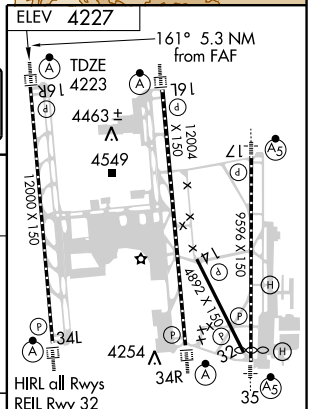
LOCALIZER 111.9 I-UAT Chan 56

Procedure NA for arrivals on OGD VORTAC airway radials 068 CW 153.

9347± 4990 4988± 9486 8740 5355± 5540

VGSI and ILS glidepath not coincident.





CATEGORY	A	B	C	D
S-ILS 16R	4423/18 200 (200-½)			
S-LOC 16R	4580/24 357 (400-½)		4580/40 357 (400-¾)	

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-UUH	APP CRS	Rwy Idg	12000
111.9	341°	TDZE	4226
Chan 56		Apt Elev	4227

ILS or LOC RWY 34L

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 34R. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climbing left turn to 9000 via TCH R-249 to STACO INT/TCH 20 DME and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

115.7 OGD Chan 104

STACO TCH 20

LOCALIZER 111.9 I-UUH Chan 56

FALEM I-UUH 0.3

FLLAG I-UUH 5.5 RADAR

DUNLP I-UUH 15.3

CAMRI I-UUH 17.1

PUTER I-UUH 20.3

(IF)

WASATCH 116.8 TCH Chan 115

MSA TCH 25 NM

11000 / 8600 / 12700

140° 230° 050°

15 NM

341° (9.8)

6100

R-249

R-197

069° 249°

IM

341° (1.8) 8500

341° (3.2) 9000

340° (9.6) 10000

10000 to PUTER 296° (5.3) and LOC (8.2)

(ZUVIB)

IAF FAIRFIELD 116.6 FFU Chan 113

(IAF) BOAGY FFU 4.5

ELEV 4227

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

TDZE 4226

34L

34R

341° 5.6 NM from FAF

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

4800 | 9000 | TCH R-249 | STACO

VGSI and ILS glidepath not coincident.

Procedure Turn NA

I-UUH | FALEM I-UUH 1.1 | IM I-UUH 0.3 | FLLAG I-UUH 5.5 RADAR | 6100 | DUNLP I-UUH 15.3 | CAMRI I-UUH 17.1 | PUTER I-UUH 20.3

341° 10000 9000 8500 6100

GS 3.00° TCH 55

0.1 0.4 0.8 4.4 NM 9.8 NM 1.8 NM 3.2 NM

CATEGORY	A	B	C	D
S-ILS 34L	4426/18 200 (200-½)			
S-LOC 34L	4700/24 474 (500-½)		4700/40 474 (500-¾)	4700/50 474 (500-1)

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-SLC	APP CRS	Rwy Idg	12004
109.5	341°	TDZE	4222
Chan 32		Apt Elev	4227

ILS or LOC RWY 34R

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 34L. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 9000 direct TCH VORTAC then via TCH R-331 to OGD VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

MISSED APCH FIX

OGDEN
OGD
115.7
Chan 104

R-281 101° 281°

CLNC DEL
127.3 379.975

WASATCH
116.8 TCH
Chan 113

LOCALIZER
I-SLC
Chan 32
109.5

GITBE
I-SLC 0.3

BESBE
I-SLC 5.5
RADAR

SCOER
I-SLC 15.5

ATANE
I-SLC 17

PLAGE
I-SLC 20.2

(IF)

IAF
FAIRFIELD
116.6 FFU
Chan 113

(ZUSOK)

(IAF)
BOAGY
FFU 4.5

R-331

341° (10.1)

MSA TCH 25 NM
11000
8600
12700
140° 230° 050°

11000 to PLAGE
296° (3.9)
and LOC (9.2)

11000
346° (9.7)

341° (1.4)

10000
341° (3.2)

ELEV 4227

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

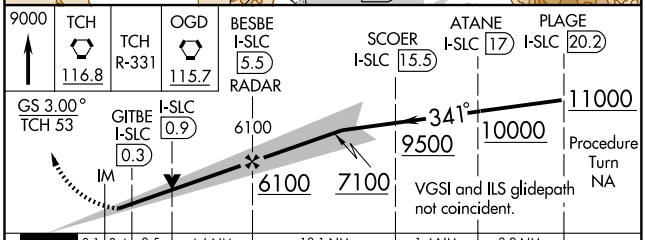
TDZE 4222

12004 X 150
9596 X 150
4892 X 150

341° 5.6 NM from FAF

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44



CATEGORY	A	B	C	D
S-ILS 34R	4422/18 200 (200-½)			
S-LOC 34R	4620/24 398 (400-½)			4620/40 398 (400-¾)

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

ILS RWY 16L (CAT II)

SALT LAKE CITY INTL (SLC)

LOC/DME I-MOY	APP CRS	Rwy ldg 12004
109.5	161°	TDZE 4227
Chan 32		Apt Elev 4227

Simultaneous approach authorized with Rwy 16R. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climb to 10000 via FFU VORTAC R-341 to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER	GND CON
124.75 127.625	124.3 322.3	119.05 257.8 (Rwy 16L-34R) 118.3 257.8 (Rwys 14-32, 17-35) 132.65 336.4 (Rwy 16R-34L)	121.9 348.6 (Rwys 14-32, 17-35) 133.65 348.6 (Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

Procedure NA for arrivals on OGD VORTAC airway radials 068 CW 153.

IAF OGDEN 115.7 OGD Chan 104

(IAF) WEBER I-MOY 33

(IF) IRRON I-MOY 22.4

TOOME I-MOY 16.4

LGOON I-MOY 12

YYIPP I-MOY 7.5 RADAR

WASATCH 116.8 TCH Chan 115

STACO TCH 20

IM

MSA TCH 25 NM

140° 11000 230° 8600 12700 050°

15 NM

11000 128° (6.1)

341° 161° (10.6) 11000

161° (6) 9000

7500 161° (4.4)

6000 161° (4.5)

4500

4542

4620±

4467±

4670

6237±

4781

4368±

5458

4990

4988±

5355±

8733 7605 8136 7640 8358 9570 8588 9284 8830 9706 7140 9259 8170 6596 9158 9410 6649

MISSED APCH FIX

FAIRFIELD FFU 116.6 Chan 113

160° 340° R-160

ALTERNATE MISSED APCH FIX

115.7 OGD R-197 Chan 104

STACO TCH 20

116.8 TCH Chan 115

069° 249° R-249

LOCALIZER 109.5 I-MOY Chan 32

116.6 FFU R-341 Chan 113

ELEV 4227

TDZE 4227

16R 16L 12004 X 150 12000 X 150 4463± 4549 17 5996 X 150 7499 X 150 4254 34L 34R 32 35

HIRL all Rwys

REIL Rwy 32

TDZ/CL Rwys 16L, 16R, 17, 34L, 34R and 35

VGSI and ILS glidepath not coincident.

4800	10000	FFU
	FFU R-341	116.6

IRRON I-MOY 22.4 — TOOME I-MOY 16.4 — LGOON I-MOY 12 — YYIPP I-MOY 7.5 RADAR — IM

11000 — 161° — 9000 — 7500 — 7000 — 6000

DH RA 108

4227 MSL

GS 3.00° TCH 55

Procedure Turn NA

6 NM — 4.4 NM — 4.5 NM — 5.2 NM — 881′ — 1025′

CATEGORY	A	B	C	D
S-ILS 16L	4327/12 100 RA 108			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

ILS RWY 16L (CAT III)

SALT LAKE CITY INTL (SLC)

LOC/DME I-MOY	APP CRS	Rwy ldg 12004
109.5	161°	TDZE 4227
Chan 32		Apt Elev 4227

Simultaneous approach authorized with Rwy 16R. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climb to 10000 via FFU VORTAC R-341 to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75 127.625	124.3 322.3	119.05 257.8 (Rwy 16L-34R)	118.3 257.8 (Rwys 14-32, 17-35)	132.65 336.4 (Rwy 16R-34L)	121.9 348.6 (Rwys 14-32, 17-35)	133.65 348.6 (Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

Procedure NA for arrivals on OGD VORTAC airway radials 068 CW 153.

IAF OGDEN 115.7 OGD Chan 104

MSA TCH 25 NM 40° 11000 230° 8600 050° 12700

15 NM

341° 161° (10.6) 11000

(IAF) WEBER I-MOY 33

11000 128° (6.1)

(IF) IRRON I-MOY 22.4

161° (6) 9000

TOOME I-MOY 16.4

7500 161° (4.4)

LGOON I-MOY 12

6000 161° (4.5)

YYIPP I-MOY 7.5 RADAR

WASATCH 116.8 TCH Chan 115

STACO TCH 20

IM 4500 4542 6237± 4620± 4467± 4670 4781 4368± 5458

MISSED APCH FIX

FAIRFIELD FFU 116.6 Chan 113

160° 340° R-160

ALTERNATE MISSED APCH FIX

115.7 OGD R-197 Chan 104

STACO TCH 20

116.8 TCH Chan 115

069° R-249 249°

4990 4988± 5355±

LOCALIZER 109.5 I-MOY Chan 32

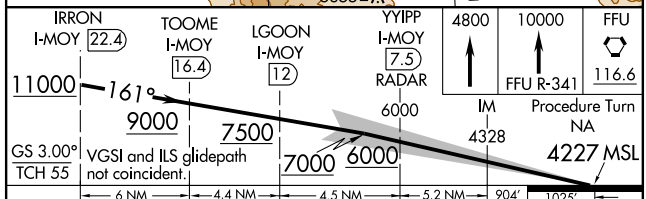
116.6 FFU R-341 Chan 113

ELEV 4227

TDZE 4227

19L 4463± 4549 12004 X 150 12000 X 150 17 9996 X 150 7A 8892 X 150 34L 4254 34R 32 35

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 34L, 34R and 35



CATEGORY	A	B	C	D
S-ILS 16L	CAT IIIa	RVR 07		
S-ILS 16L	CAT IIIb	RVR 03		
S-ILS 16L	CAT IIIc	NA		

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-UAT	APP CRS	Rwy Idg 12000
111.9	161°	TDZE 4223
Chan 56		Apt Elev 4227

ILS RWY 16R (CAT II)

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 16L. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climbing right turn to 9000 via heading 300° and TCH R-249 to STACO INT/TCH 20 DME and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

IAF OGDEN 115.7 OGD Chan 104

(IAF) FANDS I-UAT 30

MSA TCH 2.5 NM 140° 230° 050° 11000 8600 12700

15 NM

9000 161° (7.6)

9000 137° (5.5)

(IF) RRUFF I-UAT 22.4

161° (6.1)

8000

UFEMY I-UAT 16.3

7500 161° (3.7)

BHIVE I-UAT 12.6

6000 161° (5.1)

BNKER I-UAT 7.5 RADAR

R-197

STACO TCH 20

WASATCH 116.8 TCH Chan 115

R-249

069° 249°

IM

4500 4542 6237± 4620± 4781 4368± 4467± 4670 5458 5540

Procedure NA for arrivals on OGD VORTAC airway radials 068 CW 153.

4990 9347± 4988± 5355± 9486 8740

LOCALIZER 111.9 I-UAT Chan 56

ELEV 4227

TDZE 4223

16R 16L 19L 34L 34R 4463± 4549 4254 12004 X 150 12000 X 150 9696 X 150 7489 X 150

17 32 35

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 34L, 34R, and 35

VGSI and ILS glidepath not coincident.

4800	9000	TCH	STACO
	300°	R-249 116.8	

RRUFF I-UAT 22.4 — UFEMY I-UAT 16.3 — BHIVE I-UAT 12.6 — BNKER I-UAT 7.5 RADAR

9000 — 161° — 8000 — 7500 — 6000

DH RA 108

IM

4223 MSL

GS 3.00° TCH 52

Procedure Turn NA

6.1 NM | 3.7 NM | 5.1 NM | 5.1 NM | 956' | 1051'

CATEGORY	A	B	C	D
S-ILS 16R	4323/12 100 RA 108			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-UAT	APP CRS	Rwy Idg 12000
111.9	161°	TDZE 4223
Chan 56		Apt Elev 4227

ILS RWY 16R (CAT III)

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 16L. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climbing right turn to 9000 via heading 300° and TCH R-249 to STACO INT/TCH 20 DME and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

IAF OGDEN 115.7 OGD Chan 104

(IAF) FANDS I-UAT 30

MSA TCH 2.5 NM 140° 230° 050° 11000 8600 12700

15 NM

9000 137° (5.5)

9000 161° (7.6)

(IF) RRUFF I-UAT 22.4

161° (6.1)

8000

UFEMY I-UAT 16.3

7500 161° (3.7)

BHIVE I-UAT 12.6

6000 161° (5.1)

BNKER I-UAT 7.5 RADAR

R-197

STACO TCH 20

WASATCH 116.8 TCH Chan 115

R-249

069° 249°

6649

4500

4542

4620±

6237±

4781

4368±

4467±

4670

IM

5458

Procedure NA for arrivals on OGD VORTAC airway radials 068 CW 153.

5540

4990

4988±

9347±

3355±

LOCALIZER 111.9 I-UAT Chan 56

ELEV 4227

TDZE 4223

4463±

4549

12004 X 150

12000 X 150

9996 X 150

4892 X 150

4254

16L 16R 19L 17L 34L 34R 32 35

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 34L, 34R, and 35

VGSI and ILS glidepath not coincident.

4800	9000	TCH	STACO
	300°	R-249 116.8	△

RRUFF I-UAT 22.4 — UFEMY I-UAT 16.3 — BHIVE I-UAT 12.6 — BNKER I-UAT 7.5 RADAR — IM

Procedure Turn NA

9000 — 161° — 8000 — 7500 — 6000 — 4322 — 4223 MSL

GS 3.00° TCH 52

6.1 NM | 3.7 NM | 5.1 NM | 5.1 NM | 934' | 1051'

CATEGORY	A	B	C	D
S-ILS 16R		Cat IIIa	RVR 07	
S-ILS 16R		Cat IIIb	RVR 03	
S-ILS 16R		Cat IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

ILS RWY 17

SALT LAKE CITY INTL (SLC)

LOC/DME I-BNT	APP CRS	Rwy Idg	9596
111.5	166°	TDZE	4219
Chan 52		Apt Elev	4227

For inoperative MALSR, increase S-ILS 17 Cat E visibility to RVR 4000 and S-LOC 17 Cat E visibility to 1½.

MALSR

MISSED APPROACH: Climb to 5800, then climb to 10000 direct FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

RADAR REQUIRED

MSA TCH 25 NM
11000
8600
12700
140°
230°
050°

10 NM

PRYES
I-BNT 12.3
RADAR

346°
166°
(5.2)
R-006
6000

WASATCH
116.8 TCH
Chan 115

TIFUL INT
I-BNT 7.1
RADAR

LOCALIZER 111.5
I-BNT
Chan 52

MISSED APCH FIX

FAIRFIELD
FFU
116.6
Chan 113
160°
340°
R-160

6596
9259
9158
9410
7869
5458
4538
4500
4542
6237±
4670
4467±
4620±
4781
4368±
4990
4988±
5355±
8740

ELEV 4227

166° 5.3 NM from FAF

4463 ±
4549
12004 X 150
12000 X 150
9596 X 150
7892 X 150
19L
19R
17
TDZE 4219
34L
4254
34R
32
35

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

PRYES
I-BNT 12.3
RADAR

TIFUL INT
I-BNT 7.1
RADAR

7500
166°
6000
6000
I-BNT
1.8

GS 3.00°
TCH 55

5.2 NM
5.3 NM

5800	10000	FFU
		116.6

CATEGORY	A	B	C	D	E
S-ILS 17	4419/18 200 (200-½)				4419/24 200 (200-½)
S-LOC 17	4620/24 401 (400-½)		4620/40 401 (400-¾)		4620/50 401 (400-1)
CIRCLING	NA				

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-UUH	APP CRS	Rwy Idg	12000
111.9	341°	TDZE	4226
Chan 56		Apt Elev	4227

ILS RWY 34L (CAT II)

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 34R. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climbing left turn to 9000 via TCH R-249 to STACO INT/TCH 20 DME and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

115.7 OGD Chan 104

STACO TCH 20

LOCALIZER 111.9 I-UUH Chan 56

WASATCH 116.8 TCH Chan 115

FLLAG I-UUH 5.5 RADAR

DUNLP I-UUH 15.3

CAMRI I-UUH 17.1

PUTER I-UUH 20.3

MSA TCH 25 NM

11000 (140°–230°)

8600 (230°–050°)

12700 (050°–140°)

15 NM

341° (9.8)

6100

10000 340° (9.6)

8500 341° (1.8)

9000 341° (3.2)

10000 to PUTER 296° (5.3) and LOC (8.2)

(ZUVIB)

(IF)

IAF FAIRFIELD 116.6 FFU Chan 113

(IAF) BOAGY FFU 4.5

ELEV 4227

4463 ±

4549

4254

TDZE 4226

34L

34R

12000 X 150

12004 X 150

9996 X 150

8892 X 150

HIRL all Rwys

REIL Rwy 32

TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

4800 | 9000 TCH R-249 | STACO

VGSI and ILS glidepath not coincident.

DH RA 102

IM

4226 MSL

6100

8500

9000

10000

341°

Procedure Turn NA

GS 3.00° TCH 55

1051' | 866' | 5.5 NM | 9.8 NM | 1.8 NM | 3.2 NM

CATEGORY	A	B	C	D
S-ILS 34L	4326/12 100 RA 102			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

ILS RWY 34L (CAT III)

SALT LAKE CITY INTL (SLC)

LOC/DME I-UUH	APP CRS	Rwy Idg	12000
111.9	341°	TDZE	4226
Chan 56		Apt Elev	4227

Simultaneous approach authorized with Rwy 34R. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 4800, then climbing left turn to 9000 via TCH R-249 to STACO INT/TCH 20 DME and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

115.7 OGD Chan 104

STACO TCH 20

LOCALIZER 111.9 I-UUH Chan 56

MSA TCH 25 NM

140° 11000 230°

8600 12700

050°

15 NM

R-249 R-197

069° 249°

FLLAG I-UUH 5.5 RADAR

DUNLP I-UUH 15.3

CAMRI I-UUH 17.1

PUTER I-UUH 20.3

(IF)

IM

341° (9.8)

6100

WASATCH 116.8 TCH Chan 115

IAF FAIRFIELD 116.6 FFU Chan 113

(IAF) BOAGY FFU 4.5

(ZUVIB)

10000 to PUTER 296° (5.3) and LOC (8.2)

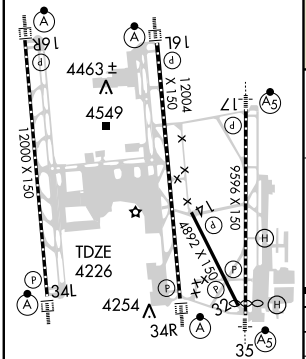
8500 341° (1.8)

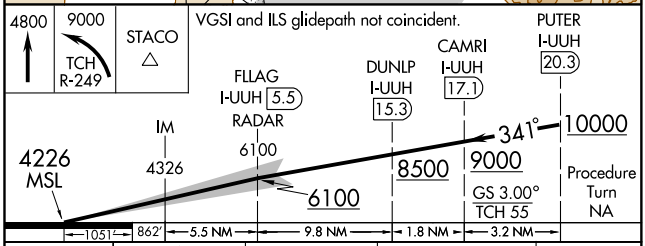
9000 341° (3.2)

10000 340° (9.6)

6649 4500 9410 6237± 4542 4620± 7869 4670 4467± 4781 4368± 5458 8621 9602 10246 10403 10116 9363 11330 10795 11489 11253 11101 10349 6682 11749 8956 10908 9343 11068 7480 7785 7918 10620 10589 10373 10006 6824 6687 7230 7220 9207 6337 7160 5665 5589± 5355± 9486 8740 9347± 4990 4988± 4559± 5540 4500 5000 6000

ELEV 4227





CATEGORY	A	B	C	D
S-ILS 34L	CAT IIIa RVR 07			
S-ILS 34L	CAT IIIb RVR 03			
S-ILS 34L	CAT IIIc NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-SLC	APP CRS	Rwy Idg	12004
109.5	341°	TDZE	4222
Chan 32		Apt Elev	4227

ILS RWY 34R (CAT II)

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 34L. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 9000 direct TCH VORTAC then via TCH R-331 to OGD VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3	322.3	119.05	257.8	121.9	348.6
127.625			118.3	257.8	132.65	336.4
			(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

MISSED APCH FIX

OGDEN OGD 115.7 Chan 104

R-281 101° 281°

CLNC DEL 127.3 379.975

WASATCH 116.8 TCH Chan 115

LOCALIZER 109.5 I-SLC Chan 32

R-331

BESBE I-SLC 5.5 RADAR

SCOER I-SLC 15.5

ATANE I-SLC 17

(IF) PLAGE I-SLC 20.2

MSA TCH 25 NM

140° 230° 050°

11000 8600 12700

341° (10.1)

15 NM

IM 4781 4368± 5458

4467± 4670

4500 4542 4620± 6237±

9410 9158 9304 8440 7869 8621 9602 10246 10403 10116 9363 10795 11330 11253 11489 10349 11101 11749 8956 8956 10908 11068

5540 4990 4988± 9347± 9486 8740 5355± 5589± 6337 7160 9207 5665 9500 7220 7230 341° (1.4) 6824 6687 10373 10589 10006 10620 7918 7785 7480 161°

10000 341° (3.2) 6682

11000 346° (9.7)

11000 to PLAGE 296° (3.9) and LOC (9.2)

(ZUSOK)

IAF FAIRFIELD 116.6 FFU Chan 113

(IAF) BOAGY FFU 4.5

ELEV 4227

4463± 4549

12004 X 150

9396 X 150

4892 X 150

TDZE 4222 4254

34L 34R 35

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

9000	TCH 116.8	TCH R-331	OGD 115.7

VGSI and ILS glidepath not coincident.

Procedure Turn NA

DH RA 100

IM

4222 MSL

6100 7100 9500 10000 11000 341°

GS 3.00° TCH 53

1047′ 901′ 5.5 NM 10.1 NM 1.4 NM 3.2 NM

CATEGORY	A	B	C	D
S-ILS 34R	4322/12 100 RA 100			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

LOC/DME I-SLC	APP CRS	Rwy Idg	12004
109.5	341°	TDZE	4222
Chan 32		Apt Elev	4227

ILS RWY 34R (CAT III)

SALT LAKE CITY INTL (SLC)

Simultaneous approach authorized with Rwy 34L. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 9000 direct TCH VORTAC then via TCH R-331 to OGD VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON		CLNC DEL
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6	127.3 379.975
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)	

MISSED APCH FIX

OGDEN OGD 115.7 Chan 104

R-281 101° 281°

WASATCH 116.8 TCH Chan 113

LOCALIZER 109.5 I-SLC Chan 32

R-331

MSA TCH 2.5 NM

11000 140° 230° 8600 12700 050°

BESBE I-SLC 5.5 RADAR

SCOER I-SLC 15.5

ATANE I-SLC 17

(IF) PLAGE I-SLC 20.2

IAF FAIRFIELD 116.6 FFU Chan 113

(ZUSOK)

(IAF) BOAGY FFU 4.5

11000 to PLAGE 296° (3.9) and LOC (9.2)

341° 11000 10000 9500 6100 7100

GS 3.00° TCH 53

IM 4319

4222 MSL

1047' 841' 5.5 NM 10.1 NM 1.4 NM 3.2 NM

VGSI and ILS glidepath not coincident.

9000 | TCH 116.8 | TCH R-331 | OGD 115.7

Procedure Turn NA

ELEV 4227

TDZE 4222

4254

34L 34R 35

12004 X 150

9596 X 150

7492 X 150

CATEGORY	A	B	C	D
S-ILS 34R	CAT IIIa	RVR 07		
S-ILS 34R	CAT IIIb	RVR 03		
S-ILS 34R	CAT IIIc	NA		

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

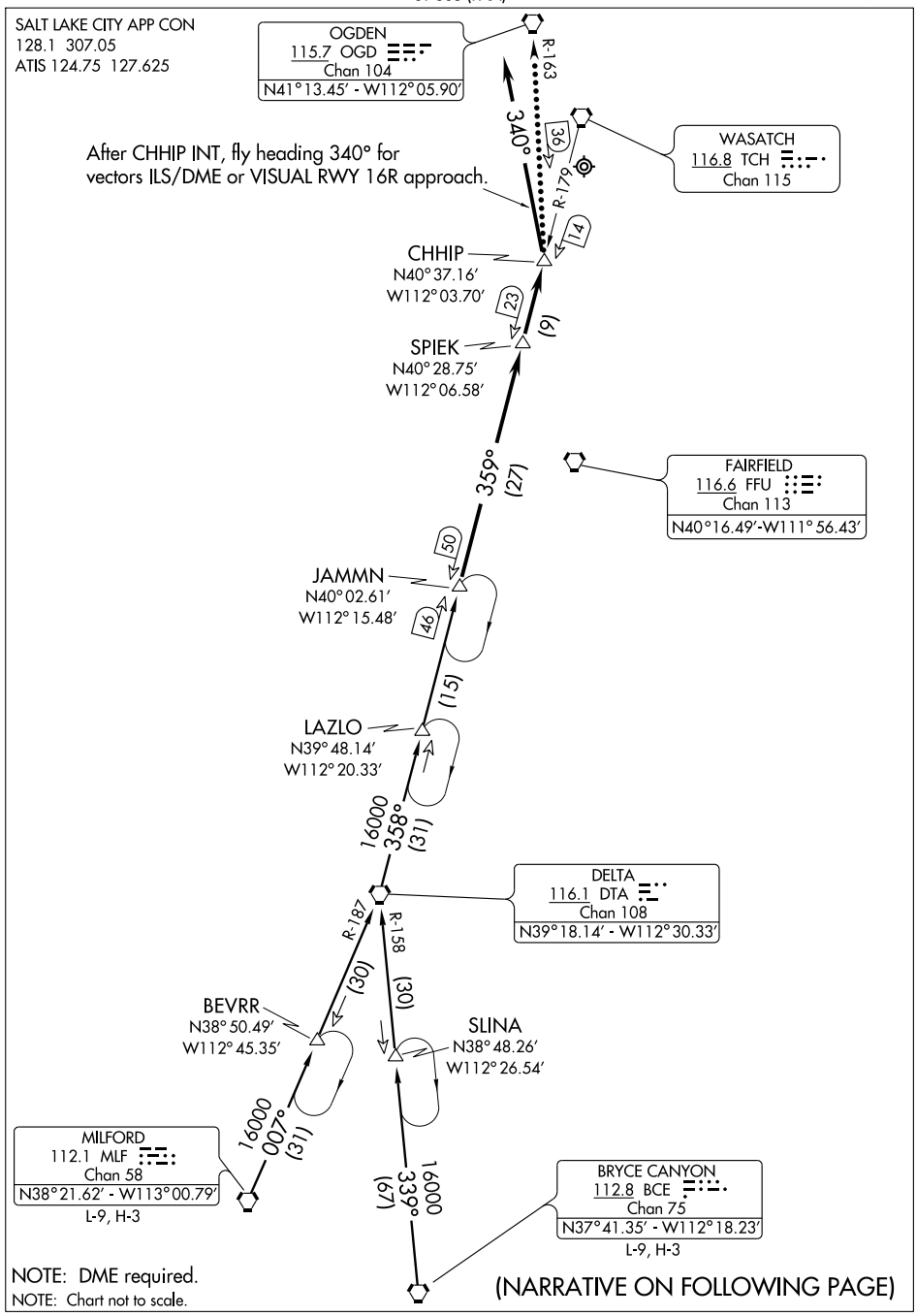
SW-4, 22 OCT 2009 to 19 NOV 2009

(JAMMN.JAMMN4) 08325

JAMMN FOUR ARRIVAL

ST-365 (FAA)

SALT LAKE CITY INTL
SALT LAKE CITY, UTAH



NOTE: DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

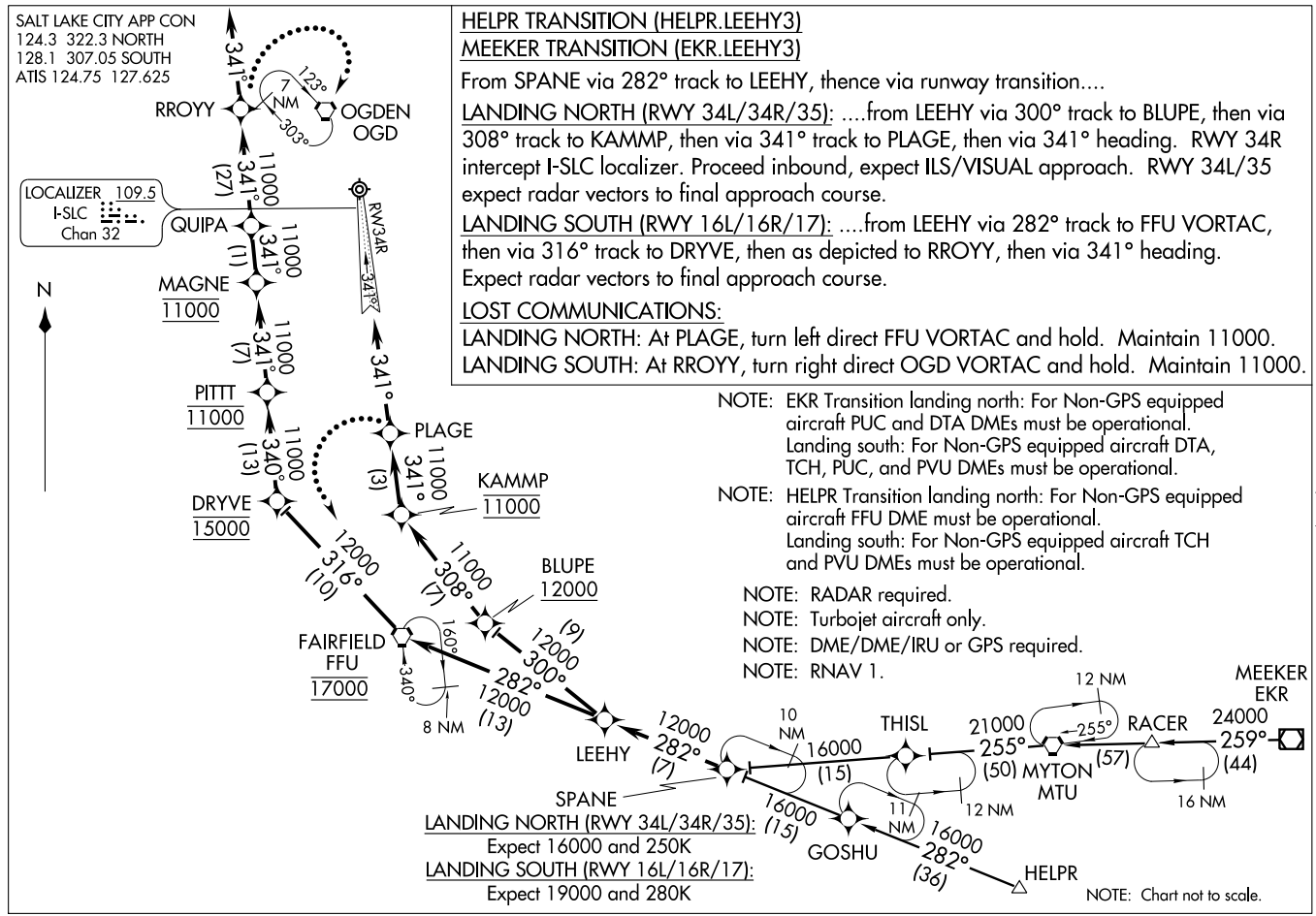
ARRIVAL DESCRIPTION

BRYCE CANYON TRANSITION (BCE.JAMMN4): From over BCE VORTAC via BCE R-339 and DTA R-158 to DTA VORTAC. Then via DTA R-358 to JAMMN INT. Thence....
MILFORD TRANSITION (MLF.JAMMN4): From over MLF VORTAC via MLF R-007 and DTA R-187 to DTA VORTAC. Then via DTA R-358 to JAMMN INT. Thence....

....From over JAMMN INT via TCH R-179 to CHHIP INT. After CHHIP INT, fly heading 340° for vectors to ILS/DME or VISUAL Rwy 16R approach.

LOST COMMUNICATIONS:
In the event of lost communications, at CHHIP INT proceed direct OGD VORTAC. Maintain 11,000 until OGD VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009



HELPR TRANSITION (HELPR.LEEHY3)

MEEKER TRANSITION (EKR.LEEHY3)

From SPANE via 282° track to LEEHY, thence via runway transition....

LANDING NORTH (RWY 34L/34R/35): ....from LEEHY via 300° track to BLUPE, then via 308° track to KAMMP, then via 341° track to PLAGE, then via 341° heading. RWY 34R intercept I-SLC localizer. Proceed inbound, expect ILS/VISUAL approach. RWY 34L/35 expect radar vectors to final approach course.

LANDING SOUTH (RWY 16L/16R/17): ....from LEEHY via 282° track to FFU VORTAC, then via 316° track to DRYVE, then as depicted to RROYY, then via 341° heading. Expect radar vectors to final approach course.

LOST COMMUNICATIONS:

LANDING NORTH: At PLAGE, turn left direct FFU VORTAC and hold. Maintain 11000.

LANDING SOUTH: At RROYY, turn right direct OGD VORTAC and hold. Maintain 11000.

NOTE: EKR Transition landing north: For Non-GPS equipped aircraft PUC and DTA DMEs must be operational. Landing south: For Non-GPS equipped aircraft DTA, TCH, PUC, and PVU DMEs must be operational.

NOTE: HELPR Transition landing north: For Non-GPS equipped aircraft FFU DME must be operational. Landing south: For Non-GPS equipped aircraft TCH and PVU DMEs must be operational.

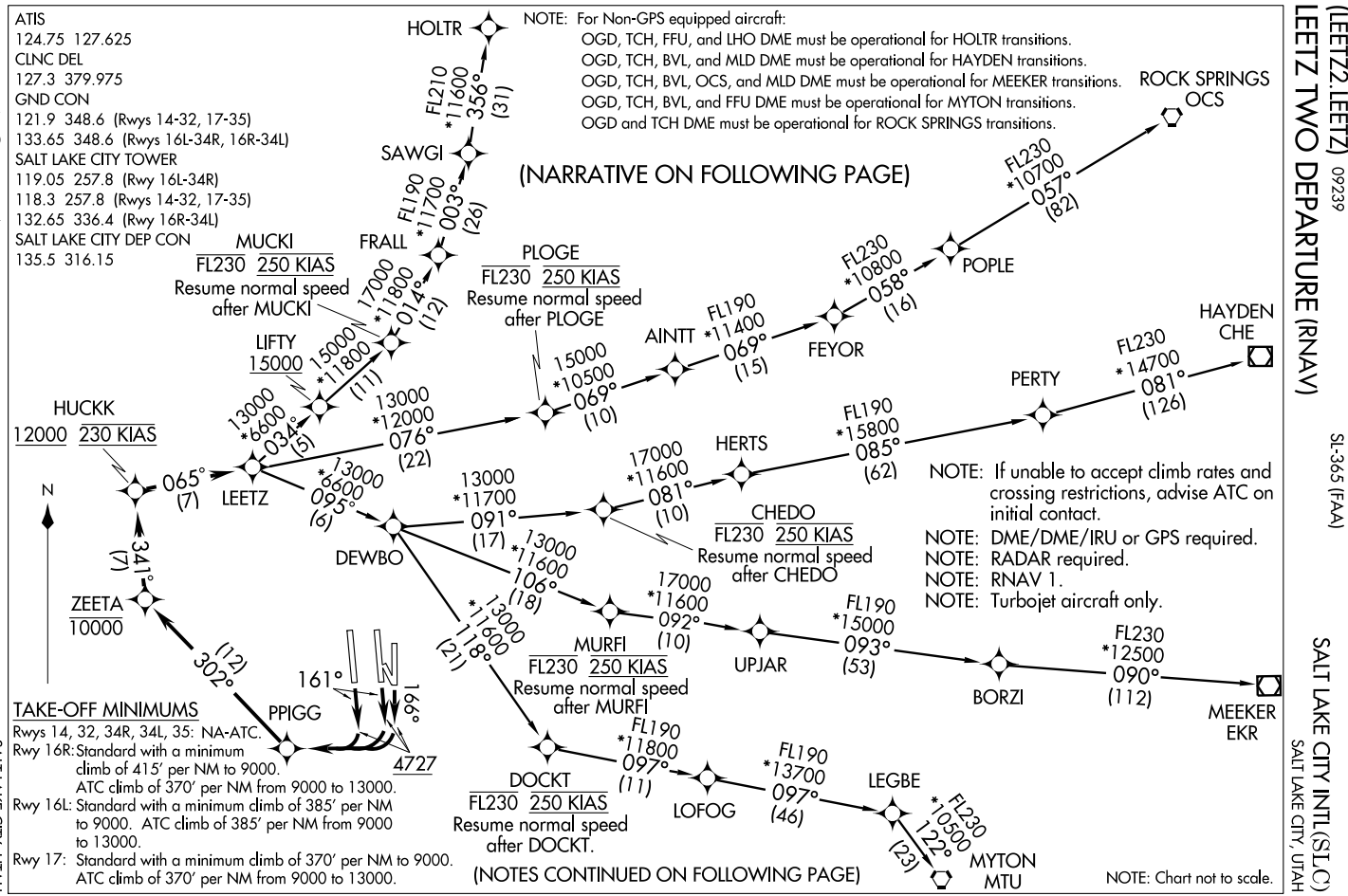
NOTE: RADAR required.

NOTE: Turbojet aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: Chart not to scale.


ATIS
124.75 127.625
CLNC DEL
127.3 379.975
GND CON
121.9 348.6 (Rwys 14-32, 17-35)
133.65 348.6 (Rwys 16L-34R, 16R-34L)
SALT LAKE CITY TOWER
119.05 257.8 (Rwy 16L-34R)
118.3 257.8 (Rwy 14-32, 17-35)
132.65 336.4 (Rwy 16R-34L)
SALT LAKE CITY DEP CON
135.5 316.15
NOTE: For Non-GPS equipped aircraft:
OGD, TCH, FFU, and LHO DME must be operational for HOLTR transitions.
OGD, TCH, BVL, and MLD DME must be operational for HAYDEN transitions.
OGD, TCH, BVL, OCS, and MLD DME must be operational for MEEKER transitions.
OGD, TCH, BVL, and FFU DME must be operational for MYTON transitions.
OGD and TCH DME must be operational for ROCK SPRINGS transitions.
(NARRATIVE ON FOLLOWING PAGE)
HOLTR
FL210 *11600 356° (31)
SAWGI
FL190 *11700 003° (26)
FRALL
MUCKI
FL230 250 KIAS
Resume normal speed after MUCKI
17000 *11800 014° (12)
LIFTY
15000
15000 *11800 (11)
HUCKK
12000 230 KIAS
13000 *8600 034° (5)
065° (7)
LEETZ
N
341° (7)
ZEETA
10000
302° (12)
161°
166°
PPIGG
4727
TAKE-OFF MINIMUMS
Rwys 14, 32, 34R, 34L, 35: NA-ATC.
Rwy 16R: Standard with a minimum climb of 415' per NM to 9000. ATC climb of 370' per NM from 9000 to 13000.
Rwy 16L: Standard with a minimum climb of 385' per NM to 9000. ATC climb of 385' per NM from 9000 to 13000.
Rwy 17: Standard with a minimum climb of 370' per NM to 9000. ATC climb of 370' per NM from 9000 to 13000.
PLOGE
FL230 250 KIAS
Resume normal speed after PLOGE
13000 *12000 076° (22)
15000 *10500 069° (10)
AINTT
FL190 *11400 069° (15)
FEYOR
FL230 *10800 058° (16)
POPLE
FL230 *10700 057° (82)
ROCK SPRINGS OCS
HAYDEN CHE
FL230 *14700 081° (126)
PERTY
FL190 *15800 085° (62)
HERTS
17000 *11600 081° (10)
13000 *11700 091° (17)
13000 *6600 095° (6)
DEWBO
CHEDO
FL230 250 KIAS
Resume normal speed after CHEDO
13000 *11600 106° (18)
MURFI
FL230 250 KIAS
Resume normal speed after MURFI
17000 *11600 092° (10)
UPJAR
FL190 *15000 093° (53)
BORZI
FL230 *12500 090° (112)
MEEKER EKR
13000 *11600 118° (21)
DOCKT
FL230 250 KIAS
Resume normal speed after DOCKT.
FL190 *11800 097° (11)
LOFOG
FL190 *13700 097° (46)
LEGBE
FL230 *10500 122° (23)
MYTON MTU
(NOTES CONTINUED ON FOLLOWING PAGE)
NOTE: If unable to accept climb rates and crossing restrictions, advise ATC on initial contact.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft only.
NOTE: Chart not to scale.
(LEETZ2.LEETZ) 09239
LEETZ TWO DEPARTURE (RNAV)
SL-365 (FAA)
SALT LAKE CITY INTL(SLC)
SALT LAKE CITY, UTAH

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16R/16L: Climb heading 161° to 4727, then right turn direct PPIGG, then via depicted route to LEETZ, thence....
TAKE-OFF RUNWAY 17: Climb heading 166° to 4727, then right turn direct PPIGG, then via depicted route to LEETZ, thence....

....via (transition) maintain FL230 or lower filed altitude. Expect filed altitude 10 minutes after departure.

HAYDEN TRANSITION (LEETZ2.CHE)
HOLTR TRANSITION (LEETZ2.HOLTR)
MEEKER TRANSITION (LEETZ2.EKR)
MYTON TRANSITION (LEETZ2.MTU)
ROCK SPRINGS TRANSITION (LEETZ2.OCS)

TAKE-OFF NOTES CONT.

TAKE-OFF OBSTACLES

Rwy 16L, 16R, and 17: Multiple light poles beginning 988' from DER, 689' right of centerline, up to 34' AGL/4254' MSL.
Rwy 17: Vehicle on road 434' from DER, 518' right of centerline, 17' AGL/4237' MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

(NORDK.NORDK3) 09183

NORDK THREE ARRIVAL (RNAV)

ST-365 (FAA)

SALT LAKE CITY INTL
SALT LAKE CITY, UTAH

SALT LAKE CITY APP CON
124.9 290.3
ATIS
124.75 127.625

DUBOIS
DBS

JACKSON
JAC

NOTE: DDY and OCS Transitions:
For non-GPS equipped aircraft
BPI DME must be operational.

NOTE: JAC TRANSITION:
Landing South: For non-GPS equipped aircraft
MLD and LHO DMEs must be operational.
Landing North: For non-GPS equipped aircraft
MLD, BVL and LHO DMEs must be operational.

NOTE: DBS TRANSITION:
Landing South: For non-GPS equipped aircraft
BVL, PIH, MLD and LHO DMEs must be operational.
Landing North: For non-GPS equipped aircraft
BPI, MLD, LHO and BVL DMEs must be operational.

24000
155°
(85)

24000
208°
(74)

173°
12 NM
353°

LAVAH

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.

MUDDY MOUNTAIN
DDY

24000
233°
(204)

18000
173°
(55)

8 NM

BRIGHAM CITY
LHO

19000
258°
(7)

CICAK

21000
262°
(63)

11 NM

KAADE

24000
262°
(65)

ROCK
SPRINGS
OCS

CARTR
Landing North
(Rwy 34L/34R/35)
Expect 19000 and
280 KTS.
Landing South
(Rwy 16L/16R/17)
Expect 15000 and
250 KTS.

15000
173°
(14)

8 NM

12000
(4)

NORDK

(16)
12000
175°

161°
12000
(10)

133°
7 NM
313°

WEBER
12000

SETTT
15000

11000
(9)

161°

DYANN
11000

OGDEN
OGD

157°
(11)

161°

RWY 16L

ANNTY
11000

161°
(37)

FAIRFIELD
FFU

CEEDR

160°
340°
8 NM

161°

LOCALIZER 109.5
I-MOY
Chan 32

DUBOIS TRANSITION (DBS.NORDK3)
JACKSON TRANSITION (JAC.NORDK3)
MUDDY MOUNTAIN TRANSITION (DDY.NORDK3)
ROCK SPRINGS TRANSITION (OCS.NORDK3)

From LHO VOR/DME via 173° track to CARTR WP, thence via 173° track to NORDK WP, thence. . . .

LANDING SOUTH (RWY 16L/16R/17): . . . .From NORDK WP via 161° track to WEBER WP, thence via 161° heading. RWY 16L intercept I-MOY localizer. Proceed inbound, expect ILS/Visual approach. RWY 16R/17 expect radar vectors to final approach course.

LANDING NORTH (RWY 34L/34R/35): . . . .From NORDK WP via 175° track to SETTT WP, thence as depicted to CEEDR WP, thence via 161° heading. Expect radar vectors to final approach course.

LOST COMMUNICATIONS
LANDING SOUTH: At WEBER WP, turn right direct to OGD VORTAC and hold, maintain 12000.
LANDING NORTH: At CEEDR WP, turn left direct to FFU VORTAC and hold, maintain 11000.

NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

NSIGN ONE DEPARTURE (RNAV)

SALT LAKE CITY INTL(SLC)

SALT LAKE CITY, UTAH

ATIS 124.75 127.625
CLNC DEL
127.3 379.975
GND CON
121.9 348.6 (Rwys 14-32, 17-35)
133.65 348.6 (Rwys 16L-34R, 16R-34L)
SALT LAKE CITY TOWER
119.05 257.8 (Rwy 16L-34R)
118.3 257.8 (Rwys 14-32, 17-35)
132.65 336.4 (Rwy 16R-34L)
SALT LAKE CITY DEP CON
135.5 316.15

TAKE-OFF MINIMUMS

Rwys 14, 32, 16R/L, 17: NA-ATC.
Rwy 34R: Standard with minimum climb of 414′ per NM to 11800. ATC climb of 415′ per NM to 17000.
Rwy 34L: Standard with minimum climb of 406′ per NM to 11800. ATC climb of 415′ per NM to 17000.
Rwy 35: Standard with minimum climb of 409′ per NM to 11800. ATC climb of 415′ per NM to 17000.

HOLTR
FL210 *11600 356° (31)
SAWGI
FL190 *11700 003° (26)
FRALL
MUCKI
FL230 250 KIAS
Resume normal speed after MUCKI
17000 *11800 014° (12)
13000 *11800 032° (5)
NSIGN
13000
13000 *12000 085° (7)
032° (6)
WOMEX
11000
347° (6)
340° (6)
334° (6)
WETIK
8400
230 KIAS
MELEC
8400 230 KIAS
RATTO
8400
230 KIAS
4727
4727
341°
341°
346°
PLOGE
FL230 250 KIAS
Resume normal speed after PLOGE
15000 *12000 118° (9)
15000 *11500 069° (10)
AINTT
FL190 *11400 069° (15)
FEYOR
FL230 *10800 058° (16)
POPLE
FL230 *10700 057° (82)
ROCK SPRINGS
OCS
N
HAYDEN
CHE
FL230 *14700 081° (126)
PERTY
FL190 *15800 085° (62)
HERTS
17000 *11600 081° (10)
COKKE
135° (14)
17000 *12000
143° (19)
17000 *12000
149° (24)
17000 *12000
CHEDO
FL230 250 KIAS
Resume normal speed after CHEDO
MURFI
FL230 250 KIAS
Resume normal speed after MURFI
17000 *11600 092° (10)
UPJAR
FL190 *15000 093° (53)
BORZI
FL230 *12500 090° (112)
MEEKER
EKR
17000 *11800 097° (11)
DOCKT
FL230 250 KIAS
Resume normal speed after DOCKT.
LOFOG
FL190 *13700 097° (46)
LEGBE
FL230 *10500 122° (23)
MYTON
MTU

NOTE: If unable to accept climb rates and crossing restrictions, advise ATC on inital contact.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft only.

TAKE-OFF OBSTACLES

Rwy 34R: Post 12′ from DER, 349′ right of centerline, 4′ AGL/4227′ MSL.
Rwy 35: Post 55′ from DER, 249′ left of centerline, 4′ AGL/4220′ MSL.

NOTE: Chart not to scale.

(NOTES CONTINUED ON FOLLOWING PAGE)

(NARRATIVE ON FOLLOWING PAGE)

NSIGN ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34R: Climb heading 341° to 4727, then left turn direct RATTO, then via depicted route to NSIGN, thence. . . .
TAKE-OFF RUNWAY 34L: Climb heading 341° to 4727, then direct WETIK then via depicted route to NSIGN, thence. . . .
TAKE-OFF RUNWAY 35: Climb heading 346° to 4727, then left turn direct MELEC, then via depicted route to NSIGN, thence. . . .

. . . .via (transition) maintain FL230 or lower filed altitude. Expect filed altitude 10 minutes after departure.

HAYDEN TRANSITION (NSIGN1.CHE)
HOLTR TRANSITION (NSIGN1.HOLTR)
MEEKER TRANSITION (NSIGN1.EKR)
MYTON TRANSITION (NSIGN1.MTU)
ROCK SPRINGS TRANSITION (NSIGN1.OCS)

Procedural Notes Cont.

NOTE: For Non-GPS equipped aircraft:
OGD, TCH, FFU, and LHO DMEs must be operational for HOLTR transitions.
OGD, TCH, BVL, and MLD DMEs must be operational for HAYDEN transitions.
OGD, TCH, BVL, OCS, and MLD DMEs must be operational for MEEKER transitions.
OGD, TCH, and MLD DMEs must be operational for MYTON transitions.
OGD and TCH DMEs must be operational for ROCK SPRINGS transitions.

SW-4, 22 OCT 2009 to 19 NOV 2009

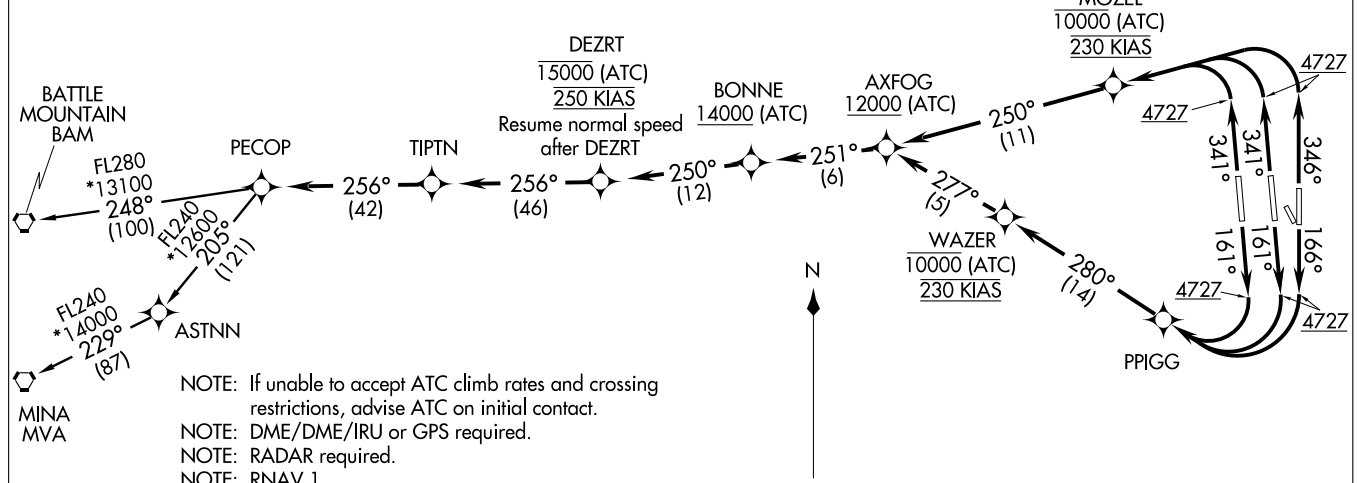
ATIS 124.75 127.625
CLNC DEL
127.3 379.975
GND CON
121.9 348.6 (Rwys 14-32, 17-35)
133.65 348.6 (Rwys 16L-34R, 16R-34L)
SALT LAKE CITY TOWER
119.05 257.8 (Rwy 16L-34R)
118.3 257.8 (Rwys 14-32, 17-35)
132.65 336.4 (Rwy 16R-34L)
SALT LAKE CITY DEP CON
126.25 387.0

TAKE-OFF MINIMUMS

Rwys 14, 32: NA- ATC.
Rwy 16R: Standard with minimum climb of 413′ per NM to 8300. ATC climb of 317′ per NM to 14000.
Rwy 16L: Standard with minimum climb of 381′ per NM to 8300. ATC climb of 331′ per NM to 14000.
Rwy 17: Standard with minimum climb of 367′ per NM to 7800. ATC climb of 341′ per NM to 14000.
Rwys 34R, 34L, 35: ATC climb of 359′ per NM to 14000.

TAKE OFF OBSTACLES

Rwy 16L: Multiple light poles beginning 988′ from DER, 689′ right of centerline, up to 34′ AGL/4254′ MSL.
Rwy 17: Vehicle on road 434′ from DER, 518′ right of centerline, 17′ AGL/4237′ MSL.
Rwy 34R: Post 12′ from DER, 349′ right of centerline, 4′ AGL/4227′ MSL.
Rwy 35: Post 55′ from DER, 249′ left of centerline, 4′ AGL/4220′ MSL.



NOTE: If unable to accept ATC climb rates and crossing restrictions, advise ATC on initial contact.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft only.
NOTE: For Non-GPS equipped aircraft:
OGD, TCH, BVL, LCU, and TWF DMEs must be operational for BATTLE MOUNTAIN transitions.
OGD, TCH, BVL, LCU, ILC, and MVA DMEs must be operational for MINA transitions departing Rwy 34R, 34L, 35.
OGD, TCH, BVL, LCU, ILC, OAL, and MVA DMEs must be operational for MINA transitions departing Rwy 16R, 16L, and 17.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

PECOP TWO DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16R/16L: Climb heading 161° to 4727, then right turn direct PPIGG, then via depicted route to PECOP, thence....
TAKE-OFF RUNWAY 17: Climb heading 166° to 4727, then right turn direct PPIGG, then via depicted route to PECOP, thence....
TAKE-OFF RUNWAY 34R: Climb heading 341° to 4727, then left turn direct MOZEL, then via depicted route to PECOP, thence....
TAKE-OFF RUNWAY 34L: Climb heading 341° to 4727, then left turn direct MOZEL, then via depicted route to PECOP, thence....
TAKE OFF RUNWAY 35: Climb heading 346° to 4727, then left turn direct MOZEL, then via depicted route to PECOP, thence....

....via (transition) maintain 15000 or lower filed altitude. Expect filed altitude 10 minutes after departure.

BATTLE MOUNTAIN TRANSITION (PECOP2.BAM)
MINA TRANSITION (PECOP2.MVA)

SW-4, 22 OCT 2009 to 19 NOV 2009

(QWENN.QWENN3) 09071 ST-365 (FAA)

QWENN THREE ARRIVAL (RNAV)

SALT LAKE CITY INTL
SALT LAKE CITY, UTAH

SALT LAKE CITY APP CON
124.3 322.3
ATIS 124.75 127.625

BRYCE CANYON TRANSITION (BCE.QWENN3)

MILFORD TRANSITION (MLF.QWENN3)

LANDING NORTH (RWY 34R/34L/35): From QWENN WP via 358° track to FFU VORTAC, then as depicted to PLAGE WP, then via 341° heading. RWY 34R intercept I-SLC localizer. Proceed inbound, expect ILS/Visual approach. RWY 34L/35 expect radar vectors to final approach course.

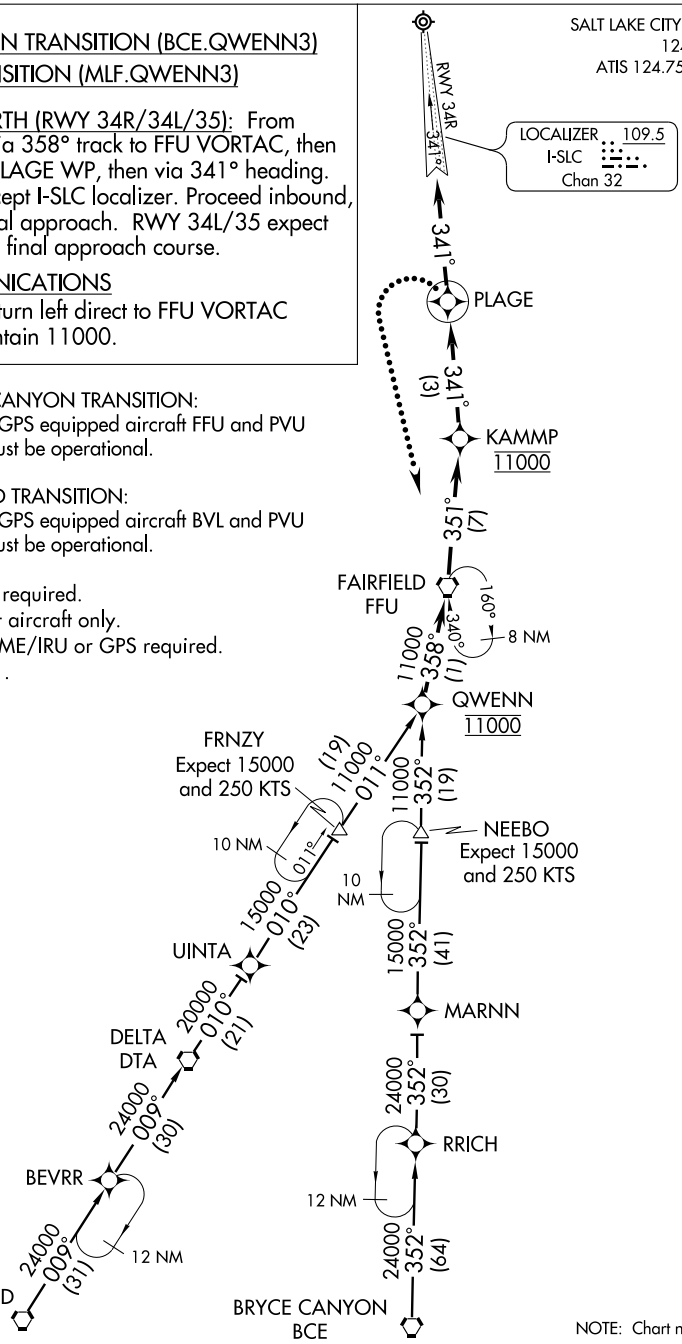
LOST COMMUNICATIONS

At PLAGE WP, turn left direct to FFU VORTAC and hold. Maintain 11000.

NOTE: BRYCE CANYON TRANSITION:
For non-GPS equipped aircraft FFU and PVU DMEs must be operational.

NOTE: MILFORD TRANSITION:
For non-GPS equipped aircraft BVL and PVU DMEs must be operational.

NOTE: RADAR required.
NOTE: Turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.



NOTE: Chart not to scale.

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

APP CRS	Rwy Idg	12004
161°	TDZE	4227
	Apt Elev	4227

RNAV (GPS) RWY 16L

SALT LAKE CITY INTL (SLC)

For inoperative ALSF, increase LNAV Cat E visibility to 2. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

ALSF-2

MISSED APPROACH: Climb to 10000 via 161° course to RULFO WP then via 164° course to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

(IAF) OGDEN OGD

10000 128° (6.1)

IRRON

161° 9000 (4.4)

YAWVA

161° 7500 (5.8)

LGOON

6000 (4.8)

(FAF) YYIPP

RW16L

161° (8.2)

RULFO

164° (23.8)

MSA RW16L 25 NM

14000

9570 8588 9284 8830 9706 7120 9259 8170 6596 9410 9158 9304 6649 8440 7869 8621 4500 4542 4620± 6237± 4670 4467± 4368± 4781 5458 5540 4990 4988± 9347± 5355± 9486 8740 5589± 7160 6337 5665

MISSED APCH FIX

FAIRFIELD FFU

160° 340° 7 NM

ELEV 4227

161° to RW16L

TDZE 4227

19R 19L 4463± 4549 12004 X 150 12000 X 150 9596 X 150 16L 17 34L 4254 34R 32 35

HIRL all Rwys

REIL Rwy 32

TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

10000	RULFO	164° course	FFU
161°			

IRRON YAWVA LGOON YYIPP 1.5 NM to RW16L RW16L

10000 161° 9000 7500 6000

Procedure Turn NA

3.02° TCH 70

4.4 NM 5.8 NM 4.8 NM 3.8 NM 1.5

CATEGORY	A	B	C	D	E
LNAV MDA	4760/24	533 (600-½)	4760/50 533 (600-1)	4760/60 533 (600-1¼)	4760-1½ 533 (600-1½)

SW-4, 22 OCT 2009 to 19 NOV 2009

RNAV (GPS) RWY 16R

SALT LAKE CITY INTL (SLC)

APP CRS	Rwy Idg	12000
161°	TDZE	4223
	Apt Elev	4227

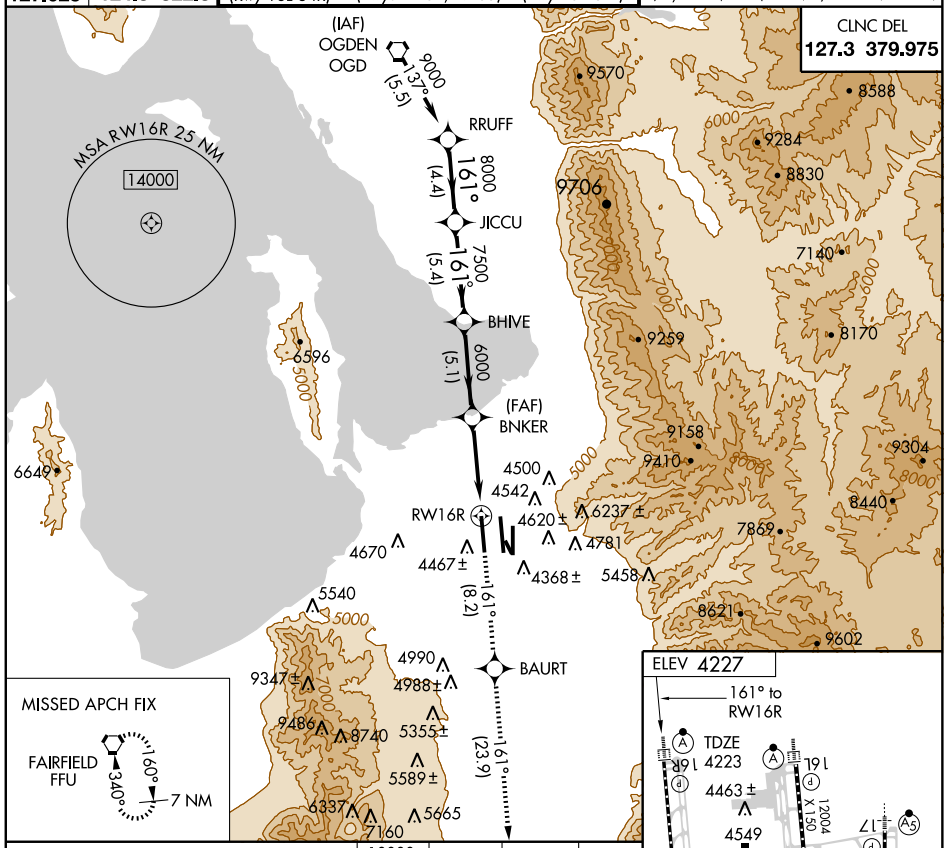
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. For inoperative ALSF increase LNAV Cat E visibility to 1¾.

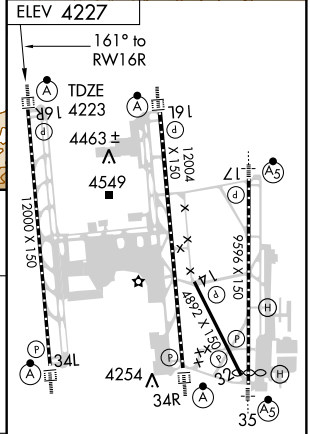
ALSF-2

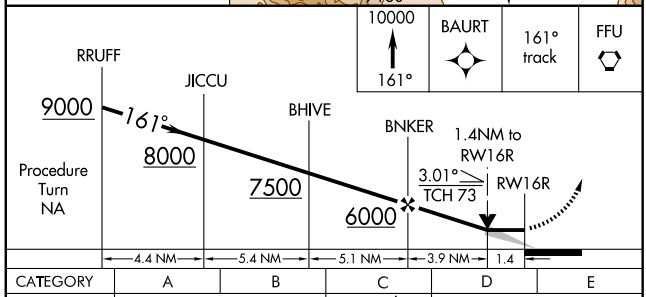
MISSED APPROACH: Climb to 10000 via 161° course to BAURT WP then 161° course to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975







CATEGORY	A	B	C	D	E
LNAV MDA	4740/24 517 (600-½)		4740/50 517 (600-1)	4740/60 517 (600-1¼)	

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	9596
166°	TDZE	4219
	Apt Elev	4227

RNAV (GPS) RWY 17

SALT LAKE CITY INTL (SLC)

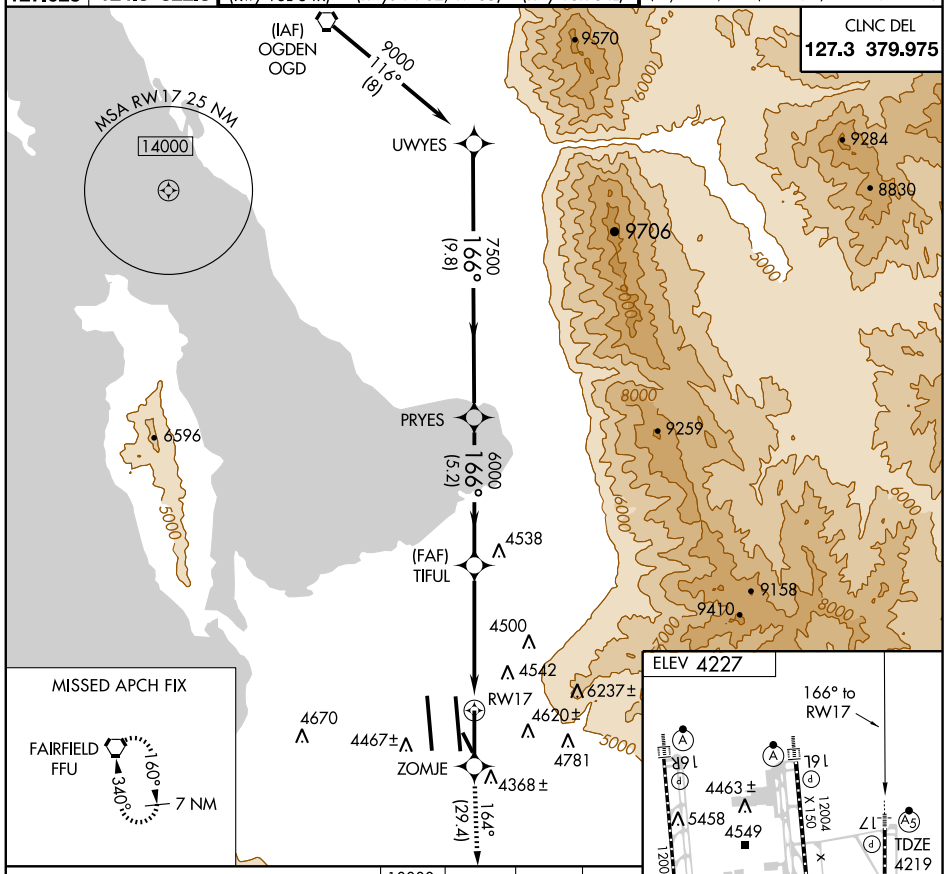
For inoperative MALSR increase LNAV Cat E to 2. DME/DME RNP- 0.3 NA.

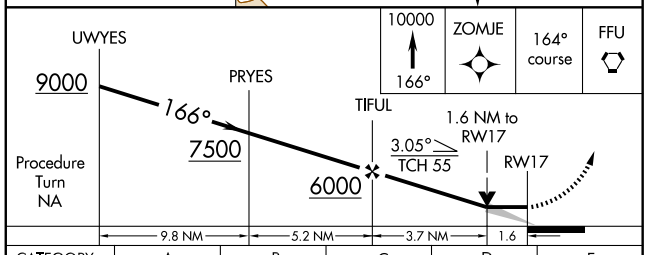
MALSR

MISSED APPROACH: Climb to 10000 via 166° course to ZOMJE WP, then via 164° course to FFU VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8 (Rwy 16L-34R)	118.3 257.8 (Rwys 14-32, 17-35)	132.65 336.4 (Rwy 16R-34L)	121.9 348.6 (Rwys 14-32, 17-35)	133.65 348.6 (Rwys 16L-34R, 16R-34L)
127.625						

CLNC DEL 127.3 379.975





CATEGORY	A	B	C	D	E
LNAV MDA	4800/24	581 (600-½)	4800/50 581 (600-1)	4800/60 581 (600-1¼)	4800-1½ 581 (600-1½)

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

RNAV (GPS) RWY 34L

SALT LAKE CITY INTL (SLC)

APP CRS	Rwy Idg	TDZE	Apt Elev
341°	12000	4226	4227

T NA — Baro-VNAV NA below -23°C (-9°F). GPS or RNP-0.3 required. DME/DME RNP -0.3 NA. For inoperative MALSR increase LNAV/VNAV Cat E visibility to 1½ and LNAV Cat E visibility to 1¾.

ALSF-2

MISSED APPROACH: Climb to 9000 via 341° course to LIEZA WP then via 336° course to OGD VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8 (Rwy 16L-34R)	118.3 257.8 (Rwys 14-32, 17-35)	132.65 336.4 (Rwy 16R-34L)	121.9 348.6 (Rwys 14-32, 17-35)	133.65 348.6 (Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

MISSED APCH FIX

OGDEN OGD

123° 303° 7 NM

MSA RW34L 25 NM 14000

LIEZA 4542 4620± 6237± 4467± 4670 4781 4368± 5458 RW34L

336° (25.3)

(FAF) BAURT 4990 4988± 9347± 5540 5355± 5589± 6337 7160 5665 9207 9486 8740 7220 7230 6824 6687 10373 10589 10006 10620 7918

341° (8.5) 6300

MARRJ 8500 341° (5.8)

R-6412 C & D

R-6412 A & B

HOAMR 6682 11101 11253 11489 10349 11749 8956 8956

IAF FAIRFIELD FFU 342° 19.6 10000 7785

IAF ARM APPROACH MODE PRIOR TO THE IAF.

9158 9410 9304 8440 7869 8621 9602 10246 10403 10116 9363 11330 10795

ELEV 4227

HIRL all Rwys

TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

REIL Rwy 32

9000 341°	LIEZA	336° course	OGD	Procedure Turn NA	HOAMR

*LNAV only

*1.4 NM to RW34L

BAURT

MARRJ

341° 10000 8500 6300

RW34L

GS 3.00° TCH 65

1.4 4.8 NM 8.5 NM 5.8 NM

CATEGORY	A	B	C	D	E
GLS PA DA	NA				
LNAV/VNAV DA	4640/50 414 (500-1)				
LNAV MDA	4720/24 494 (500-½)		4720/40 494 (500-¾)	4720/50 494 (500-1)	4720/60 494 (500-1¼)
CIRCLING	NA				

19L 19L 4463± 4549 12004 X 150 12000 X 150 9996 X 150 7428 X 150 TDZE 4226 34L 4254 34R 35 17 30 341° to RW34L

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

APP CRS	Rwy Idg	12004
341°	TDZE	4222
	Apt Elev	4227

RNAV (GPS) RWY 34R

SALT LAKE CITY INTL (SLC)

DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 40°C (105°F).
For inoperative ALSF, increase Cat. E visibilities ½ mile.

ALSF-2

MISSED APPROACH: Climb to 9000 via 341° course to ZEYYU WP then 334° course to OGD VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3	322.3	119.05	257.8	118.3	257.8	132.65	336.4	121.9	348.6	133.65	348.6
127.625			(Rwy 16L-34R)		(Rwys 14-32, 17-35)		(Rwy 16R-34L)		(Rwys 14-32, 17-35)		(Rwy 16L-34R, 16R-34L)	

MISSED APCH FIX

123° 303° 7 NM OGDEN OGD

CLNC DEL 127.3 379.975

MSA RW34R 25 NM 13000

9158 9410 9304 8440 7869 6237± 4620± 4542 4500 4467± 4670 4781 4368± 5458 5540 8621 9602 10246 10403 10116 9363 10795 11330 11489 11253 10349 11101 6682 11749 8956 9347± 4990 4988± 5355± 9486 8740 5589± 6337 7160 5665 9207 7220 7230 6824 6687 10373 10589 10006 10620 7918 7785 5000 6000 8000 10000

ZEYYU (25.6) 334° 341° (8.5) 6300 RW34R (FAF) RULFO JISKE TIKUJ

R-6412 C & D 8500 341° (5.8)

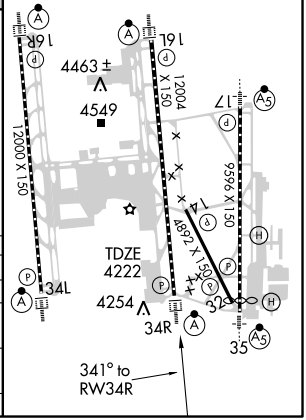
R-6412 A & B

IAF FAIRFIELD FFU 8700 (9.6)

IAF ARM APPROACH MODE PRIOR TO THE IAF.

ELEV 4227

HIRL all Rwys
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R
REIL Rwy 32



9000 341° ZEYYU 334° course OGD Procedure Turn NA TIKUJ JISKE RULFO 10000 341° 8500 6300 RW34R *1.3 NM to RW34R *LNAV only GS 3.00° TCH 73

1.3 4.9 NM 8.5 NM 5.8 NM

CATEGORY	A	B	C	D	E
GLS DA	NA				
LNAV/VNAV DA	4734/60 512 (600-1¼)				
LNAV MDA	4700/24 478 (500-½)		4700/40 478 (500-¾)	4700/50 478 (500-1)	4700/60 478 (500-1¼)
CIRCLING	NA				

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

RNAV (GPS) RWY 35

SALT LAKE CITY INTL (SLC)

APP CRS	Rwy Idg	9272
343°	TDZE	4224
	Apt Elev	4227

T NA — Baro-VNAV NA below -23°C (-9°F). GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. For inoperative MALSR, increase LNAV/VNAV Cat E visibility to 1½. Increase LNAV Cat E visibility to 2.

MALSR

MISSED APPROACH: Climb to 9000 via 343° course to VUTAW WP then 332° course to OGD VORTAC and hold.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON		CLNC DEL
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6	127.3 379.975
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)	

MISSED APCH FIX

23° OGDEN OGD 303° 7 NM

MSA RW35 25 NM 13000

VUTAW (25.8) 332° 4500 4542 4467± 4670 RW35 4368± 4620± 6237± 4781 5458 5540 5000

(FAF) ATLEZ 4990 4988± 5355± 9347± 8740 9486 5589± 6300 (8.5) 343°

OTUHY 6337 7160 5665 9207 7220 7230 8500 343° (5.8) R-6412 C & D 6824 6687 10373 10589 10006 10620 7918 6682 11101 10349 11749 8956 8956

LECSE R-6412 A & B

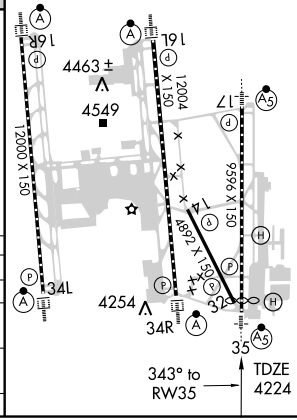
IAF FAIRFIELD FFU 10000 347° (9.4) 7785

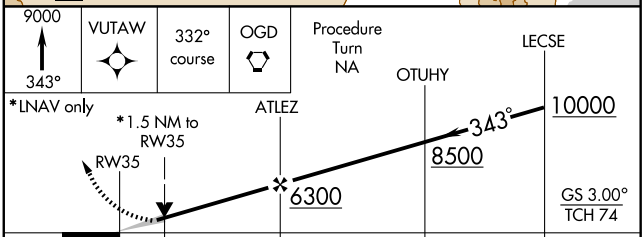
IAF ARM APPROACH MODE PRIOR TO THE IAF.

9158 9410 9304 8440 7869 8621 9602 10246 10403 10116 9363 11330 10795 11489 11253

ELEV 4227

HIRL all Rwys
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R
REIL Rwy 32





CATEGORY	A	B	C	D	E
GLS DA	NA				
LNAV/VNAV DA	4680/50 456 (500-1)				
LNAV MDA	4780/24 556 (600-½)		4780/50 556 (600-1)	4780/60 556 (600-1¼)	4780-1½ 556 (600-1½)
CIRCLING	NA				

SW-4, 22 OCT 2009 to 19 NOV 2009

ATIS 124.75 127.625
CLNC DEL
127.3 379.975
SALT LAKE CITY DEP CON
124.3 322.3
135.5 316.15

N

TWIN FALLS
115.8 TWF
Chan 105
N42°28.79′ - W114°29.37′
L-11, H-3

MALAD CITY
117.4 MLD
Chan 121
N42°11.99′ - W112°27.07′
L-11, H-3

ROCK SPRINGS
116.0 OCS
Chan 107
N41°35.41′ - W109°00.92′
L-11, H-3

WASATCH
116.8 TCH
Chan 115
N40°51.02′ - W111°58.92′
L-9-11, H-3

FAIRFIELD
116.6 FFU
Chan 113
N40°16.49′ - W111°56.43′
L-9-11, H-3

MYTON
112.7 MTU
Chan 74
N40°08.95′
W110°07.66′
L-9-11, H-3

DELTA
116.1 DTA
Chan 108
N39°18.14′ - W112°30.33′
L-9, H-3

GRAND JUNCTION
112.4 JNC
Chan 71
N39°03.57′ - W108°47.55′
L-9, H-3

R-340 R-341 311° 310° 320° 280° 340° 161° 160° R-069 R-070 R-6404C R-6404A R-6404B/D R-249 R-240 R-239 7500 R-6406A R-6403 R-6407 R-6402A/B R-6405 R-6412 A/B R-6412 C/D R-150 R-151 R-175 R-176 TCH R-161 R-350 R-351 R-270 R-269 160° R-110 R-111 340° R-160

MINIMUM CROSSING ALTITUDES AT TCH
R-070 CW R-150: 11400′
R-151 CW R-175: 8200′
R-176 CW R-239: 9900′
R-341 CW R-069: 10400′

MINIMUM CROSSING ALTITUDES AT FFU
R-351 CW R-110: 12500′
R-270 CW R-350: 11600′

NOTE: RADAR required.

NOTE: This is a radar vector departure to assigned route or fix.

TAKE-OFF MINIMUMS

Rwy 14, 32: NA - Operational.

Rwy 16R, 16L, 17: Assigned heading 160°, standard with minimum climb of 260′ per NM to 6000. Assigned heading 280° CW 340°, Standard with minimum climb of 400′ per NM to 8300.

Rwy 34L, 34R, 35: Assigned heading 260° CW 319°, standard with minimum obstacle climb of 260′ per NM to 7800. Assigned heading 320° CW 340°, standard with minimum obstacle climb of 260′ per NM to 7800, minimum ATC climb of 340′ per NM to 7500.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SALT LAKE ONE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L, 16R, 17: Climb heading 160° or as assigned, maintain 10000′ or assigned lower altitude. Thence. . . .

TAKE-OFF RUNWAY 34L, 34R, 35: Climb heading 340° or as assigned, maintain 10000′ or assigned lower altitude. Thence. . . .

. . . .expect vectors to assigned route or fix. Expect clearance to filed altitude 10 minutes after departure. Aircraft filed/assigned heading 331° CW 109° expect radar vectors eastbound leaving 11000′ due to high terrain east of TCH VORTAC.

LOST COMMUNICATIONS: If not in contact with Departure Control 1 minute after take-off:
Runways 16L and 17: Assigned heading 160°, turn right, thence. . . .
Runway 16R: Assigned heading 160°, turn left, thence. . . .
. . . .climb to 11000′ via TCH R-161 to FFU VORTAC. Aircraft departing FFU VORTAC R-111 CW R-269, climb on assigned route. All others continue climb in FFU VORTAC holding pattern (Hold south, right turns, 340° inbound) to cross FFU VORTAC at or above: R-351 CW R-110, 12500′; R-270 CW R-350, 11600′.

Runway 16L, 16R, 17: Assigned heading 280° CW 340°, fly assigned heading to 11000′. Then, aircraft heading 280° CW through 310°, execute a climbing right turn thence. . . aircraft heading 311° CW 340° execute a climbing left turn, thence. . . . proceed direct TCH VORTAC. Cross TCH VORTAC at or above 11400′ and proceed on course.

Runway 34L, 34R, 35: Climb direct TCH VORTAC. Aircraft departing TCH VORTAC R-240 CW R-340, climb on course. All others, continue climb via TCH R-249 to 7500′, then climbing right turn direct TCH VORTAC. Continue climb in TCH VORTAC holding pattern (Hold south, left turns, 341° inbound) to cross TCH VORTAC at or above: R-070 CW R-150, 11400′; R-151 CW R-175, 8200′; R-176 CW R-239, 9900′; R-341 CW R-069, 10400′. Climb on course.

TAKE-OFF OBSTACLE NOTES

Rwy 16L: Vehicle 124′ from DER, 14′ right of centerline, 15′ AGL/4239′ MSL.
Light pole 988′ from DER, 726′ right of centerline, 34′ AGL/4254′ MSL.
Pole 1024′ from DER, 689′ right of centerline, 34′ AGL/4254′ MSL.
Rwy 17: Vehicles beginning 335′ from DER, on centerline, up to 17′ AGL/4241′ MSL.
Rwy 34R: Post 13′ from DER, 349′ right of centerline, 3′ AGL/4227′ MSL.
Rwy 35: Post 56′ from DER, 249′ left of centerline, 2′ AGL/4220′ MSL.

SW-4, 22 OCT 2009 to 19 NOV 2009

ATIS 124.75 127.625
CLNC DEL
127.3 379.975
SALT LAKE CITY DEP CON
128.1 307.05

TAKE-OFF MINIMUMS

Rwys 14, 16L/R and Rwy 17 NA - Operational.

Rwy 32: 400-1 or standard with a minimum climb of 450 feet per NM to 7500.

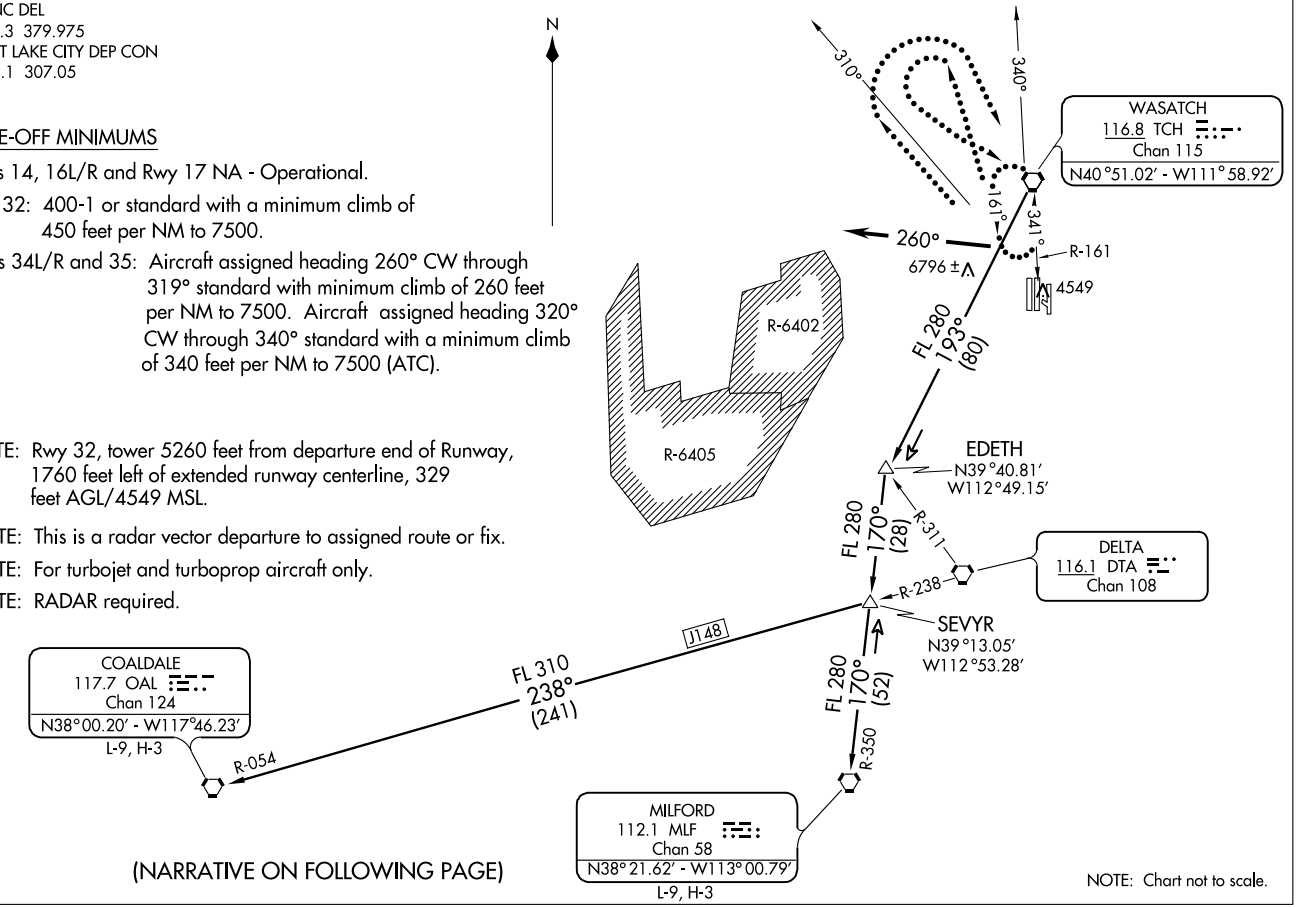
Rwys 34L/R and 35: Aircraft assigned heading 260° CW through 319° standard with minimum climb of 260 feet per NM to 7500. Aircraft assigned heading 320° CW through 340° standard with a minimum climb of 340 feet per NM to 7500 (ATC).

NOTE: Rwy 32, tower 5260 feet from departure end of Runway, 1760 feet left of extended runway centerline, 329 feet AGL/4549 MSL.

NOTE: This is a radar vector departure to assigned route or fix.

NOTE: For turbojet and turboprop aircraft only.

NOTE: RADAR required.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SEVYR ONE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 32, 34L/R, and 35: Fly heading 260° or as assigned for radar vectors to assigned route or fix. Maintain 10,000 or assigned lower altitude. Expect clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control within 1 minute after takeoff, fly assigned heading to 11,000. Then, aircraft assigned heading 310° CW through 340°, execute a climbing left turn, all others execute a climbing right turn to TCH VORTAC. Continue climb in the TCH VORTAC holding pattern (hold south, left turns, 341° inbound) to cross TCH VORTAC at or above 11,500. Proceed on course.

COALDALE TRANSITION (SEVYR1.OAL): From over TCH VORTAC via TCH R-193 and MLF R-350 to SEVYR INT, then via DTA R-238 and OAL R-054 to OAL VORTAC.

MILFORD TRANSITION (SEVYR1.MLF): From over TCH VORTAC via TCH R-193 and MLF R-350 to MLF VORTAC.

SW-4, 22 OCT 2009 to 19 NOV 2009

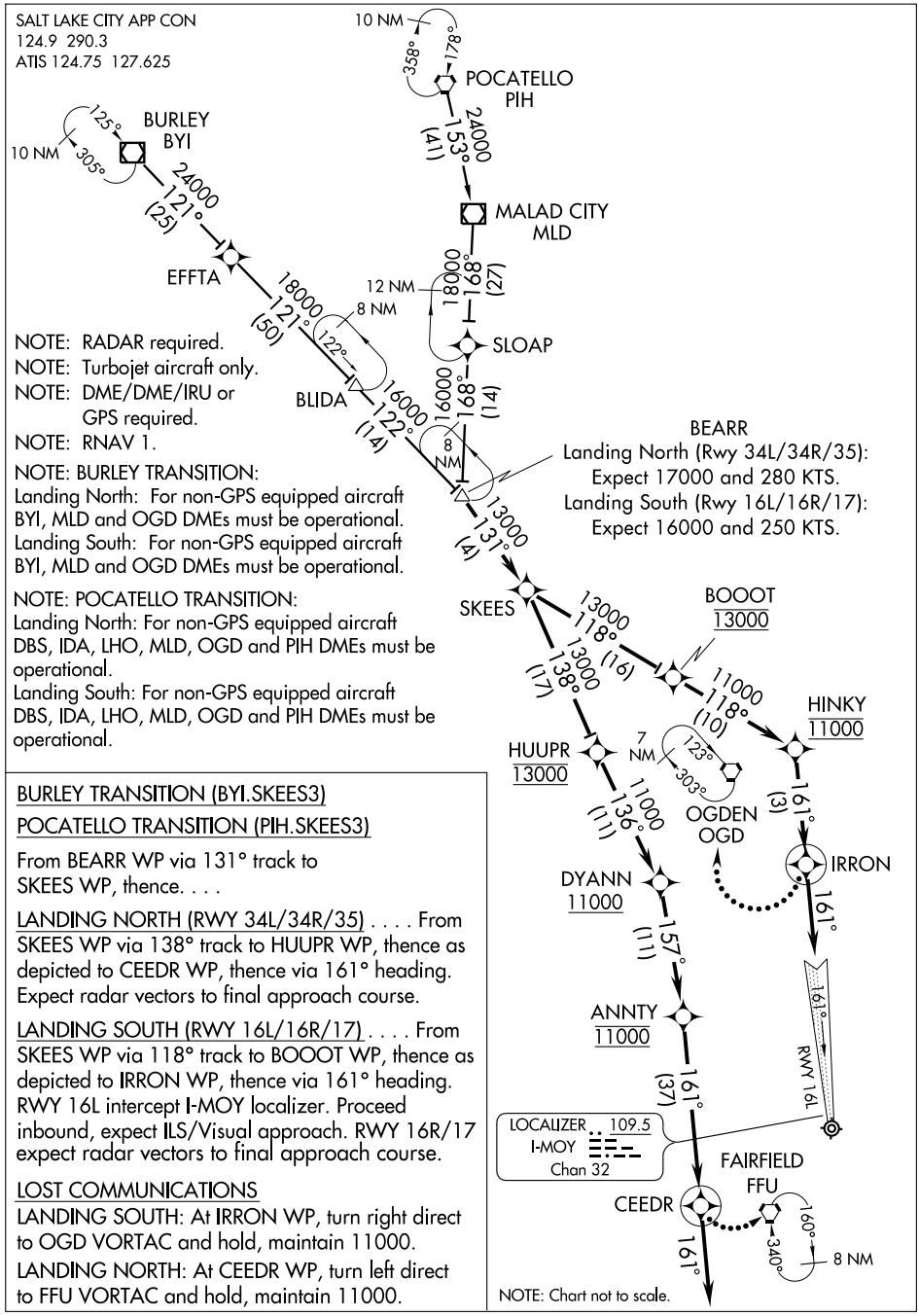
(SKEES.SKEES3) 09183

SKEES THREE ARRIVAL (RNAV)

ST-365 (FAA)

SALT LAKE CITY INTL
SALT LAKE CITY, UTAH

SALT LAKE CITY APP CON
124.9 290.3
ATIS 124.75 127.625



NOTE: RADAR required.
NOTE: Turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.

NOTE: BURLEY TRANSITION:
Landing North: For non-GPS equipped aircraft BYI, MLD and OGD DMEs must be operational.
Landing South: For non-GPS equipped aircraft BYI, MLD and OGD DMEs must be operational.

NOTE: POCATELLO TRANSITION:
Landing North: For non-GPS equipped aircraft DBS, IDA, LHO, MLD, OGD and PIH DMEs must be operational.
Landing South: For non-GPS equipped aircraft DBS, IDA, LHO, MLD, OGD and PIH DMEs must be operational.

BURLEY TRANSITION (BYI.SKEES3)

POCATELLO TRANSITION (PIH.SKEES3)

From BEARR WP via 131° track to SKEES WP, thence. . . .

LANDING NORTH (RWY 34L/34R/35) . . . . From SKEES WP via 138° track to HUUPR WP, thence as depicted to CEEDR WP, thence via 161° heading. Expect radar vectors to final approach course.

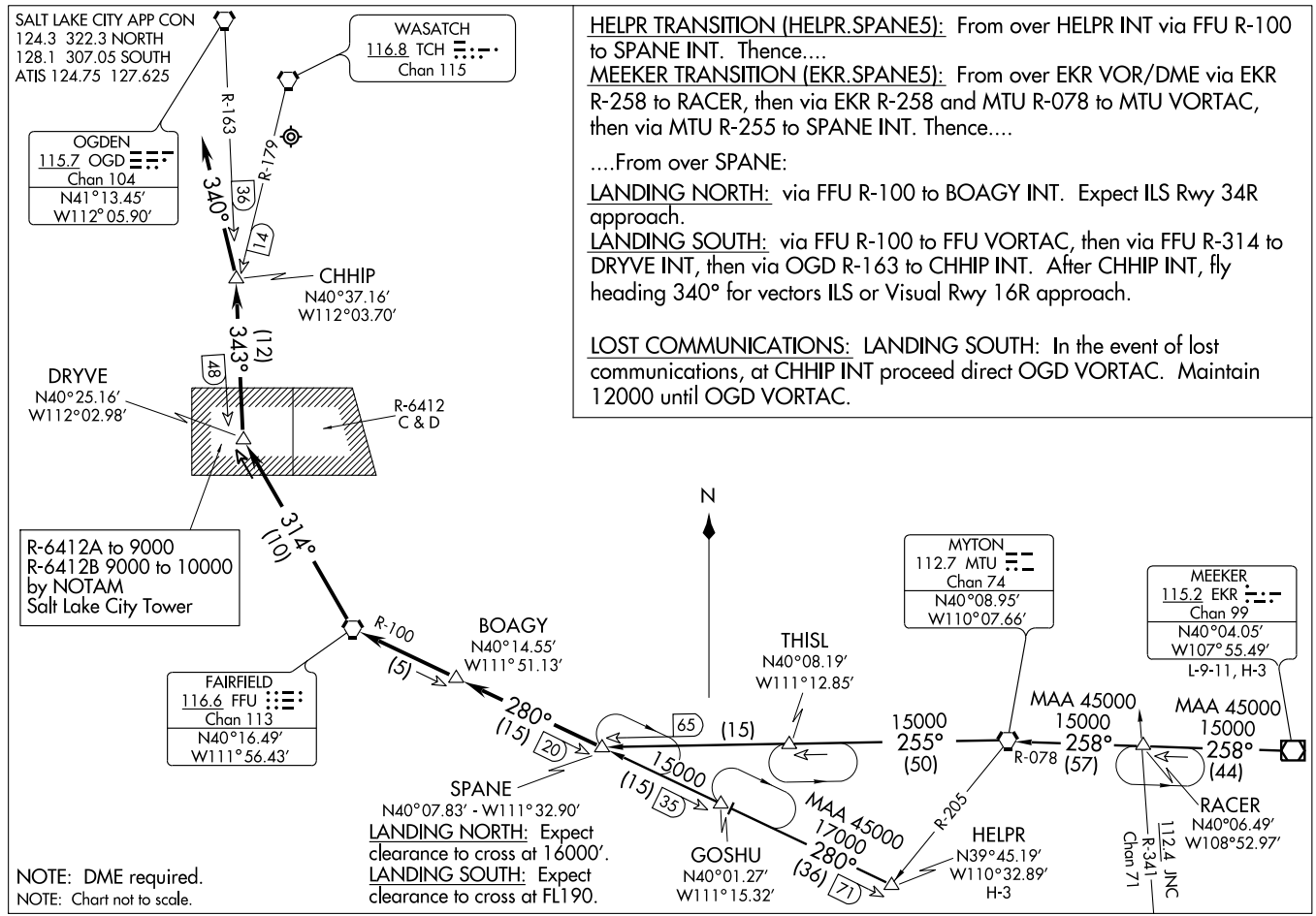
LANDING SOUTH (RWY 16L/16R/17) . . . . From SKEES WP via 118° track to BOOOT WP, thence as depicted to IRRON WP, thence via 161° heading. RWY 16L intercept I-MOY localizer. Proceed inbound, expect ILS/Visual approach. RWY 16R/17 expect radar vectors to final approach course.

LOST COMMUNICATIONS

LANDING SOUTH: At IRRON WP, turn right direct to OGD VORTAC and hold, maintain 11000.

LANDING NORTH: At CEEDR WP, turn left direct to FFU VORTAC and hold, maintain 11000.

SW-4, 22 OCT 2009 to 19 NOV 2009



HELPR TRANSITION (HELPR.SPANE5): From over HELPR INT via FFU R-100 to SPANE INT. Thence....

MEEKER TRANSITION (EKR.SPANE5): From over EKR VOR/DME via EKR R-258 to RACER, then via EKR R-258 and MTU R-078 to MTU VORTAC, then via MTU R-255 to SPANE INT. Thence....

....From over SPANE:

LANDING NORTH: via FFU R-100 to BOAGY INT. Expect ILS Rwy 34R approach.

LANDING SOUTH: via FFU R-100 to FFU VORTAC, then via FFU R-314 to DRYVE INT, then via OGD R-163 to CHHIP INT. After CHHIP INT, fly heading 340° for vectors ILS or Visual Rwy 16R approach.

LOST COMMUNICATIONS: LANDING SOUTH: In the event of lost communications, at CHHIP INT proceed direct OGD VORTAC. Maintain 12000 until OGD VORTAC.

SPANE FIVE ARRIVAL

(SPANE.SPANE5) 09071

ST-365 (FAA)

SALT LAKE CITY INTL

SALT LAKE CITY, UTAH

TWIN FALLS ONE DEPARTURE (RNAV)

SALT LAKE CITY INTL (SLC)
SALT LAKE CITY, UTAH

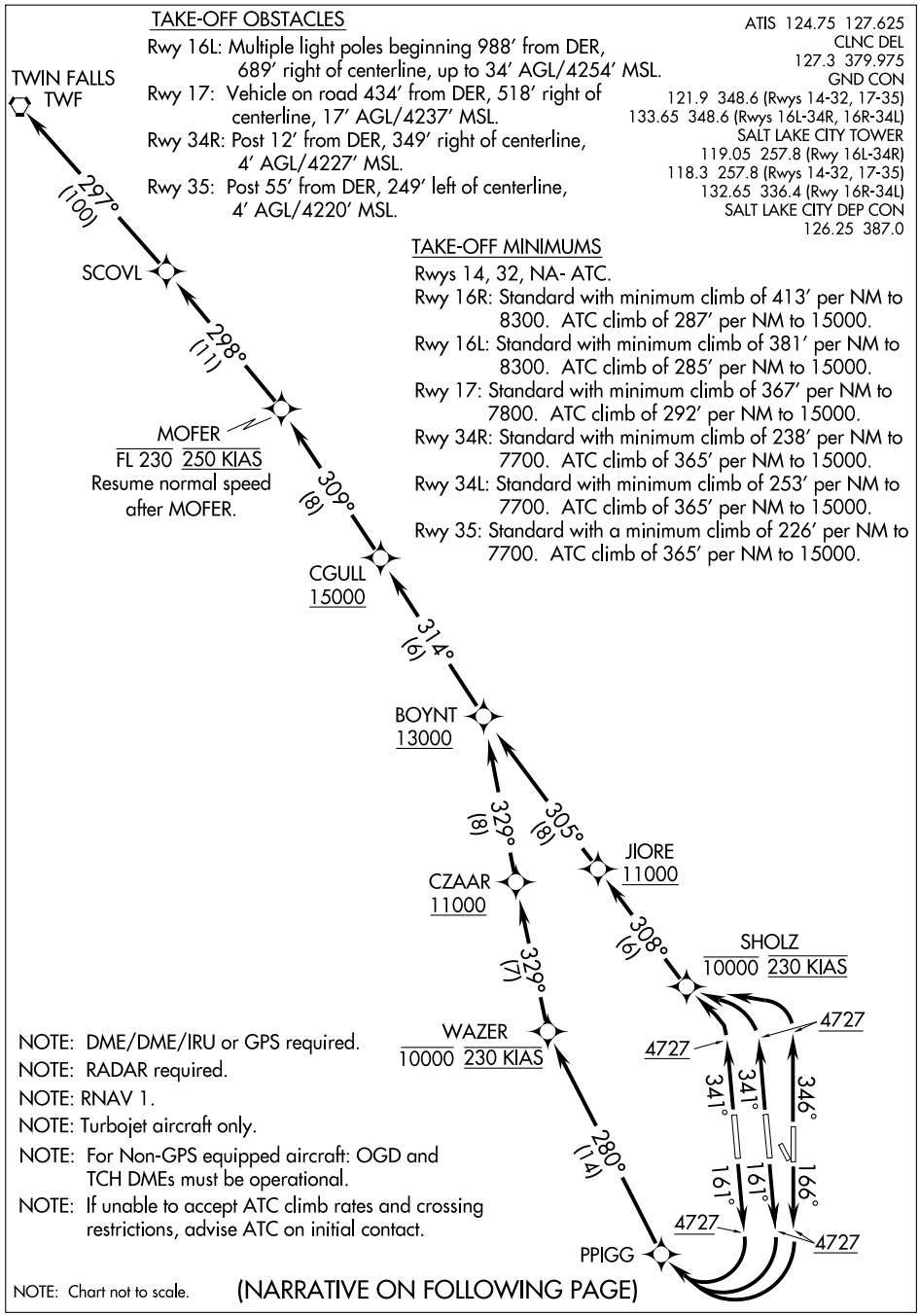
ATIS 124.75 127.625
CLNC DEL
127.3 379.975
GND CON
121.9 348.6 (Rwys 14-32, 17-35)
133.65 348.6 (Rwys 16L-34R, 16R-34L)
SALT LAKE CITY TOWER
119.05 257.8 (Rwy 16L-34R)
118.3 257.8 (Rwys 14-32, 17-35)
132.65 336.4 (Rwy 16R-34L)
SALT LAKE CITY DEP CON
126.25 387.0

TAKE-OFF OBSTACLES

Rwy 16L: Multiple light poles beginning 988′ from DER, 689′ right of centerline, up to 34′ AGL/4254′ MSL.
Rwy 17: Vehicle on road 434′ from DER, 518′ right of centerline, 17′ AGL/4237′ MSL.
Rwy 34R: Post 12′ from DER, 349′ right of centerline, 4′ AGL/4227′ MSL.
Rwy 35: Post 55′ from DER, 249′ left of centerline, 4′ AGL/4220′ MSL.

TAKE-OFF MINIMUMS

Rwys 14, 32, NA- ATC.
Rwy 16R: Standard with minimum climb of 413′ per NM to 8300. ATC climb of 287′ per NM to 15000.
Rwy 16L: Standard with minimum climb of 381′ per NM to 8300. ATC climb of 285′ per NM to 15000.
Rwy 17: Standard with minimum climb of 367′ per NM to 7800. ATC climb of 292′ per NM to 15000.
Rwy 34R: Standard with minimum climb of 238′ per NM to 7700. ATC climb of 365′ per NM to 15000.
Rwy 34L: Standard with minimum climb of 253′ per NM to 7700. ATC climb of 365′ per NM to 15000.
Rwy 35: Standard with a minimum climb of 226′ per NM to 7700. ATC climb of 365′ per NM to 15000.



NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft only.
NOTE: For Non-GPS equipped aircraft: OGD and TCH DMEs must be operational.
NOTE: If unable to accept ATC climb rates and crossing restrictions, advise ATC on initial contact.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

TWIN FALLS ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16R/16L: Climb heading 161° to 4727, then right turn direct PPIGG, then via depicted route to TWF VORTAC, thence. . . .
TAKE-OFF RUNWAY 17: Climb heading 166° to 4727, then right turn direct PPIGG, then via depicted route to TWF VORTAC, thence. . . .
TAKE-OFF RUNWAY 34R: Climb heading 341° to 4727, then left turn direct SHOLZ, then via depicted route to TWF VORTAC, thence. . . .
TAKE-OFF RUNWAY 34L: Climb heading 341° to 4727, then left turn direct SHOLZ, then via depicted route to TWF VORTAC, thence. . . .
TAKE OFF RUNWAY 35: Climb heading 346° to 4727, then left turn direct SHOLZ, then via depicted route to TWF VORTAC, thence. . . .

...maintain FL230 or lower filed altitude. Expect filed altitude 10 minutes after departure.

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

VORTAC TCH	APP CRS	Rwy Idg	12004
116.8	159°	TDZE	4227
Chan 115		Apt Elev	4227

VOR/DME or TACAN RWY 16L

SALT LAKE CITY INTL (SLC)

For inoperative ALSF, increase S-16L Cat E visibility to 1¾.

ALSF-2

MISSED APPROACH: Climb to 10000 direct FFU VORTAC and hold. (TACAN equipped aircraft continue via FFU R-160 to ZABUM/FFU 6 DME and hold south, right turn, 340° inbound.)

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

IAF OGDEN 115.7 OGD Chan 104

142° (10) 9000 R-339

MSA TCH 2.5 NM

140° 230° 050°

11000 8600 12700

YAWVA TCH 13.4

159° (4.4) 7900

JEFFR TCH 9

10 NM

5100 159° (9)

WASATCH 116.8 TCH Chan 115

FOVNU TCH 2.6

4352± 4500 4542 6237±

4467± 4670 4620± 4781 4368±

4990

9284 8830 9706 9259 6596 9158 9410

MISSED APCH FIX

FAIRFIELD FFU 116.6 Chan 113

340° 160° R-160

TACAN MISSED APCH FIX

116.6 FFU Chan 113 R-160

ZABUM FFU 6

340° 160°

ELEV 4227

TDZE 4227

159° 2.6 NM from FAF

4463± 4549

19L 19R 12004 X 150 12000 X 150 9596 X 150 8892 X 150 17 34L 34R 32 35 4254

YAWVA TCH 13.4 JEFFR TCH 9 VORTAC TCH 1.3 FOVNU TCH 2.6

9000 7900 159° 5100

Procedure Turn NA

2.94° TCH 70

10000 FFU 116.6

4.4 NM 9 NM 1.3 NM 1.3 NM

CATEGORY	A	B	C	D	E
S-16L	4720/24	493 (500-½)	4720/40 493 (500-¾)	4720/50 493 (500-1)	4720/60 493 (500-1¼)
CIRCLING	NA				

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

VORTAC TCH	APP CRS	Rwy Idg	9596
116.8	148°	TDZE	4219
Chan 115		Apt Elev	4227

VOR/DME or TACAN RWY 17

SALT LAKE CITY INTL (SLC)

Inoperative table does not apply.

MALSR

MISSED APPROACH: Climb to 10000 direct FFU VORTAC and hold. (TACAN equipped aircraft continue via FFU R-160 to ZABUM/FFU 6 DME and hold south, right turn, 340° inbound.)

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

IAF OGDEN 115.7 OGD Chan 104

142° (10) 9000 R-339

YAWVA TCH 13.4

159° (4.4) 7900

JEFFR TCH 9

159° (9) 5300

148°

WASATCH 116.8 TCH Chan 115

10 NM

MSA TCH 2.5 NM

140° 230° 050°

11000 8600 12700

MISSED APCH FIX

FAIRFIELD FFU 116.6 Chan 113

340° 160° R-160

TACAN MISSED APCH FIX

116.6 FFU Chan 113 R-160

ZABUM FFU 6

340° 160°

9284 8830 9706 9259 6596 9158 9410

4500 4542 6237± 4620± 4467± 4670 4781 4368±

GUVGE TCH 3.2

ELEV 4227

148° 3.2 NM from FAF

4463± 4549

12004 X 150 12000 X 150 9656 X 150 4892 X 150

TDZE 4219

4254

34L 34R 32 35

HIRL all Rwys
REIL Rwy 32
TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

YAWVA TCH 13.4 — JEFFR TCH 9 — VORTAC — TCH 1.6 — GUVGE TCH 3.2

10000 — FFU 116.6

9000 — 7900 — 159° — 3.01° TCH 55 — 5300 — 148°

Procedure Turn NA

4.4 NM — 9 NM — 1.6 NM — 1.6 NM

CATEGORY	A	B	C	D	E
S-17	4800/50	581 (600-1)	4800-1½ 581 (600-1½)	4800-1¾ 581 (600-1¾)	4800-2 581 (600-2)
CIRCLING	NA				

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY, UTAH

AL-365 (FAA)

VORTAC TCH	APP CRS	Rwy Idg	12004
116.8	339°	TDZE	4222
Chan 115		Apt Elev	4227

VOR/DME RWY 34R

SALT LAKE CITY INTL (SLC)

ALSF-2

MISSED APPROACH: Climb to 5300 then climb to 10700 via heading 300° and TCH VORTAC R-249 to STACO INT/20 DME and hold, continue climb-in-hold to 10700.

ATIS	SALT LAKE CITY APP CON	SALT LAKE CITY TOWER			GND CON	
124.75	124.3 322.3	119.05 257.8	118.3 257.8	132.65 336.4	121.9 348.6	133.65 348.6
127.625		(Rwy 16L-34R)	(Rwys 14-32, 17-35)	(Rwy 16R-34L)	(Rwys 14-32, 17-35)	(Rwys 16L-34R, 16R-34L)

CLNC DEL 127.3 379.975

WASATCH 116.8 TCH Chan 115

STACO TCH 20

115.7 OGD Chan 104

R-197

R-249

069°

249°

15 NM

EBEPE TCH 4.6

BESBE TCH 10.2

SCOER TCH 20.3

PLAGE TCH 24.9

MSA TCH 25 NM

140° 11000 230°

8600

050° 12700

339° (10.1) 6100

339° (4.6) 8200

R-6412 A & B

R-6412 C & D

TCH R-159

9200 to PLAGE 294° (3.9) and 339° (9.2)

9200 to PLAGE 346° (9.7)

(ZUNEX)

IAF FAIRFIELD 116.6 FFU Chan 113

(IAF) BOAGY FFU 4.5

ELEV 4227

19L

19L

4463±

4549

12004 X 150

12000 X 150

17

9599 X 150

4892 X 150

TDZE 4222

4254

34L

34R

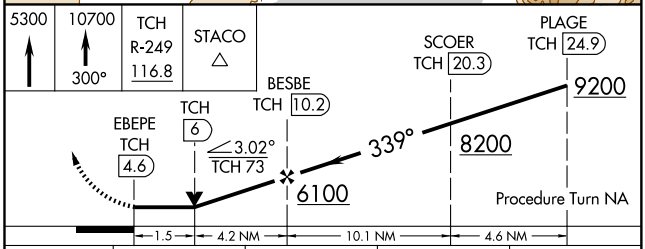
35

339° 5.6 NM from FAF

HIRL all Rwys

REIL Rwy 32

TDZ/CL Rwys 16L, 16R, 17, 35, 34L, and 34R

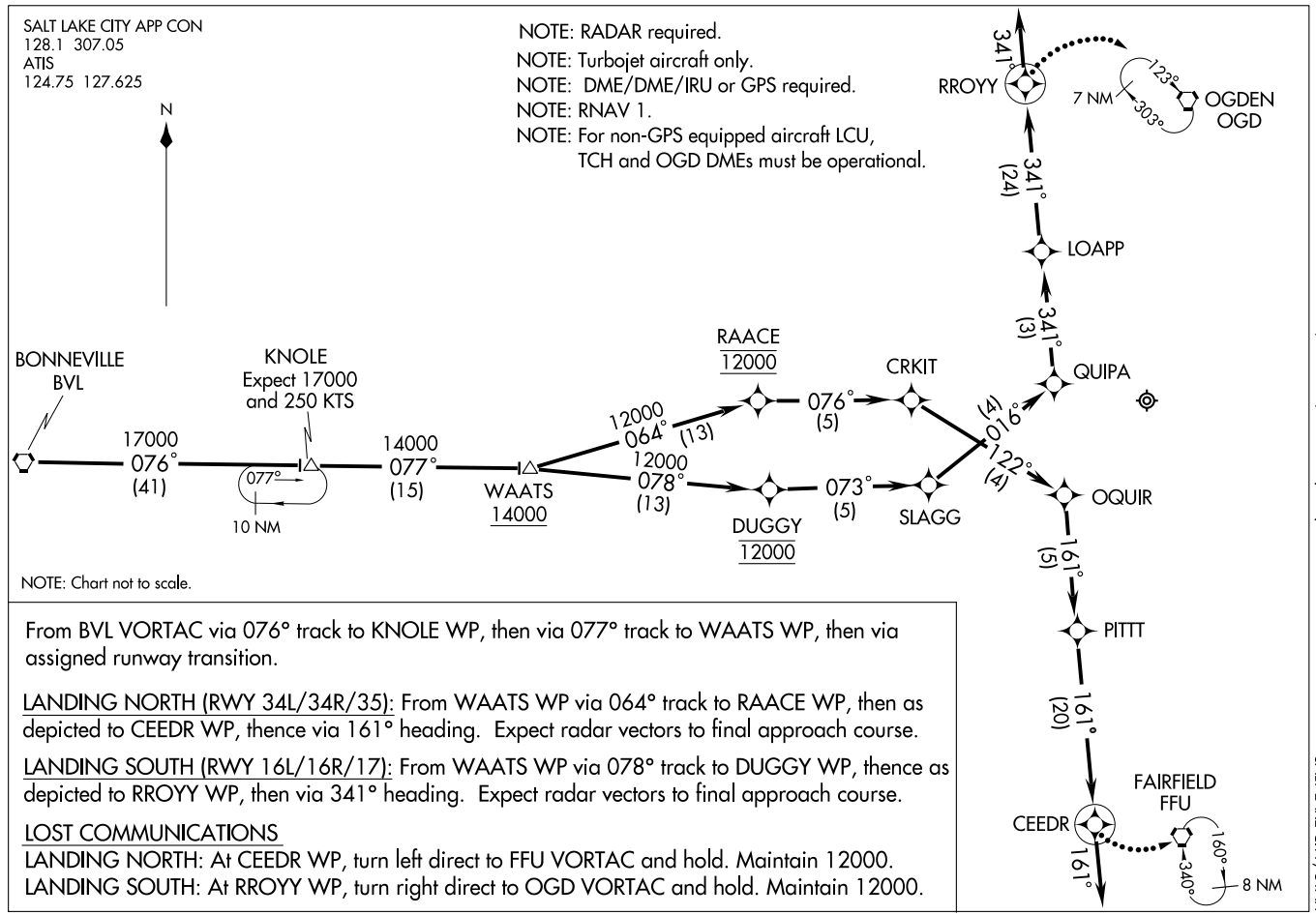


CATEGORY	A	B	C	D
S-34R	4760/24	538 (600-½)	4760/50	538 (600-1)	4760/60	538 (600-1¼)

SW-4, 22 OCT 2009 to 19 NOV 2009

SALT LAKE CITY APP CON
128.1 307.05
ATIS
124.75 127.625

NOTE: RADAR required.
NOTE: Turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: For non-GPS equipped aircraft LCU, TCH and OGD DMEs must be operational.



NOTE: Chart not to scale.

From BVL VORTAC via 076° track to KNOLE WP, then via 077° track to WAATS WP, then via assigned runway transition.

LANDING NORTH (RWY 34L/34R/35): From WAATS WP via 064° track to RAACE WP, then as depicted to CEEDR WP, thence via 161° heading. Expect radar vectors to final approach course.

LANDING SOUTH (RWY 16L/16R/17): From WAATS WP via 078° track to DUGGY WP, thence as depicted to RROYY WP, then via 341° heading. Expect radar vectors to final approach course.

LOST COMMUNICATIONS

LANDING NORTH: At CEEDR WP, turn left direct to FFU VORTAC and hold. Maintain 12000.
LANDING SOUTH: At RROYY WP, turn right direct to OGD VORTAC and hold. Maintain 12000.

WEVIC ONE DEPARTURE (RNAV)

ATIS 124.75 127.625
CLNC DEL
127.3 379.975
GND CON
121.9 348.6 (Rwys 14-32, 17-35)
133.65 348.6 (Rwys 16L-34R, 16R-34L)
SALT LAKE CITY TOWER
119.05 257.8 (Rwy 16L-34R)
118.3 257.8 (Rwys 14-32, 17-35)
132.65 336.4 (Rwy 16R-34L)
SALT LAKE CITY DEP CON
124.3 322.3

NOTE: If unable to accept ATC climb rates and crossing restrictions, advice ATC on inital contact.

NOTE: DME/DME/IRU or GPS required.

NOTE: Radar required.

NOTE: RNAV 1.

NOTE: Turbojet aircraft only.

161° 161° 166°
4727 4727
R-6412 C & D
HOPTO
R-6412 A & B
163° (3)
MYRUP
13000 230 KIAS
163° (6)

TAKE-OFF OBSTACLES

Rwy 16L: Multiple light poles beginning 988' from DER, 689' right of centerline, up to 34' AGL/4254' MSL.

Rwy 17: Vehicle on road 434' from DER, 518' right of centerline, 17' AGL/4237' MSL.

TAKE-OFF MINIMUMS

Rwys 14, 32, 34L/R, 35: NA- ATC.
Rwys 16L/R, 17: Standard. ATC climb of 400' per NM to 14000.

WEVIC
13000 *9900 173° (5)
13000 *9900 134° (9)
ZOOBE 14000
KOOGR 14000
14000 *8800 172° (3)
14000 *8200 135° (2)
GITLN
16000 250 KIAS
Resume normal speed after GITLN
ETALK
16000 250 KIAS
Resume normal speed after ETALK
14600 *10500 172° (40)
14600 *12900 135° (39)
LODUY
PLEZZ
16000 *12000 231° (23)
16000 *11300 172° (20)
16000 *13500 141° (76)
DELTA DTA
URNUW
HANKSVILLE HVE
FL230 *12600 196° (93)
FL230 *13400 172° (87)
CEDAR CITY CDC
FL240 *12700 210° (85)
NORRA
FL240 *12900 205° (138)
FL240 *12900 200° (87)
BRYCE CANYON BCE
BOULDER CITY BLD
KSINO

NOTE: For non-GPS equipped aircraft:
PVU and DTA DMEs must be operational for KSINO, NORRA, DELTA, BRYCE CANYON, and BOULDER CITY transitions.
DTA, PVU, FFU, PUC, and HVE DMEs must be operational for HANKSVILLE transitions.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SW-4, 22 OCT 2009 to 19 NOV 2009

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16R: Climb heading 161° to 4727, then left turn direct HOPTO, then via depicted route to WEVIC, thence. . . .
TAKE-OFF RUNWAY 16L: Climb heading 161° to 4727, then right turn direct HOPTO, then via depicted route to WEVIC, thence. . . .
TAKE-OFF RUNWAY 17: Climb heading 166° to 4727, then left turn direct HOPTO, then via depicted route to WEVIC, thence. . . .

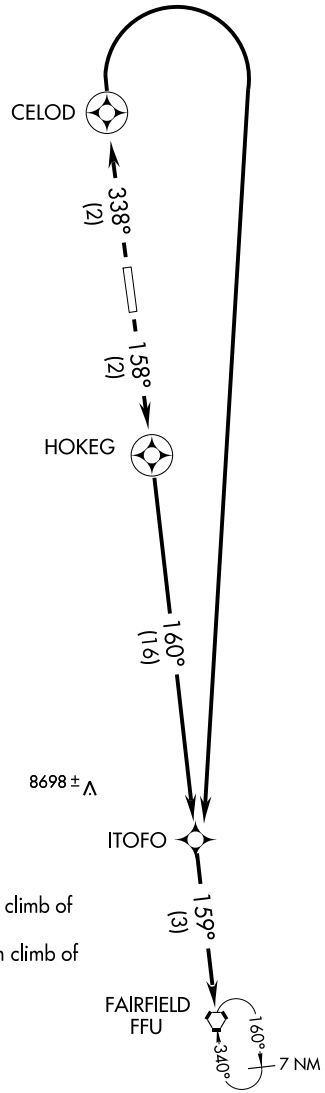
. . . .via (transition) maintain 16000 or lower filed altitude. Expect filed altitude 10 minutes after departure.

BRYCE CANYON TRANSITION (WEVIC1.BCE)
BOULDER CITY TRANSITION (WEVIC1.BLD)
DELTA TRANSITION (WEVIC1.DTA)
HANKSVILLE TRANSITION (WEVIC1.HVE)
KSINO TRANSITION (WEVIC1.KSINO)
NORRA TRANSITION (WEVIC1.NORRA)

SW-4, 22 OCT 2009 to 19 NOV 2009

ITOFO ONE DEPARTURE (RNAV)

SALT LAKE CITY DEP CON
120.2 124.3 322.3
CLNC DEL
127.0
UNICOM 122.7 (CTAF)
AWOS-3 134.425



TAKE-OFF MINIMUMS
RWY 16: Standard with a minimum climb of 280′ per NM to 7100.
RWY 34: Standard with a minimum climb of 495′ per NM to 9000.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 9000 via 158° course to HOKEG WP, 160° course to ITOFO WP, and 159° course to FFU VORTAC and hold.
TAKE-OFF RUNWAY 34: Climb to 9000 via 338° course to CELOD WP, climbing right turn direct ITOFO WP, and 159° course to FFU VORTAC and hold.

All aircraft expect further clearance to filed altitude and route within ten minutes after departure.

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5622
338°	TDZE	4606
	Apt Elev	4607

RNAV (GPS) Y RWY 34

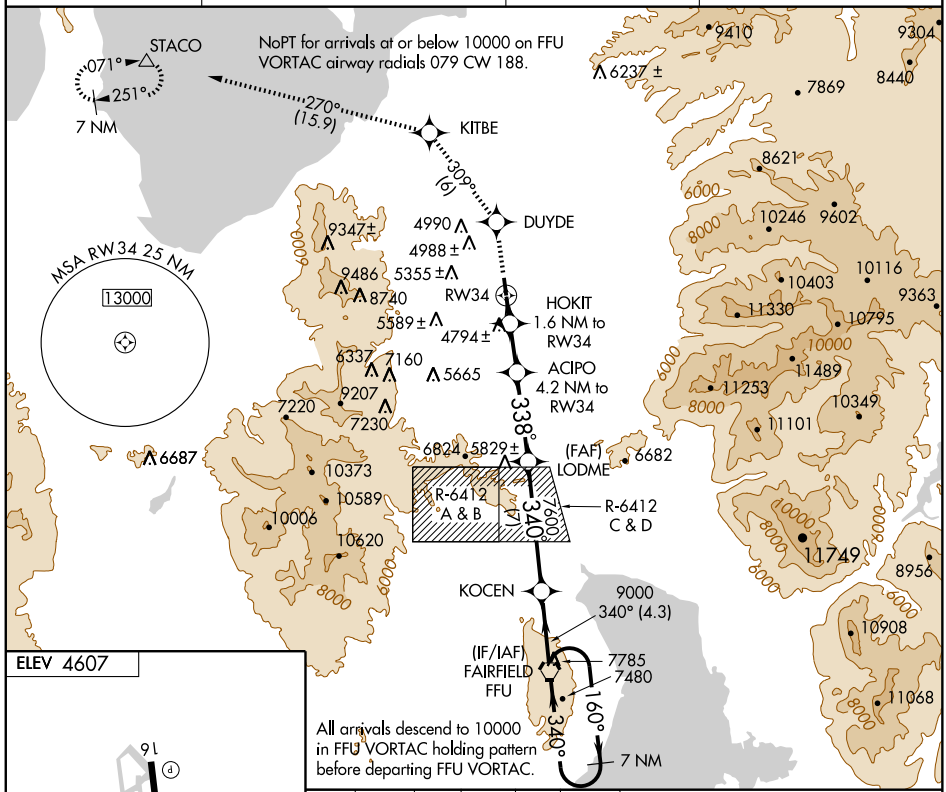
SALT LAKE CITY / SOUTH VALLEY RGNL (U42)

T
NA

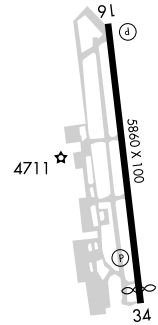
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Salt Lake City Intl altimeter setting and increase all MDAs 80 feet.
VDP NA when using Salt Lake City Intl altimeter setting.

MISSED APPROACH: Climb to 9000 direct DUYDE and via 309° track to KITBE and via 270° track to STACO and hold.

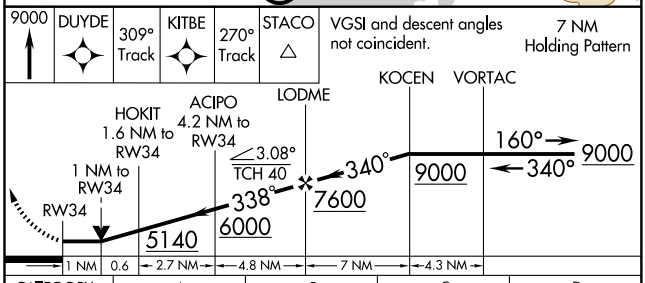
AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
134.425	120.2 124.3 322.3	127.0	122.7 (CTAF) L



ELEV 4607



MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L



CATEGORY	A	B	C	D
LNAV MDA	5060-1 454 (500-1)		5060-1¼ 454 (500-1¼)	5060-1½ 454 (500-1½)
CIRCLING	5140-1 533 (600-1)		5320-2 713 (800-2)	5460-2¾ 853 (900-2¾)

SW-4, 22 OCT 2009 to 19 NOV 2009

APP CRS	Rwy Idg	5622
338°	TDZE	4606
	Apt Elev	4607

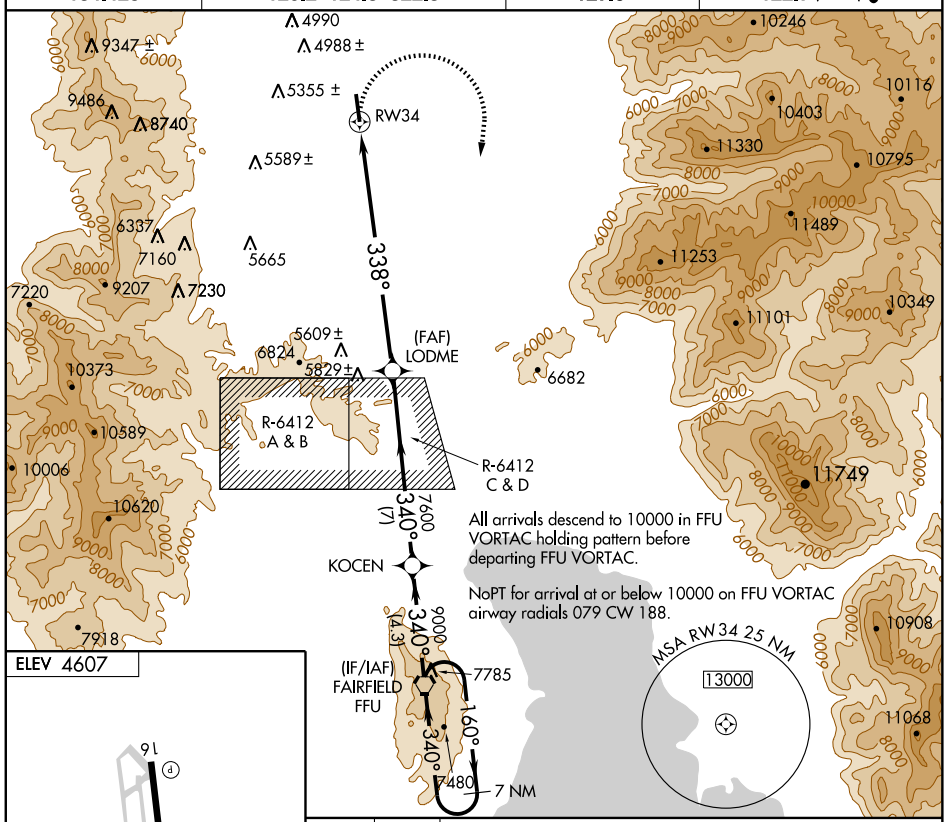
RNAV (GPS) Z RWY 34

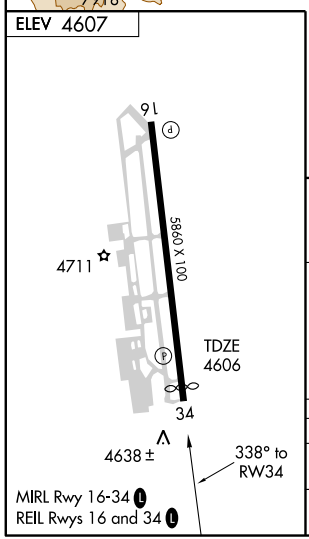
SALT LAKE CITY / SOUTH VALLEY RGNL (U42)

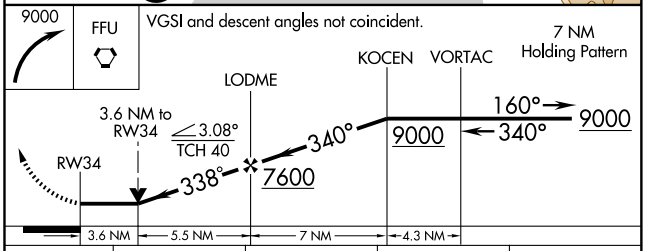
DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Salt Lake City Intl altimeter setting and increase all MDAs 80 feet.
VDP NA when using Salt Lake City Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 9000 direct FFU VORTAC and hold.

AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
134.425	120.2 124.3 322.3	127.0	122.7 (CTAF) L



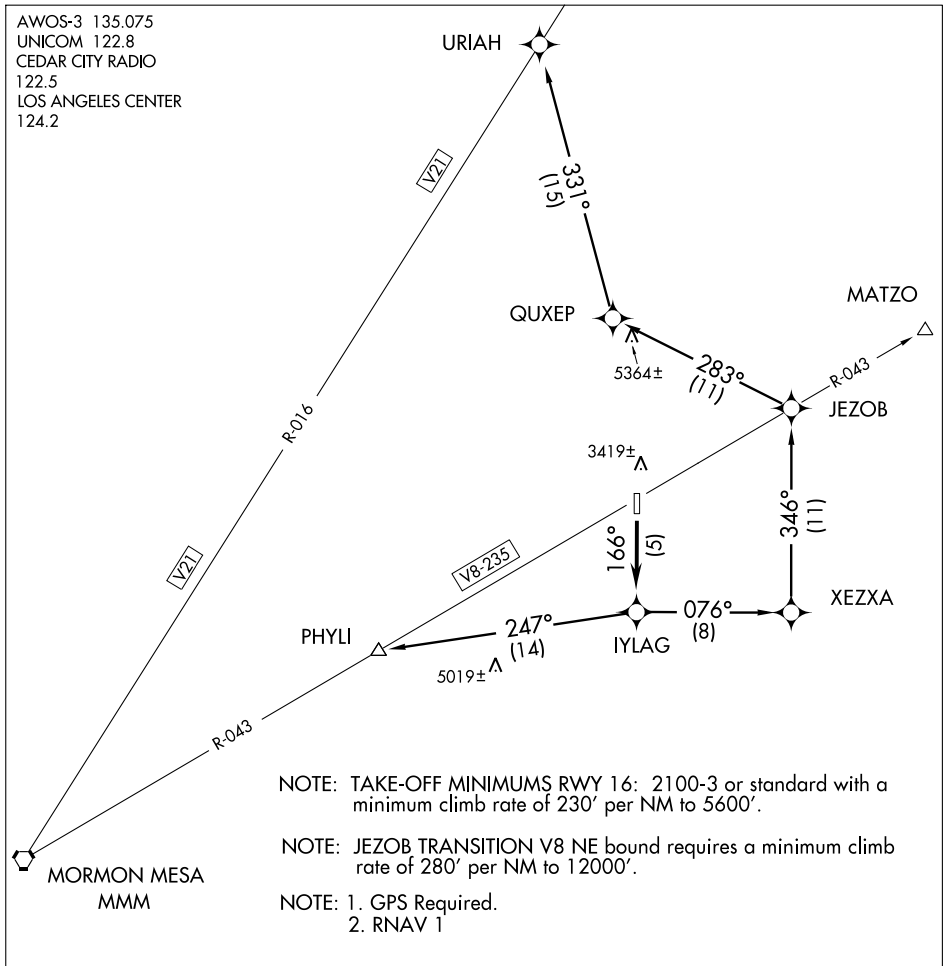




CATEGORY	A	B	C	D
LNAV MDA	6160-1¼ 1554 (1600-1¼)	6160-1½ 1554 (1600-1½)	6160-3	1554 (1600-3)
CIRCLING	6160-1¼ 1553 (1600-1¼)	6160-1½ 1553 (1600-1½)	6160-3	1553 (1600-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

IYLAG ONE DEPARTURE (RNAV)



NOTE: TAKE-OFF MINIMUMS RWY 16: 2100-3 or standard with a minimum climb rate of 230′ per NM to 5600′.

NOTE: JEZOB TRANSITION V8 NE bound requires a minimum climb rate of 280′ per NM to 12000′.

NOTE: 1. GPS Required.
2. RNAV 1

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 12000 (or assigned altitude) via course 166° to IYLAG WP then via assigned transition/route.

TAKE-OFF RUNWAY 34: Not authorized.

JEZOB TRANSITION (IYLAG1.JEZOB): From over IYLAG WP via course 076° to XEZXA WP, then via course 346° to JEZOB WP.

PHYLI TRANSITION (IYLAG1.PHYLI)

URIAH TRANSITION (IYLAG1.URIAH)

SW-4, 22 OCT 2009 to 19 NOV 2009

ST. GEORGE, UTAH

AL-5742 (FAA)

WAAS CH 53501 W34A	APP CRS 346°	Rwy Idg 6606 TDZE 2906 Apt Elev 2941

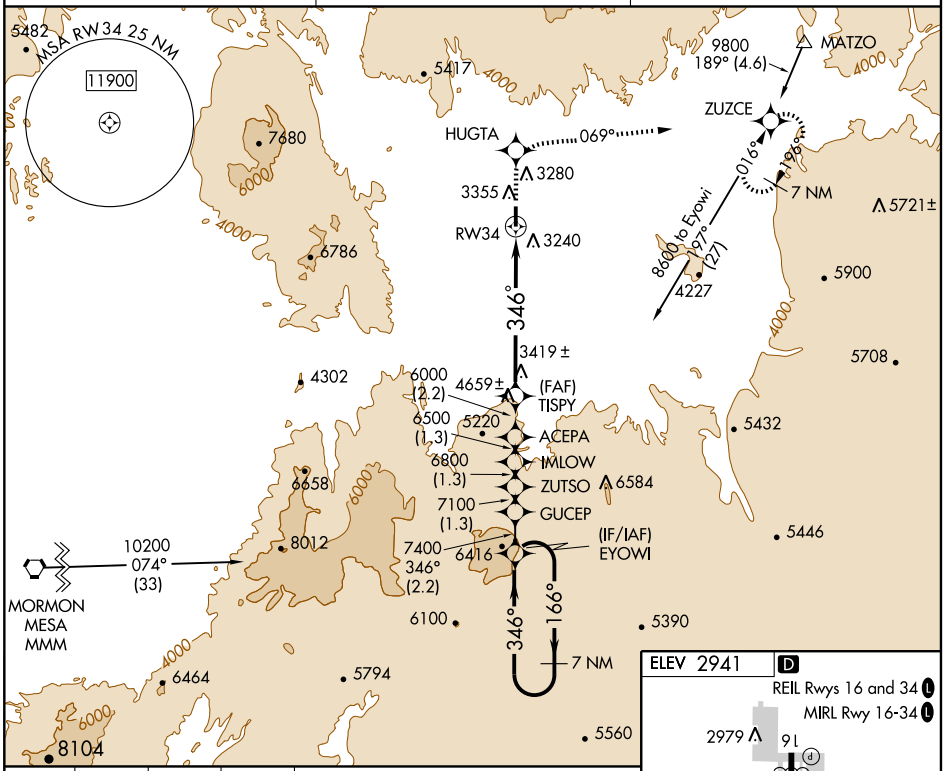
RNAV (GPS) RWY 34

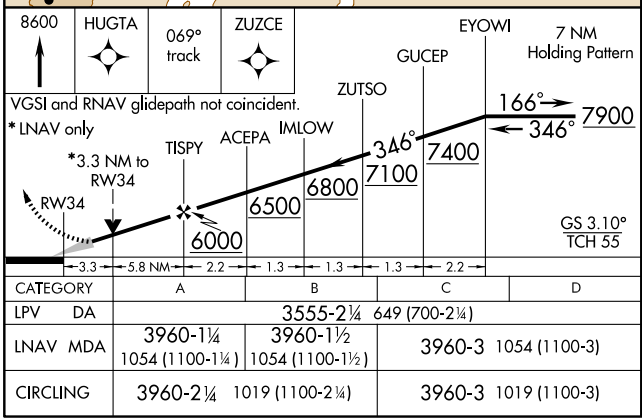
ST. GEORGE MUNI (SGU)

DME/DME RNP-0.3 NA.

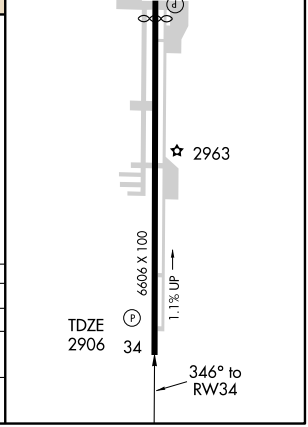
MISSED APPROACH: Climb to 8600 direct HUGTA and via 069° track to ZUZCE and hold, continue climb-in-hold to 8600.

AWOS-3	CEDAR CITY RADIO	UNICOM
135.075	122.5	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	3555-2¼ 649 (700-2¼)			
LNAV MDA	3960-1¼ 1054 (1100-1¼)	3960-1½ 1054 (1100-1½)	3960-3 1054 (1100-3)	
CIRCLING	3960-2¼ 1019 (1100-2¼)		3960-3 1019 (1100-3)	



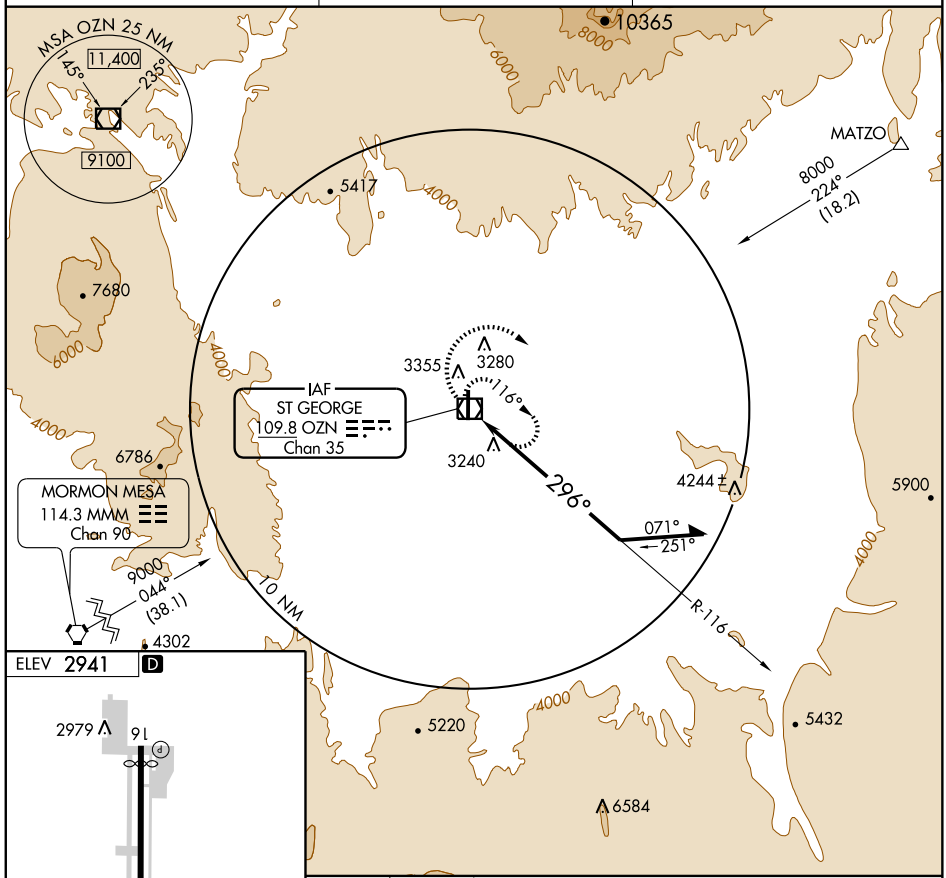
SW-4, 22 OCT 2009 to 19 NOV 2009

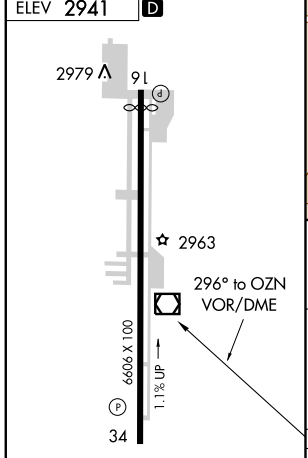
VOR/DME OZN	APP CRS	Rwy Idg	N/A
109.8	296°	TDZE	N/A
Chan 35		Apt Elev	2941

VOR-C
ST. GEORGE MUNI (SGU)

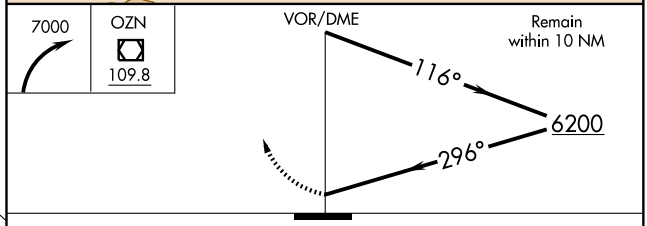
MISSED APPROACH: Climbing right turn to 7000 in OZN VOR/DME holding pattern.

AWOS-3	CEDAR CITY RADIO	UNICOM
135.075	122.5	122.8 (CTAF) L





REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
CIRCLING	4700-1¼ 1762 (1800-1¼)	4700-1½ 1762 (1800-1½)	4700-3	1762 (1800-3)

SW-4, 22 OCT 2009 to 19 NOV 2009

ST. GEORGE, UTAH

AL-5742 (FAA)

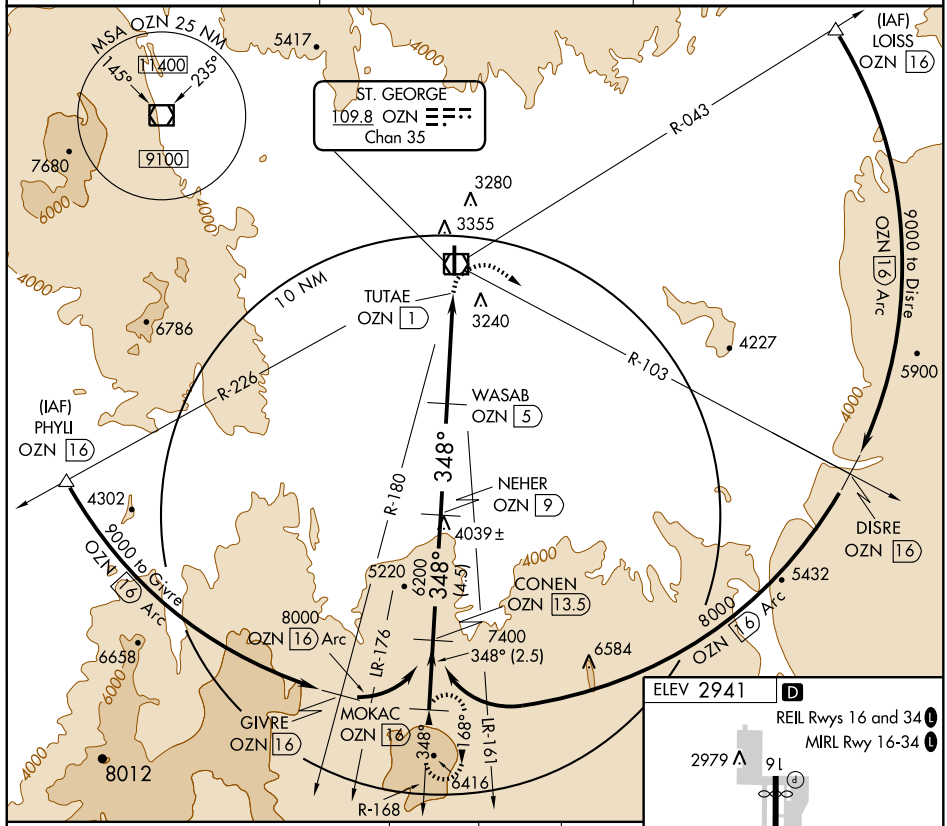
VOR/DME OZN	APP CRS	Rwy Idg	6606
109.8	348°	TDZE	2906
Chan 35		Apt Elev	2941

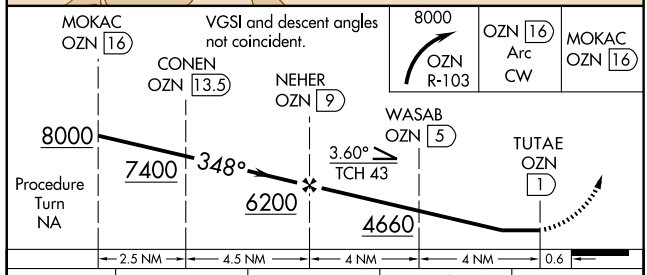
VOR/DME RWY 34

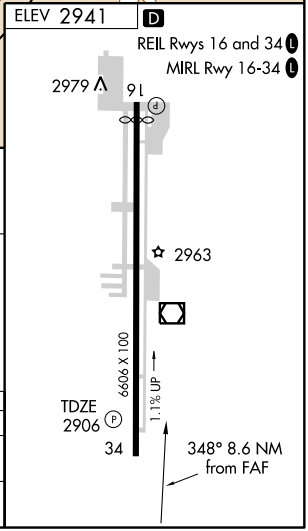
ST. GEORGE MUNI (SGU)

MISSED APPROACH: Climbing right turn to 8000 via OZN R-103 and OZN 16 DME Arc CW to MOKAC/16 DME and hold.

AWOS-3	CEDAR CITY RADIO	UNICOM
135.075	122.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-34	3500-1 594 (600-1)		3500-1½ 594 (600-1½)	3500-1¾ 594 (600-1¾)
CIRCLING	3660-1 719 (800-1)	3720-1¼ 779 (800-1¼)	3720-2¼ 779 (800-2¼)	3900-3 959 (1000-3)

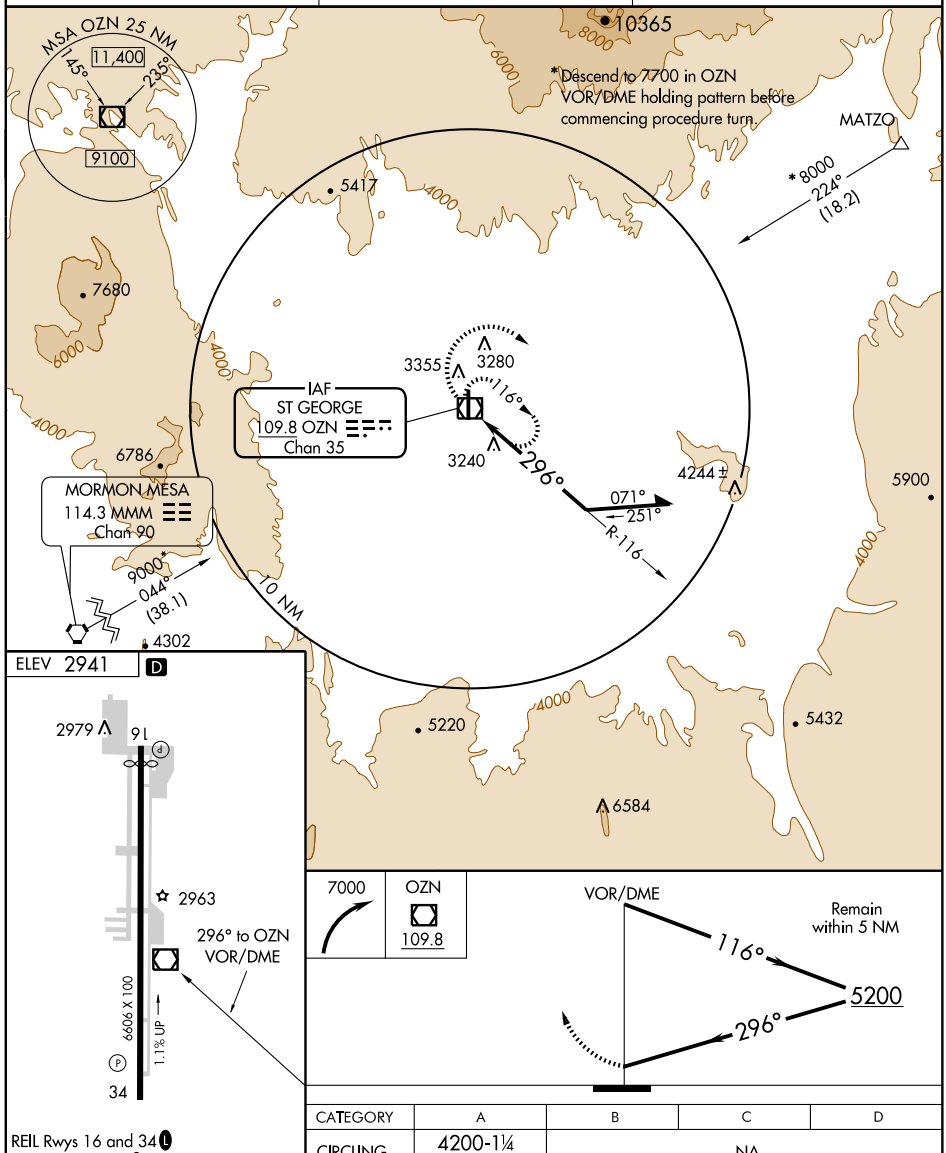
SW-4, 22 OCT 2009 to 19 NOV 2009

VOR/DME OZN	APP CRS	Rwy Idg	N/A
109.8	296°	TDZE	N/A
Chan 35		Apt Elev	2941

VOR or GPS-B
ST. GEORGE MUNI (SGU)

MISSED APPROACH: Climbing right turn to 7000 in OZN VOR/DME holding pattern.

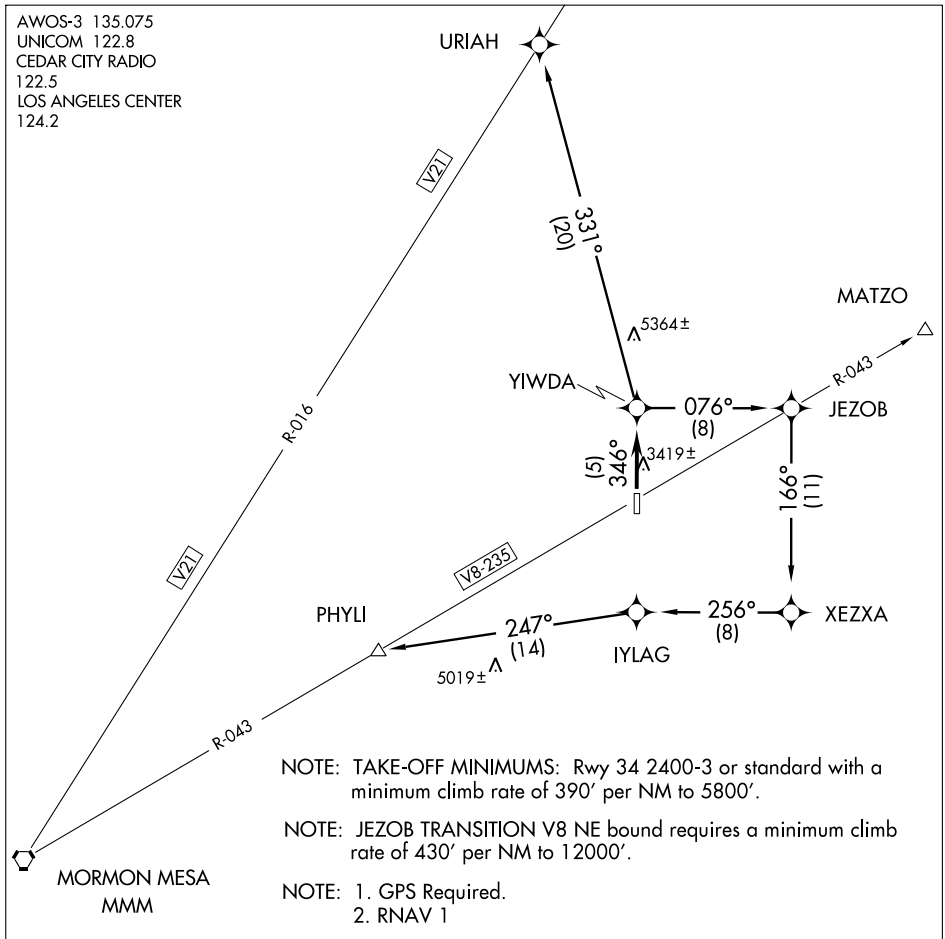
AWOS-3	CEDAR CITY RADIO	UNICOM
135.075	122.5	122.8 (CTAF) L



REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

CATEGORY	A	B	C	D
CIRCLING	4200-1¼ 1262 (1300-1¼)		NA	

YIWDA ONE DEPARTURE (RNAV)



NOTE: TAKE-OFF MINIMUMS: Rwy 34 2400-3 or standard with a minimum climb rate of 390′ per NM to 5800′.

NOTE: JEZOB TRANSITION V8 NE bound requires a minimum climb rate of 430′ per NM to 12000′.

NOTE: 1. GPS Required.
2. RNAV 1

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34: Climb to 12000 (or assigned altitude) via course 346° to YIWDA WP then via assigned transition/route.

TAKE-OFF RUNWAY 16: Not authorized.

JEZOB TRANSITION (YIWDA1.JEZOB): From over YIWDA WP via course 076° to JEZOB WP.

PHYLI TRANSITION (YIWDA1.PHYLI)

URIAH TRANSITION (YIWDA1.URIAH)

SW-4, 22 OCT 2009 to 19 NOV 2009

TOOELE, UTAH

AL-6944 (FAA)

LOC/DME I-TVY	APP CRS	Rwy Idg	6100
111.15	166°	TDZE	4297
Chan 48 (Y)		Apt Elev	4322

ILS or LOC/DME RWY 17

TOOELE / BOLINDER FIELD-TOOELE VALLEY (TVY)

▼ Inoperative table does not apply to S-ILS R17.
▲ When local altimeter setting not received, use Salt Lake City Intl altimeter setting and increase all DA/MDA 60 feet and Circling Cat. D visibility ¼ mile. For inoperative MALSR increase S-LOC Cats. A, B, and C visibility to 1 mile. For inoperative MALSR when using Salt Lake City Intl altimeter setting, increase S-LOC 17 Cats. A and B visibility to 1 mile.

MALSR

MISSED APPROACH: Climb to 5400 then climbing right turn to 9000 via heading 343° and OGD VORTAC R-192 to WEGET INT/ I-TVY 13.5 DME and hold, continue climb-in-hold to 9000.

AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
119.725	135.5 316.15	124.4	123.0 (CTAF) L

Procedure turn required for arrivals at WEGET via V32 eastbound.

MSA TVY 25 NM
090°
9700
100°
12600

12000
105° (3.5)
346°
R-210
EMONT
(IAF)
FOGEM INT
I-TVY 25.2
TCH 20
8100 NoPT
166°
(11.6)
R-192
R-285
6596
5000
WASATCH
116.8 TCH
Chan 115
9570
9706
9259
9158
9410
6537±
6649
1 min
346°
166°
8100 NoPT
249°
(8.9)
(IAF)
SALTA
R-249
(IF/IAF)
WEGET INT
I-TVY 13.5
(6.8)
6100
OGDEN
115.7 OGD
Chan 104
TOOELE
371 TVY
5540
LOCALIZER 111.15
I-TVY
Chan 48 (Y)
JONEK
I-TVY 6.6
9347±
4379±
9486
8740
9141
6048
15 NM
7000
5000

ELEV 4322
166° 5.5 NM from FAF
TDZE 4297
0.8% UP
6100 X 100
17
35

One Minute Holding Pattern

WEGET INT
I-TVY 13.5
8100
346°
166°
166°
6100
JONEK
I-TVY 6.6
5400
9000
hdg 343°
OGD
R-192
115.7
WEGET INT
I-TVY 13.5
I-TVY 2.1
I-TVY 1.2
6100
GS 3.00°
TCH 55
6.8 NM
4.5 NM
1 NM

CATEGORY	A	B	C	D
S-ILS 17	4497- ¾ 200 (200-¾)			
S-LOC 17	4640- ¾ 343 (400-¾)			
CIRCLING	4820-1 498 (500-1)	4840-1 518 (600-1)	4860-1½ 538 (600-1½)	4940-2 618 (700-2)

MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

NDB TVY 371	APP CRS 161°	Rwy Idg 6100 TDZE 4294 Apt Elev 4318

NDB RWY 17

TOOELE / BOLINDER FIELD-TOOELE VALLEY (TVY)

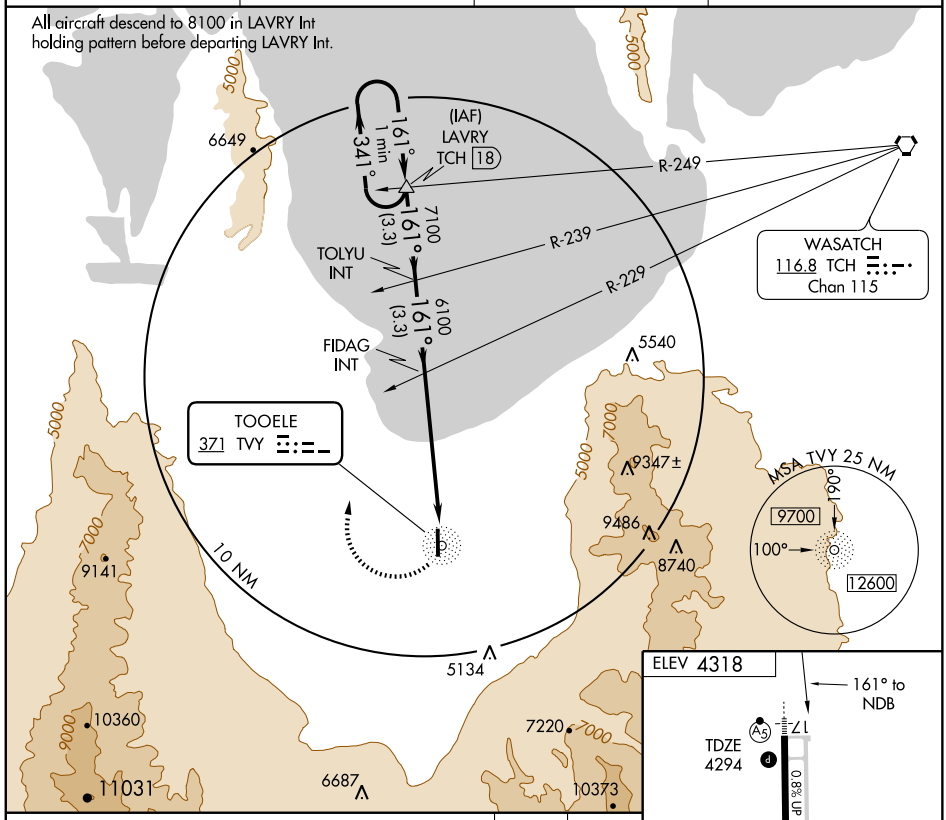
T NA — Use Salt Lake City Intl altimeter setting. Circling NA at night to Rwy 35.

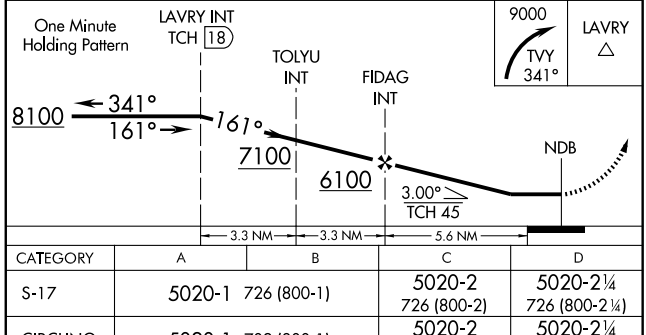
MALSR

MISSED APPROACH: Climbing right turn to 9000 via the 341° bearing from TVY NDB to LAVRY Int and hold.

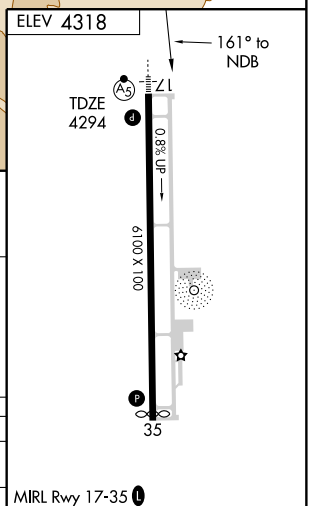
AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
119.725	135.5 316.15	124.4	123.0 (CTAF) L

All aircraft descend to 8100 in LAVRY Int holding pattern before departing LAVRY Int.





CATEGORY	A	B	C	D
S-17	5020-1	726 (800-1)	5020-2 726 (800-2)	5020-2¼ 726 (800-2¼)
CIRCLING	5020-1	702 (800-1)	5020-2 702 (800-2)	5020-2¼ 702 (800-2¼)



MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

WAAS	APP CRS	Rwy Idg	6100
CH 87113	166°	TDZE	4297
W17A		Apt Elev	4322

RNAV (GPS) Y RWY 17

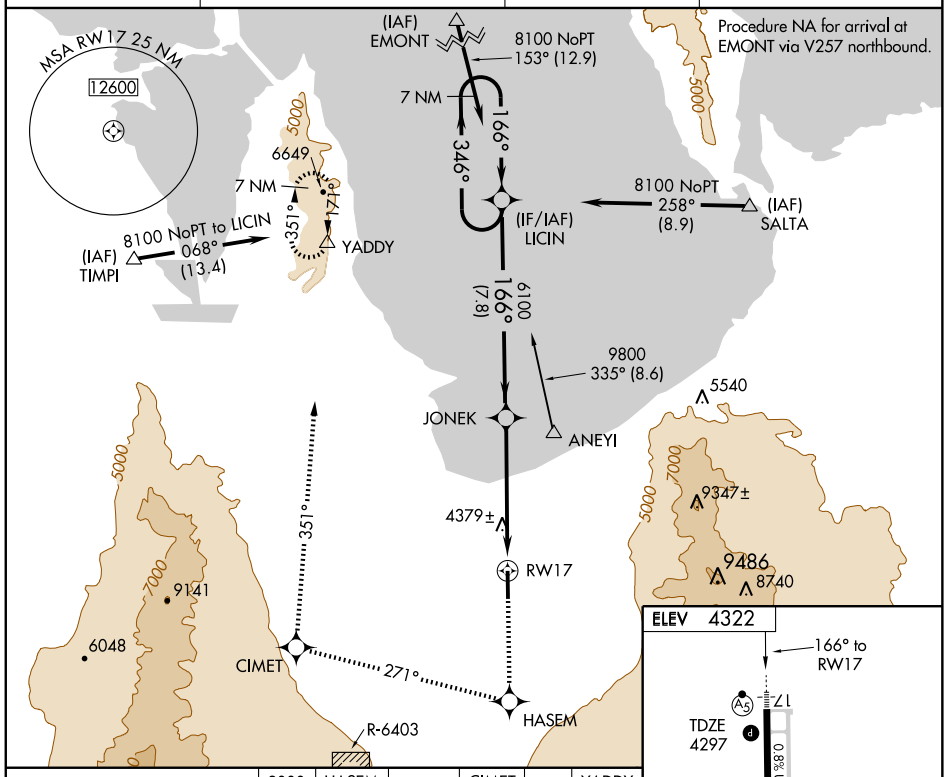
TOOELE / BOLINDER FIELD-TOOELE VALLEY (TVY)

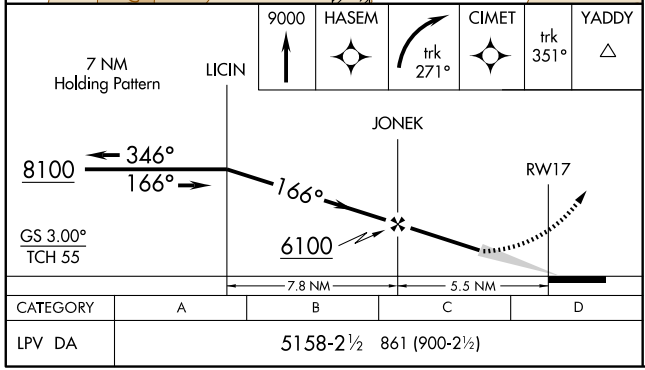
DME/DME RNP-0.3 NA. For inoperative MALSR increase visibilities all Cats. to 3 miles. When local altimeter setting not received, use Salt Lake City Intl altimeter setting and increase DA to 5218 feet and all visibilities to 1½ mile. Inoperative table does not apply when using Salt Lake City Intl altimeter setting.

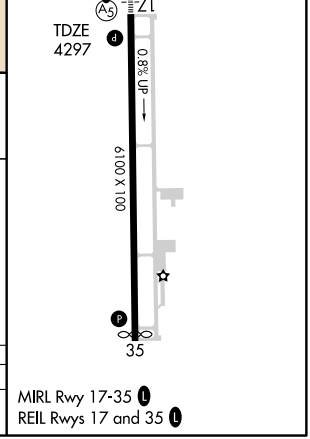
MALSR

MISSED APPROACH: Climb to 9000 direct HASEM and right turn via track 271° to CIMET and via track 351° to YADDY and hold.

AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
119.725	135.5 316.15	124.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	5158-2½ 861 (900-2½)			

MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

TOOELE, UTAH

AL-6944 (FAA)

APP CRS	Rwy Idg	6100
166°	TDZE	4297
	Apt Elev	4322

RNAV (GPS) Z RWY 17

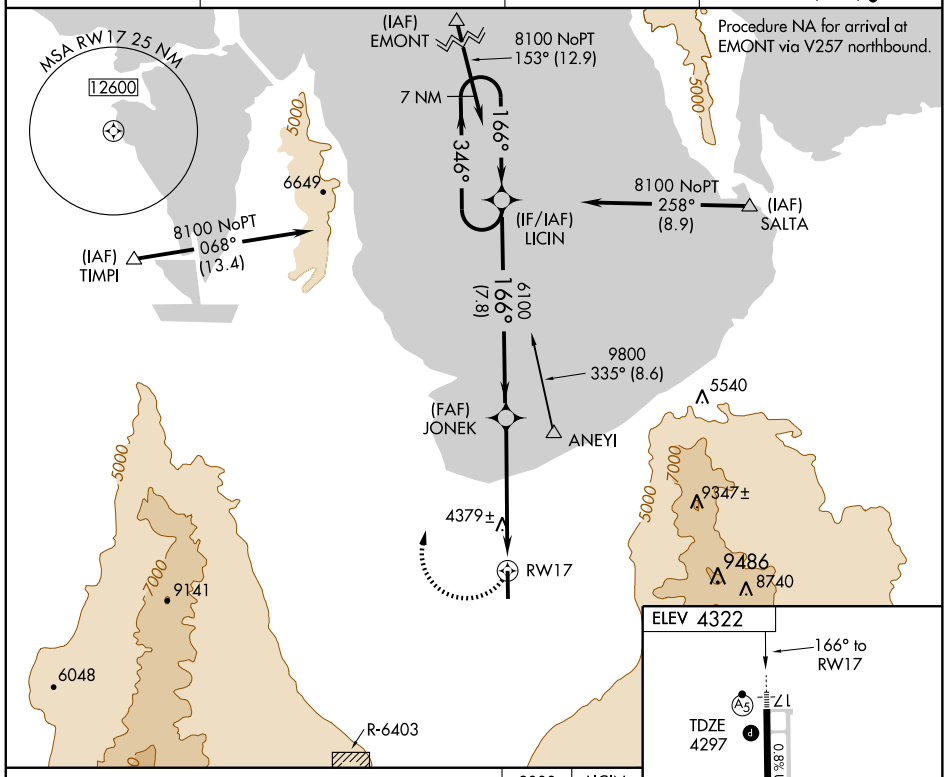
TOOELE / BOLINDER FIELD-TOOELE VALLEY (TVY)

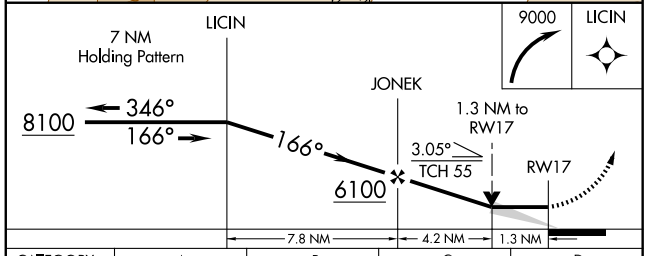
Circling to Rwy 35 NA at night. DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Salt Lake City Intl altimeter setting and increase all MDA 60 feet and LNAV Cat. C/D and Circling Cat. D visibility ¼ mile. For inoperative MALSR, increase LNAV Cats. A and B visibility ¼ mile. For inoperative MALSR, when using Salt Lake City Intl altimeter setting, increase LNAV Cats. A and B visibility ¼ mile. VDP NA when using Salt Lake City Intl altimeter setting.

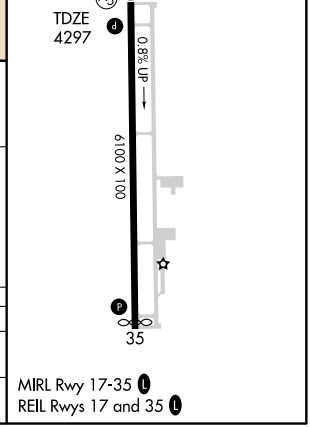
MALSR

MISSED APPROACH: Climbing right turn to 9000 direct LICIN and hold, continue climb-in-hold to 9000.

AWOS-3	SALT LAKE CITY APP CON	CLNC DEL	UNICOM
119.725	135.5 316.15	124.4	123.0 (CTAF) L





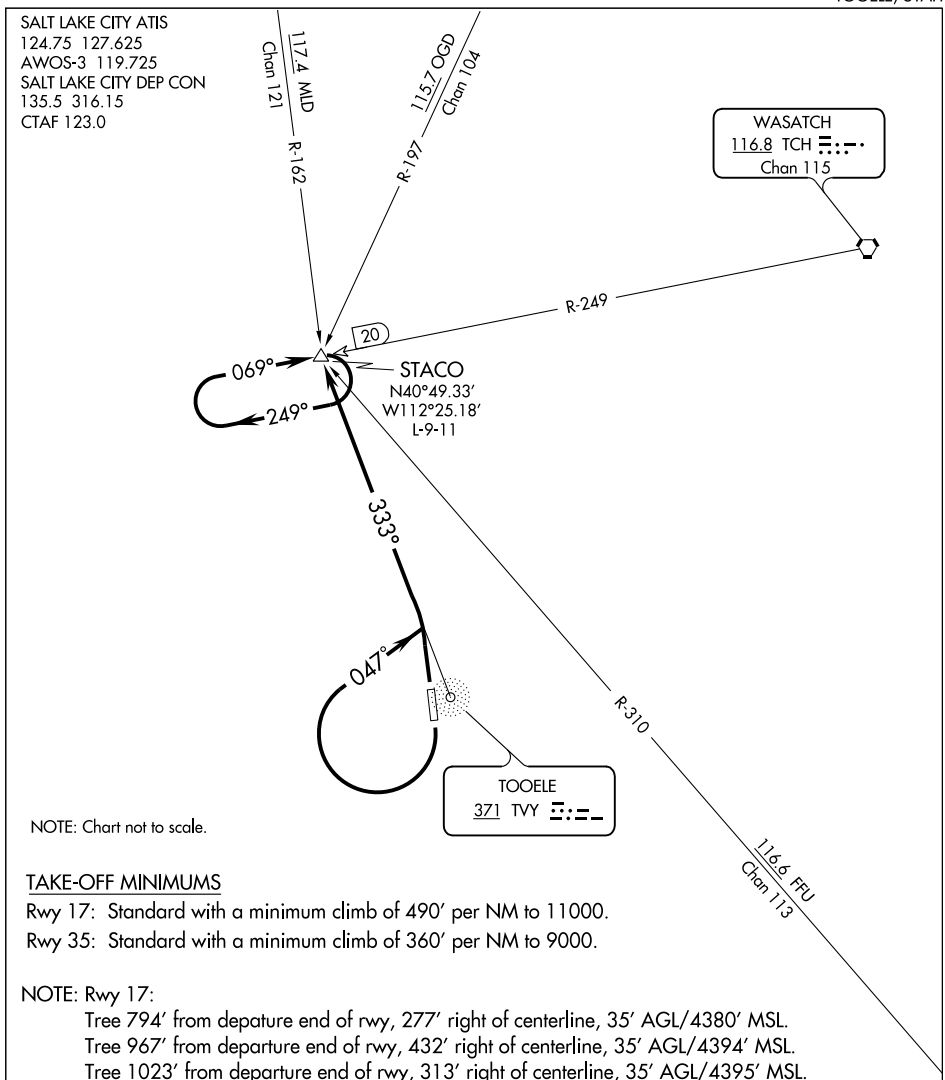


CATEGORY	A	B	C	D
LNAV MDA	4740-¾ 443 (500-¾)			4740-1 443 (500-1)
CIRCLING	4820-1 498 (500-1)	4840-1 518 (600-1)	4860-1½ 538 (600-1½)	4940-2 618 (700-2)

MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

SW-4, 22 OCT 2009 to 19 NOV 2009

STACO TWO DEPARTURE (OBSTACLE)



TAKE-OFF MINIMUMS

Rwy 17: Standard with a minimum climb of 490′ per NM to 11000.

Rwy 35: Standard with a minimum climb of 360′ per NM to 9000.

NOTE: Rwy 17:

Tree 794′ from depature end of rwy, 277′ right of centerline, 35′ AGL/4380′ MSL.
Tree 967′ from departure end of rwy, 432′ right of centerline, 35′ AGL/4394′ MSL.
Tree 1023′ from departure end of rwy, 313′ right of centerline, 35′ AGL/4395′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Climbing right turn to 11000 via heading 047° and TVY NDB bearing 333° to STACO INT and hold.

TAKE-OFF RUNWAY 35: Climb to 9000 via TVY NDB bearing 333° to STACO INT and hold.

All aircraft expect further clearance to filed route and altitude ten minutes after departure.

SW-4, 22 OCT 2009 to 19 NOV 2009

VERNAL, UTAH

AL-792 (FAA)

RNAV (GPS) RWY 34

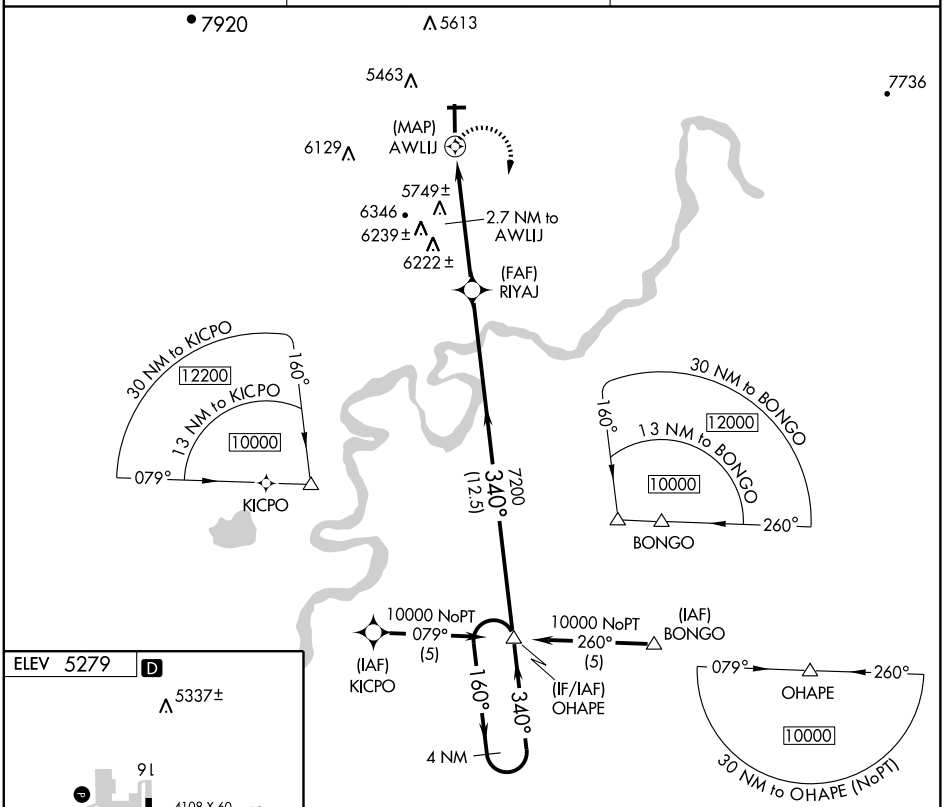
VERNAL RGNL (VEL)

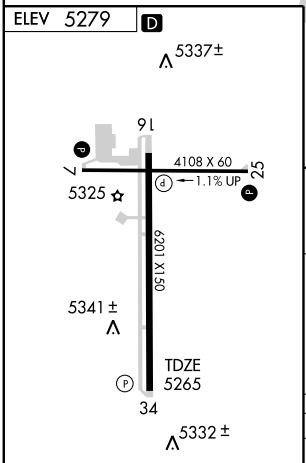
APP CRS	Rwy Idg	6201
340°	TDZE	5265
	Apt Elev	5279

T
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

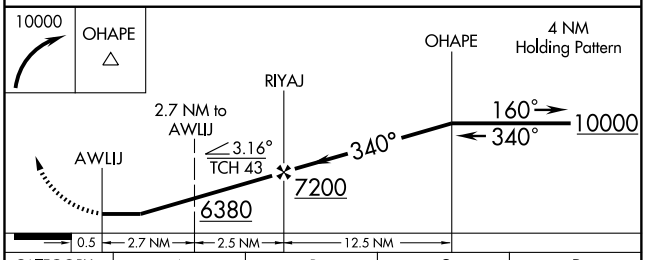
MISSED APPROACH: Climbing right turn to 10000 direct OHAPE WP and hold.

ASOS	CEDAR CITY RADIO	UNICOM
135.175	122.35	122.7 (CTAF) L





REIL Rwys 7, 16, 25, and 34 L
MIRL Rwys 7-25 and 16-34 L



CATEGORY	A	B	C	D
LNAV MDA	5980-1 715 (800-1)		5980-2 715 (800-2)	5980-2¼ 715 (800-2¼)
CIRCLING	5980-1 701 (800-1)		5980-2 701 (800-2)	5980-2¼ 701 (800-2¼)

SW-4, 22 OCT 2009 to 19 NOV 2009

VERNAL, UTAH

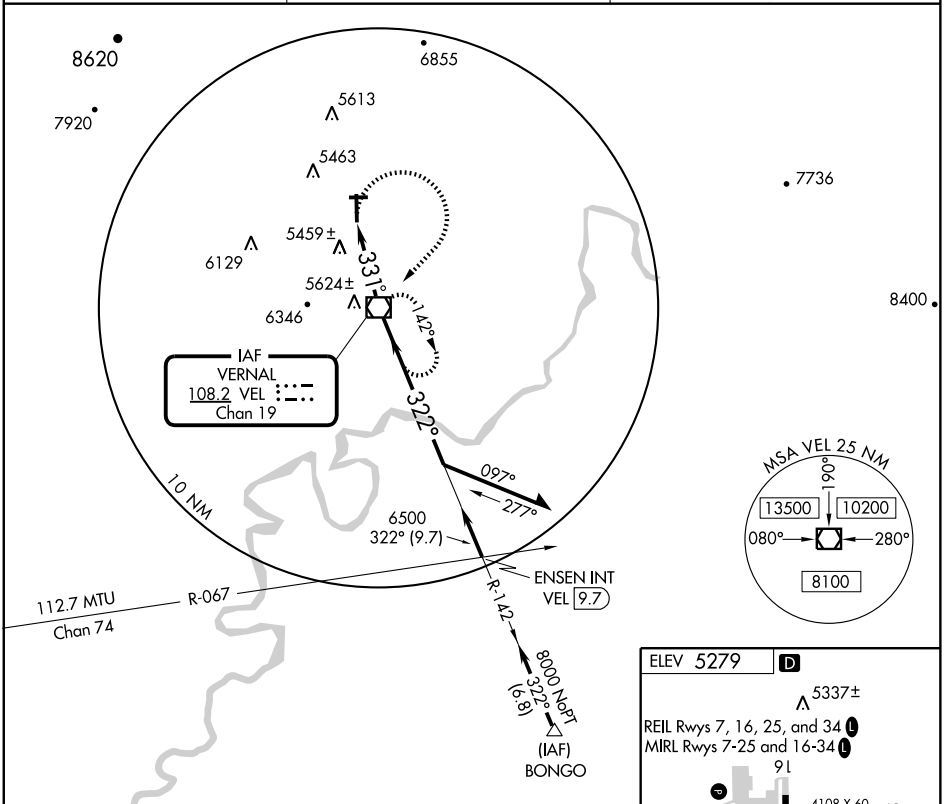
AL-792 (FAA)

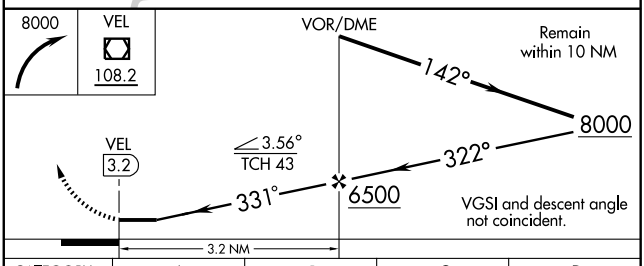
VOR RWY 34
VERNAL RGNL (VEL)

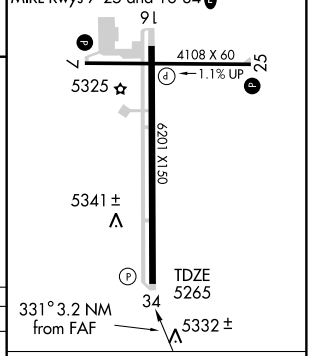
VOR/DME VEL	APP CRS	Rwy Idg	6201
108.2	331°	TDZE	5265
Chan 19		Apt Elev	5279

MISSED APPROACH: Climbing right turn to 8000 direct VEL VOR/DME and hold.

ASOS	CEDAR CITY RADIO	UNICOM
135.175	122.35	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-34	5780-1	515 (600-1)	5780-1½ 515 (600-1½)	5780-1¾ 515 (600-1¾)
CIRCLING	5780-1	501 (600-1)	5900-1¾ 621(700-1¾)	5940-2 661 (700-2)

FAF to MAP 3.2 NM

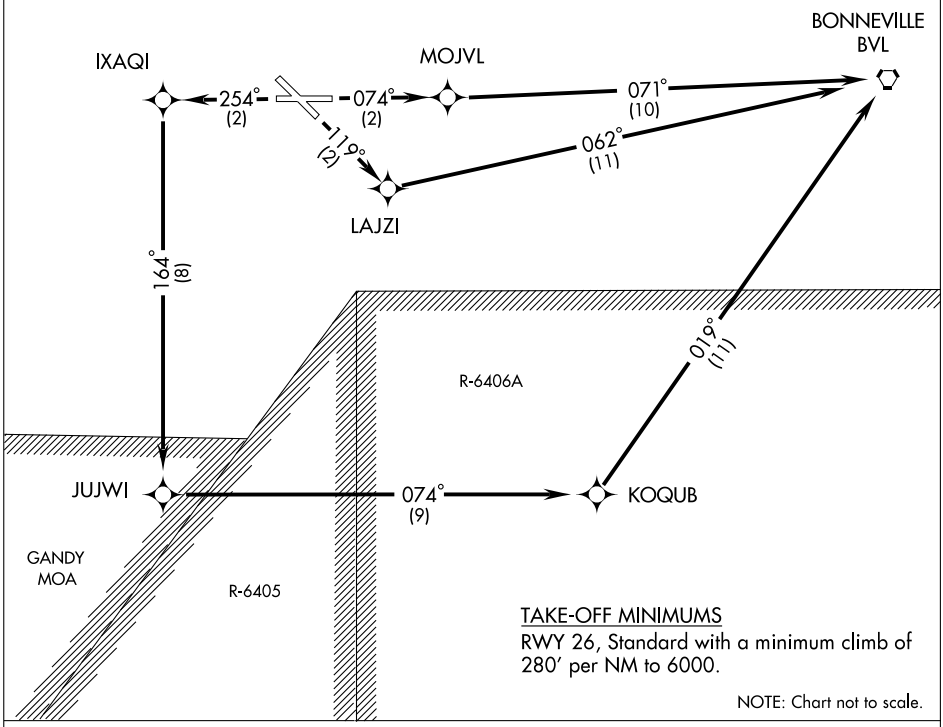
Knots	60	90	120	150	180
Min:Sec	3:12	2:08	1:36	1:17	1:04

SW-4, 22 OCT 2009 to 19 NOV 2009

BONNEVILLE ONE DEPARTURE (RNAV)

CEDAR CITY RADIO
122.1R
UNICOM 122.8 (CTAF)
AWOS-3 135.075

NOTE: 1. GPS required.
2. RNAV 1.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb to 9000 via course 074° to MOJVL WP, then via course 071° to BVL VORTAC.

TAKE-OFF RUNWAY 12: Climb to 9000 via course 119° to LAJZI WP, then via course 062° to BVL VORTAC.

TAKE-OFF RUNWAY 26: Climb to 9000 via course 254° to IXAQI WP, then via course 164° to JUJWI WP, then via course 074° to KOQUB WP, then via course 019° to BVL VORTAC.

TAKE-OFF RUNWAY 30: Not authorized.

SW-4, 22 OCT 2009 to 19 NOV 2009

WENDOVER, UTAH

AL-445 (FAA)

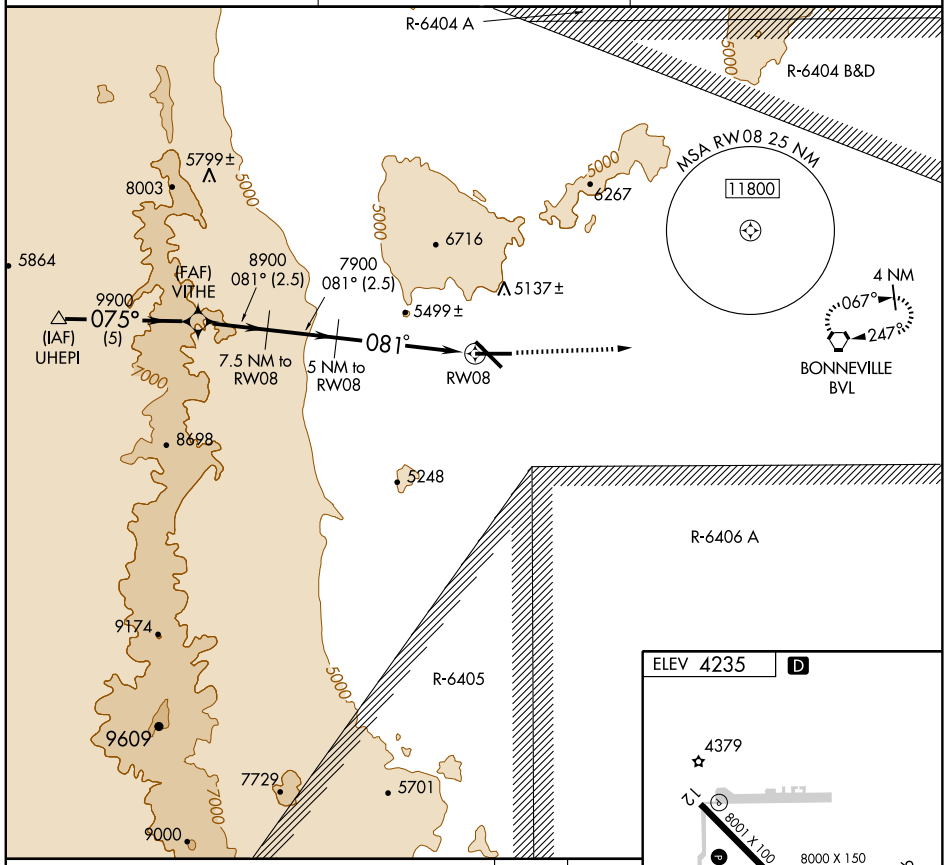
RNAV (GPS)-A
WENDOVER (ENV)

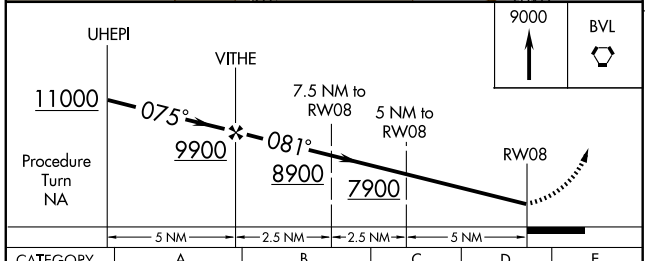
APP CRS	Rwy Idg	N/A
081°	TDZE	N/A
	Apt Elev	4235

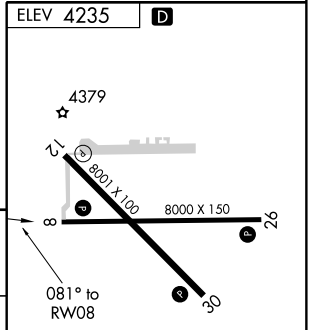
T
A NA — Circling not authorized north of Rwy 8-26.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 9000 direct BVL VORTAC and hold.

AWOS-3	CEDAR CITY RADIO	UNICOM
135.075	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D	E
CIRCLING	5900-1¼ 1665 (1700-1¼)	5900-1½ 1665 (1700-1½)	5900-3 1665 (1700-3)		

REIL Rwys 8, 12 and 30 L
MIRL Rwys 8-26 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

WENDOVER, UTAH

AL-445 (FAA)

RNAV (GPS) RWY 26

WENDOVER (ENV)

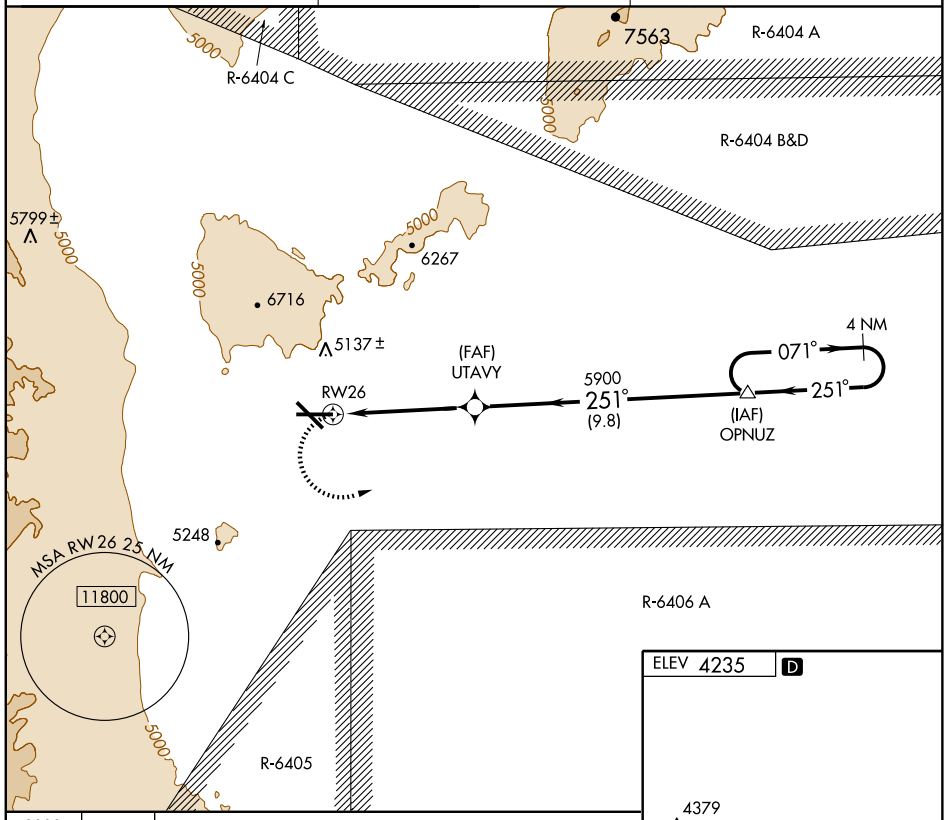
APP CRS	Rwy ldg	8000
251°	TDZE	4224
	Apt Elev	4235

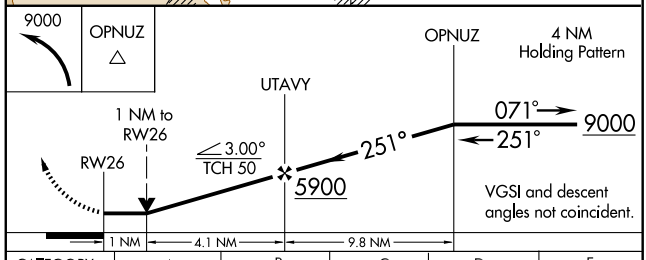
T
NA

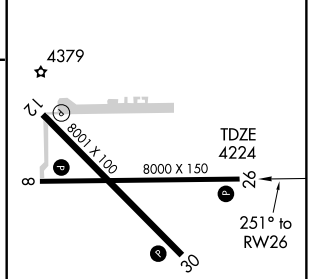
Circling not authorized north of Rwy 8-26.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 9000 direct OPNUZ WP and hold.

AWOS-3	CEDAR CITY RADIO	UNICOM
135.075	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D	E
LNAV MDA	4580-1 356 (400-1)			4580-1¼ 356 (400-1¼)	4660-1½ 436 (500-1½)
CIRCLING	4640-1 405 (500-1)	4700-1 465 (500-1)	4700-1½ 465 (500-1½)	4800-2 565 (600-2)	5000-2¾ 765 (800-2¾)

REIL Rwys 8, 12 and 30 L
MIRL Rwys 8-26 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

WENDOVER, UTAH

VORTAC BVL	APP CRS	Rwy Idg	N/A
112.3	071°	TDZE	N/A
Chan 70		Apt Elev	4235

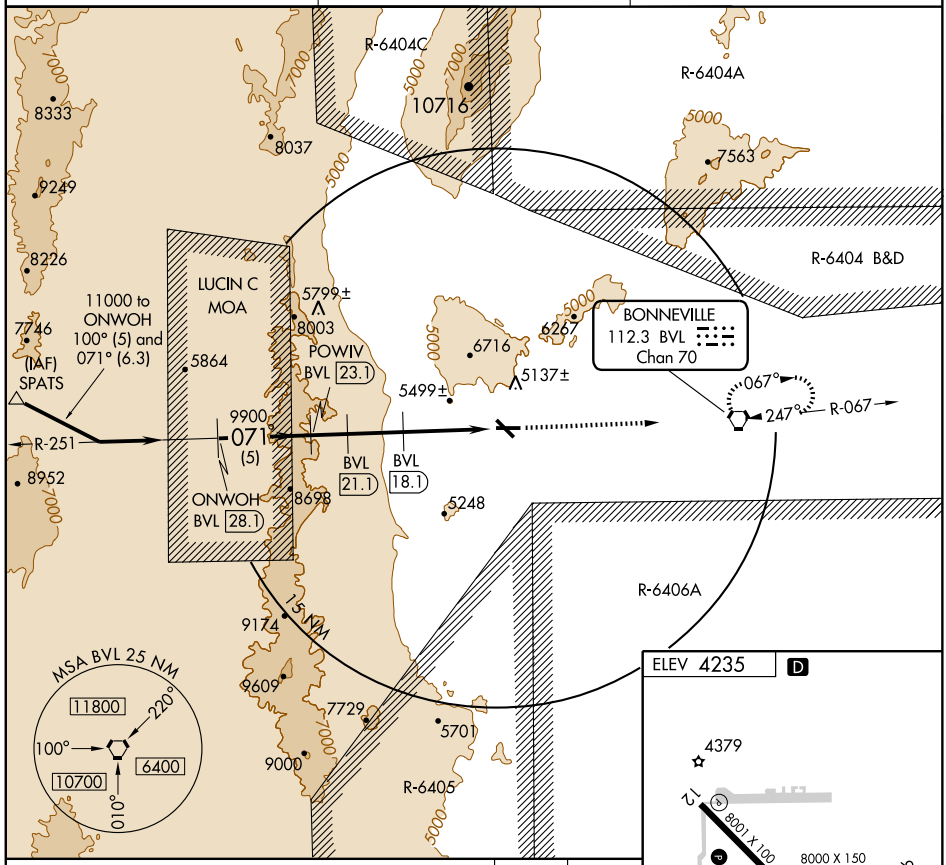
AL-445 (FAA)

VOR/DME-B
WENDOVER (ENV)

Circling not authorized north of Rwy 8-26.

MISSED APPROACH: Climb to 9000 direct BVL VORTAC and hold.

AWOS-3	CEDAR CITY RADIO	UNICOM
135.075	122.1R	122.8 (CTAF) L



CATEGORY	A	B	C	D	E
CIRCLING	5900-1¼ 1665 (1700-1¼)	5900-1½ 1665 (1700-1½)	5900-3 1665 (1700-3)		

REIL Rwys 8, 12 and 30 L
MIRL Rwys 8-26 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009

WENDOVER, UTAH

VORTAC BVL 112.3 Chan 70	APP CRS 251°	Rwy Idg 8000 TDZE 4224 Apt Elev 4235

AL-445 (FAA)

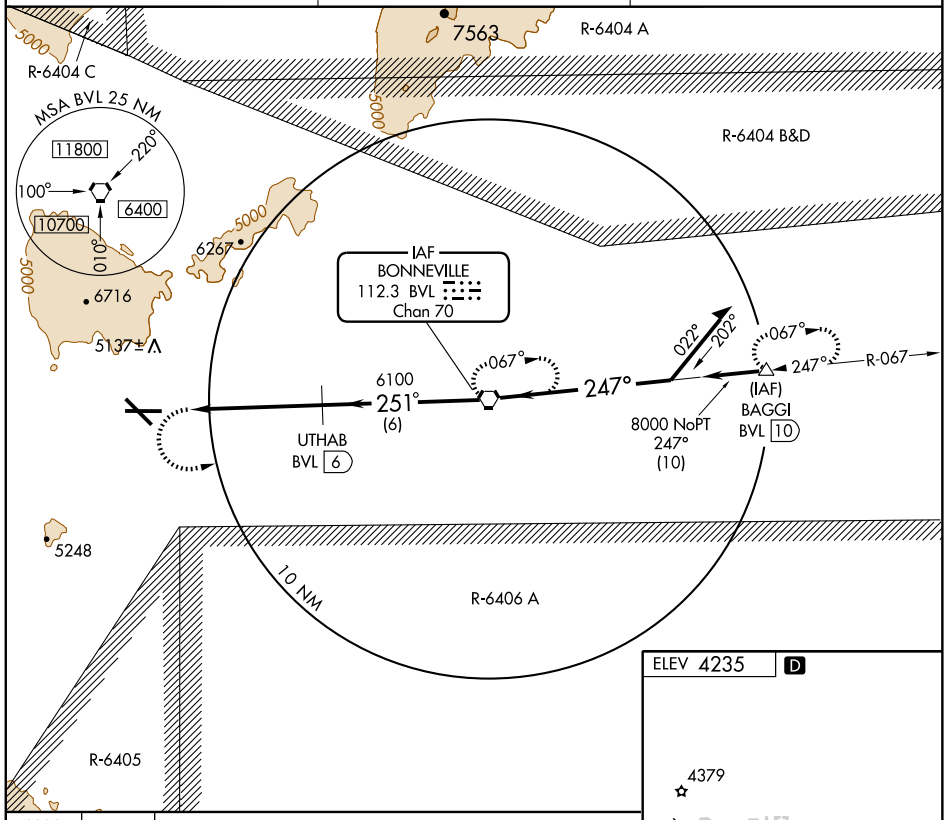
VOR/DME or TACAN RWY 26

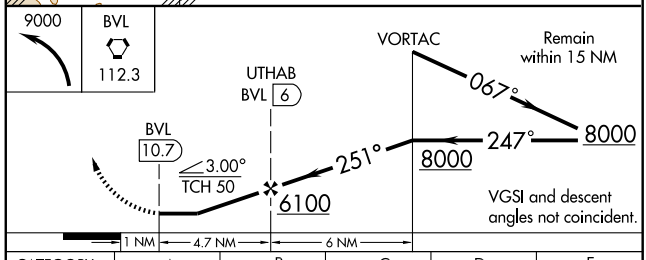
WENDOVER (ENV)

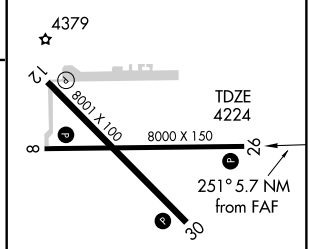
Circling not authorized north of Rwy 8-26.

MISSED APPROACH: Climbing left turn to 9000 direct BVL VORTAC and hold. (TACAN aircraft continue via BVL R-067 to BAGGI INT and hold NE, right turns, 247° inbound.)

AWOS-3 135.075	CEDAR CITY RADIO 122.1R	UNICOM 122.8 (CTAF) L







CATEGORY	A	B	C	D	E
S-26	4580-1¼ 356 (400-1¼)			4620-1¼ 396 (400-1¼)	4960-2½ 736 (800-2½)
CIRCLING	4640-1¼ 405 (500-1¼)	4700-1¼ 465 (500-1¼)	4700-1½ 465 (500-1½)	4800-2 565 (600-2)	5000-2¾ 765 (800-2¾)

REIL Rwys 8, 12 and 30 L
MIRL Rwys 8-26 and 12-30 L

SW-4, 22 OCT 2009 to 19 NOV 2009